Effectiveness of Resilience Programme on Strengths and Difficulties among Adolescents in a Selected Orphanage Home of Coimbatore, India

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Abstract

The effectiveness of resilience programmes on the strengths and difficulties of adolescents has been a topic of great interest in recent years. Resilience refers to an individual's ability to bounce back from adversity and overcome challenges. A quasi-experimental study was undertaken on strengths and difficulties among adolescents. Random sampling technique was used, and data was collected using demographic variables. The SDQ was a brief behavioural screening scale. The information was entered into an Excel sheet and examined through IBM SPSS Statistics 28. The result of the study revealed that the pre-test mean score of strengths and difficulties among adolescents was 37.79 ± 3.22, and the post-test mean score was 20.54 ± 4.16. The mean difference score was 17.25. The calculated paired "t" test value t = 25.763 was found to be statistically significant at the p = 0.001 level. The study concluded that there was a significant reduction in the level of difficulties and enhanced strength among the adolescents after the administration of the resilience programme.

Key words: Resilience programme, Adolescents, Orphanage home

The effectiveness of resilience programmes on the strengths and difficulties among adolescents has been a topic of great interest in recent years. Resilience refers to an individual's ability to bounce back from adversity and overcome challenges. Adolescence is a critical period in which young people face numerous physical, emotional, and social changes that can impact their well-being (Malhi et al, 2019). Resilience programmes aim to equip adolescents with the necessary skills and resources to navigate these challenges successfully. These programmes typically focus on enhancing protective factors such as self-esteem, problem-solving abilities, social support networks, and coping strategies.

Research studies have consistently shown positive outcomes associated with resilience programmes. Adolescents who participate in these interventions often exhibit improved mental health outcomes including reduced levels of anxiety, depression, and stress. They also demonstrate increased levels of self-confidence, optimism, and overall life satisfaction. Furthermore, resilience programmes have been found to enhance academic performance among adolescents. By equipping them with effective coping mechanisms and problem-solving skills, these interventions enable students to better manage academic stressors and improve their overall educational experience (Kalaiyasaran et al, 2014). Research on resilience as a part of developmental psychopathology focuses on why some children and adolescents maintain positive adaptation despite experiences of distressing life conditions and demanding societal conditions. Despite concerted research on the concept of resilience over three decades, there are still different definitions of the term. Three thoughts of research on resilience already in vogue, have set the path for the fourth, which focuses on multilevel analysis and the dynamics of adaptation and change. Resilience has been linked with positive youth development.

Effectiveness of resilience programmes on the strengths and difficulties among adolescents is of great relevance in today's society. The challenges faced by adolescents in orphanage homes in particular, can have a significant impact on their development. Therefore, it is essential to explore the effectiveness of resilience programmes in addressing these challenges and promoting positive outcomes.

Need of study: Adolescence is a period of transition from childhood to adulthood. It is a crucial phase of human life because many developmental changes occur in this period such as physical growth, new peer relationship with both sex, emotional

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independence from parent, intellectual skills and civil competence, turn to socially responsible behaviour pattern, and so on. Sound mental health plays a vital role in adolescence because mental health is linked with physical health, social health, emotional and functioning at school and common places. According to UNICEF (2011) report, around 20 percent of the world's adolescence has a mental health or behaviour problems (Luthar et al, 2000).

Consistent with the framework of applied developmental science, we offer a critical examination of several theories. The present paper reviews the theoretical conception of resilience, its relationships with positive youth development, and the antecedents of resilience. Ways of enhancing adolescents' resilience that are pertinent to positive development are also outlined (Lee et al, 2012).

In this study, we examined the impact of a selected resilience programme on the strengths and difficulties experienced by adolescents in an orphanage. By analysing the evidence and outcomes of the programme, we will gain insight into its effectiveness and potential benefits for these vulnerable individuals (Pinto et al, 2012).

Objectives

The study was set out with objectives to:

- Assess the strengths and difficulties among adolescents.
- Assess the effectiveness of resilience programme on strengths and difficulties among adolescents.
- Association of pre-test strengths and difficulties with selected demographic variables of adolescents.

Review of Literature

In a cross-sectional survey on the prevalence and protective factors for resilience in 119 adolescent aboriginal Australians living in urban areas by Christian et al (2019), resilience was defined as having 'low-risk' Strengths and Difficulties Questionnaire scores on the total difficulties scale (range: 0–40) or the prosocial scale (range: 0–10). The result showed that most adolescents scored in the low-risk range of the total difficulties (n=85, 73%) and prosocial scales (n=101, 86%). Family encouragement to attend school was associated with a 4.3-point reduction in total difficulty scores (95% CI, 0.22–8.3). Having someone to talk to if there was a problem and regular strenuous exercise were associated with higher scores on the prosocial behaviour scale, increasing scores by 1.2 (95% CI, 0.45–2.0) and 1.3 (95% CI, 0.26-2.3) points, respectively. The study concluded that most adolescents in SEARCH displayed resilience. Resilience was associated with nurturing family environments, social support, and regular exercise.

