

RESILIENCE, PERCEIVED SOCIAL SUPPORT AND LOCUS OF CONTROL IN MOTHERS OF CHILDREN WITH AUTISM VS THOSE HAVING NORMAL CHILDREN

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The present study compared resilience, perceived social support and locus of control among mothers of children with Autism Spectrum Disorder (ASD) and normal children. Comparative research design was used. Through purposive sampling, data were collected from 200 mothers, having ASD ($n=100$) and normal ($n=100$) children. Children's age ranged between 3-12 years ($M=6.6$; $SD=2.4$), 78% of the children were first born males. Participants were assessed through Resilience scale (Wagnild & Young, 1993), The multidimensional scale of perceived social support (Zimet, Dahlem, Zimet, & Farley, 1988), Locus of control scale (Rotter, 1966) and Demographic information sheet. The results showed significant differences in resilience and locus of control in mothers of children with ASD and normal children. However, resilience and perceived social support showed non-significant difference in both groups. Results also showed significant relationship was found between resilience and social support in both groups. These findings have clear implications for intervention for mothers of Children with ASD especially through cognitive behavioural management. Future studies need to focus on parental counselling especially regarding the future plans of the child in the long term.

Keywords. Resilience, Perceived Social Support, Locus of Control, Autism Spectrum Disorder

Disability does not only affect the disabled but the whole family (Crnic, Friedrich, & Greenberg, 1983). Rearing a handicapped child can be very difficult, especially the manifestation of Autism, parents get increasingly baffled and apprehensive about the uncertain future of their children. Moreover, practitioners also find it difficult to convey the

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disability to the family because it turns out to be a traumatic event for the whole family (Imran *et al.*, 2011; Symon, 2001).

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder which is noticeable in children of ages between 2.5 to 3 years. It affects a child's verbal, cognitive and social aspects of life. Almost 1 in 68 children is diagnosed with ASD. Researches done around world indicated that rate of autism ranges between 1- 2 % (Centersfor Disease Control and Prevention, 2016). ASD is quite widespread in Pakistan and is on the rise, with an estimate of 350,000 Children with ASD in Pakistan (The Nation, 2012).The rate of ASD is 6.31 % exclusively in Lahore (Suhail & Zafar, 2008). Whilst, parents of normal children struggle in order to deliver their children a safe atmosphere that fosters the biological, emotional and social development of their children, parents of Children with ASD face much more challenges in order to keep themselves strong and composed (Imran & Azeem, 2014; Tarabek, 2011). Since resilient people are less likely to develop emotional and mental health problems (Masten, 2001; Wagnild & Young, 2009), the present study aims to compare the resilience of mother of children with ASD and normal children mothers. Moreover, social abet is a shielding factor for the coping of parents having ASD child. Mothers of Children with ASD experience less hopelessness and burden if they get additional social support (Gray, 2002; Hartley, DaWalt, & Schultz, 2017). Pakistan being a collectivist society has a special place for interwoven relationships and family support systems that is why this aspect has been included in the present research. Further, locus of control is another variable of interest in the present study. Locus of control is an evaluation of an individual's perception of control over his/her own behavior (Rotter, 1966). Parents with a higher external locus of control are less likely to show active responses, and manifest greater predisposition for experiencing more stressful events (Coffaro, 2009). Bristol, Gallagher, and Holt (1993) reported that challenges listed by Children with ASD mothers are: High stress; weak physical health; sadness; exhaustion and anxiety about their child's dependence, impact on family verve and future psycho-social issues.

Rationale

In a developing country like Pakistan, children with developmental delays and disabilities have traditionally been the lone liability of mothers; therefore having such a child is of great challenge to the mental health of the mother. It frequently requires a reorientation and re-evaluation of the family goals, responsibilities and relationships.

Stressors created by the child are often unpredictable course of development and affects the family function (Cripe, 2013). Considering the mental health of the mothers could be negatively affected while taking care of child with ASD, the present study was planned to ascertain the issues of mothers of children with ASD. Resilience, perceived social support and locus of control may help mothers having autistic children to be strong and to help them cope with daily life stressful events more effectively.

