

## AUTISM; STRESSFUL PARENTING OUTCOMES FOR MOTHERS

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### ABSTRACT

#### OBJECTIVE

To investigate the effects of autism on mother's parenting stress and to explore the relationship between severity of symptoms and level of stress in mothers handling children with autism.

#### STUDY DESIGN

Comparative Study

#### PLACE AND DURATION OF THE STUDY

: Study was conducted at GC University Faisalabad in 2006. The data from the participants with autism were collected from Children Hospital Lahore and different special educational institutes of Lahore and Faisalabad, while data from normal matches were collected from the regular institutes of Lahore and Faisalabad.

#### SUBJECTS AND METHODS

Forty children diagnosed with autism (n = 40) and forty normal children (n = 40) matched for sex, gender and age were recruited for the study. Participants with autism were administered "Childhood Autism Rating Scale" (CARS) to confirm the diagnosis and evaluate the severity of the illness. Mothers of these children were contacted and Parenting Stress Index (Urdu form) was administered to evaluate different domains of parenting stress.

#### RESULTS

Mothers of children with autism had elevated child-rearing and life stress as compared with the mothers of normal children. Furthermore, severity of the symptoms of autism was significantly related to the levels of maternal stress. Reinforcing parents and child's demandingness proved to be the most significant predictors of maternal stress.

#### CONCLUSION

This issue is needed to be addressed, interventions are recommended for parents.

#### KEY WORDS

Autism, Parenting stress, Maternal stress.

### INTRODUCTION

Parenting stress is thought to be a complex set of persistent and substantial challenges associated with one of parents' most important character to look after their child. Although an extensive data on the stress among parents of children with disabilities is existing, but, till now, there is no consensus on the conceptualization of this phenomenon<sup>1</sup>. Stress is a specific type of relationship between individual and his surroundings, which the he / she evaluates as setting definite demands / overextending the psycho-social capitals, and so, causing threat to their well-being<sup>2</sup>.

Mothers who take care of the children with developmental or psychiatric snags are vulnerable to greater experience of stress as compared with the mothers of normally developing children<sup>3, 4, 5,6,7,8</sup>. Many other studies propose that mothers of children with ASD possibly will have higher stress in comparison to those who take care of children with other disabilities<sup>9</sup>.

Despite previous literature available, the phenomenon is not well documented in Pakistan. Present study is designed to investigate the effects of autism on mother's parenting stress and to explore the relationship between severity of symptoms and level of stress in mothers handling children with autism. The study has postulated the following:

1. Mothers of children diagnosed with autism will show elevated stress as compared with the mothers of normal children.
2. Maternal stress will be significantly different across gender in children with autism.
3. Mothers of autistic children with severe symptoms of autism will exhibit higher level of stress as compared with the mothers of children with mild or moderate symptoms of autism.

### SUBJECTS AND METHODS

#### Participants

Total sample consisted of eighty participants (N = 80) further divided into two groups; as children diagnosed with autism (n = 40), and matched normal children (n = 40) having an age ranging from 6 to 15 years (M = 8.61, SD = 1.88 for boys & M = 9.06, SD = 2.12 for girls). Both the groups included equal number of boys and girls (n = 20). The data from the participants with autism were collected from Children Hospital Lahore and different special educational institutes of Lahore and Faisalabad, while data from normal matches were collected from the regular

institutes of Lahore and Faisalabad. Mothers of the selected children were contacted and recruited as sample.

All the eighty children resided at their homes not necessarily with both parents as some parents were single (because of separation, divorce or death of partner). Mothers of these children were contacted with the help of the authorities of the above mentioned institutes. Participants were from middle to high social class. They had completed 5 to 16 years of qualification overall.

## Instruments

### Childhood Autism Rating Scale (CARS) <sup>10</sup>

It is 15 item scale to identify autism and severity of autistic symptoms. Each item is rated on a scale from 1 to 4 where score 1 = normal for child's age, 2 = mildly abnormal, 3 = moderately abnormal, and 4 = severely abnormal. Midpoint scores (e.g. 1.5, 2.5 or 3.5) are may also be given. Scoring range of the scale is 5 – 60 with cutoff score of 30. Inter-rater reliability is 0.71.