Prabhu & Shekhar (2017) conducted a cross-sectional descriptive study on resilience and perceived social support among school-going adolescents in Mangaluru. School-going adolescents from grades 8–10 of the four schools in Mangaluru city were selected through convenient sampling (n = 206). Data were collected through self-administered scales. Descriptive statistics and the t-test were applied. The study result showed that the mean age of the study sample was 14.10 (0.896) years. Adolescents had a mild level of perceived stress, a high perceived social support, and moderate resilience. A significant difference was noted between boys and girls in the global perceived social support and perceived social support from friends and significant others and resilience. The study concluded that moderate resilience points to the scope for resilience-building programmes in schools in Mangaluru. Further, the gender differences in the measured competencies indicate the need to develop gender-specific intervention packages.

A cross-sectional descriptive study was conducted to assess the mental health status of school-going tribal adolescents among 780 male students from rural communities in Ranchi district, Jharkhand. A sample was selected by using the random sampling technique. Data was collected with the Strengths and Difficulties Questionnaire (SDQ). The study found that 5.12 percent of the tribal students had emotional symptoms, 9.61 percent had conduct problems, 4.23 percent had hyperactivity, and 1.41 percent had significant peer problems. The researcher concluded that a better understanding of the prevalence of mental health issues among tribal adolescents can help family, school, and the mental health system take appropriate steps to remedy, prevent, and promote better mental and emotional health (Ali & Eqbal, 2021).

This resilience programmes was proved to be highly effective in promoting strengths while mitigating difficulties among adolescents. By providing them with the necessary tools to navigate challenges successfully, these interventions contribute significantly to their overall well-being and academic success.

Methodology

The researcher adopted an evaluative research approach, and a quasi-experimental pre-test and post-test design was used. The study was conducted among adolescents who fulfilled the inclusion criteria at PSG Sarvanajana Manavar Illam, Coimbatore (TN). The sample size was 63

adolescents. The sampling technique was simple random sampling. The tool constructed for the study had two parts: the demographic variables, which consisted of age, sex, education status, leisure time activities, hobbies, habits, living with a single parent, and any relatives visiting them regularly or not. Do you know how to overcome your difficulties? The SDQ is a brief behavioural screening scale for measuring emotional and behavioural disorders in children and adolescents ranging from 10 to 18 years of age. Interventions that include role play to maintain a positive mindset. Resilience games help develop emotional balance. Video-assisted teaching shows a way in challenging and difficult life situations, so does the pamphlet on ways to build interventions.

Sample Size: The sample size was calculated by power analysis.

N = size of your study population –students

e^2 = acceptable error (5%)

SD^2p = standard deviation of a population based on review of literature (0.89)

z^2 = standard variation at a given confidence level (1.96)

$$n = \frac{Z^2 \times N \times SD^2p}{(N-1)e^2 + Z^2 \times SD^2p}$$

$$= \frac{1.96 \times 1.96 \times 113 \times 0.89 \times 0.89}{(113-1) \times .05 \times .05 + 1.96 \times 1.96 \times 0.89 \times 0.89}$$

$$= \frac{197.12}{5.6 + 3.04} = \frac{197.12}{28.64}$$

$$= \frac{39.79}{100} \times 40 = 59.78$$

n= 59.78

Power analysis revealed to have 59.78 samples, expecting the 40 percent attrition due to data collection during pandemic. The investigator selected final sample size of 63.

Power analysis is revealed to have 63 samples. Formal permission was obtained from the ethical committee of the PSG IMS&R Institute. The investigator introduced the study to adolescents, obtained their assent and their parental (guardian's) consent from the warden for their willingness to participate in the study, explained the purpose of the study to the adolescents, and assured them of the confidentiality of the information being given during the study. A total of 63 adolescents were selected by simple random technique based on the inclusion criteria of adolescents in the age group of 10–19 years residing in orphanage homes and adolescents who were present at the time of data collection. Those unwilling were excluded criterion.

