ORIGINAL ARTICLE



ANGER EXPERIENCE, EXPRESSION AND CONTROL IN CHILDREN WITH EMOTIONAL-BEHAVIOURAL PROBLEMS IN COMPARISON WITH NORMAL CHILDREN

SAIMA MAJEED¹, FARAH MALIK²

¹Ph D Fellow, Institute of Applied Psychology, University of the Punjab, Lahore Pakistan ²Professor, Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan

CORRESPONDENCE: SAIMA MAJEED, E-mail: saimamjeed57@yahoo.com

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ABSTRACT

OBJECTIVE

To determine the level of anger experience, anger expression and anger control in children with emotionalbehavioural problems in comparison of normal children and to determine the gender differences regarding all study variables in children both normal and with emotionalbehavioural problems.

STUDY DESIGN

Correlation study with cross sectional research design.

PLACE AND DURATION OF STUDY

study was completed in 6 months from three hospitals of the Lahore, Pakistan including Mayo Hospital, Services Hospital, Punjab Institute of Mental Health, and Children Library Complex.

SUBJECTS AND METHODS

Non probability, purposive sample of 200 children (100 normal, 100 with emotional-behavioural problems) was studied with the help of State- Trait anger Expression Inventory-2 Children Adolescents4, Demographic Information Sheet and Medical History Form.

RESULTS

Children with emotional-behavioural problems scored high on anger experience both state and trait as well as on anger expression both in and out. Children with emotionalbehavioural problems were score low on anger control subscale.

CONCLUSION

Children with emotional-behavioural problems experience more anger and they also manifest anger in their behavior and attitudes. While normal children have more control in their anger expression.

KEY WORDS

State- Trait Anger Expression Inventory-2, Anger experience/ expression, Anger control, Emotional-behavioural problems.

INTRODUCTION

Anger is a developmentally appropriate even healthy and normal reaction to threatening stimuli. It motivates the individual for action when he needs protection and preservation of his needs. Anger related concepts e.g anger response, frequency, duration, intensity, types of behavioural reactions, and the triggering factors changes as children progress through developmental stages. Numerous factors involve with anger and aggression in children and adolescents, including emotional arousal, social information processing, and contextual and situational influences1.

Speilberger2 gave dimensional approach of anger and conceptualizes anger as multistage and multifaceted phenomena. He explained these stages of anger as anger experience both state and trait, anger expression both in and out and anger control. Understanding a person's anger requires a complete set of scores that can elucidate psychological dynamics. Anger refers to an emotional state that comprises of feelings that vary in intensity from mild irritation to full rage. Activation and arousal of the autonomic nervous system also accompanied with affective part of anger. Intense anger often accompanied by cognitions, to abundant or destroys the negative stimuli.

Children with emotional-behavioral disorders are characterized primarily by behavior that falls significantly beyond the norms of their cultural and age group on two dimensions: externalizing and internalizing. Both patterns of abnormal behavior have adverse effects on children's academic achievement and social relationships3. Gender differences in emotional expression both negative and positive have long been studied and concluded that girls are more likely to express sadness while boys express anger and aggression4,5. However no empirical literature found with gender differences in emotional expression especially with observations or experimental methods6. Multiple factors influences a child's emotional expression including temperament7, socialization process8 contextual and situational factors in which emotions are expressed6. Women are expected to be more relationship oriented, submissive and express such emotions which support the familial relationships where as men are expected to be more assertive and can be aggressive if needed9.

Within Pakistani cultural context empirical research on anger expression in children is really scarce. It can be speculated that due to inadequate assessment tools or tools in foreign languages good empirical

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researches could not be possible. Keeping in mind the cultural and language barrier present study used Urdu translated version of STAXI-2 C/A 10. the present study hypothesized that children with emotional-behavioural problems will have higher score on anger experience and expression as compare with normal children while these children will have lower scores on anger control as compare with normal children. furthermore boys will score higher on anger experience and anger expression as compare with girls while girls will score higher on anger control as compare with boys.

SUBJECTS AND METHODS

Participants

A non-probability purposive sample of 200 children including 100 children with emotional-behavioural problems and 100 normal children were collected for present study. The clinical group of children including 57 boys and 43 girls with mean age 11.00 (SD=1.64) years was drawn from child psychiatric units of three hospitals of Lahore city. Clinical group was selected as children rated with emotional- behavioral problem as per criteria of DSM-5 Parent/Guardian-Rated Level 1 Cross-Cutting Symptom and referred by the psychiatrists and clinical psychologists with emotional-behavioural problems. Exclusion criterion was children with developmental disorders, intellectual disabilities, co morbidity with psychosis, children with physical disability/ handicapped, or having neurological impairment.