Objectives

- To check relationship between resilience, locus of control and social support in the sample.
- To compare the mental health of mothers of children with ASD and mothers of normal children.

Hypotheses

- There is a difference in resilience scores of mothers of children with ASD and mothers of normal children.
- There is a difference in social support scores of mothers of children with ASD and mothers of normal children.
- There is a difference in locus of control scores of mothers of children with ASD and mothers of normal children.
- There is a relationship in scores of resilience, perceived social support and locus of control among mothers of children with ASD and mothers of normal children.

Method

Research Design

Comparative Research Design (Shaughnessy, Zechmeister & Zechmeister, 2015) was used to compare the difference between resilience, perceived social support and locus of control between mothers of ASD and normal children.

Sample and Sampling Strategy

A purposive sample of 200 mothers (Children with ASD=100; normal children=100) with age ranged between 23-52 years ($M_{age}=35$; $SD=5.4$) and children's ages ranged between 3-12 years ($M_{age}=6.6$; $SD=2.4$) was taken. Sample of mothers having Children with ASD was taken from five institutions of Lahore namely: Rising Sun School ($n=20$), Amin Maktab Centre for Special Education ($n=20$), Autism Institute of

Pakistan ($n=20$), Zubaida Shareef Center for Special Education ($n=20$) and from Oasis School ($n=20$). The data of mothers having normal children were collected from five institutions namely: The Educators ($n=20$), Bloom Field Hall School ($n=20$), The Smart School ($n=20$), The Message School System ($n=20$) and The City School ($n=20$). All mothers were educated, 12% had done intermediate, 43% bachelors, Masters 38% and 6.5% had done higher studies. In the present sample, majority of children were first born. The comparative group of normal children was blocked on age and gender of the child, only.

Assessment Measures

Resilience scale. Fourteen item Resilience Scale (Wagnild & Young, 1993) translated Urdu version by Khalid (2013) was used to evaluate resilience among mothers. The items are scored on seven point scale. Scores between 82 -98 show high resilience; 64-81, average resilience and low resilience in 31-48. Cronbach's alpha coefficients ranged from .72 to .94 (Khalid, 2013).

Locus of control scale. In the present study Urdu version (Ahmed, 1989) of Rotter's Locus of Control Scale (1966) was used to measure internal versus external perceptions of person control among participants. Scale includes six fillers and 23 items related to locus of control. Each item comprises of two statements: One presenting internal, and the other with external locus of control. The scale's internal consistency was between .65 and .79.

The multidimensional scale for perceived social support. The Urdu version (Jibeen & Khalid, 2010) of Multidimensional Scale for Perceived Social Support (MSPSS) developed by Zimet, Dahlem, Zimet, & Farley (1988) was used to check perceived social support that included family, contacts, and significant others etc. in the present study. It consists of 12 items. Items are ranked on a seven point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The internal consistency (Cronbach's alpha) for MSPSS Urdu version was 0.92.

Demographic information sheet. This includes information regarding: Age, gender, education, occupation, family monthly income, religion, family system, history of psychiatric illness and birth order.

Procedure

For pilot study, a purposive sample of 20 mothers, ten having children with Autism Spectrum Disorder from Rising Sun and ten mothers having normal children from The City School System was taken.

First of all permission was taken from the concerned authorities. They were informed about the research purpose, its significance, time involved and procedure. Furthermore, written consent of the mothers was also taken to participate in the present research. The subjects were also told about their right to quit study at any point in time. Individual testing was carried out. The administration of the questionnaire took 35 to 40 minutes approximately. Further it was found that participants of pilot study were not able to understand questionnaires in English language, therefore for better comprehension Urdu translation of questionnaires was used in main study. Permission was taken from authors of the tools. For the main study same procedure as of pilot study was followed.

