

The Effect of Growth appraisal & Individual Assessment of Stress on Mental Health of Autistic Children's Parents

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Abstract: Having a child with autism is one of the most difficult things that can happen to a family and has a devastating impact on the parents' mental health. This paper studied the effect of two variables known as Appraisal of growth and Threat appraisal on mental health of Autistic Children parents. The paper is an applied research in terms of objective, a survey research in terms of data collection, and a descriptive - analytic research in terms of data analysis. The statistical universe is comprised of parents of 6 to 12 years old children with autism who had referred to rehabilitation centres of Tehran in 2013. Tools used for gathering data are general health questionnaire (GHQ), Post Traumatic Growth Inventory (PTGI) and the Stress Appraisal Measure (SAM). The research findings show that there is a significant relation between individual assessment of stress and growth appraisal with parents' overall mental health. Also age, education & annual income of parents had impact on mental health.

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Introduction

The term Autism Spectrum Disorder & Pervasive Development Disorder refers to a wide continuum of associated cognitive & neurobehavioral disorders including but not limited to three core defining features: Impairments in socialization, Impairments in verbal & non-verbal communication & restricted & repetitive patterns of behaviour. (American Psychiatric Association {APA}, 1994) These symptoms must exist in three year old children (Sadock, 2009).

Family stress research has demonstrated that parents of children with autism experience high levels of anxiety, stress, isolation, and uncertainty. (Webster, 2004) These parents encounter many challenges (Duarte, 2005).

When diagnosing these disorders, increasing mental pressures are imposed on the parents and this may lead to such reactions as trauma, despair, anger, depression, and so on. For most families, this diagnosis is so shocking and unexpected that some parents deny existence of this disorder in their children. Autism disorders, along with various lingual, communicational, behavioural and social disorders as well as difficult diagnosis, lack of certain and effective treatments and poor prognosis may provide the stage for many mental pressures over the family (Rafe'ei, 2007).

Vulnerability of the family to this disorder is sometimes so much that family mental health situation is highly damaged (Narimani, AqaMohammadian, and Rajabi, 2007). Sometimes, all wishes and hopes are converted into despair as soon as parents become aware of their children's disorder (Pisula, 2002). These

problems may include coordinating their normal tasks with the therapeutic programs, & being emotionally compatible with the different situation of their children (Pin, 1999; quoted by Raeis Dana, Kamali, Tabatabaie, and Shafarudi, 2009). Spending too much time on determining treatment, providing health care in the house, addressing school problems, and addressing behavioural problems of children with disabilities creates a life full of stress. (Baker, Blacher, Crnic, & Edelbrock, 2002) Also research indicates that these parents are engaged in doing activities related to helping and supporting their children for 29.7 hours per week in average. This restricts their ability in meeting family expenses and being employed outdoor (National Alliance for Caregiving, 2009). It is worth mentioning that these problems are doubled in families handled by one parent (Rupp & Ressler, 2009).

Evidence confirms that these parents experience higher stress compared to other parents of children with special needs (Chime, 2008, Piver.1992; Cook et al 1994; Ivan & Palmer, 1999; Lainhart, 1999; Shulang & Chang 2000; Kun & Carter, 2000). One of the greatest concerns of these parents is about their children's vague future & if they will ever be quite normal and whether others would understand their condition & treat them properly. (Mansell, 2004) In fact, the most stressful factor that these parents experience is low society acceptance of autistic behaviours and failure in receiving social supports (Chime, 2008). Even some studies indicate that mothers of children with autism, experience more stress and concern comparing to other chronic diseases (Piven, 1992; Cook et al., 1994; Piven and

Palmer, 1999; Iainhart, 1999; Shu, Lang & Chang, 2000; Kuhn & Carter, 2006). For example, Ogeston, Mackintosh & Myers (2011) compared hope and concern in mothers of autistic children (199 mothers) and those with down syndrome (60 mothers) and showed that autistic children's mothers have lower hope and more concerns about the future. These children make their family's social interactions and activities limited and influences their interpersonal relations. In these families, life is focused on the autistic child. Having autistic children cause depression, concern, stress, and shame in the parents and in some cases, has a negative effect on the marital relations; because it causes more discussions between parents & ruins their intimacy (McCabe, 2008). Some environmental variables that may be effective on these parents mental health include financial obstacles, social exclusion, family stress, access to the required information and services (Resch, 2010; Worcester, 2008).

