

# Effect of a Brief Intervention on Anger Management among Adolescents

Uma Maheswari A<sup>1</sup>, Baby Rathinasabapathy<sup>2</sup>, Padmavathi Nagarajan<sup>3</sup>

<sup>1</sup>Senior Nursing Officer, Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER), Pudhucherry, India, <sup>2</sup>Vice Principal, College of Nursing, Mother Theresa Post Graduate and Research Institute of Health Sciences, Pudhucherry, India, <sup>3</sup>Assistant Professor, College of Nursing, JIPMER, Pudhucherry

## Abstract

**Background:** Adolescence is the transition period between childhood and adulthood, during which an individual experiences a number of emotional issues. Adolescents' anger may be triggered and/or intensified by variety of factors. To be healthy and safe, adolescents need to be equipped with skills that allow them to cope with anger in a productive manner. This study was aimed to assess the effect of anger management techniques on the level of anger among adolescents.

**Method:** An experimental pre-test, post-test design was adopted to achieve the objectives of the study. A simple random sampling technique was used to select 120 adolescents, studying at Government schools of Puducherry. Socio-demographic details were collected by a semi-structured proforma. The level of anger was assessed by Adolescent anger rating scale before and after the intervention. Anger management techniques such as deep breathing exercises, assertive communication and the techniques to improve interpersonal relationship were taught to the subjects over a period of one-week.

**Results:** Majority of the subjects was in the age group of 14 years, in both the experimental (n=28, 46.67%) and control group (n= 26, 43.33%). There was a significant reduction in the level of anger among the experimental group from the pre-test mean (SD) score of (92.5 ± 19.13) to post-test (68.95 ± 11.58) and the paired 't' test value (12.91) demonstrated that the difference was statistically significant at p<0.001.

**Conclusion:** The study results indicate that anger management intervention was effective in reducing the level of anger among adolescents. The techniques adopted in the study are simple and cost effective and the regular practice of these techniques would definitely enhance the coping skills of adolescents in controlling their anger.

**Key Words:** Adolescents, Anger Management Techniques, behavioural changes

## Introduction

Anger is one of the basic feelings that the individuals experience when they do not meet their needs in daily life. Anger may be viewed as an acute emotional reaction elicited by any of a number of stimulating situations including threat, overt aggression, restraint, verbal attack, disappointment, or frustration.<sup>1</sup> When a person gets anger, it triggers physiological and biological

changes, such as increased heart rate and blood pressure, high energy levels, and a rise in adrenalin, noradrenalin, and hormones.<sup>2</sup> Anger manifests itself both outwardly in physical and verbal aggression, and inwardly in various forms of self-harm. School personnel are confronted not only with the direct effects of anger and aggression, such as threats of violence and fighting among students, but also with the indirect effects such as learning difficulties and social adjustment problems.<sup>3</sup> Adolescents' anger may be intensified by feelings of frustration, during which they experience a desire for greater privacy and independence. Some adolescents express their anger covertly by withdrawing from social activities

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**Corresponding author:**

**Padmavathi Nagarajan**

padmavathi2002@gmail.com

or not following through with their home or classroom obligations, while others express it overtly by screaming, throwing objects, or slamming doors. Some may exhibit both overt and covert anger behaviors.<sup>4</sup>

Risk among adolescents can be attributed to the many stressors, including: (1) peer pressure to conform the values and ideologies that may conflict with family and/or societal norms; (2) adjusting to the demands and expectations of school; (3) coping with physical, sexual, or emotional abuse by parents, teachers, and/or significant others; and (4) grappling with feelings of worthlessness, loneliness, and helplessness. Other stressors, such as parental divorce or death, poverty, neglect, and alcoholism, as well as bullying by peers may trigger anger outbursts in adolescents.<sup>5</sup> To be healthy and safe, adolescents need to be equipped with skills that allow them to cope with anger in a productive manner. Most anger management groups have the potential to help adolescents develop the resources to creatively and effectively manage their anger. Studies revealed that school-wide emotional-behavioral interventions focused on anger management techniques yielded a positive effect.<sup>6</sup> The aim of the present was to assess the effect of a brief intervention on anger management among adolescents.

## Materials and Methods

An experimental pre-test, post-test design was adopted to achieve the objectives of the study. A simple random sampling technique was used to select 120 adolescents, studying at Government schools of Puducherry. Permission was obtained from the Joint director of school education, Puducherry for conducting the study and the information was passed to the respective school head masters and class teachers.

By lottery method, subjects were assigned either to the experimental group (n=60) or to the control group (n=60). Adolescents of both gender, aged between 13-16 years and those subjects who lived with their parents or biological relatives were enrolled in the study. Subjects who stayed in the hostel were excluded. Written informed consent was obtained from the subjects and their parents after explaining the details of the study. Confidentiality was assured and the privacy was maintained throughout the study. Socio-demographic details were collected by a semi-structured proforma. The level of anger was

assessed by Adolescent anger rating scale (AARS)<sup>7</sup> before and after the intervention.