### Parenting Stress Index (PSI) <sup>11,12</sup>

This is a 101 item self-report questionnaire to screen stress in parent-child relationship. A 19-item scale of Life Events stress (optional) is also included. Total sum of scores on two domains i.e. Parent & Child and one Life stress scale provides over all stress scores. Parent domain scores are related to Parental performance on seven sub-domains categorized as Depression, Attachment, Sense of Competence, Role Restrictions, Social Isolation, Parent Health and relationship with spouse. Child Domain is designed to measure the behavioral and temperamental abilities of the child which make parenting role tough i.e. Adaptability, Mood, Acceptability, Demandingness, Distractibility / Hyperactivity and Reinforcement of parents. In the normative sample, cumulative score of 260 or above fall beyond 85th percentile of the normative sample. Higher score is indicative of adversely affecting stress and need for professional consultation for the parents. Life stress is measured by asking questions about Stressful life events other than parent child relationship. Acceptable internal consistency of Urdu form i.e. alpha coefficient = .89 is reported for total sample.

## Procedure

Forty children already diagnosed with autism were selected from different institutes for special children and hospitals. They were matched with normally developing same sex peers of same age range. Mothers and teachers of autism diagnosed children and matched counterparts were contacted through administration of the institutes after obtaining informed consent. They were provided with a brief introduction to the study in order to get their full attention and co operation. Parents and teachers of the children rated them on the Childhood Autism Rating Scale. Parent Stress Index was administered to all the mothers. All the participants were thanked for their cooperation. Data were analyzed by using the SPSS for windows (version 13).

## RESULTS

Table 1 presents the means and standard deviations of demographic characteristics of mothers of children having autism and matched control group.

**Table 1**  
Demographic Characteristics of the Sample (N=80)

Groups	Boys(n= 20)		Girls(n= 20)	
	M	SD	M	SD
<b>Autism (n=40)</b>				
Age of child (yrs)	9.06	2.12	8.61	1.873
Mother's age (yrs)	38.65	4.738	38.3	3.21
SES (income/month)	70600	17070	71700	18350
Mother' Education (yrs)	11.90	1.77	11.65	2.98
<b>Controls (n=40)</b>				
Age of child (yrs)	8.61	1.873	9.06	2.12
Mother's age (yrs)	37.2	5.022	39	4.27
SES (income/month)	70400	16731	69200	20955
Mother's Education (yrs)	12.30	2.79	11.35	2.21

**Table 2**  
t-test to compare stressing the mothers of mild-moderately and severely autistic children)

Variable	Mild-moderate (n=15)		Severe (n=15)		t	P
	M	SD	M	SD		
Depression	29.467	5.194	35.267	3.882	-3.464	.001**
Spouse	25.333	3.13202	31.32	27.867	-2.167	.01**
Total Stress	359.13	32.941	399.60	27.969	-3.627	.0005**

\*\*P< .01 (1 tailed)

Multivariate Analysis Of Variance (MANOVA) was computed to see the effect of autism diagnosis and gender of the child on stress of mothers. Results showed that the mothers' parenting stress varied significantly between the two groups as per diagnosis,  $p < 0.01$  and life stress of mothers also varied as per diagnosis of their child,  $p < 0.05$ . Mothers of children with autism showed higher levels of parenting and life stresses than their matched counterparts. The effect of gender on parenting and life stress of mothers was found non-significant,  $p > 0.05$ . (see table 3).

Adaptability, reinforcing parent, demandingness and acceptability from child domain while attachment, health, depression and spouse from parent domain are significantly positively correlated with maternal stress (see table 4).

**Table 3**  
Multivariate Analysis of Variance for gender and diagnosis by keeping PSI total and life stress as dependent variables (N = 80)

Source	Dependent Variable	SS	df	MS	F
Gender	Total Stress	858.05	1	858.05	0.730
	Life Stress	33.8	1	33.8	1.192
Diagnosis	Total Stress	220290.05	1	220290.05	187.408**
	Life Stress	110.45	1	110.45	3.894*
Gender*Diagnosis	Total Stress	238.05	1	238.05	0.201
	Life Stress	24.2	1	24.2	0.853
Error	Total Stress	89334.6	76	1175.455	
	Life Stress	2155.5	76	28.362	
Total	Total Stress	8305522	80		
	Life Stress	8768	80		

