

## Spousal Rejection and Psychological Distress: Mediating Role of Behavioural Problems in Children with Autism Spectrum Disorder (ASD)

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The study investigated mediating role of spousal perception of behavioural difficulties of children with ASD in relation to spousal rejection and psychological distress. For this purpose, thirty couples raising at least one child with ASD were purposively drawn from autism institutes in Lahore and Islamabad. Path analysis revealed that data fit in the theoretically proposed model specifically for wives but not for the husbands. Findings revealed that despite equal perception of behavioural difficulties of children with ASD, wives scored higher on depression and anxiety, and perceived their husbands' as more rejecting. Spousal perception of children difficulties significantly accounted for the variance in relationship of spousal rejection with depression and anxiety among wives when wives' age was statistically controlled.

*Keywords:* marital conflicts, behavioural anomalies, progressive developmental disorder, maternal depression

Raising children with ASD becomes a tragic experience for parents and such experience may lead to parental distress and marital conflict. American Psychiatric Association (2000) reports cluster of symptoms constituting ASD i.e., atypical eye contact, repetitive body motions such as rocking or hand flapping, echolalia, and a limited range of interests and claimed that 1 out of 166 children is diagnosed with ASD worldwide. Researchers argue that parents and other family members of children with ASD are more likely to experience higher level of distress and stress (Meadan, Hale & Ebata, 2010), lower sense of coherence and meaningfulness (Pisula & Kossakowska, 2010). As a result of marital conflicts and psychological distress, divorce rate is twice greater among parents of children with ASD than parents who have children without any disability (Hartley et al., 2010). As the children receive diagnosis of ASD, parents begin to feel sadness, grief, confusion, or clinical depression and mostly parents are ill-prepared to handle such children (Altiere & von Kluge, 2009). Parents of children with autism and other behavioral disorders experience higher level of stress compared to parents of children with Down syndrome and without disability (Dumas, 1991). Plenty of autism related research has focused on parental gender differences in perceiving behavioural difficulties in children with autism and subsequent experience of psychological distress. Specifically, maternal psychological health has been found to be associated with perception of behavioural difficulties in children with ASD. Beck,

Hastings, Daley, and Stevenson (2004) investigated the way mothers express emotions towards children with intellectual disability and without disability. Findings reported that mothers express more negativity towards child with intellectual disability (ID) but do not show dissatisfaction. Similarly, mothers begin to blame themselves for the diagnosis of autism in their children and become suspicious about their parenting practices. Self-blames and suspicions are attributed to diagnosis of autism in children and such faulty attributions lead towards maternal depression and marital dissatisfaction (Fisman & Wolf, 1991). Another research reported that mothers of children with autism have more negative perception of child behavioural problems and higher level of stress than mothers of children with Down syndrome and other intellectual disabilities (Griffith et al., 2010). Maternal depression has emerged as a significant predictor of paternal stress while child behavioural problem and partner's depression predict maternal depression (Hastings et al., 2005). Similarly, both mothers and fathers of children with ASD experience equal level of stress and depression but mothers score higher on anxiety measure than do the fathers. Findings further revealed that paternal mental health and behavioural problems of children with ASD are significantly associated with maternal stress (Hastings, 2003).

Diagnosis of ASD places greater responsibility on family members and primary caregivers, specifically, parents. Primary caregivers and other family members report high self-esteem despite lower level of marital satisfaction and family cohesiveness compared to that of normative group (Higgins et al., 2005). A longitudinal study reported the stable relationship between parental perception of behavioural problems in children with ASD and parental stress over a period of one year and both these variables exacerbate each other over time (Lecavalier et al., 2006). The

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mental health of mothers rearing children with ASD has been reported to be in severe danger as 15.7% mothers of children with ASD are more likely to receive diagnosis of different psychiatric disorders compared to 8.2% mothers in control group. Amongst other disorders, 7.8% mothers of children with ASD receive diagnosis of personality disorders compared to 2.1% in mothers of children without disability (Mouridsen et al., 2007). In the same vein, research reported that mothers of children with autism and mothers of children with intellectual difficulties without autism score significantly higher on depression measure compared to that of fathers rearing children with autism, fathers of children with intellectual difficulties without autism, mothers and fathers of control groups (Olsson & Hwang, 2001).

