

Original Article

A pilot study to investigate the effectiveness of problem focused strategies on maladjustment and scholastic performance among children of alcoholics in selected community area at Erode

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ABSTRACT

Context: Children of alcoholics showed in general more maladjustment tendencies. Due to this rampant parental alcoholic disorder, the parents have neglected their children hence denying them the much-needed support for achievement of academic grades. **Aim:** The present study aimed to investigate the effectiveness of problem focused strategies on maladjustment and scholastic performance among children of alcoholics between experimental and control group. **Methods:** A quasi-experimental design was used in this study. Snow ball sampling technique was used for selecting 24 samples, in which 12 samples in experimental group and 12 in control group. The tools used for the study were background variables and Mathew Maladjustment Inventory and Academic performance test. Problem focused strategies were intervened for 2 months in eight sessions, with duration of 30–45 min. **Findings:** Results revealed that paired “*t*” test value within the experimental group on maladjustment (pre-test and post-test) showed statistical significance ($t = 4.9$) among children of alcoholics. Paired *t* test value within the control group (pre-test and post-test) showed not quite statistical significance ($t = 0.68$) among children of alcoholics. Paired “*t*” test value within the experimental group on Scholastic performance (pre-test and post-test) showed statistical significance ($t = 2.44$) among children of alcoholics. Paired *t* test value within the control group (pre-test and post-test) showed not quite statistical significance ($t = 0.27$) among children of alcoholics. Unpaired *t* test value (between experimental and control group) on maladjustment showed statistical significance ($t = 5.14$). Unpaired *t* test value (between experimental and control group) on scholastic performance showed statistical significance ($t = 2.73$). Correlation between the level of maladjustment and scholastic performance among children of alcoholics revealed significant negative correlation in experimental group compared to control group. **Conclusion:** The study findings revealed that administration of problem focused strategies was significant in reducing maladjustment symptoms and improves the scholastic performance.

Keywords: Children of alcoholics, maladjustment, problem focused strategies, scholastic performance

Submitted: 18-07-2022, **Accepted:** 08-08-2022, **Published:** 30-09-2022

INTRODUCTION

Alcohol is a universal problem and of a great public health concern. Alcohol addiction is now the third leading cause of life style choice death. Nearly More than 3 million people died as a result of harmful use of alcohol in 2016, according a report released by the World Health Organization (WHO).^[1] This represents 1 in 20 deaths. More than three quarters of these deaths were among men. Overall, the harmful use of alcohol causes more than 5% of the global disease burden.

Parental drinking problem can directly effect on their children. For this reason, children of alcoholics (COAs) tend to show negative outcomes while they are growing up, such as depression, anxiety, suicidal ideation, substance abuse, or interpersonal difficulties.^[2]

In general, COAs appear to have lower self-esteem than non-COAs in childhood, adolescence and young adulthood. Children of alcoholics exhibit elevated rates of psychopathology. Anxiety, depression, and externalizing behavior disorders

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are more common among COAs than among children of non-alcoholics.^[3] The previous studies have shown that, compared to other children, children of parents who abuse alcohol perform less well in school and display worse academic achievements.^[4]

It is hypothesized that negative influence of parental alcoholism has impact on offspring development, health, and well-being, such as with increased risks of student behavioral problems, with potential implications on academic performance.^[5] It is anticipated that, children of alcoholic parents are likely to show signs of psychopathology and impairment which includes higher rates of internalizing disorders, externalizing behavior, alcohol and drug use and academic and cognitive deficits.^[6]

Studies have reported that children of alcohol dependent parents are predisposed to maladjustment. They often have personality disturbances manifested by signs of hostility, impulsiveness, depression, and sexual confusion. These children reported depressive and anxiety symptoms more frequently than children from non-addicted families.^[7]

In India, we do not have the awareness for the impact on COAs and the necessary intervention programs for the same. Many developed countries have a school-based support group system where the team is sensitized to the issues of COAs.^[8]

The children of the experimental Group received a form of intervention called Mathew's MGIT (Multiple Group interaction Technique) which consists of an initial lecture by the organizer followed by peer social interaction with awareness for generating social support and idea generation for problem solving. The children of control groups received an attention placebo Enrichment Programme and Individual Counseling (on demand only). The experimental group showed a higher positive improvement score compared to control group, indicating superiority of the peer interaction procedure particularly in the case of girls.^[9]

Children of alcoholics have little or no choice but to adapt to the environment and the family in which they are raised. In the future, affected children who go untreated may bring their troubles to adult relationships and families. Only few studies have looked at the impact of parental alcohol misuse on children. Lack of the previous research in this area and the prevalence of alcoholism are very high in both rural and in urban areas. Therefore, the present pilot study aimed to investigate the effectiveness of problem focused strategies on maladjustment and scholastic performance among children of alcoholics.

