

Comparison of Obsessive Compulsive Disorder and Coping Stress Status in Mothers of Disabled and Mothers of Normal Children

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Abstract

Aim: This study aimed at comparing OCD and coping stress status in mothers of disabled children and mothers of normal children.

Methods: This study was a comparative in terms of comparing obsessive-compulsive disorder and coping stress among mothers of disabled and normal children and correlation in terms of prediction of coping stress among two groups. All obsessive-compulsive women in Ahwaz, which was implemented on January 2017. 100 mothers of disabled children and 100 mothers of normal children were tested based on the severity of their OCD and their responses out of 40 scores: scores between 24-27, without OCD and scores between 27-32, with OCD, and scores greater than 32, very severe OCD and a functional disorder. Of these, 50 mothers of disabled children and 50 mothers of normal children having scores between 32 and 27 were selected for the test. In fact, their selection was done purposefully. Data collected with Yale–Brown Obsessive Compulsive Scale (Y-BOCS), and Coping Inventory for Stressful Situations CISS, which were analyzed with SPSS 23.

Findings: Mothers of normal children in stressful conditions use problem-solving strategies. Approximately 68% of the variance criteria are predictable for OCD in the mothers of both disabled children and normal children. Accordingly, mothers of disabled children experience more stress than mothers of normal children.

Conclusion: Mothers of disabled children use emotion-focused and avoided strategies for coping stress.

Keywords: Psychological, Obsession, Compulsion, Coping stress

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Introduction

The rate of obsessive-compulsive disorder (OCD) has a prevalence of approximately 2.5% in the general population [1]. OCD features a pattern of unreasonable thoughts and fears (obsessions) that lead you to do repetitive behaviors (compulsions). These obsessions and compulsions interfere with daily activities and cause significant distress. You may try to ignore or stop your obsessions, but that only increases your distress and anxiety. Ultimately, you feel driven to perform compulsive acts to try to ease your stress [2]. These symptoms create significant functional impairment in many areas through avoidance of triggering situations and excessive time spent on obsessions and compulsions [2]. Stressful life events have been long hypothesized to play a role in causing or precipitating obsessive-compulsive symptoms (OCSs). OCS is selectively associated with certain types of stressful life events. In particular, a history of family disruption may make a modest but significant contribution to the severity of OCS [3]. These patients have more problems with performance, more social isolation and more resistance to treatment, compared with patients without OCS [4]. Several reports implicate environmental influences such as relevant life events and traumatic events in the onset of the disease [5]; OCD patients suffer from significantly higher stress by daily events [6] and there is an

important relationship between distress tolerance and obsessions [7]. Woodman & Hauser (2013) showed that increasing demands of raising children with disability with all the expected developmental and functional deficiencies put families and parents in particular in confrontation with resultant stresses [8]. The negative psychological effects of having a child with disability have emerged in the results of many studies such as [8, 9] in which all the families of children with disability reported low self-esteem, and high levels of stress and depression, especially compared to the families of non-disabled children [10]. Mount & Dillon (2014) described stresses experienced by the parents of children with disability as a unique type of stresses as they expressed permanent feelings of crisis; as a result, they are facing with daily challenges due to their inability to act or do any effort to handle developmental and behavioral challenges in their child [11]. The study of Shyam, Kavita and Deepika Govi (2014) revealed that mothers of children with both mental and physical disability and mothers of children with mental disability scored significantly higher level of parenting stress and family burden compared to mothers of children with physical disability, mothers of deaf and dumb children, and mothers of children without disability [12]. Kiani, Khodabakhsh and Khastwo Hashjin, (2014) found that mothers of children with an

autism spectrum disorder, generally, reported significantly higher levels of stress and depression than mothers of children without autism spectrum disorder. The results indicted high levels of stress experienced by parents of children with disabilities. Parents of children with physical disability tend to have higher levels of stress, while parents of children with hearing impairment have the lowest levels of stress. The results also showed that engagement coping strategies were frequently more used in the parents with preference to use problem solving focused engagement strategies more than emotion focused engagement strategies. On the other hand, fathers of children with disabilities preferred to use engagement strategies more likely than mothers who preferred disengagement strategies. Finally, the results indicated high positive and significant correlation and acceptable predictable relation between levels of stress and coping strategies [13]. Mothers who have children with special needs reported higher amounts of stress compared to mothers who do not have children with special needs. A mother's ability to adapt to stressful situations depends upon a number of variables, including her psychological strengths, individual and family resources, and the type of coping strategies utilized [14].