Normal children including 50 boys and 50 girls with mean age 11.41(SD=1.53) years was drawn from Children library Complex where children from all over Lahore were attending their summer camp. Inclusion criterion was children going to main stream schools and screened as normal with the help of DSM-5 Parent/Guardian-Rated Level 1 Cross-Cutting Symptom. Exclusion criteion was same as for clinical sample.

Instruments

The information regarding age, gender, number of sibling, birth order, educational level and parental profession, family monthly income and other related background information was collected on a demographic sheet. To seek information regarding their illness, duration of illness, duration of treatment and related back ground information, Medical History Performa was developed for present study. Study variables were measured through following instruments.

State- Trait Anger Expression Inventory-2 Children /Adolescent11

STAXI-2C/A is a self-report measure designed to measure experience and expression of anger of children and adolescents. The age range is between 8 to 17 years. STAXI-2 C/A includes total six subscales. State Anger (S-Ang) which measures subjective feeling of annoyance irritability at the time of testing is further subdivided into two measures named State Anger-Feelings (S-Ang/F) which measures intensity of angry feelings and State Anger Expression (S-Ang/VP) measures a person feeling of expressing anger at a specific time. Trait anger (T-Ang) measures anger experience, proneness which further subdivided into two subscales named Trait anger temperament (T- Ang/T) which designed to measure individual's disposition to experience anger without provocation and Trait Anger Reaction (T-Ang/R) which measures frequency of anger experience. Anger usually express out ward or inwards so in order to measure anger expression two subscales were designed namely Anger expression out (AX-O) and Anger Expression in (AX-I). To measure how children and adolescents control their anger and remained calm and relax a subscale was constructed named Anger control (AC). Psychometric properties of STAXI-2 C/A were adequate for both clinical and non clinical population. For present study Urdu version of STXI-2 C/A10 was used.

Procedure

Permission for data collection was taken from administration of Children Library Complex and Head of Child psychiatry Department of two hospitals of Lahore, Pakistan. Then data collection was initiated. Verbal Assent and written informed consent was taken from children and their parents respectively. Brief description of nature and purpose of the present study was provided and they were also informed that the collected information would remain private and would be used only for research purposes. Urdu version was administered individually to each child in the absence of teachers and parents for natural and original response of children. Data was analyzed on SPSS.

RESULTS

Results in Table 1 revealed important demographic information about the participants. The106 boys and 94 girls were included with mean age of 11.07(SD=1.58). Among clinical group most of the children (32) were referred for their anger problems. Twenty two children were diagnosed with Oppositional Defiant Disorder and 22 with Conversion Disorder. Children also reported depression, anxiety, OCD and conduct problems and they were diagnosed accordingly.

Results in table 2 indicated clinical group got high mean score on all subscales of STAXI-2 C/A. Where as normal children got high score on anger control subscale. Alpha coefficient of entire scale showed good internal consistency. Results in table 3 revealed significant inter correlation among subscales which proved adequate construct validity of translated Urdu version of STAXI-2 C/A. There is as significant positive relationship between anger experience and anger expression whereas there was an inverse relationship between anger experiences and expression with anger control.

Results in table 4 indicated there is a significant difference between normal children and children with emotional behavioural problems regarding their anger experience, anger expression and anger control. Results also indicated that difference between means of both groups of children with high to medium effect size. While computing the gender difference results in table 5 and 6 indicated that gender play no role regarding anger experience, anger expression and anger control for both groups. Boys and Girls perform similarly on all study variables.

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Table 1

Demographic description of Participants N=200

Variables	Total	Sample	N=	200		Clinical Gp n=100		Clinical GP n=100
	f	%	М	SD	f(%)	M(SD)	f(%)	M(SD)
Age			11.07	1.58		11.00(1.64)		11.41(1.53)
Gender								
Boys	106	53			57(57)		49(49)	
Girls	94	47			43(43)		51(51)	
Grade			5.49	1.86		5.2(1.94)		5.73(1.76)
School								
Public	71				35(35)		36(36)	
Private	129				65(65)		64(64)	
No of Siblings			3	1.63		3(1.39)		3(1.83)
Birth order								
First born	74	37.5			42(42)		32(32)	
Middle born	64	32			26(26)		38(38)	
Last born	53	26.5			29(29)		24(24)	
Only child	9	4.5			3(3)		6(6)	
Family syste	m							
Joint	98	49.82			41(41)		55(55)	
Nuclear	102	51.1			59(59)		45(45)	

