

Relationship between Codependency, Perceived Social Support, and Depression in Mothers of Children with Intellectual Disability

Sajed Yaghoobnezhad, Mina Karimi, Seyede Marjan Modirkhazeni

Abstract—The goal of this research was to study the relationship between codependency, perceived social support and depression in mothers of children with intellectual disability (ID). The correlational method was used in this study. The research population is comprised of mothers of educable children with ID in the age range of 25 to 61 years. From among this, a sample of 251 individuals, in the multistage cluster sampling method, was selected from educational districts in Tehran, who responded to the Spann-Fischer Codependency Scale (SFCDS), the Social Support Questionnaire and the Beck Depression Inventory (BDI). The findings of this study indicate that among mothers of children with ID depression has a positive and significant correlation with codependency ($P < 0.01$, $r = 0.4$) and a negative and significant correlation with the total score of social support ($P < 0.01$, $r = -0.34$). Moreover, the results of stepwise multiple regression analysis showed that codependency is allocated a higher variance than social support in explaining depression ($R^2 = 0.023$).

Keywords—Codependency, social support, depression, mothers of children with ID.

I. INTRODUCTION

THE World Health Organization (WHO) has predicted that in 2020 the second major health problem after the ischaemic heart disease will be depression [1]. Meanwhile, parents of children with ID, particularly the mothers of these children, are among indicator groups that face the problems of depression due to the mental pressure caused by the birth and presence of a child with ID [2], [3].

In order to answer the question of why mothers of children with ID feel more depressed than mothers of normal children and even the other family members of the child with ID, some consequences of the birth and presence of the child with ID can be mentioned, consequences such as: the negative impact on the family's mental health, disorder in the family's interactive and communicative processes, mental pressure, emotional responses like depression, anxiety and other emotional disturbances and problems in the economic situation [4]. However, the mothers in these families, due to having the traditional role of caring and nurturing, take on more responsibilities for their mentally retarded child, as a

result of which they face more psychological pressures and problems [5]. This is to such an extent that these conditions create disorder in their role as spouses and parents in relation to their husbands and other children. This problem will virtually affect the whole family. Therefore, attention to the depression of mothers of children with ID and recognition of the factors that help to the etiology of depression among them seems necessary. Although awareness of higher prevalence of depression among mothers of children with ID clarifies the importance of clinical attention to this issue, what becomes important in the process of medical intervention with this psychological problem is clarification of the etiological dimensions of depression among mothers of children with ID. In this regard, research findings indicate that depression is an outcome of the interaction of several different factors. Meanwhile, some researchers have mentioned variables such as codependency [6] and the level of social support [7] as the variables affecting depression.

Determining the conceptual field of codependency, which has been put forward since 1980 for individuals that use unhealthy interaction patterns in response to the dysfunctional family, is difficult as in many psychological concepts and a single definition of it has not been accepted among mental health professionals [7]. Nevertheless, according Khosravi, most professionals define codependency in the field of inefficiency relations and identity confusion [8]. Hughes-Hammer, Martsof and Zeller, in explaining codependency, have defined it as a structure including the five concepts of focusing on others, self-neglect, compulsion for helping and controlling events and others through manipulating or advising, which is correlated to the four signs of the problems of the family of origin, low self-worth, self-concealment and medical problems [9]. Although the findings of the cross-cultural research by Noriega, Ramos, Medina-Mora and Villa indicate the 25% prevalence of codependency among women that have sought early medical interventions [10], Reyomend, by analyzing various studies, shows that codependency is a multidimensional issue and different personality, cultural, social and environmental factors play a role in it [11]. In this regard it can be said motherly obsessions, ineffective parenting forms such as coercion, control, lack of communications and expression of feelings, lack of clarity of roles, lack of acceptance, lack of satisfaction and protectionism as the factors affecting codependency [8]. Nevertheless, as codependency has a negative relationship with characteristics such as self-confidence and self-