According to Feizi et al. (2014) and Dervishaliaj (2013), parents of children with developmental problems are always bearing a

load of stress [15,16]. It could be said that mothers of children with special needs experience more stress than mothers of normal children. Parents of children with different disorders reported higher levels of anxiety and depression, negative parent-child interactions, insecure attachment of the child, physical abuse, and child's behavioral and emotional problems [17]. Parental OCD seems to be similar to other parental mental health problems that effect on parenting [18]. Mothers with OCD, who are housewives without additional help, feel restricted in pursuing their social and leisure activities, and experience more stress [19]. Mothers of children with developmental delays experience greater levels of stress, and have children with higher maladaptive behavior than normal children. Despite differences in the reported stress, parents of disabled children, by using coping stress strategies, try to reduce their stress. Future research should investigate the relationship between the various types of coping strategies and their effect on reducing stress in the families that have disabled children or any developmental delay children [8]. Our aim in this study was OCD disorder and coping with stress status in mothers with disabled and normal children.

Materials and Methods

The design of this study in terms of OCD and stress among the mothers of disabled and

normal children was comparative, and in terms of coping stress prediction among the two groups was correlation. Community of the study was all obsessive-compulsive women in Ahwaz. In this study, which was conducted at January of 2017, 100 mothers of disabled children and 100 mothers of normal children were tested on an OCD. If the scores were in the range of 24-27, they did not have OCD, and if the scores were in the range of 32-27, OCD was weak, and if it was more than 32, OCD was severe and there was a functional impairment. Of these, 50 were mothers of disabled children and 50 mothers of normal children had scores between 27 and 32, who were selected for the test. In fact, their selection was done purposefully. After clarifying the mothers about the study and reassuring them about the anonymity of the questionnaires as well as confidentiality of their information, written informed consents were obtained from all of them. The inclusion criteria were mothers having mentally retarded and normal children, housewife, or (non-working) mothers with OCD. Assessment of these patients was made using the Yale–Brown Obsessive Compulsive Scale (Y-BOCS), and Endler & Parker–CISS (Coping Inventory for Stressful Situations). Data were analyzed by using SPSS version 23 and descriptive and analytical statistics (independent t-test, Pearson’s correlation coefficients and multiple

regressions).

Yale-Brown Obsessive Compulsive Scale (Y-BOCS)

The Y-BOCS [20] is a 10-item assessment of obsessive-compulsive symptom severity. It has been found to have high inter-rater reliability, internal consistency, and excellent concurrent validity with another measure of OCD severity (Goodman et al., 1989). It includes a symptom checklist (Y-BOCS-SC), consisting of 71 items assessing the present and lifetime obsessions and compulsions. The Y-BOCS-SC is divided into 15 clinically determined categories of OCD symptoms, including hoarding obsessions and compulsions [21]. The Y-BOCS-SC exists in both clinical interview and self-report forms, which have been found to yield highly correlated results [22]. Only the self-report form was used in this study. In the current study, Cronbach’s $\alpha = 0.86$ was as a measure of general OC symptoms.

Endler & Parker - CISS (Coping Inventory for Stressful Situations)

CISS, developed by Endler and Parker, is a four-factor model of human coping with adversity [23]. Its construct differentiates three types of coping: emotion-oriented, task-oriented, and avoidant. The avoidant style has two dimensions: distraction and social diversion. These coping categories scatter

across the PAEI categories as follows:

P – Task-oriented coping: a primary control style that is adaptive when situations are appraised as changeable. Focus is maintained and emotions are controlled. This can be maladaptive for complex changing social problems.

A – Emotion-oriented coping: a secondary control style this is adaptive when situations are appraised as unchangeable. The aim is to reduce stress, but over the long run, it can increase stress and produce negative outcomes like anxiety and depression.

E – Avoidant-distracted coping: This is adaptive in the short-term for uncontrollable problems. You just do not let the problem bother you and focus on something more interesting. If problems are controllable, this strategy will be maladaptive over the long run.

I – Avoidant-social coping: Recourse to others is sought in the face of threat, for diversion or for assistance. This strategy is also adaptive for short-term, but over time, it is more effective to develop the skills needed to address the

threat as an instrumental problem.