METHODS

This pilot study was approved by Institutional Human Ethical Committee. After obtaining written informed assent/consent,

children of alcoholics subjects who fulfilled the inclusion criteria such as with age between 15 and 18, both gender were recruited and enrolled in the study between January and June 2022. The total sample size was 24, 12 in experimental group and 12 in control group. Snowball sampling technique was used to recruit the study subjects. Script interview was conducted to identify the initial sample and further required subjects for the study recruited based on the referrals of existing subjects.

All participants were interviewed before intervention by assessing background variables age, gender, educational standard, birth order, family monthly income, type of family, mother's education, father education, and parent's occupation. The levels of maladjustment were assessed by Mathew maladjustment inventory and scholastic performance by Academic performance test. Immediately after pretest the subjects received problem focused strategies which comprises group sessions. The sessions schedule were as follows

Session I: Introduction and creating trust worthy relationship

Session II: Recognizing the stress and its symptoms

Session III: Focused breathing an relaxation response training

Session IV: Training problem solving skills

Session V: Internal and external locus of control

Session VI: Training coping using humors and explaining the advantages of social support

Session VII: Engaging in work tasks and time management to improve study skills

Session VIII: Reinforcement and Follow up

Problem focused strategies were intervened for 8 weeks, with duration of 30–45 min. Control group received standard methods of care. Post-test was conducted using the same assessment techniques for all participants. Pilot study was executed to check the feasibility and time requirement of the study. Risk benefit ratio was calculated. Confidentiality of the data was ensured throughout the study.

Descriptive, parametric, and non-parametric statistical methods were used to analyze and interpret the data. The data were expressed as frequency, percentage distribution, mean, SE. Paired "t" test, and Unpaired "t" test was used for estimating the effectiveness of problem focused strategies in experimental and control group. Correlation between the levels of maladjustment with scholastic performance among children of alcoholics was analyzed using Karl–Pearson correlation method in both groups. Chi-square test was used to associate the maladjustment level and scholastic performance with selected background variables. A probability of 0.05 or less was taken as statistically significant. Statistical Package for the Social Sciences, PCT version 17(SPSS Inc, Chicago) was used for analyzing the data.

RESULTS

Description of Samples Characteristics

Percentage distribution of children of alcoholics according to their demographic variables in experimental group and control group

Experimental group

Distribution of children of alcoholics according to their age group shows that 58% of them were 15–16 years and 42% were 17–18 years. About 50% of the children of alcoholics were male and 50% of them were females. Most (42%) of the children of alcoholics were studying 12th standard, 33% were studying 10th standard and 25% were studying 11th standard. According to the birth order, highest percentages (42%) of them were second born, 33% were first born and 25% were third born. Family monthly income showed highest percentage (67%) earned Rs.5000–10,000 and 33% belong to the income group of Rs.10001–15,000. Highest percentages (83%) were living in nuclear family and 17% were from joint family. Father’s educational status reported that 75% were illiterate, 17% were educated up to primary to secondary, and only 8% were educated up to higher secondary. Mother’s educational status reported that 58% were educated up to primary to secondary and 42% were illiterate. Parent’s occupation showed that 58% of them were unskilled worker and 42% were skilled worker.

Control Group

Distribution of children of alcoholics according to their age group shows that 33% of them were 15–16 years and 67% were 17–18 years. About 50% of the children of alcoholics were male and 50% of them were females. Most (67%) of the children of alcoholics were studying 12th standard, 16.5% were studying 10th standard and 16.5% were studying 11th standard. According to the birth order, highest percentages (42%) of them were first born, 33% were second born and 25% were third born. Family monthly income showed highest percentage (58%) earned Rs.5000–10,000 and 42% belong to the income group of Rs.10001–15,000. Highest percentages (92%) were living in nuclear family and only 8% were from joint family. Father’s educational status reported that 75% were illiterate and 25% were educated up to primary to secondary. Mother’s educational status reported that 67% were educated up to primary to secondary and 33% were illiterate. Parent’s occupation showed that 67% of them were unskilled worker and 33% were skilled worker.