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II. METHODOLOGY

A. Research Methodology and Population Sampling Method

determination [12] and codependent persons do not have a strong personal identity [11], depression is also expected to have a higher prevalence among these persons and to double the problems of this group. Furthermore, research evidence suggests that social support can have an important role in protection of people's health, reduction of negative effects of great pressures caused by the environment and society [13], and people's mental health [14]. Based on the definition by Cobb, social support is the level of love, assistance, attention of the family members, friends and other persons and the perceived sense of belonging to a network of social relations. Social support in fact refers to different types of support which is received from others in society and is defined, more precisely, as the level of love, companionship and attention of the family members, friends and other persons [13]. However, the findings of research by Naderi, Safarzadeh and Mashak suggest that mothers of children with ID feel that they have less social support than mothers of normal children, since these mothers feel frustrated and lonely in relations with friends and family members and virtually perceive a lower level of social support; and this is caused by their inability to solve the problems of these children over time, their unawareness of official support resources and their communication constraints caused by the presence of the children with ID [15]. In this respect, some researchers believe that a person may conclude, based on his/her previous experiences, whether he/she has social support or not, and if the answer is negative, interaction with the social network decreases and the negative effect of life events like the presence of a child with ID increases [7].

In general, the studies show that persons that have high social support and less interpersonal conflicts, when faced with the events and pressures of life, show more resistance, struggle more effectively and show fewer signs of depression or mental confusion. Thus, focusing on social support and negative events of life may be useful in preventing the disorders of depression, and it seems that social support, in stress, acts as a protective shield and prevents the emergence of symptoms of depression and moderates the severity of psychological symptoms [16].

On the whole, survey and review of the literature review indicates that there is a negative and significant relationship between the average score of social support and severity of depression and mental pressure [17], [18] and it can be even said that from among the factors affecting depression, low social support is highly effective [16]. Therefore, by considering the role of codependency and social support as the antecedents of depression, this study moves beyond merely comparing depression in mothers of children with ID and those of normal children; it investigates the relationship between depression, codependency and social support among mothers of children with ID and explains the share of each of these variables in predicting the depression of these mothers.

Based on the goal and nature of the research problem, the method of the current research is correlational. The population in this study is comprised of mothers of educable children with ID in the age range of 28 to 61 years in Tehran. From this number, a sample of 257 individuals was selected in the stepwise cluster sampling method. Accordingly, from among the 20 educational districts in Tehran, the five regions of 3, 4, 8, 10 and 16 were randomly selected at first and then from among the exceptional schools in these regions one school was selected and the mothers of children with ID at these five schools were selected as the research participants. From among the 323 participants in this study, ultimately 257 individuals completed the research tools.

B. The Research Tools

1. The Spann-Fischer Codependency Scale (SFCDS)

This self-report scale was designed by Fischer and Spann and has 16 questions, each of which is scored from 1 to 6 by means of the Likert scale (ranging from strongly disagree to disagree, somewhat disagree, somewhat agree, agree and strongly agree). The lowest score is 16 and the highest score is 96. Fischer and Spann for assessment of the validity of this questionnaire, divided it into the three codependent group, improved group and control group, and its Cronbach alpha was calculated as 0.77. This scale was implemented for the other two groups and the Cronbach alpha of the improved group and the codependent group was obtained as 0.73 and 0.8 respectively [19]. In Iran also, Khosravi et al. in a study evaluated the validity of this test in the Iranian population and its validity, by means of the Cronbach alpha, was obtained as 0.76 [8].

2. The Social Support Questionnaire

This questionnaire or scale was provided by Vaux et al. in 1968. The theoretical structure of this scale is based on Cobb's definition of social support. He has defined social support as the level of love, assistance, attention of the family members, friends and other persons and the perceived sense of belonging to a network of social relations [20]. This scale has 23 items and includes the three fields of the family, friends and others. Cronbach alpha coefficient of these scales has been 0.90, 0.80 and 0.84 respectively in the sample of the students and in the five groups of social minorities it has been obtained as 0.9, 0.81 and 0.84 respectively [20].

3. The Beck Depression Inventory (BDI)

From among the scales and questionnaires that have been provided for evaluation of depression, the Beck Depression Inventory (BDI) is one of the most appropriate tools for reflection of states of depression. It is a pen-and-paper scale including 21 items and was primarily introduced by Aron Beck et al. in 1961. Second edition of the Beck Depression Inventory (BDI-II) is the revised form of the BDI, which has been developed to measure the severity of depression [21]. The revised form of the BDI, compared with the primary

form, is more consistent with DSM-IV. Additionally, the second edition of this questionnaire also covers all the components of depression based on the cognitive theory of depression. The questions of this questionnaire are scored from zero to three, and in total the lowest attainable score in this tool is zero and the highest is 63. Beck, Steer and Brown, have reported the internal consistency of this tool as 0.73 to 0.92 with the average of 0.86 and the alpha coefficient for the patient and the non-patient groups as 0.86 and 0.81 respectively [21].