A study of 612 adult twin pairs [24], determined heritability, estimates the CISS coping styles as follows: 35% for emotion-oriented coping, 34% for task-oriented coping, 33% for distraction, and 39% for social diversion. They note that these values are consistent with other studies into the heritability of coping styles and mechanisms. Validity for all CISS scales and concurrent validity for the occupational scales was 0.74, 0.66, and 0.68, respectively.

Results

As can be seen, the mean of OCD in mothers of disabled children and mothers of normal children is 10.51, and its standard deviation is 6.41. The mean and standard deviation of mothers of normal children is 9.67 and 5.70, respectively. The $M \pm SD$ of OCD mothers of disabled children is 5.70 ± 11.70 . Accordingly, it is clear that the mean of OCD in mothers of disabled children is higher than in mothers with normal children (Table 1).

Table 1: Demographic Features of OCD mothers with disabled children and mothers with normal children

Variable	Groups	(mean $\pm$ SD)	Maximum score	Minimum score	Frequency (percent)
Obsession-compulsive disorder	Control Group	9.67 $\pm$ 5.70	18	3	50
	Case group	11.70 $\pm$ 7.88	27	1	50
	Total	10.51 $\pm$ 6.41	27	1	100

As a result, the $M \pm SD$ of emotion-focused coping with the stress of mothers with normal

children was 63.55 ± 11.20 , and that of mothers with disabled children was 64.85 ± 15.17 . These

results suggest that the mothers of disabled children use more emotion-focused coping strategies to reduce the psychological pressure than mothers of normal children do.

The $M \pm SD$ of problem solving-focused coping strategies with the stress of mothers of normal children was 67.47 ± 12.70 . The $M \pm SD$ of problem solving-focused coping strategies with the stress of mothers of disabled children is 67.31 ± 9.29 . These results indicate that mothers of normal children use more problem

solving-focused coping strategies than mothers of disabled children to reduce the psychological pressure. Also the results showed that the $M \pm SD$ avoidance- based coping strategies with the stress of mothers of normal children $68/10 \pm 11.70$. The $M \pm SD$ of avoidance coping strategies with the stress of mothers with disabled children is 68.20 ± 12.10 . Therefore, it can be said mothers of disabled children use avoidance coping strategies more than mothers of normal children (Table 2).

Table 2: Relationship between obsessive-compulsive disorder and coping methods with the stress of mothers of disabled children and mothers of normal children

Variable	Group	Mean	Standard deviation	t	df	Significant
Emotion-focused	Mothers with normal children	63.55	11.20	-0.11	98	0.90
	ODC mothers with exceptional children	64.85	15.17			
Problem-focused	Mothers with normal children	67.47	12.70	0.05	98	0.96
	ODC mothers with disabled children	67.31	9.29			
Avoidance	Mothers with normal children	68.10	11.70	0.62	98	0.53
	ODC mothers with disabled children	68.20	12.10			

The correlation between OCD and emotion-focused coping strategies with the stress of mothers of disabled children and mothers of normal children ($R=0.742$ and $P=0.001$) at the level of $p < 0.05$ was not significant. The results showed a significant positive relationship between the emotion-focused coping strategies with stress and OCD. The correlation between OCD and problem-focused coping strategies with the stress of

mothers of disabled children and mothers of normal children ($R= 0.672$ - and $P= 0.001$) at the level of $p < 0.05$ was significant.

There was a significant negative relationship between OCD and problem solving focused coping strategies with stress. Therefore, it can be said that whenever the stress rate increases in mothers of disabled children, their use of problem solving strategies in reducing stress decreases. The correlation coefficient

between OCD and avoidance coping strategies in mothers of disabled children and mothers of normal children ($R=0.422$ and $P=0.001$) at the level of $p < 0.05$ was

significant, and also there was a significant positive correlation between the way of avoidance to coping with stress and OCD (Table 3).

Table 3: Relationship between obsessive-compulsive disorder and coping methods with the stress of mothers of disabled and normal children

Variables	Obsession		
	Frequency	Correlation coefficient	Significance level of p
Emotion-focused	100	0.742	0.001
Problem-focused	100	-0.672	0.001
Avoidance	100	0.422	0.001

Regression analysis showed that the multi-correlation between the subscales of coping with the stress of OCD mothers of disabled children with mothers of normal children ($P=0.001$, $MR=86\%$) at level of $P < 0.05$ was statistically significant. This result shows that there is a significant relationship between the subscales of using emotion-focused coping, problem-oriented and avoidance with the

OCD of disabled children and mothers of normal children. In other words, through the use of the predictor variables of emotion-focused coping strategies, problem solving focused strategies and avoid-focused coping strategies, approximately 68% of the variance criteria for OCD mothers of disabled children and mothers of normal children can be predicted (Table 4).

