

# Effect of humour on reduction of hopelessness and increase of social adjustment in mothers of children with intellectual disability

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## Abstract

**Introduction:** This study aims to determine the effect of humour training on reducing hopelessness and increasing social adjustment in mothers of children with intellectual disability.

**Method:** In this quasi-experimental study, the statistical population was all the mothers of children with intellectual disability in District 7, city of Mashhad, in the 2015-2016 school year. Using multi-stage sampling 50 mothers of children with intellectual disability among those randomly selected were allocated into case and control groups (each group,  $n = 25$ ). At first, Beck Hopelessness and Bell social adjustment questionnaire was implemented as a pretest in both groups, after which, only the case group was given humor training for 8 one and a half hour sessions. At the end the posttest was carried out in the two groups. The data were analyzed by SPSS-21 software and Covariance analysis test.

**Results:** The results show that humour training reduces hopelessness ( $P < 0.05$ ) and increases social adjustment of mothers of children with intellectual disability ( $P < 0.05$ ) significantly.

**Discussion and Conclusion:** According to the findings, humor training has a significant effect on reduction of hopelessness and increase of social adjustment in mothers of children with intellectual disability. Thus, it is recommended to use this training for mothers of these children, by specialists.

**Key words:** Sense of humour, Hopelessness, Intellectual disability, Children

## Introduction

Intellectual disability in children, as a crisis, can deeply affect the family communications and actions, and the families who have open, effective, and permanent relationships and show flexibility in their roles can well adapt to this crisis. (Venables, and Simon, 2001). One of the limitations of mentally retarded children is the weakness of their strength and sensory-motor abilities (Afrooz, 2004). Due to the lack of behavioral appropriateness, these children suffer from hopelessness, and are considered the most important problem for their parents and teachers (Durand, 1995).

Intellectually disabled children have difficulties in social interaction and communication almost since their childhood. Some do not show willingness to being embraced by parents, some not feel anxious of staying in alien places, and some are not able to understand and interpret the thoughts and feelings of others. Social cues such as smiles, winks, and emotions may be meaningless to these children (Kooshesh, 2008). Another issue which has attracted the attention of experts in this regard is lack of social and participative games for intellectually disabled children. Unlike normal children, mental organization in intellectually disabled children has not reached the extent of development that makes them able to visualize abstract affairs and take part in puzzle games through domination of internalization over externalization (Mansour, 2007).

Mothers of such children may often show undesirable features such as despair and social conflict in dealing with the problems of their children. Hopelessness in these have foreboding about the child's future. This can lead to problems such as sadness, suicidal tendencies, indifference, difficulty in concentration, and sleep disorders (Ervin & Henricus, 1997). According to opinions of some researchers such a situation firstly causes hopelessness and then depression. As a result of hopelessness, a person becomes severely inactive and loses the ability to assess their situations and make decisions. Hopelessness breaks people and makes them defenseless in the face of stressors. Over time, this hopelessness and depression affects the patient's relations with the surrounding social environment (Mandler, 1972). Hopelessness can lead to other negative consequences. Hopeless people do not find any way to get out of stressful situations (Zimmerman, and et al, 2005). Low ability in creating an optimistic outlook, egocentricity, lack of emotional self-regulation, and failure in showing flexible responses to unpredictable events make the experience of hopelessness harder and may warrant psychotherapy interventions (Williams, 2008).

Another negative feature that mothers of children with intellectual disability may show is difficulty in social adjustment (Beck, and Lester, 1974). Social adjustment is a multidimensional complex communication process between a person and society (Hosseinchari, and Fadakar, 2005). Social adjustment skills are a process that enables individuals to understand and predict the behavior of others, control their own behaviors, and adjust their social interactions (Slomowski, and Dunn, 1996). Studies have

shown that the birth of an intellectually disabled child can cause mental stress and crises in such mothers and put their adjustment and physical and mental health at risk (Saloviita, Itälänna, & Leinonen, 2003). They also may become socially isolated and more vulnerable to post-traumatic stress (Friedrich, and Friedrich, 1981). Some even acknowledge that these adverse effects not only affect the parents but also change family relationships (Gupta, and Singhl, 2004). However, the extent to which the social relations of a family with an intellectually disabled child are limited depends on the severity of the child's disability; the greater the severity of child's intellectual disability, the more limited the leisure time and social communications of their family (Shariati, and Davarmanesh, 1995).