AARS is a 41 item, self-reported four point rating scale, ranging from hardly ever (1), some times (2), often (3), and very often (4) and is designed to measure the specific expressions of anger of adolescents. It has three domains: instrumental anger with twenty items, reactive anger with eight items, and anger control with thirteen items.<sup>7</sup> The score ranges from 41 to 164. Higher the score reflects greater endorsements of anger. Score of  $\leq 50\%$  is categorized as mild anger, 51-75% as moderate anger and  $>75\%$  as severe anger.

## Anger management techniques

Anger management comprises of quick control (deep breathing exercise), effective communication (assertiveness) and inter personal relationship (dealing with anger). Deep breathing exercise is done by taking in air through nose for four counts, holding it for two seconds, and then letting air out through mouth for six counts. As participants were doing the exercise, they were asked to notice the air going in and out of the body. Effective communication techniques with different styles of communication like assertive communication were taught to the participants by explaining how the ways of communication with others can make a difference to the responses that are received by someone. Further, the importance of interpersonal relationship that are helpful and supportive was explained to control the anger.

Participants in the experimental group were divided in to three sub groups (20 in to each group) and were administered anger management techniques for three days and practiced the techniques for another four days under the supervision of the researcher. Control group participants were asked to communicate their reaction to different anger provoking situations in writing. After a week, post-test was administered to both the groups. The content was validated by the experts from the field of Psychiatric Nursing, Clinical Psychology and Psychiatry.

## Results

### Socio-demographic characteristics of the participants

Out of 120 subjects, majority were in the age group

of 14 years, in both the experimental (n=28, 46.67%) and control group (n=26, 43.33%); Gender distribution was 30 (50%) equal in both the groups; Mostly, the subjects were second born child in both the experimental (n=24, 40%) and control group (n=27, 45%); 58 (96.67%) and 55 (91.67%) subjects were living with both of their parents in the experimental and control group respectively; 47 (78.33%) subjects in experimental group and 51 (85%) subjects in control group were from nuclear family. Majority of the subjects had their residence in urban

area, in both the experimental (n=57, 95%) and control group (n=57, 95%).

Different types of anger reactions are shown in **table 1**. Majority of the subjects (n=32, 53.33%) expressed their anger through verbal in the control group. Comparatively, 25 (41.67%) subjects in the experimental group had used other methods apart from the verbal and physical methods of reaction.

**Table 1: Different types of anger reactions of study participants (N=120)**

Type of anger reaction	Experimental Group		Control Group	
	No	%	No.	%
Verbal	24	40	32	53.33
Physical	11	18.33	8	13.33
Others	25	41.67	20	33.33

The pre-test and post-test means scores of anger in different domains in both the groups are summarized in Table 2.

**Table:2. Comparison of mean scores of anger before and after the intervention between experimental and control group (N=120)**

Level of anger on different domains	Experimental Group				Control Group				
	Pre- Test		Post- Test		Pre- Test		Post- Test		
	No.	%	No.	%	No.	%	No.	%	
<b>Instrumental anger</b>									
Mild Anger (51 – 75%)	31	51.67	54	90	24	40	25	41.67	
Moderate Anger (51 – 75%)	24	40	6	10	29	48.33	30	50	
Severe anger	5	8.33	0	0	7	11.67	5	8.33	
<b>Reactive anger</b>									
Mild Anger (51 – 75%)	19	31.67	50	83.33	22	36.67	19	31.67	
Moderate Anger (51 – 75%)	37	61.67	9	15	34	56.67	37	61.67	
Severe anger (>75%)	4	6.67	1	1.67	4	6.67	4	6.66	

**Cont... Table:2. Comparison of mean scores of anger before and after the intervention between experimental and control group (N=120)**

Anger control								
Mild Anger (51 – 75%)	8	13.33	35	58.33	19	31.67	19	31.67
Moderate Anger (51 – 75%)	45	75	24	40	39	65	37	61.67
Severe anger (>75%)	7	11.67	1	1.67	2	3.33	4	6.66
Total anger								
Mild Anger (51 – 75%)	21	35	52	86.67	22	36.67	20	33.33
Moderate Anger (51 – 75%)	34	56.67	8	13.33	37	61.67	40	66.67
Severe anger (>75%)	5	8.33	0	0	1	1.67	0	0

Before the intervention, the mean anger score in the experimental group was  $92.5 \pm 19.13$  and it was reduced to  $68.95 \pm 11.58$  after the intervention. The effect of anger management intervention was analyzed using the paired *t*-test. The value (12.91) demonstrated that the difference was statistically significant at  $p < 0.001$  and it is illustrated in **Table 3**.

Similarly, in the control group, the pre-test mean anger score was  $92.00 \pm 16.10$  and the post-test score was  $91.80 \pm 13.88$ . The calculated 't' value was 0.22 and the p value was 0.827 and did not approach the statistical significance. Further, the Chi-square analysis revealed that none of the socio-demographic parameters were associated with the level of anger except gender.