\* $p < .05$ , \*\* $p < .001$

**Table 4**  
Correlation matrix of total scores & subscales of PSI (n=40)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Distractibility	1	-.31	.49**	.04	.08	-.04	.17	.22	.23	.01	-.06	.24	.311	.38*
2 Adaptability	-	1	.02	.60**	.10	.28	.52**	-.04	.20	.26	.32*	.41**	.23	.40*
3 Reinforcing Parent	-	-	1	.19	.18	.37*	.29	.52**	.48**	.07	.14	.49**	.24	.64**
4 Demandingness	-	-	-	1	.07	.29	.62**	.03	.30	.18	.32*	.28	.19	.50**
5 Mood	-	-	-	-	1	-.06	-.17	-.06	-.15	.26	.19	.28	-.19	.16
6 Acceptance	-	-	-	-	-	1	.22	.37*	.28	.09	.25	.26	.21	.30
7 Competence	-	-	-	-	-	-	1	.00	.51**	.40*	.41**	.48**	.30	.46**
8 Isolation	-	-	-	-	-	-	-	1	.28	-.22	-.09	.28	.31	.27
9 Attachment	-	-	-	-	-	-	-	-	1	.054	-.09	.39*	.12	.45*
10 Health	-	-	-	-	-	-	-	-	-	1	.27	.32*	.11	.21
11 Role restriction	-	-	-	-	-	-	-	-	-	-	1	.15	.10	.17
12 Depression	-	-	-	-	-	-	-	-	-	-	-	1	.35*	.55*
13 Spouse	-	-	-	-	-	-	-	-	-	-	-	-	1	.34*
14 Total Stress	-	-	-	-	-	-	-	-	-	-	-	-	-	1

Step wise regression was computed by taking parent and child domain as factors in the model. Results revealed that Reinforcing parent was the strongest predictor of maternal stress which shows 64% variance in the data. Another strong predictor of maternal stress was demandingness of the child. Excluded variables included child's gender, symptom severity, and some child domain factors like Adaptability, Mood, Acceptability, Distractibility, and hyperactivity. While complete parent domain was also excluded (see table 4).

Independent sample t-test was run to analyze the difference between total stresses of mothers handling mild-moderately and severely autistic children. The sample was minimized to 15 children from each group for the purpose of equality. Results showed significant difference between mean scores of total stress, depression and spouse relations of mild-moderately autistic children and severely autistic children (see table 2).

**Table 5**  
Predictors of parenting stress among mothers of autistic children (n = 40)

Variable	B	SE	$\beta$	t	P
<b>Step 1</b>					
<i>(R=.64, R<sup>2</sup>=.41)</i>					
Reinforcing Parent	5.26	1.03	.64	5.11	.000
<b>Step 2</b>					
<i>(R=.75, R<sup>2</sup>=.56)</i>					
Reinforcing Parent	4.64	.92	.56	5.06	.000
Demandingness	2.82	.80	.39	5.54	.001

Step1:  $F(38) = 26.13, P < .000$ , Step2:  $F(37) = 23.26, P < .000$

## DISCUSSION

Mothers of autism diagnosed children experienced greater stress as

compared with those of normal children. This finding of the present study is consistent with researches indicating that child's adaptive and maladaptive behaviors accounted for a significant proportion of the variance in maternal stress<sup>4,13</sup>. Children with autism show behavior problems like inability to understand and even convey their message to other people<sup>14</sup>. The primary association of stress among mothers was found with having an autistic child<sup>13</sup>.

Second hypothesis of the study i.e. mothers of autism diagnosed children will have elevated scores on life stress as compared with the mothers of non-autistic group is supported with statistical evidence. The life stress included Stress experienced outside of the child parent relationship. The mothers might be experiencing more stressful life circumstances due to having a child with autism.

Child's demandingness and reinforcing parent significantly explained the maternal stress while gender, symptom severity and other characteristics of the child were over ruled. These findings are in line with a study which explored that behavioral symptoms of children, maternal anxiety and maternal depression were correlated with parenting stress<sup>15</sup>. Studies on developmentally delayed (general) children endorse these findings, have shown that a significant source of parental stress is child behavioral problems<sup>15,16</sup>.

study findings, there competence, attachment, depression and relationship with spouse are strongly correlated. A study indicated that hyperactivity of the children overrules the severity of the problem. Perception of parenting skill is also influenced by the behavioral difficulties and impairments of children<sup>17</sup>.

## LIMITATIONS

Since it was time limited study so the sample of the present study was very small; another reason for small number of sample was that children diagnosed with autism were scarce and even among

those, most of the mothers refused to be the part of the study.

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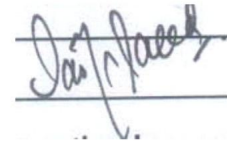
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## Undertaking Statement of the Contribution of the Authors

It is hereby declared that the research idea entitled "Autism; Stressful Parenting Outcomes for Mothers" was conceived and supervised by miss Rabia Khawar and empirical data gathering and write up is done by Miss Saima Saeed



Rabia Khawar



Saima Saeed