Table 4: Multivariate correlation coefficients between OCD and deal with the stress of mothers of disabled children and mothers of normal children to the input method

Predictor variable	Predictive variables	Multivariate predictors	Coefficient of determination	Value of	Significance level	Regression coefficients
Obsession	Emotion-focused	0.826	0.683	68.96	0.001	B=0.531 t=6.95 P=0.001
	Problem-focused					B=0.414 t=6.43 P=0.006
	Avoidance					B=0.531 t=6.95 P=0.001

Discussion

While much attention has been paid in the

literature to parental stress, less attention is paid to OCD mothers of disabled children. The

main objective of this study was to investigate psychological OCD in mothers of disabled and normal children and how they use coping stress strategies. The results showed that the average of OCD in mothers of disabled children was higher than that of mothers of normal children. This means that OCD mothers of disabled children with have experienced more stress. The results further indicated that using emotion-oriented and avoidance strategies is significantly correlated with OCD mothers of disabled children. For this reason, the mothers of disabled children due to having OCD and comorbid conditions and taking care for disabled children have intensified OCD and thus use emotion-oriented and avoidance strategies. There was a positive correlation between using emotion-oriented strategies and mothers of disabled children with OCD. This correlation means that increase of OCD in mothers of disabled children is associated with the use of emotional and avoidable strategies. There is a similar evidence showing that women are more likely to employ emotion-focused and avoidance coping strategies than men [25, 26]; this may be responsible for their higher tendency toward depression, anxiety and other emotional disorders. Also our findings showed a negative correlation between using problem-focused coping strategies and OCD mothers of disabled children. It means that increase of OCD in

mothers of disabled children is associated with using less problem-solving strategies. Variation in the use of coping strategies is correlated to many factors [8,27], indicating that parents tend to use emotional-focused and avoidance strategies in early stages of diagnosing disability in their children, and as the child is growing, the parents tend to use problem-focused strategies. This variation in using coping strategies was different between fathers and mothers; the results of [28-30] indicated that mothers of children with disabilities were looking for social support and are concerned more about emotions, while fathers tend to use avoidance and problem-focused strategies. Indeed, there is similar evidence showing that women more likely to employ emotion-based and avoidance coping strategies. The findings of this study are in agreement with those of [25, 26, 31, and 32]. Lack of using problem-solving strategies is associated with increased disturbance in performance. The results support that using problem solving-focused coping strategies is positively correlated to psychological well-being [33]. The findings of the present research are consistent with the similar previous investigations. Problem solving-focused coping strategies are viewed as positive responses that can enhance the long-term functioning of parents of disabled children. Problem-focused coping strategies

are concentrated on distress and stress. Possibly these strategies have abilities for reappraisal of intrusive thoughts. However, those with OCD tend to resort to emotion-focused coping strategies, focusing on stress reduction instead of eliminating the source of the stress [34]. In line with this finding, Pourmohamadreza-Tajrishi et al. [2015] showed that problem-focused coping strategy training program has positive effect on the promotion of mental health and decrease of EGSI and psychological symptoms (phobia, depression, paranoid thoughts, psychosis, somatic complaints, interrelations sensitivity, obsession-compulsion, anxiety, and aggression) in mothers of children with Down syndrome [35]. The results showed a significant positive relationship between the emotion-focused coping strategies with stress and OCD. In addition, employing emotion-focused coping strategies increases OCD symptoms. It can be said that a positive correlation between OCD symptoms and arousal. Also there is a significant positive correlation between the way of avoidance to coping with stress and OCD. Hayat & Zafar [2015] found that parents who employed avoidance to coping with stress reported lower levels of psychological well-being as compared to those who relied on problem-focused coping strategies [33]. Many studies have indicated that emotion-focused strategies

(ineffective coping) are correlated with more psychological problems [36], while problem solving-focused or active coping strategies are related to wellbeing and health [37,38]. Females usually prefer to use emotion-focused coping strategies more than males; mothers of disabled children also use less problem-focused strategies than their fathers and parents of normal children [39]. There is a significant negative relationship between OCD and problem solving-focused coping strategies with stress, so that OCD mothers of disabled children experience less stress when using problem solving strategies. The results indicated that mothers of disabled children as compared to mothers of normal children suffer greater depression, anxiety and stress. Regarding the use of coping strategies, mothers of normal children have reported that, they employ more problem solving-strategies than mothers of disabled children. For supporting this finding, Thapa et al. [2013] showed that encouraging the use of problem solving-focused coping style may lead to better outcome in OCD patients [40]. The findings of the present research are consistent with the similar previous investigations [3, 34, and 35]. The current study had some limitations. Firstly, nearly half of the OCD mothers did not sign the consent form to participate in the study and others were trying to rush in to fill out the questionnaire; such conditions may be

effective on the research results.