Regarding behavioural problems and symptoms of ASD in children, another research reported that maternal negative social and emotional outcomes significantly correlate with different dimensions of symptoms like severity, frequency and symptom types (Ekas & Whitman, 2010). Early maternal stress significantly predicts child behavioural difficulties and children perceiving maternal stress face difficulty in learning social skills (Necce & Baker, 2008). A reciprocal link exists between maternal depression and marital distress. Depressed spouse may significantly affect the perception of marital satisfaction of non-depressed spouse (Mead, 2002). Tehee and colleagues (2009) reported that mothers of children with ASD are found to be more stressed as compared to fathers. Dyson (1996) compared 19 families of children with learning disabilities with 55 families of normally achieving children. Although families of children with learning disabilities report higher levels of stress, no significant difference exists in family functioning of both groups, except in personal growth area. Parents of children with Autism often feel frustrated, anxious, pessimistic, and have high rate of depressive and anxiety disorders (Blackledge & Hayes, 2006; Sharpley et al., 1997; Yirmiya & Shaked, 2005). Research indicates that the chronic nature and atypical experiences associated with raising a child diagnosed with ASD often contribute to chronic stress and increased marital dissension between spouses (Sabbeth & Leventhal, 1984).

Based on the existing literature, the link between maternal psychological distress and marital adjustment can be convincingly developed. A study compared parents of children with physical disability, parents of children with mental retardation, and parents of normal children. Findings revealed that parents of children with physical disability and mental retardation experience higher marital maladjustment, social burden, and neuroticism than that of parents rearing normal children (Singhi, Goyal, Pershad, Singhi & Walia, 1990). Research findings support the relationship of maternal perception of behavioural problems in children with ASD and maternal depression. In this regard, researchers demonstrate that maladaptive behaviour of children significantly account for the variance in maternal stress (Tomanik, Harris & Hawkins, 2004).

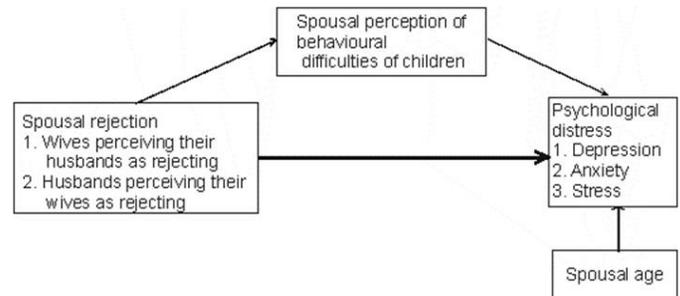
Unfortunately, less attention has been given to paternal perception of behavioural problems of children with ASD. This study included fathers of children with ASD as well. Although research revealed that behavioural problems in children with intellectual disability positively predict maternal stress (Beck, Daley, Hastings, & Stevenson, 2004) yet no systematic approach has been used to identify mediating role of perception of child

behavioural difficulties and dearth of research in this area lead us to propose mediation model in order to identify the directional link among study variables.

## Research Question

Does the spousal perception of behavioural difficulties in children with ASD mediate between spousal rejection and psychological distress?

Based on the research question, it was anticipated that perception of spousal rejection might contribute to spousal depression, anxiety, and stress (indicators of psychological distress) through the mediating role of spousal perception of behavioural difficulties in children with ASD if spousal demographic variables are included in the model as covariates.



**Fig. 1** Purposed mediation pathway of study variables

## Method

### Sample

Thirty couples who had at least one child diagnosed with ASD were drawn through purposive sampling technique. The sample was approached with the help of heads of autism institutes of Islamabad and Lahore in which children with ASD were attending therapy sessions and their parents were in close contact with respective autism institutes. The diagnosis of ASD was confirmed through children's medical reports of psychiatrists. Prior informed consent was obtained from all the participants and information regarding objectives and procedure of study, participants' rights, potential risks, confidentiality, and privacy was clearly communicated to the respondents. The sample included couples who had intact marital relationship and at least one child diagnosed with ASD whereas single, divorced, step or separated parents were excluded. All the respondents willingly participated except one spouse who refused to participate before assessment. One couple was dropped because current study required responses of both spouses so that spousal rejection could be assessed. Mostly couples belonged to upper-middle or upper socioeconomic class. Husbands were engaged in high status jobs like doctors, engineers, army officers, or high status businesses earning >100000 Pakistani rupees per month on average because couples with this socioeconomic status can afford expensive therapy sessions of autism institutes in Pakistan.