Results

For the total sample, overall results showed that majority of mothers had higher resilience score ($M=69.47$; $SD=16.78$) and higher perceived social support score ($M=3.59$; $SD=0.77$). Results showed significant difference in resilience and locus of control of mothers having children with ASD and mothers having normal children. The mothers of children with ASD had high external LOC and mothers of normal children had high internal LOC. However, significant relationship was only found between resilience and social support in mothers having children with ASD and normal children.

Table 1

Independent sample t-test Comparing Resilience in Mothers of Children with ASD and Mothers of Normal Children (N=200)

Variable	ASD (n=100)	Non- ASD (n=100)	$t(198)$	p	95% CI		Cohen's d
	$M(SD)$	$M(SD)$			LL	UL	
Resilience	72 (15.78)	66 (17.43)	2.15	.05	-9.68	-.41	.36

Table 1 shows significant difference in scores of resilience in mothers with ASD and normal children. The results indicates that mothers of children with ASD are higher on resilience ($M=72$, $SD= 15.78$) than mothers of normal children ($M= 66$, $SD=17.43$).

Table 2

Independent sample t-test Comparing Perceived Social Support in Mothers of Children with ASD and Mothers of Normal Children (N=200)

Variable	ASD (n=100)	Non- ASD (n=100)	<i>t</i> (198)	<i>p</i>	95% <i>CI</i>		Cohen's <i>d</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)			<i>LL</i>	<i>UL</i>	
PSS	3.68 (.74)	3.50 (.79)	-1.62	.25	-.04	-.39	.23

Note. PSS= Perceived Social Support

Table 2 shows non-significant difference in the scores of perceived social support scores of both groups.

Table 3

Independent sample t-test Comparing Locus of Control in Mothers of Children with ASD and Mothers of Normal Children (N=200)

Variable	ASD (n=100)	Non- ASD (n=100)	<i>t</i> (198)	<i>p</i>	95% <i>CI</i>		Cohen's <i>d</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)			<i>LL</i>	<i>UL</i>	
LOC	-3.33 (5.09)	7.87 (5.98)	2.85	.01	-.33	-.07	.40

Note. * $p < .01$. LOC= Locus of Control

Table 3 shows a highly significant difference in the scores of Locus of Control of Mothers of children with ASD and normal children. Results indicate that mothers of children with ASD have high external locus of control and mothers of normal children have high internal locus of control.

Table 4

Pearson Product Moment Correlation for Resilience, Perceived Social Support and Locus of Control among Mothers with Children with ASD and Mothers with Normal Children (N=200)

Variable	1	2	3
1.Reselience	-	.54**	-.19
2.PSS	.50**	-	-.03
3. LOC	-.10	-.03	-

Note. ** $p < 0.01$. Upper Diagonal= Mothers With Children with ASD; Lower Diagonal= Mothers of Normal Children; PSS=Perceived social support; LOC=Locus of control.

Table 4 showed highly significant relationship between Resilience and Perceived Social Support among mothers with Children with ASD and Normal Children.

Table 5

Frequency of number of children in Normal and Clinical Group and their Ages (N=200)

Ages of children (in years)	Clinical Group	Normal Group
3	2	2
4	23	23
5	22	2
6	9	9
7	14	14
8	9	9
9	2	2
10	10	10
11	5	5
12	4	4

Table 5 shows frequency of number of children in Normal and Clinical Group and their Ages.