Researchers believe that there are some moderating factors between the experienced mental pressure and child's disorder. Existence of some features may increase the parents' internal strength against mental pressures and prevent its outcome and disease (Feiz, 2001).

In general, studies of parental well being in this area have addressed an array of variables that maybe clustered into several broad domains:

Individual characteristics, Environmental & Social support & Subjective Appraisals including: Stress, Perception of growth, meaning & threat. (Elliot & Mullins, 2004; Mccubbin & Mccubbin, 1996; Wllander & Varni, 1992) According to transactional models of stress, cognitive appraisal mediates the stressfulness of events. & the appraisal of an event is a predictive of psychological well-being (Lazarus, 1997), Cognitive-Relational theory views appraisal as the process of evaluating or categorizing the personal significance of events (Lazarus 1991).

Post Traumatic Growth is defined as the subjective experience of positive psychological change reported by an individual as a result of struggle with trauma. Examples of positive changes are an increased appreciation of life, sense of increased personal strength, identification of new possibilities or positive spiritual change. (Tedeschi, Park & Calhoun, 1998)

With regard to the above mentioned matters, the necessity of paying attention to the mental health of these parents is raised and the main question of this paper is that what is the effect of appraisal of growth and individual appraisal of stress on mental health of autistic children's parents?

Materials and Methods

The present paper is an applied research in terms of objective, a survey research in terms of data collection and a descriptive – analytical research in terms of data analysis. Statistical universe is comprised of parents of 6 to 12 years old autistic children who had referred to the rehabilitation centres in Tehran in 2013. Due to difficult access to the parents of these children, available sampling method was used to select the respondents. In sum, the research questionnaire was completed by 100 parents (70 mothers and 30 fathers).

To gather data, below questionnaire has been used:

1-A demographic questionnaire designed to gather basic information such as their age, annual income, occupation, number of children, child age & education level

2-General health questionnaire (GHQ): it has been offered in 1979 by Goldberg and Hiller to screen non-psychotic psychiatric disorders. It contains 28 questions and 4 sub-scales namely, depression, anxiety/ insomnia, physical symptoms, and dysfunction, and each sub-scale has 7 questions. (Riahi, 2012) reliability of this questionnaire was measured by using Cronbach's alpha and reliability coefficient was estimated 0.90.

3-Post Traumatic Growth Inventory (PTGI): it has been offered by Tedeschi and Calhoun (1996) and contains 21 points and 5 dimensions namely, relating to others, new possibilities, personal strength, spiritual changes, and life satisfaction. Cronbach's alpha coefficient for this index has been estimated 0.98.

4-The Stress Appraisal Measure (SAM): it has been offered by Peacock E, & Wang, P (1990). It contains 28 points and 7 dimensions namely, centrality, challenge, control by others, control by self, stressfulness, threat and uncontrollability. This scale has been offered for assessing individual interpretation of different aspects of stressful situation. Reliability of this questionnaire has been estimated as 0.85 by using Cronbach's alpha coefficient.

Findings

parents age was between 25 and 52, with average of 35 and standard deviation of 4.5. Children were between 6 and 12, with average of 8 and standard deviation of 2.1. 67 of parents had autistic sons and the remain had autistic daughters. Regarding education of the respondents, 22% had elementary school degree, 15% had junior high school degree, 34% had diploma, 27% bachelor of sciences and 2% had higher degrees. Table (1) shows mean and standard deviation of the mental health dimensions in the sample. It is seen that anxiety and insomnia have influenced mental health of the respondents more than other dimensions.

Table 1- mean and standard deviation of mental health dimensions in the parents of autistic children

Mental Health Dimensions	Mean	Standard Deviation
Depression	25	4.5
Anxiety / insomnia	53.8	9
Physical symptoms	47.1	8.7
Dysfunction	37	4

Also table (2) presents mean and standard deviation of growth appraisal and its dimensions. As seen, spiritual changes in the parents have occurred more than other dimensions. Also personal strength is among dimensions that has better situation compared to other dimensions. In general, one can say that the respondents have a moderate situation in terms of growth appraisal index.