The samples were assessed by socio-demographic data, which consisted of age, sex, education status, leisure time activities, hobbies, habits, living with both parents or a single parent, and any relatives visiting them regularly or not. Do you know how to overcome your difficulties? The SDQ comprises a total of 25 items divided into five subscales: emotional problems, hyperactivity, relationships, conduct, and pro-social behaviour, with five items in each subscale. The tool is a standardised one, and Cronbach's alpha ranged from 0.33 to 0.45 levels of agreement. It is highly reliable and valid tool to use the scale for adolescents.

A pre-test was conducted to assess the demographic variables and the SDQ, a brief behavioural screening scale. Intervention was administered through role play to maintain a positive mindset. Resilience games help develops emotional balance. Video-assisted teaching on and a pamphlet based on ways to build interventions are other helps. The post-test was carried out using the same questionnaire. The information was entered into an Excel sheet and examined through IBM SPSS Statistics 28.

Results

The results have been shown in Tables 1 to 5.

Table 1: Frequency and percentage distribution of demographic variables of adolescents (n=63)

S. No.	Demographic variables	f	%
1	Age in years		
	10-12	11	17.5
	13-15	42	66.7
	16-18	10	15.8
2	Standard at school		
	6-8	27	42.9
	9-11	36	57.1
3	Hobbies		
	Reading	35	55.6
	Sports	28	44.4
4	Habits		
	Chatting with friends	28	44.4
	Helping others	35	55.6
5	Leisure time activities		
	Drawing	3	4.8
	Sleeping	38	60.3
	Sports	22	34.9
6	How long staying in orphanage home		
	<1year	19	30.2
	>4years	5	7.9
	1-2 years	25	39.7
	3-4 years	14	22.2

S. No.	Demographic variables	f	%
7	When you face any difficulties in life, how do you overcome		
	Friends	28	44.4
	Resistance	24	38.1
	Self confidence	6	9.5
	Tolerance	5	7.9
8	Are you having single parent or parent-less		
	Yes	60	95.2
	No	3	4.8
9	Do you have friends in this home	63	100
10	Any relatives visiting you	63	100

Table 2: Assessment of pre-test and post-test level of strengths and difficulties among adolescents (n=63)

Strengths and difficulties	Normal		Borderline		Abnormal	
	f	%	f	%	f	%
Pre-test	0	0	31	49	32	51
Post-test	34	54	29	46	0	0

Table 3: Effectiveness of resilience programme on domain wise strengths and difficulties among adolescents (n=63)

Strengths and difficulties	Test	Mean ± S.D	Paired 't' test value
Emotional symptoms	Pre-test	6.98±1.03	t = 10.723 p=0.0001 S***
	Post-test	3.96 ± 1.78	
Conduct problem	Pre-test	5.77 ± 1.06	t = 7.669 p=0.0001 S***
	Post-test	3.90 ± 1.61	
Hyperactivity	Pre-test	6.40 ± 1.42	t = 14.016 p=0.0001 S***
	Post-test	3.19 ± 1.47	
Peer problem	Pre-test	8.62 ± 3.67	t = 20.264 p=0.000 S***
	Post-test	4.63± 1.16	
Prosocial behaviour	Pre-test	8.33± 3.90	t = 15.819 p=0.000 S***
	Post-test	4.27± 1.27	
SDQ impact supplement	Pre-test	1.68± 0.97	t = 4.408 p=0.0001 S***
	Post-test	0.57± 0.13	

***p<0.001, S – Significant

Table 4: Effectiveness of resilience programme on over all strengths and difficulties among adolescents (n=63)

Strengths and Difficulties	Mean ± S.D	Paired t' test value
Pre-test	37.79 ± 3.22	t = 25.763 p=0.0001 S***
Post-test	20.54 ± 4.16	

***p<0.001, S – Significant

Table 5: Association of pres test strengths and difficulties among adolescents with selected demographic variables (n=63)