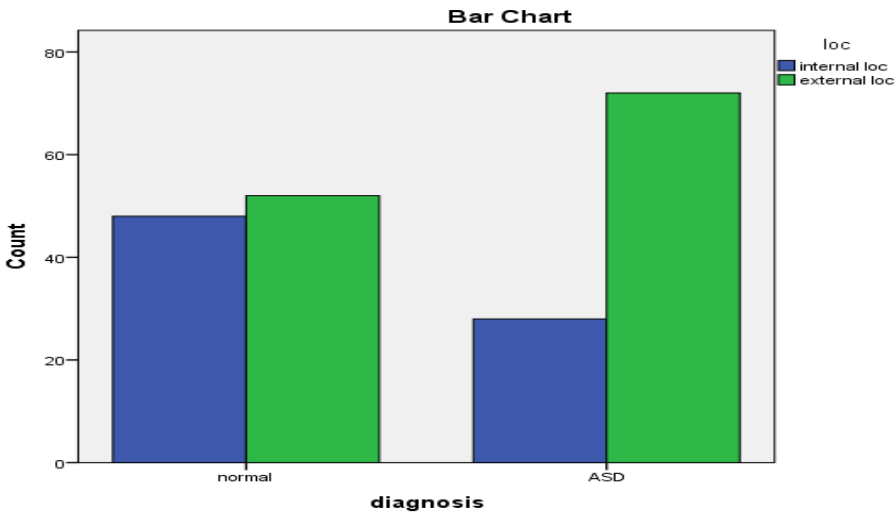


Figure 1. Bar graph showing Locus of Control Scores of Mothers of Children with ASD and Mothers with Normal Children

Discussion

The results of independent sample *t*-test revealed significant difference in resilience scores of mothers having children with ASD and normal children. The results of present study are similar to a study conducted by Ismael and Jacoub (2012) explored association among parents' resilience factors including family cohesiveness, social resources, positive outlook, financial resources, spiritual beliefs, making meaning out of adversity and child aspects. Their research indicated that parents having children with ASD experience significant level of resilience factors. Similarly, Dagga (2013) conducted a study to explore the association between resilience and psychological stress in parents having children with ASD. Findings indicated that level of resilience among caretakers of children diagnosed with ASD was considerably high. The similarity in result of the present study and the existing literature may be explained due to the fact that globally the mothers of children with ASD have pressures to raise their special child which makes them more united and closer as a family. That bonding may make them resilient. Further, the sample of present study comprised of mothers of higher income level group which provides them financial resources that also results in increase in resilience of mothers.

Non-significant difference in perceived social support score of mothers of children with ASD and mothers having normal children was found. The findings of present study coincides with the findings of Brobst, Clopton and Hendrick (2009) study as they compared behavioral problems, marital satisfaction, social support and parent child relation of parents having children with ASD and normal children. Results depicted insignificant difference in social support of parents having Autistic Spectrum Disorder and normal children. Mothers of children with ASD reported considerably higher social support. Further Meral and Cavkaytar (2012) examined the perceived social support of parents having children with ASD. Results indicated that mothers of children with ASD had average family social support perception. The similarity in findings of the present study and the existing literature may be explained due to the fact that generally the mothers of children with ASD have pressure to raise their special child which results in need of social support to cope with the burden. In the present study, sample comprised of mothers living in collectivistic culture. In collectivistic culture mothers generally get emotional support from their families (Zaman, 2014).

Moreover, significant differences in locus of control score was found among mothers having children with ASD and normal children.

The present research findings are consistent with previous researches done on locus of control. The study by Kaniel and Tov (2011) compared coping strategies of mothers and fathers having children with ASD. The results depicted significant impact of internal LOC and external LOC on both parents of children with ASD. In the same line Jones and Passey (2005) conducted a study to explore effect of family adaptation, LOC and coping resources of parents having learning disabled children. The findings depicted strong positive impact of parental internal LOC on parents of disabled children. In addition a study by Wah (2011) explored relationship of parental LOC and quality of life of parents having children with Autism in Hong Kong. Further parents of children with ASD had moderate external locus of control. There was inverse relationship of parental locus of control with the psychological health and social relationships. Similarly Hassall, Rose, and McDonald (2005) examined associations for parents LOC, family support and parenting stress. Findings depicted significant association among parental LOC and social support. In same lines Hall (1995) examined the impact of LOC in determining the effect of social support and coping strategies in productive family adaptation. Results depicted that parents of children with ASD had moderately high external locus of control. There was inverse relationship of parental locus of control with the psychological health and social relationships. The similarity in findings may be due to reason that globally, mothers having child with Autism blame external factors for disability of their children to protect themselves from stress and to cope with the disability (Hartley, DaWalt, & Schultz, 2017; Zaman, 2014).