Table 2- mean and standard deviation of growth appraisal dimensions in the parents of autistic children

Dimensions of post traumatic growth	Mean	Standard deviation
Relating to others	45.5	9
New possibilities	37	8
Personal strength	59.3	6
Spiritual changes	68	7.3
Life satisfaction	51	6.5

Table (3) presents mean and standard deviation of individual assessment of stress. As seen, parents of the studied children have had moderate to high stress.

Table 3- mean and standard deviation of stress appraisal in the parents of autistic children

stress appraisal in the parents of autistic children	Mean	Standard Deviation
Centrality	56	7.4
Challenge	41	6.4
Control by others	45	8.1
Control by self	51	7.8
Stressfulness	65	9.2
Threat	40	5.8
uncontrollability	53	6.4

Table (4) has studied the relation of independent variables (individual stress and growth appraisal) with the mental health of parents. Pearson correlation coefficient shows that there is a negative significant relation between individual assessment of stress and mental health. So, as an individual has had more assessment of stress and stressful conditions, mental health has been reduced. Also the positive significant correlation coefficient between growth appraisal and mental health indicates that as parents have experienced more growth, they have better mental health.

Table (4) relation of independent variables (individual stress and growth appraisal) with the mental health of parents

Mental Health	
Individual assessment of stress	-0.951
Growth after injury	0.905

Table 5- regression coefficients test: variables explaining mental health general index

Predictor variables	R	R ²	F	Standard regression coefficients (β)	t	P
Age of parents	0.65	0.57	15.58	0.12	2.45	0.000
Education of parents				0.10	1.98	0.000
Children age				0.08	1.97	0.000
Family income				0.24	2.59	0.000
Individual assessment of stress				0.45	6.1	0.000
Growth appraisal				0.48	6.8	0.000

To study the effect of the research independent variables on the mental health of parents with autistic children, regression test has been used. The results in table (5) shows that age of parents explains 12% of the parents' mental health; education of parents, 10%; children,s age, 8%; family income, 24%; individual assessment of stress, 45%; growth appraisal, 48%. In

sum, variables entered into the regression model explain 57% of changes in the mental health.

Also, the research model has been fitted by using structural equations method. Figure (1) shows coefficients of each variable. The value of chi-square statistic of this model is 2672.5 and its degree of freedom is (10).