One of the important coping skills in the face of life's problems associated with hopelessness and social adjustment is having a sense of humor. This concept, as part of positive psychology, carries inclusive and multiple concepts. Humor can be defined as individual differences in behaviors, experiences, emotions, attitudes, and abilities in fun, laughing, joking, and so on (Martin, 2007). Humour can be seen as a complex emotional and cognitive feature which exists in different societies and cultures (Ziegler, 1998). Humour is effective in reduction of anxiety, stress, depression, and isolation, increasing self-esteem, energy, and hope, and creating a sense of power, domination, and control. Humorous people can express their problems easier and try to support others in the face of everyday problems in order to lessen their burden of grief, and this makes them enjoy more interaction with others and feel more helpful and beneficial (Nezlek, and Derks, 2001).

According to theoretical foundations mentioned about humour and its important role in reduction of anxiety and depression and increasing social interaction and also existence of few studies about the effects of humour on reducing hopelessness and increasing the adjustment of parents of intellectually disabled children, the present study has been done to answer the important question, can the humour training have an influence on decreasing hopelessness and increasing social adjustment of mothers of children with intellectual disability.

### Objectives and hypothesis

The present study aims to determine the effectiveness of humour in reducing hopelessness and increasing the adjustment of mothers of children with intellectual disability. The main research hypotheses are as follows:

1. Humour training is effective in reducing the hopelessness of mothers of children with intellectual disability.
2. Humour training is effective in increasing social adjustment of mothers of children intellectual disability.

## Introduction

### Participants

The present research was a quasi-experimental study. The statistical population included all mothers of intellectually disabled children who were studying in Mashhad in the academic year 2014-2015. Among them, 50 mothers were selected as the sample by multistage random sampling

and randomly divided into two case and control groups (25 subjects in each group).

### Instruments

Research tools were as follows:

**1- Beck Hopelessness Scale (BHS):** This questionnaire has been developed by Aaron T. Beck in 1979 and aims to examine and measure people's negative expectations about future events. In this questionnaire, a person's views and opinions about the world, future, the personal experiences and the way of interpreting these three dimensions are evaluated. BHS has been developed for people aged 17-80 and the score range is between 0 and 20. Higher scores are indicative of higher levels of hopelessness. The items are scored by 1 (true) and 0 (false). After obtaining scores of each item, the questionnaire's subscales can be calculated. Validity and reliability of this scale have been evaluated in various studies, particularly in the field of suicidal tendencies and various correlations such as 0.36-0.76 BHS and 0.56 by clinical scale of hopelessness have been reported. This scale has shown high ability in measurement of hopelessness structures and negative expectations (Beck, 1988). Dezhkam (2004) obtained the reliability of this scale to be 0.79 using internal consistency coefficient (Cronbach's alpha). In the present study, the reliability of BHS was calculated as 0.76 using Cronbach's alpha. This figure for subscales of feeling about the future, lack of motivation, and hope and expectation of the future was obtained as 0.69, 0.71, and 0.70, respectively.

**2- Bell Adjustment Inventory:** This questionnaire consists of 160 items (five 32-item subscales) and the respondents express their views by answering "Yes" or "No". Five subscales of this questionnaire include adjustment at home, physical adjustment, emotional adjustment, job adjustment, and social adjustment. In the present study, the items related to job adjustment were eliminated because the studied children had no job. Lower scores on this scale indicate high adjustment and higher scores suggest low adjustment. Reliability coefficient of this questionnaire using Spearman-Brown formula was obtained as 81.91, 88.00, 0.91, and 0.00 for family, physical, social, and emotional dimensions, respectively. Inner correlation coefficient among the dimensions of adjustment has been reported to range from 11% to 60%. Reliability of this questionnaire in the present study was calculated as 0.833 using Cronbach's alpha. This figure for family, physical, social, and emotional dimensions of adjustment was obtained 0.612, 0.555, 0.650, and 0.787, respectively. The items related to various dimensions of adjustment are answered by choosing one of three options of "Yes", "No", and "I do not know". Each item is scored according to the normalized table.