Conclusion

It is concluded that significant differences were found in resilience and LOC score of mothers having children with ASD and normal children. However, non-significant difference was found in perceived social support score of mothers having child with Autism and normal children. Moreover, significant relationship was found between resilience and perceived social support in mothers having child with Autism and normal children.

Limitations and Future Implications

The sample was collected only from Lahore. The sample comprised of mothers who were literate and fine beyond the level of poverty. The sample comprised of self-reports. There was also self-

selection bias, as members were permitted to decline to partake in finishing the study.

For future studies, the sample should be collected from different cities of Pakistan. The sample should also include participants from different educational and socio economic backgrounds. The sample should include other children of household. Moreover, ASD needs to be explored with other variables such as parental adjustment and coping strategies. Further, a mix design research can also help in gathering in depth information and experiences of the caregivers. In the long run, health professionals need to focus on supportive therapy and Rational Emotive Behavior Therapy especially for the family of the child with ASD. The future efforts should include heightened emphasis regarding ASD in medical and allied health sciences curriculum, unremitting medical education, public awareness campaigns, promotion of school services, and caregiver support groups for these children and families. Awareness programs needs to be started all over the country especially in the rural areas. Whilst, the element of denial also makes the case worse; even among educated people; therefore, psycho-educational programs needs to be launched pan Pakistan. All these steps will enhance the early identification and diagnosis of autism, leading to early interventions and ultimately improving prognosis. Support at the Governmental level is imperative, as ASD is a long term condition it effects all the members of the family, therefore Government should also provide support, as raising child with ASD increases the social, emotional and financial stress for the whole family.

References

- American Autism Society. (2012). *Causes of autism*. Retrieved from <http://http://www.autism-society.org/what-is/autism>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Association.
- Bristol, M. M., Gallagher, J. J., & Holt, K. D. (1993). Maternal depressive symptoms Autism: Response to psycho educational intervention. *Rehabilitation Psychology*, 18(3), 122-127.
- Boyd, B. A. (2002). Examining the relationship between stress and lack of social support in mothers of children with autism. *Focus on Autism & Other Developmental Disabilities*, 17(4), 208-215.

- Brobst, J. B., Clopton, J. R., & Hendrick, S. S. (2009). Parenting children with autism spectrum disorder. *Journal of Autism and Other Developmental Disabilities*, 24(1), 38-49.
- Centers for Disease Control and Prevention. (2016). *Autism spectrum disorder*. Retrieved from <https://www.cdc.gov/ncbddd/autism/facts.html>
- Coffaro, A. (2009). *Maternal locus of control and perception of family status at entry and exit of birth to three early interventions* (Unpublished Doctoral Dissertation). University of Pittsburg, Pittsburg.
- Cripe, C. T. (2013). *Family resilience, parental resilience and stress mediation families with autistic children* (Unpublished Doctoral Dissertation). North Central University, Canada.
- Crnic, K. A., Friedrich, W. N., & Greenberg, M. T. (1983). Adaptation of families with autistic children: A model of stress, coping and family ecology. *American Journal of Mental Deficiency*, 88 (2), 125-138.
- Dagga, S. K. (2013). *Psychological stress and resilience among parents of autistic children in Gaza Strip* (Unpublished Master's Thesis). Islamic University of Gaza, Gaza.
- Gray, D. E. (2002). Ten years on: A longitudinal study of families of children with autism. *Journal of Intellectual and Developmental Disability*, 27(3), 215-222.
- Hall, L. E. (1995). *Parental internal attributes as factors in family adaptation to a child with a disability* (4th ed.). Hoboken: John Wiley & Sons, Inc.
- Hartley, S. L., DaWalt, L. S., & Schultz, H. M. (2017). Daily couple experiences and parent affect in families of children with versus without autism. *Journal of Autism and Developmental Disorders*, 47(6), 1645-1658.
- Hassall, R., Rose, J., & McDonald, J. (2005). Parenting stress in mothers of children with an intellectual disability: The effects of parental cognitions in relation to child characteristics and family support. *Journal of Intellectual Disability Research*, 49(6), 405-418.
- Imran, N. & Azeem, M. W. (2014). *Autism spectrum disorders: Perspective from Pakistan*. In V. B. Patel, C. R. Martin & V. R.