The Level of Maladjustment and Scholastic Performance among Children of Alcoholics

In pre-test, experimental group showed 8% with mild level of maladjustment, 67% with moderate maladjustment level, and 25% had severe level of maladjustment. In post-test, 67% experienced mild level of maladjustment, 33% of subjects showed moderate maladjustment level and none of

the subjects had severe level of maladjustment. In pre-test, control group showed 8% with mild level of maladjustment, 75% with moderate maladjustment level, and 17% had severe level of maladjustment. In post-test, 8% experienced mild level of maladjustment, 84% of subjects showed moderate maladjustment level, and 8% had severe level of maladjustment [Table 1].

Frequency and percentage distribution of pre-test level of scholastic performance in experimental group showed 58% were below average, 42% were average and none of the subjects reported good level of scholastic performance. In post-test none of the subjects reported below average level of scholastic performance, 67% showed average level of and 33% showed good level of scholastic performance. Frequency and percentage distribution of pre-test level of scholastic performance in control group showed 67% were below average, 25% were average, and 8% of the subjects reported good level of scholastic performance. In post-test 50% of the subjects reported below average level of scholastic performance, 42% showed average level of scholastic performance, and only 8% showed good level of scholastic performance [Table 2].

Comparison of Problem Focused Strategies on Maladjustment and Scholastic Performance among Children of Alcoholics between Experimental and Control Group

The mean scores in experimental group decreased in the post-test and showed significant reduction in level of maladjustment comparatively to the control group among children of alcoholics. The Paired *t*-test value of maladjustment scores showed statistical significance in experimental group compared to control group. The mean scores in experimental group increased in the post-test and showed significant

Table 1: Frequency and percentage distribution of level of maladjustment among children of alcoholics ($n_1=12, n_2=12$)

Level of maladjustment	Experimental group		Control group	
	Pretest, <i>n</i> (%)	Posttest, <i>n</i> (%)	Pretest, <i>n</i> (%)	Posttest, <i>n</i> (%)
Mild level	1 (8)	8 (67)	1 (8)	1 (8)
Moderate level	8 (67)	4 (33)	9 (75)	10 (84)
Severe level	3 (25)	-	2 (17)	1 (8)

Table 2: Frequency and percentage distribution of scholastic performance among children of alcoholics ($n_1=12, n_2=12$)

Level of scholastic performance	Experimental group		Control group	
	Pretest, <i>n</i> (%)	Posttest, <i>n</i> (%)	Pretest, <i>n</i> (%)	Posttest, <i>n</i> (%)
Below average	7 (58)	-	8 (67)	6 (50)
Average	5 (42)	8 (67)	3 (25)	5 (42)
Good	-	4 (33)	1 (8)	1 (8)

improvement in level of scholastic performance comparatively to the control group among children of alcoholics. The Paired *t*-test value of scholastic performance scores showed statistical significance in experimental group compared to control group. Unpaired *t*-test calculated to determine the effectiveness of problem focused strategies on maladjustment and scholastic performance among children of alcoholics in both experimental and control group. The maladjustment level and scholastic performance level showed that there is significant difference between experimental and control group. Null hypothesis is rejected and research hypothesis is accepted. Hence, it can be concluded that there is significant difference between the post-test score of maladjustment and scholastic performance among children of alcoholics [Table 3].

Domain wise comparison of the mean scores in experimental group decreased in the post test and showed significant reduction in level of maladjustment among children of alcoholics. The Paired *t*-test value of maladjustment scores showed statistical significance in experimental group [Table 4].

Domain wise comparison of the mean scores in control group marginally decreased in the posttest and showed no significant reduction in level of maladjustment among children of alcoholics. The Paired *t*-test value of maladjustment scores showed statistical non significance in control group [Table 5].

Correlation between the level of maladjustment and scholastic performance among children of alcoholics revealed significant negative correlation in experimental group compared to control group. Association between post-test maladjustment scores and selected demographic variables among children of alcoholics

in experimental and control group revealed that there was no significant association between age, gender, educational standard, birth order, family monthly income, type of family, mother’s education, father education, and parent’s occupation.