## Measures

In order to investigate the relationship among study variables, three scales (Urdu versions) along with demographic form were administered on designated sample. All the scales had good psychometric properties and were easy to understand because of native language.

**Intimate Partner Acceptance-Rejection/Control Questionnaire (IPAR/CQ).** This scale was designed to measure the extent to which wives perceive their husbands as accepting or rejecting and vice versa. It covers different dimensions of partner acceptance-rejection like warmth/affection, hostility/aggression, undifferentiated rejection, indifference/neglect and control. The total sum of IPAR/CQ was computed by adding the total score of all the dimensions of IPAR/CQ. Urdu version of IPAR/CQ was used in current study. The scale was translated into Urdu using standardized back translation procedure (see Malik & Rohner, 2012). The alpha reliability of IPAR/CQ for the current study was .92 for husbands' perception of wives' acceptance-rejection and .94 for wives' perception of husbands' acceptance-rejection.

**Depression Anxiety Stress Scale (DASS-42).** DASS-42 is a 42 items self-report measure designed to assess level of depression, anxiety, and stress. This scale inherits the capacity to discriminate between the normal and clinical population. It contains three subscales i.e., depression, anxiety and stress. Each scale contains 14 items and each item is rated on 4 point Likert type response format i.e., "Did not apply to me at all", "Applied to me to some degree, or some of the time", "Applied to me to a considerable degree, or a good part of time", and "Applied to me very much, or most of the time". Scoring of the DASS-42 is 0-3 and high score on DASS-42 indicated psychological maladjustment. Total score was computed by adding the sums of all subscales. Sample items are "I couldn't seem to experience any positive feeling at all" (depression scale), "I was aware of dryness of my mouth" (anxiety scale), "I found myself getting upset by quite trivial things" (stress scale). This scale was translated into Urdu using standardized back translation procedure (see Farooqi & Habib, 2010). For the current study, alpha coefficients of DASS-42 subscales were .74 (depression scale), .79 (anxiety scale), and .89 (stress scale) respectively. These alpha coefficients were similar to alpha coefficients of DASS-42 (English version) as reported by Lovibond and Lovibond (1995).

**Strengths Difficulties Questionnaire (SDQ).** The SDQ is a parent-reported 25 items behavioural screening questionnaire developed by Goodman (1997) for assessing positive and negative attributes of children and adolescents (4-16 years). It contains 5 subscales named as emotional symptoms, conduct problem, hyperactivity, peer relationship, and prosocial. Each subscale has 5 items that are rated on 3 point likert type scale with response format "Not True", "Somewhat True" and "Certainly True" containing the values ranging from 0-2. In reverse items, values are also reversed (2-0). Total score of SDQ is computed by adding total scores of its subscales and higher score on SDQ reflects severe behavioural problems and vice versa. Sample items are "often complains of headaches, stomach-aches" (emotional symptom), "often have temper tantrums or hot tempers" (conduct problems), "restless, overactive, cannot stay still for long" (hyperactivity), "rather

solitary, tends to play alone" (peer problem). Psychometric properties revealed that this scale has high factorial validity (see Rothenberger et al. 2008). This scale was translated into Urdu using standardized back translation procedure (Syed, Azam & Khan, 2009). For the current study, alpha coefficients was satisfactory (.84)

## Procedure

All the parents (30 couples) were contacted through the heads of Autism Institutes in Lahore and Islamabad. Formal written informed consent was obtained from parents after clearly briefing them about purpose of research, procedure, benefits, risks, legal and ethical rights, confidentiality and privacy of information. Their queries related to the study were answered satisfactorily. After gaining informed consent procedure, scales were administered on the designated sample. Formal permissions of using scales were sought from respective authors. Participants took on average 40-60 minutes in completing the battery of tests. Participants had no problem in understanding and comprehending items of scales because all the items were in Urdu language. On completion of scales, counselling services were offered to the participants as per their choice. To ensure the comfort level of participants, data from the couples were obtained in separate sessions.