III.RESULTS

Firstly, by means of the Pearson correlation coefficient, the relationship between depression, codependency and social support among mothers of children with ID was investigated and the related findings are presented in Table I.

The findings of Table II indicate that among mothers of children with ID depression has a positive and significant correlation with all the components of codependency. Also, depression has a negative and significant correlation with the social support of the family and that of others and the total score of social support, but the relationship between the support of friends and depression among these people is not significant. In addition, by means of the Pearson correlation coefficient, the codependency with social support among mothers of children with ID was also measured as the secondary research finding.

Based on the findings of Table III, the subscale of sense of guilt and the total score of codependency have a negative and significant correlation with all the components and the total score of social support; but escape from self has no relationship with any components of social support. Besides, the relationship between search for identity and goals and the social support of friends, that of others and the total score of social support has become significant.

In order to determine the share of codependency and social support in explaining the variance of depression of mothers of children with ID, the stepwise multiple regression analysis was used.

TABLE I
CORRELATION COEFFICIENTS OF CODEPENDENCY, SOCIAL SUPPORT AND THE DEPRESSION OF MOTHERS OF CHILDREN WITH ID

	Variables	Depression
Codependency	Denial of feelings and needs	**0.40
	Escape from self	**0.36
	Sense of guilt	*0.42
	Search for identity and goals in the relationship	**0.30
	Total score of codependency	**0.48
Social support	Family	**-.023
	Friends	-0.06
	Others	**-.018
	Total score of social support	**-.022

**Significant at the 0.01 level

TABLE II
CORRELATION COEFFICIENTS OF SOCIAL SUPPORT AND CODEPENDENCY AMONG THE MOTHERS OF CHILDREN WITH ID

Variables	Social support	Others	Friends	Family
Denial of feelings and needs	*-0.10	**-.013	-0.01	-0.07
Escape from self	-0.09	-0.06	-0.07	-0.07
Sense of guilt	**-.019	**-.016	**-.013	*-0.14
Search for identity and goals in the relationship	**-.015	**-.015	*-0.11	-0.06
Total score of codependency	**-.017	**-.017	*-0.11	*-0.010

*Significant at the 0.05 level, Significant at the 0.01 level

TABLE III
STEPWISE MULTIPLE REGRESSION ANALYSIS FOR PREDICT OF DEPRESSION OF MOTHERS OF CHILDREN WITH ID BY COMPONENT OF SOCIAL SUPPORT AND CODEPENDENCY

	Step	Predictor	R	R ²	F	Significance F	B	t	Significance
Components of codependency	1	Sense of guilt	0.416	0.137	94.9	0.001	1.10	9.7	0.001
	2	Sense of guilt	0.476	0.227	66.2	0.001	0.76	6.2	0.001
		Denial of feelings and needs					0.56	5.6	0.001
Components of social support	3	Sense of guilt	0.491	0.241	47.8	0.001	0.63	4.9	0.001
		Denial of feelings and needs and escape from self					0.57	2.9	0.003
	1	Family	0.235	0.055	26.5	0.001	-1.71	-5.1	0.001
2	Others	0.262	0.069	16.7	0.001	-1.43	-4.1	0.001	
						-1.01	-2.5	0.011	

TABLE IV
STEPWISE MULTIPLE REGRESSION ANALYSIS FOR PREDICT OF DEPRESSION OF MOTHERS OF CHILDREN WITH ID BY SOCIAL SUPPORT AND CODEPENDENCY

Step	Predictor	R	R ²	F	Significance F	B	T	Significance
1	Codependency	0.483	0.233	137.6	0.001	0.41	11.7	0.001
2	Codependency	0.569	0.316	69.3	0.001	0.35	10.5	0.001
	Social support					-0.42	-3.1	0.002

Due to the high correlation of 0.70 between the total score of the variables and their subscales, the components were first entered into an equation and a separate regression equation was also calculated for the total scores. Moreover, the share of the total scores of codependency and social support in explaining the variance of depression of mothers of children with ID was also measured in general. In order to measure this, the stepwise multiple regression analysis was used, the results of which are presented in the Table III.

The results of the stepwise multiple regression analysis showed that in the sample group both variables of codependency and social support were entered into the regression equation. Codependency alone predicts 23.3% of the variance of depression of mothers of children with ID. The F-test for significance of the correlation coefficient equals 137.6, which is significant at the 0.001 level. Codependency and social support in total explain 31.6% of the variance of depression of mothers of children with ID. The F-test for significance of the correlation coefficient equals 69.3, which is significant at the 0.001 level.