S. No.	Demographic variables	Borderline		Abnormal		Chi Square Value
		f	%	f	%	
1	Age in years					χ^2 = 25.068 df= 2 p = 0.000 S***
	10-12	1	1.6	10	15.9	
	13-15	30	47.6	12	19.0	
	16-18	0	0.0	10	15.9	
2	Standard at school					χ^2 = 0.132 df= 1 p=0.716 N.S
	6-8	14	22.2	13	20.6	
	9-11	17	27.0	19	30.2	
3	Hobbies					χ^2 = 0.384 df= 1 p=0.535 N.S
	Reading	16	25.4	19	30.2	
	Sports	15	23.8	13	20.6	
4	Habits					χ^2= 0.384 df= 1 p=0.535 N.S
	Chatting with friends	15	23.8	13	20.6	
	Helping others	16	25.4	19	30.2	
5	Leisure time activities					χ^2 = 3.587 df= 2 p=0.166 N.S
	Drawing	0	0.0	3	4.8	
	Sleeping	21	33.3	17	27.0	
	Sports	10	15.9	12	19.0	
6	How long staying in orphanage home					χ^2 = 14.792 df= 3 p=0.002 S***
	<1Year	8	12.7	11	17.5	
	>4Years	0	0.0	5	7.9	
	1-2 years	19	30.2	6	9.5	
	3-4 years	4	6.3	10	15.9	
7	When you face any difficulties in life, how do you overcome					χ^2 = 5.294 df= 3 p=0.151 S**
	Friends	15	23.8	13	20.6	
	Resistance	13	20.6	11	17.5	
	Self confidence	3	4.8	3	4.8	
	Tolerance	0	0.0	5	7.9	
8	Are you having single parent or parentless:					χ^2 = 3.051 df= 1 p=0.081 N.S
	Yes	31	49.2	29	46.0	
	No	0	0.0	3	4.8	

***p<0.001, **p<0.01, N.S – Not Significant

Discussion

Strengths and difficulties of adolescents are interpreted as normal difficulty, borderline difficulty, and abnormal difficulty, which were used in this study to interpret the different levels of challenges faced by adolescents.

When it comes to normal difficulty, adolescents often encounter typical obstacles that are within the range of what is expected for their age. These challenges can include navigating friendships, dealing with academic pressures, and finding their identity. While it may be challenging at times, facing and overcoming these obstacles can contribute to their personal growth and development. Borderline difficulty, on the other hand, refers to challenges that lie between normal difficulty and abnormal difficulty. Adolescents facing borderline difficulty may experience a heightened level of obstacles in their lives. These difficulties might include mental health issues, academic struggles, or challenges related to their family and social environment. Despite the increased challenges, the strengths of adolescents facing borderline difficulty often lie in their resilience and the ability to seek support from trusted individuals.

Abnormal difficulty refers to significant challenges that exceed what is typically expected during adolescence. These difficulties can manifest in various forms, such as severe mental health disorders, substance abuse, or significant traumas. The strengths of adolescents facing abnormal difficulty may include their ability to adapt, seek professional help, and develop coping mechanisms to navigate through these immense challenges.

The findings represent the description of demographic variables of adolescents. In regard to age of adolescents, 42 (66.7%) were between the age group of 13-15 years. In regard to the class, 36 (56.1%) were studying in 9-11 standard, with regard to the hobbies 35 (55.6%) were in sports. In regard to the habits 35 (55.6%) were helping others, 25 (39.7%) were staying in orphanage home for 1-2 years, 28 (44.4%) overcame their difficulties in life from their parents, majority of adolescents i.e. 60 (95.2%) had single parent, 63 (100%) had friends in orphanage home and the relatives were visiting regularly.

The present study results have been found to be consistent with a cross-sectional study by Christian et al (2019) on resilience level among adolescent children, a school-based study in Kolkata. The samples were 151 students of 7-9 standards in a school of Kolkata. A Child and Youth Resilience Measure-12 questionnaire was used. Ethical issues were addressed. SPSS (v.16.0) was used for data analysis. The result revealed that among 151 students of 12-14 years, 57 (37.7%) Physical activities 79 (52.3%), Extracurricular activity yes 137 (90.72%). The study concluded that the adolescents were engagement in physical activity will help increase resilience level and build up the coping capacity.

In the analysis of pre-test, 32 (51%) had abnormal strengths and difficulties, 31 (49%) had border line strengths and difficulties among adolescents. The present study results have been found to be contradictory to a descriptive cross-sectional study conducted in assessment of psychological problems in school going adolescents from schools of urban area (Rahul & Ragini, 2021). The samples were 500 adolescents in 4 public schools. Data was collected by demographic information, and Strengths and Difficulties Questionnaire. The result revealed that total difficulties score was normal (80.4%), borderline (11.6%) and abnormal (8%). The study concluded that the psychological problems are fairly common in the adolescent age group. Adolescents having mental health problems and disorders need to have access to timely, integrated, multi-disciplinary mental health services to ensure effective assessment, treatment, and support.

The overall comparison between the pre-test and post-test revealed that the pre-test mean score of strengths and difficulties among adolescents was 37.79 ± 3.22 and the post-test mean score was 20.54 ± 4.16. The mean difference score was 17.25. The calculated paired t test value of t = 25.763 was found to be statistically significant at $p<0.001$ level. This clearly infers that resilience programme on over all strengths and difficulties among adolescents were found to be effective in reducing the level of difficulties and enhanced the strength among the adolescents in the post test. So the research hypothesis H1 was retained.