## Results

Before moving towards statistical analyses, table 1 demonstrates demographic characteristics of sample and that of children with ASD.

Table 1  
*Demographic Characteristics of Sample and Children with ASD*

Source	M(SD)
<b>Spouses</b>	
Husbands' age	41.6(7.3)
Wives' age	36.5(6.9)
Duration of Marriage	12.5(6.2)
<b>Children with ASD</b>	
Children's age	8.1(3.5)
Children's age at the time of diagnosis	2.9(.82)

Table 2 shows that wives perceived their husbands as less accepting compared to husbands' perception about wives but the difference did not remain significant. t test demonstrates that despite similar perception of behavioural difficulties in children with ASD, husbands showed less anxiety and stress than did the wives. Responding to the preliminary question asked prior to administration of scales i.e., to what extent do you feel that your marital relationship is secure?, 33% wives qualitatively reported complete insecurity in the marital relationship while 23% husbands reported the same. Similarly, 26% wives qualitatively reported their marital relationship as extremely insecure and 40% husbands did the same.

Keeping the initial picture of data in view, correlation analyses were conducted separately for husbands and wives. Wives perception of husbands' rejection was found to be strongly

associated with psychological distress among wives while husbands' perception of wives' rejection turned to be even more strongly associated with psychological distress in husbands.

Table 2  
Comparing Husbands and Wives on Study Variables (N=60)

Variables	Husbands		Wives		t(58)	p	Cohen's d		Cohen's d
	M	SD	M	SD			LL	UL	
IPAR/CQ	106	40	117.03	48.4	-.33	.73	-43.6	30.8	.73
SDQ	18.0	6.3	16.3	5.3	1.13	.26	-1.3	4.8	.96
Depression	10.9	8.7	14.7	9.6	-1.56	.12	-8.5	1.05	.17
Anxiety	8.4	7.2	12.5	9.0	-1.95	.05	-8.3	.09	.11
Stress	16.1	9.1	20.7	8.5	2.03	.05	-9.1	-.07	.44

Note. IPARQ= Intimate Partner Acceptance Rejection/ Control Questionnaire (perception of spousal rejection); SDQ = Strength Difficulties Questionnaire (Spousal perception of behavioural difficulties in children)

Table 3  
Correlation Coefficients showing relationships among study Variables (N=60)

Variables	1	2	3	4	5	6	7	8	9
1.IPAR/CQ_H	-	.95***	.37*	.74***	.73***	.65***	.76***	.75***	.66***
2.IPAR/CQ_W	.95***	-	-.26	-.10	-.11	-.09	.83***	.82***	.60***
3. SDQ	-.27	-.27	-	.29 <sup>†</sup>	.31 <sup>†</sup>	.30 <sup>†</sup>	-.17	-.21	-.18
4. Depression	-.16	-.15	.42**	-	.95***	.89***	-.21	-.20	.002
5. Anxiety	-.12	-.11	.42**	.91***	-	.86***	-.21	-.22	-.02
6. Stress	-.15	-.15	.30 <sup>†</sup>	.83***	.84***	-	-.12	-.13	-.04
7. wives' age	.76***	.83***	-.25	-.32	-.22	-.26	-	.85***	.51**
8.Husbands' age	.75***	.82***	-.26	-.29	-.32	-.23	.85***	-	.34*
9. Child age	.66***	.60***	-.39*	-.10	-.11	-.08	.51**	.34*	-

Note 1.IPARQ\_H= Intimate Partner Acceptance Rejection/ Control Questionnaire\_ Husband (Husband perception of wives, rejection); IPAR/CQ\_W = Intimate Partner Acceptance Rejection/ Control Questionnaire\_ Wives (Wives perception of husband's rejection); SDQ = Strength Difficulties Questionnaire (Spousal perception of behavioural difficulties in children)