### Procedure

After selecting a random sample of 50 mothers of children with intellectual disability and randomly dividing them into two groups of case and control and also obtaining permission and doing the related correspondence, all of the subjects were pretested using the two questionnaires mentioned above in a session lasting 2 hours. Before handing out the questionnaires, the subjects were

briefed on the research subject and its importance, the importance of accuracy in filling out the questionnaires, and confidentiality of results. Subjects in the case group received an eight 90-minute training course (direct comment method) once a week. The topics of these eight sessions included introduction and familiarity with the rules of the group, identifying the uniqueness of humour style of people, laughing exercise, the ability to play with words and telling jokes, conscious searching of humour and fun in everyday life, learning of laughing at self, the use of humour and jokes at the height of tension and discomfort, and summarization and exchange of experiences. At the end of this training course, posttest was performed for both groups.

### Data Analysis

The obtained data was analyzed using SPSS-16 software. The statistics were defined in tables, means, as well as in inferred statistics, by using Covariance analysis test (ANCOVA).

## Results

As it can be seen in Table 1, mean score of hopelessness reduction after intervention is  $15.48 \pm 1.63$  in the case group and  $13.52 \pm 0.02$  in the control. This shows an increase in the case group compared to the control. In order to make sure of consistency between the groups in terms of studied parameters, Levene test was used. The results of this test showed that F-value is equal to 0.61 which is not significant at the level of  $p > 0.05$ . Therefore, the assumption of equality of variances was confirmed, and regarding the compliance with other assumptions, the statistical test can be done for analysis of data.

The findings presented in Table 2 show that training sense of humour has a significant impact on the reduction of hopelessness in mothers of children with intellectual disability ( $p < 0.01$ ,  $F = 83.78$ ).

According to Table 3, mean score of social adjustment after intervention is  $4.92 \pm 0.90$  in the experimental group and  $3.52 \pm 0.87$  in the control. This shows an increase in the experimental group compared to the control. In order to make sure of consistency between the groups in terms of studied parameters, Levene test was used. The results of this test showed that F-value is equal to 0.54 which is not significant at the level of  $p > 0.05$ . Therefore, the assumption of equality of variances was confirmed, and regarding the compliance with other assumptions, the statistical test can be done for analysis of data.

Table 4 shows that training sense of humour has a significant impact on social adjustment in mothers of children with intellectual disability ( $p < 0.01$ ,  $F = 27.19$ ).

## Discussion and Conclusions

The results confirmed the first research hypothesis which indicates that "Humour training is effective in reducing the hopelessness of mothers of intellectually disabled children". This is consistent with the findings of Troller (2003), Richman (2007), Kevin, and Meyer (2007), Abdel-

**Table 1: Mean and standard deviation of hopelessness scores in pretest and posttest for each group**

Group	Stage	Number	Mean	SD
Case	Pre test	25	13.44	2.14
Control		25	13.40	2.02
Case	Post test	25	15.48	1.63
Control		25	13.52	2.02

**Table 2: A summary of the results of covariance test about the effect of humour on reduction of hopelessness**

Source of influence	Sum of squares	Degree of freedom	Mean square	F-value	P
Pre test	136.42	1	136.42	246.13	0.000
Groups	46.44	1	46.44	83.78	0.000
Error	26.05	47	26.05		
Total	10723	50			

**Table 3: Mean and standard deviation of social adjustment scores in pretest and posttest for each group**

Group	Stage	Number	Mean	SD
Experimental	Pretest	25	2.88	1.20
Control		25	3.28	0.73
Experimental	Posttest	25	4.92	0.90
Control		25	3.52	0.87

**Table 4: A summary of the results of covariance test about the effect of humour on social adjustment**

Source of influence	Sum of squares	Degree of freedom	Mean squares	F-value	P
Pretest	1.65	1	1.65	2.13	0.15
Groups	21.07	1	21.07	27.19	0.000
Error	36.42	47	0.77		
Total	953.000	50			

Khalek, and Lester (2006) and Mawdsely, et al, (2006), who reported that humour can reduce death, anxiety, and discomfort and bring peace. The results are also consistent with the findings of Khoshooiy (2007), Motalebzadeh (2005), Golestaneh (2012), Kakavand, and Shams (2010), and Behpazhou, et al (2009) inside Iran who stated that humor improves mental health, happiness, and adjustment and reduces mental disorders, grief, mental diseases, and hopelessness. From the interpretation of these findings, it can be stated that since hopelessness is a dominant feature of mothers of intellectually disabled children, it seems that humour, as a cognitive and emotional strategy, can help such mothers to cope with emotional conflicts or stressful external factors through giving importance to humorous and entertaining aspects of life. Therefore, hopelessness of mothers of intellectually disabled children can be reduced through humor training.