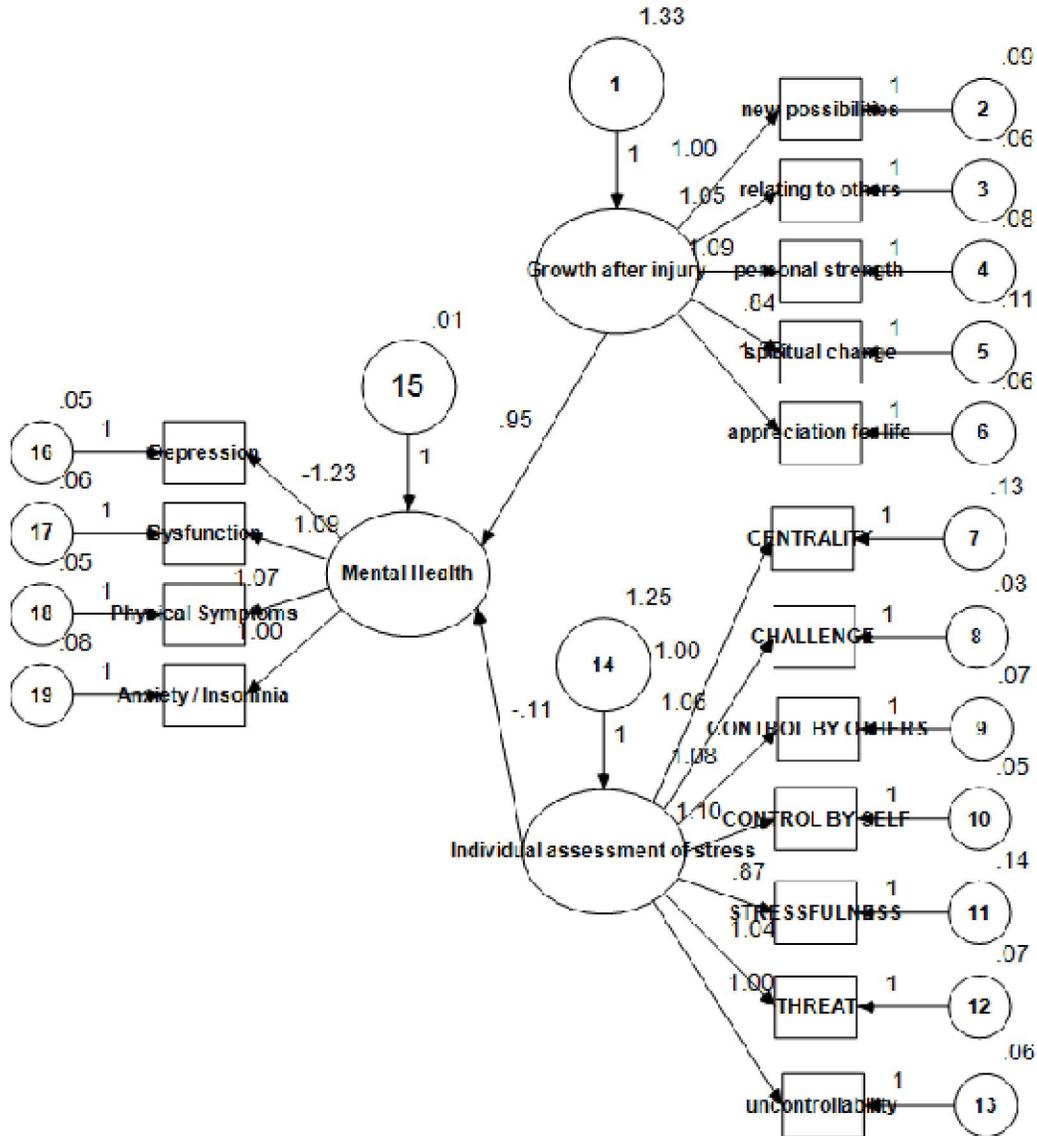


Figure 1- the research model fitness

Table 6- model goodness of fit indices

RMR	GFI	NFI	RFI	IFI	TLI	CFI
0.919	0.629	0.806	0.771	0.812	0.778	0.811

In table (6), goodness of fit indices shows that the research model has an appropriate fitness.

Conclusions

In the present paper, the effect of growth appraisal and individual assessment of stress, as the research independent variables, were studied. The research results showed that both independent variables are effective on the mental health of

parents. Individual appraisal of stress explains 45% and growth appraisal explains 48% of the parents' mental health. Family income & parents age are among other variables that may be effective on the health of parents.

These results indicate the critical role assigned to appraisal activity.

Parents who perceived more threats to important areas of their lives had lower levels of well-being.

These findings are compatible with Resch, Benz & Elliott's research in 2012 which emphasize the importance of threat & growth appraisal in their findings. This perspective is also consistent with Tedeschi & Calhoun (1995) process model of post traumatic growth which argues that the more an individual needs to work through a traumatic event and its painful after effects, the more he/she will benefit from the experience.

Results are also aligned with Linley & Joseph (2004) findings which showed that people who reported adversarial growth over time were less distressed subsequently.

It is important to conduct research, create policies & promote interventions that are family centered for families of these children.

Considering the researches on personal growth, social support & relationship are key predictors of psychological well-being. (Millam, 2004)

It is recommended to organize both group therapy & individual therapy for these parents in their children's therapeutic centres so they can relate with each other & share their feelings & experiences while their children are getting therapy. Interventions involving social support can effectively help individuals alter their negative appraisal of stressor (Dobson, k.s., 1979). It is necessary to have experienced clinicians in these centres & they should help the parents to find their own specific meaning in this era & ways of coping, they should help them improve their cognitive appraisals using CBT or other cognitive based therapies to build a sense of control, predictability & optimism.

Cognitive Behavioural Stress Management (CBSM) interventions that replace negative appraisals & aversive coping methods with positive appraisal & adaptive coping methods in conjunction with relaxation techniques & group based intervention regimes result in positive immune & endocrine functioning. (Parkes, K.R, 1984 & Vitaliano, P.P, 1987)

It should be noted that according to Greenberg's findings(2013) all Autism centres need a psychologist to conduct sessions based on positive psychology, mindfulness, & stress management for the parents in order to enhance their inner growth feelings & manage their stress in the best way.