Note 2. Correlation coefficients above the diagonal pertain to husbands and correlation coefficients below the diagonal pertain to wives. Spousal rejection means husbands' perception of wives' rejection and wives' perception of husbands' rejection

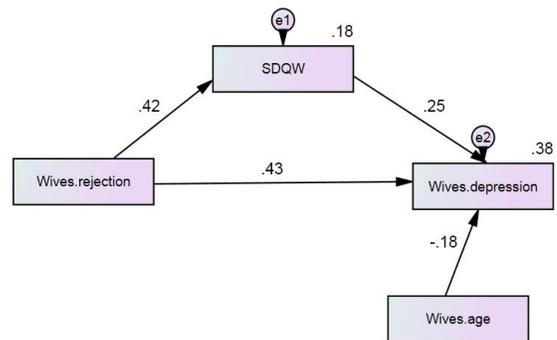
<sup>†</sup> p > .05. \*p < .05. \*\*p < .01. \*\*\*p < .001.

Moreover, wives perception of behavioural difficulties in children with ASD significantly correlated with psychological distress but this relationship remained non-significant for husbands. The age of husbands, wives and that of child was found to be strongly associated with spousal perception of rejection.

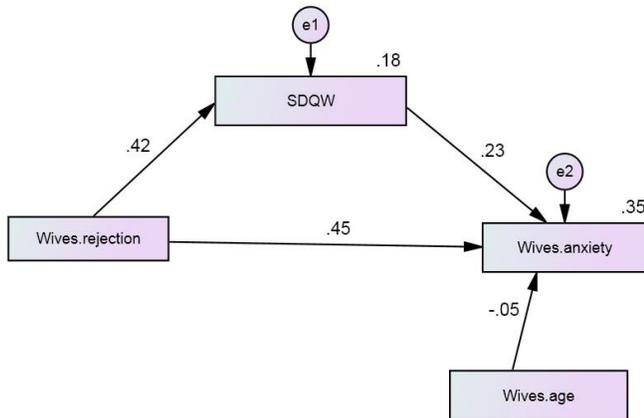
Correlation analyses revealed that husbands' perception of behavioural difficulties of children with ASD did not correlate with any of the three indices of psychological distress and wives' perception of behavioural difficulties in children with ASD did not correlate with stress. In result, it was not useful to draw mediation model for husbands. Path analysis was conducted by including wives' perception of behavioural difficulties in children with ASD as mediator between the relationship of wives' perception of husbands' rejection (predictor) and psychological distress (outcome variables).

Model I demonstrates that wives' perception of behavioural difficulties of children with ASD played mediating role in explaining the relationship of wives' perception of husband rejection and depression. The estimated indirect effect revealed that wives perception of behavioural difficulties in children with ASD significantly accounted for the variance in the relationship of wives' perception of husband rejection and depression when wives' perception of behavioural difficulties of children with ASD was

included in the model as mediator and wives' age was included as covariate. The indices of model fit reflect that the data fit in the proposed theoretical model. The non-significant Chi-square value reveals that obtained data fit in the proposed hypothetical model [ $\chi^2(2) = 2.25, p = n.s., \chi^2 / df = 1.13$ ]. Other model fit indices supported the theoretically purposed model as CFI = .98, NFI = .90, TLI = .95, RMSEA = .06. Bootstrap confidence interval criterion was used to estimate significance of mediation. The interact effect ( $\beta = .10$ ) remained significant at bootstrap confidence interval ( $p < .05$ ) reflecting partial mediation.



**Fig. 2** Model I showing mediating role of behavioural difficulties in children with ASD in the relationship of spousal rejection and maternal depression ( $n = 30$ ). Wives.rejection = Wives' perception of husbands' rejection, SDQW = Wives' perception of child behavioural difficulties



**Fig. 3** Model II reflecting mediating role of behavioural difficulties in children with ASD in the relationship of spousal rejection and maternal anxiety ( $n=30$ ). Wives.rejection = Wives' perception of husbands' rejection, SDQW = Wives' perception of child behavioural difficulties