The study findings also confirmed the second hypothesis which argues that "Humour training is effective in increasing social adjustment of mothers of intellectually disabled children". This is consistent with the findings of Williams (2001) who concluded that humour has a significant impact on general adjustment, positive self-concept, and ability to make good social relationships, self-esteem, and increased social adjustment. This

result is also consistent with the findings of Naderi and Shokouhi (2010), Zahed, et al (2012), Behpazhou (2009), Khodayarifard, and Rahiminejad (2006), and Azin and Mousavi (2009) inside Iran who reported that humour can predict death anxiety, increase social, emotional, and academic adjustment, improve mental health, and reduce shyness of students. It seems that, with the training of humour as an important coping skill, mothers have managed to show more resistance to life's problems and interpersonal stresses and tensions and improve their individual and social adjustment and flexibility by reducing these tensions. Some researchers and experts consider social adjustment synonymous with social skills. In their opinion, social skill is the ability to establish mutual relations with others in a specific social context in a way that is acceptable and valuable to the community. It seems that training of sense of humour has helped mothers of intellectually disabled children to reduce hopelessness and its negative outcomes such as depression, isolation, and loneliness, find the opportunity for acquiring social skills and constructive interactions with others, and finally improve their social adjustment.

## References

- Abdel-Khalek, A. & Lester. (2006). Optimism and pessimism in Kuwaiti and American college students, *International journal of social psychiatry*, 52(2); 110-126.
- Afroz, G. (2004). *An Introduction to Psychology and Education of Exceptional Children*; Tehran University Press.
- Azin, A., Mousavi, S. M. (2009). Studying the role of educational factors in social adjustment of high school students in Fereyduhshahr; *Journal of Applied Sociology*, 22 (1): 183-200.
- Beck, A. & Lester, D. (1974). Assessment of pessimism: the hopelessness scale. *Journal of Counseling and Clinical Psychology*, 42, 861-86.
- Beck, A.T., and Steer, R.A. (1988). *Beck hopelessness scale*. The Psychological Corporation, San Antonio.
- Behpazhou, A., Soleymani, M., Afroz, G., & Lavasani, M. (2009). Effect of social skill training on social adjustment and academic performance of slow-learning students; *Journal of Educational Innovations*, 9 (33); 163-186.
- Dejkam, K. (2004.) *Adaptability and standardization of Beck Hopelessness Scale with students of Islamic Azad University*. Unpublished Master's thesis. Islamic Azad University, Tehran Branch.
- Durand, B.M.(1995). *Severe Behavior Problem. A Functional Communication Training Approach*. New York: N. Y. the Guilford Press.
- Ervin A., and Henricus, M. (1997). *An ethological approach of interpersonal theories of depression*. Available at <http://dissertations.ub.rug.nl>.
- Friedrich, W.N., & Friedrich, W.L. (1981). Psychosocial assets of parents of handicapped and no handicapped children. *American Journal of mental deficiency*, 530-585: 551
- Golestaneh, S. M. (2012). Role of personality traits, creativity, and humor styles in predicting mental well-being of university students; *Persian Gulf University of Bushehr, Journal of Personality and Individual Differences*, 1, 98-114.
- Gupta, A. and Singhl, N. (2004). Positive perceptions in parents of children with disability. *Asia pacific disability rehabilitation journal*, 15 (1): 22-34.
- Hosseinchari, M., Fadakar, M. M. (2005). Studying the effect of university on communication skills based on a comparison between school students and university students; *Journal of Behavior Scholar*, 4(33); 67-85.
- Kakavand, A. R., Shams, H. (2010). Relationship of humor styles of university students with their general health; *Journal of Applied Psychology*, 2, 32-43.