DISCUSSION

From the pilot study findings, it can be concluded that administration of problem focused strategies reduces maladjustment and improves scholastic performance among children of alcoholics. This pilot study result was consistent with the study findings of competencies are skills that help children cope with stress, thereby reducing their risk for alcoholism and other psychosocial problems. Most programs teach specific emotion-focused and problem-focused coping skills. Emotion-focused coping is a process by which the child seeks social support or uses strategies such as distancing or reframing the negative aspects of the situation to emphasize the positive aspects. Problem-focused coping emphasizes the problems of living in an alcoholic home, such as having to explain unusual parental behavior to friends. Emotion-focused and problem-focused skills are not mutually exclusive, and children who learn both skills are better equipped to manage their lives.

Using a high-risk community sample, multiple regression analyses were conducted separately for mothers (*n* = 416) and fathers (*n* = 346) to test the unique, prospective influence of parental negative effect on adolescent maladjustment (internalizing symptoms, externalizing symptoms, and negative emotionality) 2 years later over and above parental

Table 3: Comparison of problem focused strategies on maladjustment and scholastic performance among children of alcoholics between experimental and control group

Variables	Group	Mean	SD	Significance of paired <i>t</i> -test	Significance of unpaired <i>t</i> -test
Level of maladjustment	Experimental group Pretest	63.16	16.9	<i>t</i> =4.9* <i>P</i> <0.05	Experimental and control group Posttest
	Experimental group Posttest	35	9.02		
	Control group Pre-test	61	15	<i>t</i> =0.68 <i>P</i> <0.05	<i>t</i> =5.14* <i>P</i> <0.05
	Control group Post-test	56	14		
Scholastic performance	Experimental group Pre-test	52	12	<i>t</i> =2.44* <i>P</i> <0.05	Experimental and control group Post-test
	Experimental group Post-test	64	10.79		
	Control group Pre-test	50.5	11	<i>t</i> =0.270 <i>P</i> <0.05	<i>t</i> =2.73* <i>P</i> <0.05
	Control group Post-test	51.5	11.6		

Level of significance - **P*<0.05. SD: Standard deviation

Table 4: Domains of maladjustment among experimental group

Domains of maladjustment	Experimental group	Mean	SD	Significance of paired t-value
Anxiety	Pre-test	9.75	2.5	3.22*
	Post-test	6.83	1.81	
Depression	Pre-test	11.4	4.80	1.75*
	Post-test	8.8	3.9	
Mania	Pre-test	8.41	2.09	2.5*
	Post-test	6.4	1.75	
Inferiority	Pre-test	9.75	2.52	4.3*
	Post-test	5.41	2.32	
Paranoia	Pre-test	9.16	3.37	3.08*
	Post-test	6	1.29	
General maladjustment	Pre-test	14.66	4.69	6.08*
	Post-test	5.91	1.89	

Level of significance - * $P < 0.05$. SD: Standard deviation

Table 5: Domains of maladjustment among control group

Domains of maladjustment	Control Group	Mean	SD	Significance of Paired t-value
Anxiety	Pre-test	9.33	2.5	0.68
	Post-test	8.83	2.54	
Depression	Pre-test	11.4	4.80	1.05
	Post-test	10.33	4.2	
Mania	Pre-test	8.41	2.09	0.45
	Post-test	8.83	2.37	
Inferiority	Pre-test	9.75	2.52	1.08
	Post-test	8.75	2.12	
Paranoia	Pre-test	9.16	3.37	1.05
	Post-test	6	1.29	
General maladjustment	Pre-test	14.66	4.69	1.12
	Post-test	13.0	3.67	

Level of significance - $P < 0.05$. SD: Standard deviation

alcohol and affective disorders, major disruption in the family environment, and parenting. Adolescent sex was tested as a moderator. Results indicated that maternal (but not paternal) negative affect had a unique, prospective effect on adolescent internalizing symptoms in girls and negative emotionality in both sexes, but did not predict adolescent externalizing symptoms. Findings demonstrate that mothers' negative affect may have unique effects on adolescent adjustment, separate from the effects of clinically significant parental psychopathology, parenting, and disruption in the family environment.^[10]

A study was established to influence alcohol related parental behavior disorders on children's academic achievement in public primary schools at Kenya. The target population was