Our finding is supported by the study of Prabhu & Shekhar (2017), who conducted a cross-sectional study using descriptive research design on resilience and perceived social support among school-going adolescents in Mangaluru. School-going adolescents from grades 8–10 of the four schools of Mangaluru city were selected through convenient sampling (n = 206). Data were collected through self-administered scales. Descriptive statistics and t-test were applied. The study result showed that mean age of the study sample was 14.10 (±0.896) years. Adolescents had mild level of perceived stress, high PSS, and moderate resilience. Significant difference was noted between boys and girls in the global PSS and PSS from friends and others. The study concluded that moderate resilience highlights the scope for resilience building programmes in schools of Mangaluru. Further, the gender differences in the measured competencies indicate the need to develop gender-specific intervention packages.

The findings revealed that the demographic variable age (χ^2= 25.068, p = 0.000), how long staying in orphanage home (χ^2=14.792, p=0.002), when you face any difficulties in life, how do you overcome (χ^2= 5.294, p=0.151) had shown statistically significant association with pre-test level of strengths and difficulties among adolescents at

p<0.001 level. The other demographic variables had not shown statistically significant association with pre-test level of strengths and difficulties among college students.H2 was retained.

Recommendations

- A similar study can be undertaken with a large sample for better generalisation of the findings.
- A comparative study can be conducted among adolescent students of urban and rural areas on management of resilience programme on strengths and difficulties among adolescents.

Implications of study

Nursing practice: Guides and counsellors should be appointed in the school for the help of students in facing the strengths and difficulties. Due attention should be paid to the period of adolescence since the students at this stage are more prone to encounter various psychological problems which are likely to affect their physical, mental, emotional, health, home and social adjustment.

Nursing administration: Provision of various types of co-curricular activities should be in every school & colleges; using teachers as facilitators to implement the programme in the schools.

Nursing education: Curriculum should be so framed as; as to be helpful in the mental health of government school students. The role of teacher should be as a monitor, and he/she should encourage the students to take part in co-curricular activities and social activities.

Nursing research: Researchers should also consider the development and evaluation of interactive educational programmes with the use of modern technology (e.g. social media, mobile applications, etc.) for adolescents within the context of society, in order to provide evidence of their impact.

Limitations of the study

- The investigator found difficult in conducting the study during the Covid-19 pandemic situation.
- Lack of free time among the samples to spend for research study. The duration of the intervention was limited to 45 minutes.

Conclusion

The study aimed at assessing the resilience programme on strengths and difficulties among adolescents in a selected Orphanage Home. The investigator concluded that there was significant reduction in the level of in reducing the level of difficulties and enhanced the strength among the adolescents after administration of resilience programme.

References:

1. Malhi GS, Das P, Bell E, et al. Modelling resilience in adolescence and adversity: A novel framework to inform research and practice. *Transl Psychiatry* 2019; 9 (1) 316
2. Kalaiyarasan MM, Daniel Solomon. Mental Health among Adolescence. : *International Journal of Research in Applied Natural and Social Sciences* 2014; 2 (8): 27-32
3. Luthar SS, Cicchetti D, Becker B. The construct of resilience: A critical evaluation and guidelines for future work. *Child Development* 2000; 71 (3): 543-62
4. Lee TY, Chau KC, Wai MK. Resilience as a positive youth development construct: A conceptual review. *The Scientific World Journal* 2012: 1-9. doi 10.1100/212/390450
5. Pinto T M, Laurence PG, Macedo CR, Macedo EC. Resilience programs for children and adolescents: A systematic review and meta-analysis. *Frontiers in Psychology* 2021 November, 2012;12.doi.org/103389/fpsyg.2021.754115
6. Christian Y, Craig JC, Clapham Kathleen, Banks Sandra, Williamson Anna. The prevalence and protective factors for resilience in adolescent aboriginal Australians living in urban areas: A cross-sectional study. *Australian and New Zealand Journal of Public Health* 2019; 43 (1): 8-14
7. Prabhu SG, Shekhar R. Resilience and perceived social support among school-going adolescents in Mangaluru. *Indian J Soc Psychiatry* 2017; 33: 359-64
8. Ali A, Eqbal S. Mental health status of tribal school going adolescents: A study from rural community of Ranchi, Jharkhand. *Telangana Journal of Psychiatry* 2016; 2(1): 38-41
9. Rahul M, Ragini M. Assessment of psychological problems in school going adolescents from schools of Urban area. *MedPulse International Journal of Anesthesiology* 2021; 19(2): 18-22 ■