Model II was generated to demonstrate the mediating role of wives' perception of behavioural difficulties in children with ASD in the relationship of wives' perception of husbands' rejection and anxiety (an index of psychological distress among wives). This model implies that mediator had the power to influence the direct relationship between predictor and outcome variable. The data resulted in model fit when wives' age was included as covariate in the model. Goodness of fit indices reveal that  $\chi^2(2) = 2.25, p = n.s., \chi^2 / df = 1.13, CFI = .98, NFI = .90, TLI = .94, RMSEA = .06$ . Wives' perception of husbands' rejection had the indirect effect ( $\beta = .096$ ) on anxiety among wives through the mediating role of wives' perception of behavioural difficulties in children with ASD. The beta value of indirect effect was significant at bootstrap confidence interval ( $p < .05$ ) indicating partial mediation.

### Discussion

As anticipated, spousal rejection was found to be associated with psychological distress directly and through the mediating role of perception of behavioural difficulties in children with ASD specifically in wives. On the contrary, husbands' perception of wives' rejection did directly correlate with three indices of psychological distress (depression, anxiety, and stress) but data did not support the mediating role of perception of behavioural difficulties in children with ASD for husbands. These findings are in line with existing literature that raising child with ASD can be more psychologically devastating experience for mother than for the fathers (Fisman & Wolf, 1991). It was found that wives perceived their husbands more rejecting than the husbands did. Despite almost equal level of perception of behavioural difficulties in children with

ASD among spouses, wives experienced more psychological distress than did the husbands. These findings are consistent with existing researches as they argued that mothers or wives were more likely to experience stress and depression while getting with the children with ASD (Ekas & Whitman, 2010; Griffith et al., 2010; Hastings et al., 2005). These findings can be explained in specific cultural context. Pakistani wives are expected to take responsibility of rearing children and staying in home to fulfil domestic duties. They spend all their time in looking after the children. Remaining continuously in close contact with a child with ASD may cause psychological distress in addition to marital distress. It can be argued that wives rearing children with ASD tend to experience greater psychological distress when they perceive their husbands less accepting. This relationship becomes more strengthened when wives' perception of behavioural difficulties in children with ASD is introduced as mediator in the model. It seems logical because specifically negative perception of child difficulties may increase the psychological distress among wives. These findings are quite consistent with another research conducted by Lecavalier et al., (2006). An acceptable model fit was obtained by including the wives' age in the model. Wives' age negatively predicted their psychological distress.

This relationship may be understood in connection with stress level of wives. Wives did not experience significant level of stress when their children received diagnosis of ASD. Unlike other researchers who reported parental stress associated with parental perception of child behavioural difficulties (Griffith et al., 2010; Tehee et al., 2009), maternal stress was not associated with perceived behavioural difficulties in children with ASD. Probably, wives begin to handle and manage the child with ASD with patience and courage. Despite of taking stress, specifically wives/mother set the goal to help their children recovering from trauma. Taking the behavioural difficulties in children with ASD as challenge, mothers/wives may be motivated to bring their children back into normal life rather than getting stressed. The support of husbands and other family members may turn to be an impetus for wives sticking with the goal of treating the children as special children and getting them back into normal life.

### Conclusion

Conclusively, wives' perception of behavioural difficulties in children with ASD significantly mediates between the relationship of wives' perception of husbands' rejection with depression and anxiety in wives while statistically controlling wives' age. This relationship was not true for the husbands. Findings revealed that wives scored higher on depression, anxiety, and stress than did the husbands. Wives' perception of behavioural difficulties in children with ASD was significantly associated with psychological distress in wives but this relationship remained non-significant for husbands.

### Limitations and suggestions

Although this study would be a valuable contribution in scientific knowledge and its significance is worth-considering, yet sample was limited to 30 socioeconomically high status couples.

Furthermore, this study relayed on self-report measures that poses the problem of common method variance. It is suggested that one may extend this work with larger, ethnically and socioeconomically diverse sample, and mixed method approach to increase external validity.

### Implications of the Study

These findings can help the mental health professionals in designing intervention program for wives rearing children with ASD and marital distress by taking their perception about behavioural difficulties in children with ASD into account. The findings of current study can be helpful in family and marital counselling of families who rear children with ASD.

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