 Table 2

 Mean, Standard Deviation, minimum-maximum range and Alpha
 coefficient of Urdu version of STAXI-C/A (N=200) with Clinical (n=100)

 and Non Clinical Group (n=100)
 interval of the standard stand

Scales & Subscales	К	M(SD)	Range Min-Max	Cl Gp M(SD)	Non-Cl Gp M(SD)	α
State Anger	10	15.75(4.82)	1-29	18.24(4.38)	13.30(3.90)	.87
State Anger Feelings	5	7.97(2.38)	1-14	9.16(2.00)	6.80(2.14)	.75
State Anger Expression	5	7.78(2.83)	1-15	9.08(2.89)	6.50(2.10)	.83
Trait Anger	10	18.19(4.76)	10-30	19.02(5.01)	17.38(4.37)	.84
Trait Anger Temperament	5	8.83(2.49)	4-15	9.59(2.52)	8.09(2.22)	.73
Trait Anger Reaction	5	9.35(2.6)	5-15	9.42(2.81)	9.29(2.57)	.75
Anger Expression Out	5	8.60(2.47)	5-15	9.27(2.46)	7.94(2.30)	.68
Anger Expression In	5	8.33(2.01)	5-14	8.08(1.84)	8.61(2.14)	.69
Anger Control	5	9.23(2.50)	5-15	8.51(2.10)	9.95(2.66)	.64

k= No. of items. α=Coefficient Alpha.

Table 3

Bivariate correlation between subscales of Urdu translated version of STAXI-2 C/A, N= 200

Subscales	S-Ang	S-Ang/F	S-Ang/VP	T-Ang	T-Ang/T	T-Ang/R	AX-O	AX-I	AC
S-Ang		.910**	.937**	.244**	.316**	.141**	.282**	.034	107
S-Ang/F			.707**	.297**	.363**	.189**	.319**	.000	095
S-Ang/VP				.166**	.232**	.080	.212**	.058	103
T-Ang					.913**	.926**	.662**	132	158*
T-Ang/T						.691**	.654**	229**	212*
T-Ang/R							.568**	022	083
AX-O								162**	231*
AX-I									.456**
AC									
М	15.75	7.97	7.78	18.19	8.83	9.35	8.60	8.33	9.23
SD	4.82	2.38	2.83	4.76	2.49	2.6	2.67	2.01	2.50

*p<.05, **p<.01

Table 4

Difference between Clinical and non Clinical group for Subscales of STAXI-2 C/A, N=200

Subscales	M(SD)	M(SD)	df	t	р	Cf 95%	UL	Cohen's
	Clinical Gp n=100	Non Clinical GP n=100				LL		d
S-Ang	(4.37)18.28	(3.90)13.30	198	-8.48	00.	-3.82	-6.13	1.20
S-Ang/F	(2.00)9.18	(2.14)6.80	198	-8.10	00.	-1.80	-2.95	1.14
S-Ang/VP	(2.89)9.10	(2.10)6.50	198	-7.27	00.	-1.89	-3.30	1.02
T-Ang	(5.00)19.06	(4.37)17.38	198	-2.52	01.	-36.	-2.99	0.35
T-Ang/T	(2.52)9.62	(2.22)8.09	198	-4.54	00.	-86.	-2.19	0.64
T-Ang/R	(2.80)9.44	(2.57)9.29	198	-40.	70.	60.	-90.	0.05
АХ-О	(2.45)9.28	(2.30)7.94	198	-3.97	00.	-67.	-2.00	0.56
AX-I	(1.83)8.07	(2.14)8.61	198	1.91	05.	1.09	-01.	0.27
AC	(2.09)8.53	(2.66)9.95	198	4.18	00.	2.08	75.	0.59

 $Note: \ CI= \ Confidence \ Interval, \ LL= \ Lower \ Limit, \ UL= \ Upper \ Limit.$

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Subscales	M(SD)	M(SD)	df	t	р	Cf 95%		Cohen's
	Boys	Girls				LL	UL	d
S-Ang	18.28(1.81)	18.27(4.97)	98	.00	.99	- 1.76	1.76	0.00
S-Ang/F	9.35(1.81)	8.90(2.22)	98	.98	.32	40	1.80	0.19
S-Ang/VP	8.92(2.61)	9.32(3.23)	98	67	.50	- 1.55	.76	0.13
T-Ang	19.35(5.08)	18.67(4.93)	98	. 66	. 50	- 1.33	2.68	0.13
T-Ang/T	9.73(2.56)	9.46(2.50)	98	.53	.59	74	1.28	0.10
T-Ang/R	9.61(2.89)	9.20(2.69)	98	.73	.47	72	1.53	0.14
AX-O	9.40(2.47	9.11(2.46)	98	.57	.56	70	1.27	0.11
AX-I	-1.54	8.39(1.82)	98	- 1.54	.12	- 1.30	.16	0.31
AC	8.64(2.09)	8.37(2.11)	98	.65	.51	56	1.11	0.13

Table 5 Gender wise difference for Subscales of STAXI-2 C/A of Children with Emotional-Behavioural problems n= 100

Note: CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit.