IV. DISCUSSION AND CONCLUSION

The goal of this study was to measure the relationship between depression, codependency and social support among mothers of children with ID and to explain the share of codependency and social support in predicting the depression of these persons. The findings of this study suggest that depression of mothers of children with ID has a positive and significant correlation with codependency and a negative and significant correlation with the total score of social support. Also, results of the stepwise multiple regression analysis showed that the variable of codependency is allocated a higher variance than social support in explaining the depression of mothers of children with ID. These findings are aligned with the results of several studies [11], [14], [16]-[18], [22], [23].

In explaining the relationship between codependency and depression among mothers of mentally retarded children or children with ID, it can be pointed out that the problems and challenges of the mother of a child with ID start with one of the most poignant moments of her life, when she is informed by medical and clinical centers that her child, as a mentally retarded person, will face cognitive, social, psychological and medical problems all through its life, and this subjects the mother to problems such as unstable emotional states, psychological damages, constant grief, inconsistency and social isolation [24]. Also, during the life of the child with ID, the responsibility of caring for it can specifically make parenting for this child mentally stressful, since this causes new and unique problems and challenges for the mothers of these children, which they have not so far experienced [25], in such a way that the mothers of these children feel a double and continuous sense of helplessness, boredom and exhaustion, emotional instability, anger, grief and mental pressure. According to Fisher and Crawford, these conditions cause assistance, as the coping style in the dependent person, to become active. Furthermore, the powerlessness to control things reduces the energy of the mother of the child with ID

and brings about learned helplessness [26]. This sense of powerlessness leads to her excessive involvement or pre-occupation with her spouse or another close person [27].

In explaining the relationship between social support and depression among mothers of children with ID, it can be said that when a person perceives that he/she is accepted by those around him/her and is an important element in interpersonal relationships, his/her self-esteem, confidence and efficiency increase and he/she is therefore protected against depression [28], while the birth and presence of the mentally retarded child or the child with ID virtually leads to the disruption of interactive and communicative processes in mothers of children with ID.

Although sources of social support are very diverse, the family environment is known as the first place for attainment of social support. However, for various reasons such as shame and embarrassment or limitations caused by their mentally retarded children, mothers of children with ID face problems regarding their extended family, and these problems exacerbate their sense of isolation and depression in practice. Furthermore, due to their depression, these mothers also gradually lose other sources of social support such as their friends. Meanwhile, one of the sources of support that mothers of children with ID can benefit from are official supports which are provided by the government or the private institutions in the form of counseling and rehabilitating trainings and services. Although such supports can have a decisive role in the efficiency of mothers of children with ID, as in this study the concept of social support is extracted from Cobb's theoretical view, it has not been mentioned here. Thus, it is suggested that by designing educational programs in the form of family training sessions and holding constant and continuous counseling sessions for providing insight and learning skills in the field of more independent behaviors and strategies for attainment and maintenance of social support for mothers of children with ID, the conditions for improvement of psychological states- particularly reduction of depression- in these persons be provided.

REFERENCES

- [1] Kalaria R. (2001). Africa adopts dare to care attitude for mental illness, *Neuro report*, 12(10): 65,
- [2] Hayes, A., Watson, S.L. (2013). The impact of parenting stress: a meta-analysis of studies comparing the experience of parenting stress in parents of children with and without autism spectrum disorder. *J Autism Dev Disord.*;43(3):629-42.
- [3] Santamaria F., Cuzzocrea F., Gugliandolo M.C., Larcana R. (2012). Marital satisfaction and attributions style in parents of children with Autism Spectrum Disorder, Down Syndrome and nondisabled children. *Life span and disability*, XV, 1, 19-37.
- [4] Benn, R., Akiva, T., Arel, S., Roeser, R., W. (2012). Mindfulness training effects for parents and educators of children with special needs. *Developmental Psychology*, Vol 48(5), 1476-1487.
- [5] McConkey, R., Truesdale-Kennedy, M., Chang, M., Jarrah, S. and Shukri, R. (2008). The impact on mothers of bringing up a child with intellectual disabilities: A cross - cultural study International. *Journal of Nursing Studies* (in press) Published On-line. 27,149-160
- [6] Martsof, D. S. (2002). Codependency, boundaries, and professional nurse caring: Understanding similarities and differences in nursing practice. *Journal of Orthopaedic Nursing*, 21(6): 61-67.