The effect of spiritual changes on personal growth in this finding is consistent with Macintosh research which found that religion hastened recovery by helping people to find meaning by connecting them to supportive & engaged community, so it is suggested to provide all centres with spiritually based books & manage meetings with spiritually mentors in order to enhance parents, feelings of connectedness to god & help them in finding a meaning in this difficult path.

Also, family income was effective on the parents' mental health. That is, by decrease in the income, parents have reported lower levels of mental health. This finding is consistent with the results of Wikler research (1981).

This research was the first one being conducted in Iran & it had lots of limitations. It is recommended to use the questionnaires of appraisals on a bigger population & also the research should be broadened by being administered in different cities & on parents of children with other disabilities.

References

1. Andre Wittenborn, Angela Hubner, Linda Aleen(2011) relationship satisfaction & mental health of parents of children with Autism
2. Baker, L., Blacher, Crnic, K. & Edelbrock, C. (2002). Behavior problems and parenting stress in families of three -years- old children with and without development delays. *American Journal on mental Retardation*, 107, 433-444.
3. Beckman PJ.(1991) Comparison of mother and fathers perception of the effects of young children with and without disabilities. *Ame J on Mental Retard*; 95 (5): 585-95.
4. Chime N, Pooretamad H, Khoramabadi R.(2008) Problems and needs of mothers with autistic children. *J Family Res*;3(3):697-707.
5. Cook, EH; charak, DA; Arida, J; spohn, JA. (1994)"Depressive and obsessive – compulsive symptoms in hyper serotonemic parents of children with autistic disorder." *Journal of Psychiatry Research*, 52(1), 25-33.
6. Cox, T (1979).*Stress .Mcmillan, Londonanalysis. Can. J. Behav. Sci*; 11: 274-285.
7. Daniel, N, Macintosh(1992):*Journal of the American academy of religion*.67(3),700-703
8. Duarte CS, Bordin IA, Yazigi L, Mooney J. (2005), Factors associated with stress in mothers of children with autism. *Autism*; 9(4):416-27.
9. Feiz, Abdollah; Taher Neshat Dust, Humid; Naeli, Hossein (2001). A study on the relation between psychological hardness and methods of coping with stress, *Journal of Psychology and Education*, No. 20.
10. Friedrich WN, Wilturmer LT, Cohen DS. (1985) Coping resources and parenting mentally retarded children. *Ame J on the mental defi*; 90: 130-139.
11. Gray, K; Tonge,B. (2001). Are there early features of Autism in infants and preschool children? *Journal Pediatrics Child Health*, 37(3), 221-226.