- Preedy (Eds.), *Comprehensive guide to autism*, pp. 1-8. USA: Springer. Doi: 10.1007/978-1-4614-4788-7_152
- Imran, N. (2011). A survey of autism knowledge and attitudes among the healthcare professionals in Lahore, Pakistan. *BioMed Central Pediatrics*, 11(107), 1-6. Doi:10.1186/1471-2431-11-107
- Ismael, B. A., & Jacoub, S. M. (2012). Determination of parents' resilience with autistic child in Baghdad city. *Journal of Faculty of Medicine of Baghdad*, 54(4), 325-330.
- Jibeen, T., & Khalid, R. (2010). Predictors of Psychological Well-being of Pakistani Immigrants in Toronto, Canada. *International Journal of Intercultural Relations*, 34(5), 452-464. Doi: 10.1016/j.ijintrel.2010.04.010
- Jones, J., & Passey, J. (2005). Family adaptation, coping and resources: Parents of children with developmental disabilities and behavior problems. *Journal on Developmental Disabilities*, 11(1), 31-46.
- Kaniel, S., & Tov, A. S. (2011). Comparison between mothers and fathers in coping with autistic children: A multivariate model. *European Journal of Special Needs Education*, 21, 140-147.
- Khalid, A. (2013). *Coping strategies, resilience and quality of life in caregivers of schizophrenic patients* (Unpublished MPhil Thesis). Beaconhouse National University, Lahore, Pakistan.
- Masten, A. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56, 227-238.
- Meral, B. F., & Cavkaytar, A. (2012). A study on social support perception of parents who have children with Autism. *International Journal on New trends in Education and Their Implications*, 3(3), 124-135.
- Pallant, J. (2007). *SPSS survival manual: A step by step guide to data analysis using SPSS for windows* (3rd ed.). Australia: Open University Press.
- Rotter, J. (1966). Generalized expectations for internal versus external control of reinforcements. *Psychological Monographs: General and Applied*, 80, 1-28.
- Shaughnessy, J., Zechmeister, E., & Zechmeister, J. (2015). *Research methods in psychology* (10th ed.). USA: McGraw-Hill.

- Suhail, K., & Zafar, F. (2008). Prevalence of autism in special education schools of Lahore. *Pakistan Journal of Psychological Research*, 23(3/4), 45.
- Symon, J. B. (2001). Parent education for autism: Issues in providing services at a distance. *Journal of Positive Behaviour Interventions*, 3 (3), 160-174.
- Tarabek, J. (2011). *Relationship satisfaction and mental health of parents of children with autism: A comparison of autism, ADHD, and normative children* (Unpublished Master's Thesis). University of Washington, New York.
- The Nation. (31st March, 2012). 350,000 children suffer from autism in pakistan. Retrieved from <http://nation.com.pk/islamabad/31-Mar-2012/350-000-children-suffer-from-autism-in-pakistan>
- Wah, C. C. (2011). *The role of locus of control in quality of life*. (Unpublished Master's Thesis). Hong Kong Baptist University, Hong Kong.
- Wagnild, G., & Young, H. (2009). Resilience. *Journal of Nursing Measurement*, 1(2), 165- 178.
- Zaman, R. M. (2014). *Parenting in Pakistan: An overview*. In H. Selin (Ed.), *Parenting across cultures. Science across cultures: The history of non-western science*, Vol. 7, pp. 91-104. USA: Springer, Dordrecht. ISBN: 978-94-007-7502-2.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52, 30-41.

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