- [7] Dias R, Paula LE, Norman EM, de PA. (2005). Translation and adaptation of the Social Support Network Inventory in Brazil. *J Nurs Scholarsh*; 37:258-60.
- [8] Khosravi, N; Panahi, L; Ahmadabadi, Z; Sadeqi, M. (2013). The relationship between inefficiency of family of origin and women's codependency: the moderating role of academic education. *Journal of Applied Psychology*, 7th year, N. 25, Pp. 80-100.
- [9] Hughes-Hammer, C., Martsof, D. S., and Zeller, R. A. (1998). Depression and codependency in women. *Journal of Psychiatric Nursing*, 12(6): 326-334.
- [10] Noriega G, Ramos L, Medina-Mora ME. and Villa, AR. (2008) Prevalence of Codependence in Young Women Seeking Primary Health Care and Associated Risk Factors. *American Journal of Orthopsychiatry*.;78 (2): 199-210.
- [11] Reyomend, Ward KS. (2007). Self-reported history of childhood maltreatment and codependency in undergraduate nursing students. *Journal of Emotional Abuse*.; (7): 37-50.
- [12] Lindley, N. R., Giordano, P. J., and Hammer, E. D. (1999). Codependency: Predictors and psychometric issues. *Journal of Clinical Psychology*, 55(1): 59-64.
- [13] Uchino BN. (2006). Social support and health: a review of physiological processes potentially underlying links to disease outcome-es. *J Behav Med*; 29:377-87.
- [14] Kilpatric R. (2005). Support, Social, relationships and mental health. *Physical Medicine and Rehabilitation*; 364-349.
- [15] Naderi, F; Safarzadeh, S; Mashak, R. (2011). Comparison of hypochondria, social support, social anxiety and public health among mothers of children with ID and mothers of normal children. *Journal of Health and Psychology*, Issue 1, N. 1, Pp. 14-15.
- [16] Bakhshayi, N; Birshak, B; Atef Vahid, M; Bolhari, J. (2003). The relationship between the perceived social support and stressful life events, and depression. *Journal of Andisheh va Raftar*, 9(2).
- [17] Chan DW. (2002). Stress, self-efficacy, social support, and psychological distress among prospective Chinese teachers in Hong Kong. *Education Psychology*; 22:557-69.
- [18] Lyndall S, Dorothy B. (2008). The mental health costs and benefits of giving social support. *International. J Stress Manage*; 14:370-85.
- [19] Fischer, J., Spann, L., and Crawford, D. (1991). Measuring codependency. *Alcoholism Treatment Quarterly* 8: 87-99.
- [20] Lakey, B., and Cohen, S. (2000). Social support theory and measurement. In S. Cohen, L. Underwood, and B. H. Gottlieb (Eds.), *Social support measurement and intervention: A guide for health and social scientists* (pp. 29-52). New York: Oxford University Press.
- [21] Beck AT, Steer RA, Brown GK. (1996). *Manual for the Beck Depression Inventory-II*. San Antonio, TX: Psychological Corporation.
- [22] Penedo, F.J.; Antoni, M.H.; Schneiderman, N.; Ironson, G.H.; Malow, R.M.; Cruess, S.H. and Laperriere, A. (2001) "Dysfunctional Attitudes, Coping, and Depression among HIV-Seropositive Men Who Have Sex with Men". *Cognitive Therapy and Research*. Vol, 25.
- [23] Greenberger, E.; Chen, C. and Tally, S.R. (2000). Family, peer and individual correlates of depressive among US. And Chinese adolescents. *Consulting and Clinical Psychology*, Vol. 68 (2), p.p. 209-219.
- [24] Blacher, J. and Cameron, L. (2005). Families and Intellectual Disability Current Option in Psychiatry *Journal of Family psychology*, 18 (5): 50-67.
- [25] Piazza, VE, Floyd, FJ, Mailick, MR, Greenberg, JS. (2014). Coping and psychological health of aging parents of adult children with developmental disabilities. *American Journal on Intellectual and Developmental Disabilities*. 119, 186-198.
- [26] Fisher, J., and Crawford, D. (1992). Codependency and parenting styles. *Journal of Adolescent Research*, 7, 352-363.
- [27] O'Gorman, P. (1993). Codependency explored: A social movement in search of definition and treatment. *Journal of Psychiatric Quarterly*, 64, 199-212.
- [28] Windle, M. (1992). A longitudinal study of stress buffering for adolescent problem behaviors. *Developmental Psychology*, 28, 522-530.