12. Greenberg, M; Psychology today; march (2013) Mindful self express
13. Kuhn, j; carter, A. (2006). "Maternal self efficacy and Associated parenting cognitions among mothers of children with Autism". American journal of orthopsychiatry, 76(4), 564-575.
14. Lainhart, j. E. (1999). Psychiatric problems in individuals with autism, their parents and siblings. International Review of Psychiatry, 11(4), 278- 298.
15. Lazarus, R. S. and Folkman. (1984) S. Stress, Appraisal and coping. Springer, New York
16. Lazarus, R .S. and Launier, R. (1978) Stress-related transactions between person and environment .In: Perspectives in Interactional Psychology. Pervin, L. A. and Lewis, M.(Eds) Plenum, New York.pp.287-327
17. Lazarus, R.S. (1966) Psychological Stress and the Coping Process. McGrawhill, New York
18. Mansell W, Morris K. (2004), A Survey of parents' reactions to the reaction to the diagnosis of an autistic spectrum disorder by a local service: access to information and use of services. Autism, 8(4) : 387-407
19. McCabe H. (2008) Autism and family in the People's Republic of China: learning from parents' perspectives. Res Pract Persons Severe Disabil; 33(1-2):37-47.
20. Millam, J.E (2004). Post traumatic growth among Hiv/Aids patients; journal of applied social psychology(34)2353-2376
21. Moos, R. H. and Billings, A. G. (1982) Conceptualizing and measuring coping resources and processes. In: Handbook of Stress: Theoretical and clinical aspects .Goldberger, L. and Breznitz, S.(Eds) Free Press, New York .pp.212-230
22. Narimani, Mohammad; AqaMohamadian, Humid Reza; and Rajabi, Suran (2007). Comparison of mental health of mothers of exceptional children with mental health of mothers of ordinary children, Quarterly Journal of Mental Health Principles, 15-24, 33, 34.
23. National Alliance for Caregiving. (2009). Caregivers of children: A focused look at those caring a child with special needs under the age of 18. Bethesda, MD: The MetLife Foundation.
24. Ogeston, Paula, L., Mackintosh, Virginia, H. & Myers, Barbara, J. (2011), Hope and worry in mothers of children with an autism spectrum disorder or Down syndrome. Research in Autism Spectrum Disorders, 5(4), 1378-1384
25. P.alex Linley & stephan Joseph(2004).positive change following trauma & adversity: a review; journal of traumatic stress;17(1),11-21
26. Pisula, E. (2002). Parents of children with Autism: Recent research findings. Psychological functioning of mothers. Clinical Child Psychology, 19, 371-379.
27. Piven, j; Palmer, P. (1999). Psychiatric disorder and the Broad Autism phenotype: Evidence from a family study of multiple – Incidence Autism. American Journal Psychiatry, 156, 557-563
28. Piven, J; wzorek, M; landa, R; folstein, s. (1992). Psychiatric disorders in the parents of autistic individuals. Journal American Academy Adolescent Psychiatry, 31(2), 370- 371.
29. Raeis Dana, Mahin; Kamali, Mohammad; Tabatabaei, Seyed Mehdi; & Shafarudi, Narges (2009). A journey with parents of unable children from diagnosis to compliance, Rehabilitation Research Paper, 37-41, 10(1).
30. Rafe'ei, Tal'at (2007). Autism: assessment and treatment. Tehran: Danjeh Publication.
31. Resch, J. A., Mireles, G., Benz, M. R., Zhang, D., Peterson, R. L., & Grenweldge, C. (2010). Giving parents a voice: A qualitative study of the challenges experienced by parents of children with disabilities. Rehabilitation Psychology, 55, 139–150. doi:10.1037/a0019473
32. Riahi, Forugh; Khajedin, Nilufar; Izadi, Mazidi Sakineh; Eshrati, Tayebah; Naghdi Nasab, Leila.(2011) The effect of supportive and cognitive therapy on the mental health and illogical beliefs of mothers of autistic children, Medical Journal of Jondi Shapour : 6(10), 75: 637-645.
33. Rupp, K., & Ressler, S. (2009). Family caregiving and employment among parents of children with disabilities on SSI. Journal of Vocational Rehabilitation, 30, 153–175.
34. Sadock BG, Sadock VA, Ruiz P. Kaplan & Sadock's (2009) comprehensive textbook of psychiatry . 9th ed. Philadelphia: Wolters Kluwer/ Lippincott Williams & Wilkins;. P. 35-40.
35. Shu, B. C., Lung, F. W. & Chang Y. Y. (2000). The mental health in mothers with autistic children: A care-control study in southern Taiwan, Kaohsiung. Journal of medical science, 16(6), 308-334.
36. Tedeschi RG, Calhoun LG., (1996) The Posttraumatic Growth Inventory: measuring the positive legacy of trauma, J Trauma Stress. Jul; 9(3):455-71.
37. Tedeschi, R. G. & Calhoun, L. G. (1996). The post traumatic growth inventory. Measuring the positive legacy of trauma .Journal of Traumatic Stress, 9, 455-471. doi:10.1177/019394598901100403
38. The American Psychiatric Association (2002). Revised text of Diagnostic and Statistical Manual of Mental Disorders DSM IV-TR, translated by M.R. Ninkhu and M. Avadis Yans. Tehran: Sokhan Publication.
39. Webster A, Feiler A, Webster V, Lovell C. (2004) Parental perspectives on early intensive intervention for children diagnosed with autistic spectrum disorder. J Early Childhood Res;2(1):25-49
40. Wikler L. (1981) Chronic stresses of mentally retarded children. Family relation; 30: 281-288.
41. Worcester, J. A., Nesman, T. M., Raffaele Mendez, L., M., & Keller, H. R. (2008). Giving voice to parents of young children with challenging behavior. Exceptional Children, 74, 509–525.