Conclusion

This work was about comparing OCD and coping with stress status in mothers of disabled and normal children; however, more studies are necessary to verify these findings and suggest that whether supportive family can decrease stress in these mothers and help them choose the best coping strategies.

Conflict of interest statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

1. National Comorbidity Survey (NCS) and National Comorbidity Survey Replication (NCS-R) Boston, MA: Harvard School of Medicine; 4, 2012. Available from: <http://www.hcp.med.harvard.edu/ncs/>
2. Vahia VN. Diagnostic and statistical manual of mental disorders: A quick glance. *Indian Journal of Psychiatry* 2013; 55(3): 220-3.
3. Vidal-Ribas P, Stringaris A, Rück C, Serlachius E, Lichtenstein P, Mataix-Cols D. Erratum to “Are stressful life events causally related to the severity of obsessive-compulsive symptoms? A monozygotic twin difference study”. *Eur Psych* 2015; 30(5): 309-16.
4. Poyurovsky M, Fuchs C, Weizman A. Obsessive-compulsive disorder in patients with first-episode schizop. *Am J Psychiatry* 1999; 156(12): 1998-2000.
5. Zohar J, Fostick L, Black DW, Lopez-Ibor JJ. Special populations. *CNS Spectr* 2007; 2(3): 36-42.
6. Coles ME, Heimberg RG, Frost RO, Steketee G. Not just right experiences and obsessive-compulsive features: experimental and self-monitoring perspectives. *Behav Res Ther* 2005; 43: 153-67.
7. Cougle JR, Timpano KR, Fitch KE, Hawkins KA. Distress tolerance and obsessions: an integrative analysis. *Depress Anxiety* 2011; 28(10): 906-14.
8. Woodman AC, Hauser CP. The role of coping strategies in predicting change in parenting efficacy and depressive symptoms among mothers of adolescents with developmental disabilities. *JID R* 2013; 57(6): 513-30.
9. Picci RL, Oliva F, Trivelli F, Carezana C, Zuffranieri M, Ostacoli L, Furlan PM, Lala

- R. Emotional Burden and Coping Strategies of Parents of Children with Rare Diseases. JCF 2015; 2(24): 514-22.
10. Lopes V, Clifford T, Minnes P, Ouellette-Kuntz H. Parental stress and coping in families of children with and without developmental delays. JDD 2008; 14(2): 99-104.
11. Mount N, Dillon D. Parents' experiences of living with an adolescent diagnosed with an autism spectrum disorder. ECP 2014; 31(4): 72-81.
12. Shyam R, Govil K, Govil D. Stress and Family Burden in Mothers of Children with Disabilities. IJIMS 2014; 4(1): 152-9.
13. Kiani F, Khodabakhsh M, Khastwo Hashjin H. "Comparison of Parenting Related Stress and Depression Symptoms in Mothers of Children with and without Autism Spectrum Disorders (ASD). IJ P 2014; 2(3.3): 31-7. [In Persian]
14. Ahmann E. Supporting fathers' involvement in children's health care. Pediatr Nurs 2006; 32(1): 88-90.
15. Feizi A, Najmi B, Salesi A, Chorami M, Hoveidafar R. Parenting stress among mothers of children with different physical, mental, and psychological problems. JRMS 2014; 19(2): 145-52. [In Persian]
16. Dervishaliaj E. Parental Stress in Families of Children with Disabilities: A Literature Review. JSSR 2013; 3(7): 579-84.
17. Habibi Asgar Abad M, Rashidi A, Motevalipour A. Comparing the parental stress between the mothers of disabled boys and the mothers of normal boys. J Res Behav Sci 2009; 2: 175-81.
18. Griffiths J, Norris E, Stallard P, Matthews S. Living with parents with obsessive-compulsive disorder: children's lives and experiences. Psychol Psychother 2012; 85(1): 68-82.
19. Gupta VB. How Hindus Cope with Disability. JoRD & Health 2011; 15(1): 72-8.
20. Goodman WK, Price LH, Rasmussen SA, Mazure C, Fleischmann RL, Hill CL, Heninger GR, Charney DS. The Yale-Brown Obsessive Compulsive Scale: I. Development, use, and reliability. Arch Gen Psychiat 1989; 46: 1006-11.
21. Goodman WK, Price LH, Rasmussen SA, Mazure C, Delgado P, Heninger GR, Charney DS. The Yale-Brown Obsessive Compulsive Scale. II. Validity. Arch Gen Psychiat 1989; 46: 1012-6.
22. Steketee G, Frost R, Bogart K. The Yale-Brown Obsessive Compulsive Scale: interview versus self-report. Behav Res Ther 1996; 34(8): 675-84.
23. Endler NS, Parker JDA. "Multidimensional Assessment of Coping: A Critical Evaluation." JoPSP 1990; 58(5): 844-54.
24. Kozak B, Strelau J, Miles JNV. Genetic determinants of individual differences in