- Kevin, J., & Meyer, M .S. (2007). *The relationship between therapist's use of humor and therapeutic alliance*. Unpublished PhD thesis. Ohio State University, 10-27.
- Khodayarifard, M., Rahiminejad, A. (2006). *Studying the factors affecting social adjustment of control and non-control students; a research project in association with the Office of Research of Foundation of Martyrs and Veterans Affairs and Tehran University*.
- Khoshooiy, M. (2007). *Psychology of Humor*. Isfahan: Kankash Publication.
- Kooshesh, M. (2008). *Studying the treatment of communication problems in children with learning disorder; The sixth Congress on Mentally Retarded Children with an Emphasis on Communication Disorders*, Tehran, Social Welfare and Rehabilitation Sciences University.
- Mandler, G. (1972). Helplessness: Theory and research in anxiety. In C. D. Spielberger (Ed.), *Anxiety: Current trends in theory and research* (pp. 359-374). New York: Academic Press.
- Mansour, M. (2007). *Genetic Psychology: Psychological Developments from Birth to Senescence*; Tehran, SAMT Publication.
- Martin, R.A. (2007). *The Psychology of humor: An integrative approach* (chapter 1 and 7), Buring-ton, MA: Elsevier Academic press.
- Mawdsely, R., Verazin, E., Bersch, E., Crowly, M, E. (2007). Relationship between humor and Physical Therapist Student's Anxiety. *The Journal of Physical Therapy Education*, 21(1), 70.
- Motalebzadeh, A. (2005). *Studying the effect of humor on mental health and mental happiness of high school students in Shiraz*; Unpublished Master's thesis, Faculty of Psychology and Educational Sciences, Shiraz University.
- Naderi, F., & Shokouhi, M. (2010). Relationship of optimism, humor, and social maturity with death anxiety among nurses of Golestan Hospital in Ahwaz; *Journal of New Findings in Psychology*, 21, 43-59.
- Nezlek, J. B., & Derks, P. (2001). Use of humor as a coping mechanism, psychological adjustment, and social interaction. *Humor*, 14(4), 395-414.
- Richman, J. (2007). The role of Psychotherapy and humor for Death anxiety, Death wishes, and Aging, *Journal of Death and Dying*, 54: 41-5.
- Saloviita, T., Itälänna, M., and Leinonen, E. (2003). Explaining the parental stress of fathers and mothers caring for a child with intellectual disability: A double ABCX model. *Journal of Intellectual Disability Research*, 47(4-5), 300-312.
- Shariati, N., Davarmanesh, A. (1995). *Effects of mental disabilities of children on families (a summary of a study)*; Tehran, State Welfare Organization, Social Welfare and Rehabilitation Sciences University; 120-300.
- Slomowski, C. and Dunn, J. (1996). *Young Children Understands of Other People's Feeling and Beliefs*. *Child Development*. 62,
- Troller, P. J. (2003). *Taking the "grim" out of grim reaper : families, humor and the dying process*. Unpublished PhD thesis. University of Wisconsin-Stout. 1352-1336.
- Venables, G., Simon, G. (2001). *Adolescent in Clinical Psychiatry*. Britain: Arnild.
- Williams, F. Ch. (2001). *Humor and the retention of lecture by student athletes to information session*; Unpublished PhD thesis. Pennsylvania University, 15-29.
- Williams, G. C. (2008). *Adaptation and Natural Selection: A Critique of Some Current Evolutionary Thought: A Critique of Some Current Evolutionary Thought*. Princeton University Press.
- Zahed, A., Rajabi, S., Omid, M. (2012). Comparison of social, emotional, and academic adjustment and learning self-regulation among the students with and without learning disabilities; *Journal of Learning Disabilities*, 1 (2): 43-63.
- Ziegler, J. B. (1998). Use of humour in medical teaching. *Medical Teacher*, 20(4), 341-348.
- Zimmerman, S., Williams, C. S., Reed, P. S., Boustani, M., Preisser, J. S., Heck, E., & Sloane, P. D. (2005). Attitudes, stress, and satisfaction of staff who care for residents with dementia. *The Gerontologist*, 45(suppl. 1), 96-105.