**Table 3: Comparison of pretest and posttest anger scores in the experimental Group (N=60)**

	Anger score Mean $\pm$ S.D	Paired 't' value	P value
Pre-test	$92.50 \pm 19.13$	t = 12.91	p = 0.001 *
Post- test	$68.95 \pm 11.58$		

\* Significant at  $p < 0.001$

## Discussion

The results of the present study demonstrated that the anger management techniques were effective in reducing the level of anger among adolescents. The study results are consistent with the previous studies conducted by various researchers.<sup>8-10</sup> A similar study from Tehran conducted by Mokhler et al had shown that the anger management training significantly decreased the level of anger among adolescent girls aged 15-18

years.<sup>11</sup> The literature review suggested that many of the anger management programmes employed deep breathing exercises, relaxation training and cognitive restructuring.<sup>10, 11</sup> Putranto et al developed an animated video for Indonesian car drivers to reduce their anger level. This educational video was used to reduce the risk associated with road safety and to change the driver's behaviour to control their anger.<sup>12</sup> The similar kind of intervention may be implemented for the children and

adolescents as a school based intervention to reduce the violence incidents.

Learning healthy anger management requires patience, a willingness to try different ways of dealing with anger, commitment, and practice.<sup>13</sup> Lenic et al described a creative group counseling approach for adolescents to manage their anger. Being aware of triggering factors, identifying the causes and practicing anger control techniques may be beneficial to control and prevent anger.<sup>14</sup>

Adolescents who learn to effectively manage their feelings of anger greatly decrease the incidence of self defeating behaviors, increase self-awareness, develop a healthier self-concept, and increase their ability to build positive and healthy relationships.

### Conclusion

The current study had explored the effectiveness of a school-based anger management intervention. Even though, it is not routinely taught in the schools and practiced by the students, the study findings have important implications in the field of education and mental health of adolescents. Since, today's adolescents face many situations that provoke anger, they should be helped to cope with this problem in an effective way. It is the responsibility of everyone in the society including the parents, teachers, counselors and the mental health professionals.

**Conflicts of Interest :** Nil

**Ethical Clearance:** Ethical approval was obtained from the Mother Theresa Post Graduate & Research Institute of Health Sciences, Puducherry.

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### References

1. Chaplin JP. Dictionary of Psychology. 2nd ed. New York: Dell, 1985, p.211-12.
2. Peacock J. Anger Management: Gaining Control of Your Anger. 1<sup>st</sup> ed. Mankato: Minn Capstone, 2000.
3. John E. Anger and Aggression. 2<sup>nd</sup> ed. 2000; Philadelphia: Mosby, 2000, p. 283-85.
4. Gabriel E, Nelson K. Destructive Anger among Adolescents: Management Strategies for Principals and Teachers” (2014). Faculty Publications. Paper 6. <http://digitalcommons.andrews.edu/gpc-pubs/6>
5. Thompson and Henderson. “Counselling Children”. 6th ed. Belmont: Brooks/Cole, 2004.
6. January AM, Casey R, Paulson D. A meta-analysis of classroom-wide interventions to build social skills. Do they work? School Psychology Review. 2011; 40:242-56.
7. Burney DM, Kromrey J. Initial Development and Score Validation of the Adolescent Anger Rating Scale. Educational Psychology Measure, 2001; 61: 446-60.
8. Serin NB. The Impact of anger management training on anger, aggression and problem-solving skills of primary school students. International Online Journal of Education and Teaching (IOJET). 2019; 6:525-43
9. Lök N, Bademli K and Canbaz M. The effects of anger management education on adolescents' manner of displaying anger and self-esteem: A randomized controlled trial. Arch of Psy Nurs. 2018;32: 75-81.
10. Down R, Willner P, Griffiths J. Anger Management groups for adolescents: a mixed-methods study of efficacy and treatment preferences. Clinical Child Psychology and Psychiatry. 2011; 16: 33-52.
11. Mokhber T, Masjedi A, Bakhtiari M. The Effectiveness of Anger Management Training on Decreasing the Anger of Unsupervised Girl Adolescents. Open Journal of Medical Psychology 2016; 5: 66-71
12. Putranto LS, Tajudin AN, Rostiana. Development of Anger Reduction Animated Video for Indonesian Car Driver. IOP Conference Series: Earth and Environmental Science, 2002; Volume 498.
13. Golden B. Healthy anger: How to help your child/teen manage their anger. New Living Magazine. Retrieved January, 2021, from [http:// www.newliving.com/issues/jan\\_2004/articles/ anger%20 for%teen](http://www.newliving.com/issues/jan_2004/articles/anger%20for%teen).
14. O'Lenic C, Arman JF. Anger management for adolescents: A creative group counseling approach. In G. R. Walz & R. K. Yep (Eds.), VISTAS: Compelling perspectives on counseling, 2005 (pp. 55-58). Alexandria, VA: American Counseling Association.