- coping Styles. *Anxiety, Stress, and Coping* 2005; 18(1): 1-15.
25. Kapsou M, Panayiotou G, Kokkinos CM, Demetriou AG. Dimensionality of Coping: an empirical contribution to the construct validation of the Brief-COPE with a Greek-speaking sample. *J Health Psychol* 2010; 15: 215-29.
 26. Kelly MM, Tyrka AR, Price LH, Carpenter LL. Sex differences in the use of coping strategies: predictors of anxiety and depressive symptoms. *Depress Anxiety* 2008; 25(10): 839-46.
 27. Wang P, Michaels CA, Day MS. Stresses and Coping Strategies of Chinese Families with Children with Autism and Other Developmental Disabilities. *J Autism Dev Disord* 2011; 41: 783-95.
 28. Seymour M, Wood C, Giallo R, Jellett R. Fatigue, Stress and Coping in Mothers of Children with an Autism Spectrum Disorder. *J Autism Dev Disord* 2013; 43(7): 1547-54.
 29. Hartley SL, Seltzer MM, Head L, Abbeduto L. Psychological well-being in fathers of adolescents and young adults with Down syndrome, fragile X syndrome, and autism. *Family Relations* 2012; 61(2): 327-42.
 30. Glidden LM, Natcher AL. Coping strategy use, personality, and adjustment of parents rearing children with developmental delays. *J I DR* 2009; 53: 998-1013.
 31. Eaton JR, Bradley G. The role of gender and negative affectivity in stressor appraisal and coping selection. *Int J Stress Manag* 2008; 15: 94-115.
 32. Mak Winnie WS, Ho Gladys SM. Caregiving Perceptions of Chinese Mothers of Children with Intellectual Disability in Hong Kong. *JARID* 2007; 20(2): 145-56.
 33. Hayat I, Zafar, M. Relationship between Psychological Well-being and Coping Strategies among Parents with Down Syndrome Children. *IJHSS* 2015; 7(1): 109.
 34. Zator K. Obsessive Compulsive Disorder as Stress and Coping: Cognitive Models and Associated Treatments. *WUPJ* 2014; 12(1): 1-11.
 35. Pourmohamadreza-Tajrishi M, Azadfallah P, Hemmati Garakani S, Bakhshi E. The Effect of Problem-focused Coping Strategy Training on Psychological Symptoms of Mothers of Children with Down syndrome. *IJPH* 2015; 44(2): 254-62.
 36. Braun-Lewensohn O, Celestin-Westreich S, Celestin LP, Verleye G, Verte D, Poncaert-Kristoffersen I. Coping styles a moderating the relationships between terrorist attacks and well-being outcomes. *J Adolescence* 2009; 32(3): 585-99.
 37. Frydenberg E, Lewis R. the Adolescent Coping Scale: construct validity and what the instrument tells us. *Aust J Guid Couns* 1999; 9: 19-36.

38. Lewis R, Frydenberg E. Concomitants of failure to cope: what we should teach adolescents about coping. *Br J Educ Psychol* 2002; 72(3): 419-31.
39. Beckman P. Comparison of mothers' and fathers' perceptions of the effects of young children with and without disabilities. *Am J Ment Retard* 1991; 95(5): 585-95.
40. Thapa DK, Shyangwa PM, Shakya R, Sapkot N. The Application of Cope Inventory in Obsessive-Compulsive Disorder. *JUCMS* 2013; 1(3): 22-7.