Table 6

Gender wise difference for Subscales of STAXI-2 C/A of Normal Children n= 100

Subscales	M(SD)	M(SD)	df	t	р	Cf 95%		Cohen's
	Boys	Girls				LL	UL	d
S-Ang	12.67(4.17)	13.90(3.57)	98	-8.48	.11	-2.76	.31	1.71
S-Ang/F	6.57(2.30)	7.01(1.98)	98	-8.10	.29	-1.29	.40	1.63
S-Ang/VP	6.10(2.06)	6.88(2.08)	98	-7.27	.06	-1.60	.04	1.46
T-Ang	18.18(4.63)	16.60(4.00)	98	-2.52	.07	14	3.29	0.50
T-Ang/T	8.38(2.30)	7.80(2.12)	98	-4.54	.19	29	1.46	0.91
T-Ang/R	9.79(2.70)	8.80(2.36)	98	40	.05	01	2.00	0.08
AX-O	7.83(2.47)	8.03(2.46)	98	-3.97	.66	-1.12	.71	0.80
AX-I	8.85(2.26)	8.37(2.01)	98	1.13	.26	36	1.33	0.22
AC	10.32(2.51)	9.58(2.77)	98	1.39	.16	36	1.33	0.28

Note: CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit.

DISCUSSION

Results revealed that clinical and non-clinical group expressed their anger in different severity levels. clinical group was more aggressive than normal counter parts. Children exposed to a family environment that displays conflict, anger and hostility are at greater risk for a wide range of maladaptive behavior problems such as aggression and noncompliance¹². Children's social relationships are greatly affected by angry and aggressive attitude and may cause children to be rejected by their peers at a high rate¹³. About half of all peer rejected children are seen as aggressive¹⁴.

Previous empirical evidences addressed gender differences in

different emotional expressions but results are not consistent in these studies. Some of the researches revealed gender differences in some emotional expressions like fear, shame and guilt and others proposed no such differences for sadness and anger¹⁵. Maccoby and Jacklin¹⁶ narrated in their review that boys' and girls' frustration reaction including outbursts of negative emotions in response to negative stimuli e.g crying and anger were same. As far as intensity of these negative emotions was concerned it diminished with age more in girls than in boys. The reasons of this change according to them may be developmental pattern as females are acquiring embedded understanding of gender consistent role.

Meta- analysis¹⁵ found small but significant gender differences for

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fear but not for sadness and anger out bursts. Their data was based upon parental perception of their children's emotional expression rather than actual observation of children emotional or bahavioural reactions.

It is very important to understand that gender differences in emotional expression either positive e.g happiness joy or nurturance or negative e.g sadness, fear and anger are not found, despite of the most established view that they are robust¹⁷. It is essential to take into account other factors e.g age of the person, situational and interpersonal context, emotional valence of the situation, the social expectations or demand characteristics for describing gender differences in emotional or behavioural reactions⁶.

CONCLUSION

Anger experience scales both state and trait anger had significant positive relationship with anger expression scales both in and out where as negative relationship with anger control. Children with emotional-behavioural problems scored higher on anger experience and anger expression where as lower on anger control as compared with normal children.

CLINICAL AND RESEARCH IMPLICATIONS

The present study has many practical implications on the part of parents, educators and clinicians. To guide and support the families in their child rearing practices while having children with emotionalbehavioural problems. Results indicated that emotional-behavioural problems, anger experience and manifestation are related with each other suggested that it is important to guide parents that how to handle anger issues of children with emotional-behavioural problems in more adaptive ways. It will also be helpful to tell the parents that anger experience and inappropriate expression are part of emotional-behavioural problems of a child rather than reflection of his bad behavior. This study would not only helpful for clinicians and parents to identify anger in children and try to teach them anger management but it also be related to the theoretical and empirical interests of researchers who are interested in expression of anger on mental health and behavior of children especially in Pakistani cultural context.

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Sr. #	AuthorName	Contribution to the paper	Signature
1	Saima Majeed	Designed and drafted the study, collected and analyzed the results, write the manuscript and review for publication under the supervision of second author	Jone,"
2	Dr. Farah Malik	Designed and drafted the study, analyzed the results, review the manuscript for publication	Jon at Malion

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