1385 persons consisting of head teachers, teachers, and learners in classes 6 and 7. Due to this rampant parental alcoholic disorder, the parents have neglected their children hence denying them the much-needed support for achievement of academic grades. This neglect was manifested in children lacking basic needs, being unkept, carelessness in their academic assignments, lack of concentration in class, chronic absenteeism, truancy, deviancy, and antisocial behavior. The effects of this neglect cause the children to perceive rejection and therefore, are unable to achieve their full potential in academic work.^[11]

The mental impact of growing up in an alcoholic household often persists into adulthood and can lead to many different maladaptive behaviors that can have a significant impact on your ability to connect with others and have close, trusting relationships.^[12]

Treatment will look different for every child of an alcoholic and can vary depending on the age and the particular traits developed. The road to recovery is not easy, but children can learn better and more appropriate coping skills, cultivate healthier relationships, and develop an improved sense of self-worth and self-esteem, among other benefits.^[13] There have been attempts to study various aspects of children of people with alcohol dependence from India and some published literature is available that looks at various domains in the same sample.^[14]

A systematic review on risk and protective factors for COAs shows that if the problems are identified at the earliest age and appropriate rehabilitation services are provided then the complication can be prevented.^[2] The studies reported that being exposed to parental alcoholism, children had approximately twice the risk of meeting criteria for lifetime major depressive disorder and persistent depressive disorder.^[15]

CONCLUSION

Pilot study was executed to check the feasibility and time requirement of the study. From the pilot study findings, it can be concluded that administration of problem focused strategies reduces maladjustment and improves scholastic performance among children of alcoholics.

REFERENCES

1. World Health Organization. Global Status Report on Alcohol and Health. Geneva: World Health Organization; 2016.
2. Park S, Schepp KG. A systematic review of research on children of alcoholics: Their inherent resilience and vulnerability. *J Child Fam Stud* 2015;24:1222-31.
3. Nancy A, Asir SD. A study on family environment among children of alcoholics at Chettikulam, Perambalur District. *IOSR*

- J Humanit Soc Sci (IOSR-JHSS) 2014;19:26-32
4. Torvik FA, Rognmo K, Ask H, Roysamb E, Tambs K. Parental alcohol use and adolescent school adjustment in the general population: Results from the HUNT study. *BMC Public Health* 2011;11:706.
 5. Berg L, Back K, Vinnerljung B, Hjern A. Parental alcohol-related disorders and school performance in 16-year-olds-a Swedish national cohort study. *Addiction* 2016;111:1795-803.
 6. Rothenberg WA, Hussong AM, Chassin L. Modeling trajectories of adolescent-perceived family conflict: Effects of marital dissatisfaction and parental alcoholism. *J Res Adolesc* 2016;27:105-21.
 7. Fitzgerald HE, Sullivan LA, Ham HP, Zucker RA, Bruckel S, Schneider AM, *et al.* Predictors of behavior problems in three-year-old sons of alcoholics: Early evidence for the onset of risk. *Child Dev* 1993;64:110-23.
 8. Sawant NS. Children of alcoholics: Are they vulnerable or resilient? *Ann Indian Psychiatry* 2020;4:111-4.
 9. Thampi A. Problems of Children of Alcoholics: Identification and Intervention. Thesis Submitted to the Mahatma Gandhi University; 2002.
 10. Haller M, Chassin L. The unique effects of parental alcohol and affective disorders, parenting, and parental negative affect on adolescent maladjustment. *Merrill Palmer Q (Wayne State Univ Press)* 2011;57:4.
 11. Kamau AN. Influence of Alcohol Related Parental Behavior Disorders on Learner's Academic Achievement in Public Primary Schools in Marmanet, Laikipia County, Kenya. Thesis Submitted to Kenyatta University; 2017.
 12. Hooper LM. In: Levesque R, editor. *Parentification*. Encyclopedia of Adolescence. Champaign, Switzerland: Springer; 2017.
 13. American Association for Marriage and Family Therapy. *Children of Alcoholics*. [Last retrieved on 2015 Apr 26].
 14. Stanley S, Vanitha C. Psychological correlates in adolescent children of alcoholics-implications for intervention. *Int J Psychosoc Rehabil* 2008;12:67-80.
 15. Thapa S, Selya AS, Jonk Y. Time-varying effects of parental alcoholism on depression. *Prev Chronic Dis* 2017;14:E136.



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