



# Comparison of Distress Tolerance and Adjustment of Mothers of Intellectual Disability Children and Mothers of Normal Children in Yasouj City (Iran)

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## ABSTRACT

The purpose of the present study was to compare distress tolerance and adjustment of mothers of intellectual disability children and mothers of normal children. The sample included 94 mothers with intellectual disability children and 94 mothers with normal children. Bell adjustment inventory and Simmons and Gahir Distress Tolerance Questionnaire (DTS) were performed on subjects. The results showed that there was a significant difference between the subjects regarding the components of tolerance distress and adjustment components. It means that mothers of children with intellectual disabilities in components of distress tolerance variable (tolerance, absorption, evaluation, and adaptation) and components of adjustment variable (home adjustment, health adjustment, social adjustment, emotional adjustment, job adjustment) have a lower score.

**Key Words:** Distress Tolerance, Adjustment, Mothers of Intellectual Disability Children, Mothers of Normal Children

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## Introduction

Where once the focus was only on the disabled children, the last two decades have seen an increased interest in the entire family. This is manifested both in the large number of studies on the subject and in the development of additional services geared for families. Individuals and their families evolve within a single system, constantly striving for balance. The birth of a child with developmental disabilities creates a severe breach of this balance and the family undergoes a difficult existential experience (Kandel and Merrick, 2003). Parents' first reaction to the birth of a child with an intellectual disability (ID) is often a combination of hopelessness, loss, and resentment. These feelings can be an obstacle for

the parents' capacity to accept the child (Van Riper and Selder, 1989). The birth of a child is a sign of faith and hope, prompting expectations of continuity and perpetuation. The mere existence of the newborn, the baby's traits and appearance, are usually a source of pride. All parents have plans and expectations for their children, often imagining future scenarios and the child's advances (first steps, nursery school, elementary school, military service, college, etc...). The child's success is perceived as the parents' achievement. When a handicapped child is born, all expectations and hopes are dashed. It is difficult to perceive this child as continuing the parents. The child is no source of pride—rather a source of great disappointment.

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Parents of handicapped children undergo a difficult and painful process involving a revision of their views and expectations. They are obliged to adapt to the knowledge that all their hopes and plans for the future must change (Ayalon, 1983). Adjustment process for parents is often more difficult as additional demands may be placed on parents. Many studies have shown that parents of children with ID report experiencing greater stress than parents of children without disabilities (Gupta and Kaur, 2010). Research on parents of children with disabilities has long been focused on adaptation, defined as adjustment to the actual disability rather than adjustment to attitudes or prejudices towards disability (Olney and Kim, 2001).

After receiving information of the child's handicap, parents enter a situation with the potential for crisis. Various studies have proven that the birth of a special needs child might breach intra-family balance. The frustration and the failure experienced as a result of the birth of a disabled child, a child who does not conform to expectations, as well as coping with increasing special needs, create previously nonexistent responsibilities. Several studies have emphasized the functional crisis experienced by mothers and fathers of children with ID, stating that this crisis is accompanied by severe disappointment, psychological stress, a strong feeling of loss, and reduced self-esteem (Kandel, and Merrick, 2003).

Expectations and prejudices about disability are contextual factors that are often overlooked in analyses of the life situation of parents of children with ID. Parents often raise their children within the context of a powerful societal discourse that devalues disabilities and they are therefore expected to feel emotionally burdened (Green, 2007).

The child may need hospitalization, medical care, developmental services, and basic care giving services beyond those of a typically developing child. These demands can be prolonged for parents as they cope with financial demands, time constraints, intense emotions, and feelings of inadequacy about their ability to adjust to their child's needs (Blacher, 1984).

An endless list of possible reactions of parents of disabled children, e.g.: anger, embarrassment, concern, anxiety, denial, confusion, rejection, ambivalence, bitterness, idleness, over-protection, shame, self-pity, shock, deep pain, sorrow, depression, hostility, mourning, wish to kill or suicide attempts

(Wolfensberger and Kurtz, 1969) and parental reactions can be divided into three types: The first type is called "the crisis of change" and it stems from the occurrence of an unexpected change in the individual life and self-perception. This is not a reaction to the disability per se, rather to the sudden change in life circumstances. The second type of crisis is connected to the transformation of individual personal values as a result of the specific crisis. Most people have been educated according to an ethical system that stresses individual personal abilities and achievements. The birth of a disabled child requires parents to love a significant figure—their child, who is deprived of the ability to grant a feeling of achievement. The result is bivalent feelings toward the child. A third type of crisis is called "the crisis of reality" and it stems from the harsh objective conditions formed by the need to raise a handicapped child: financial difficulties, limitation of the parents' free time, and the great deal of time that parents are required to devote to their child (Kandel and Merrick, 2007).

The various crises experienced by the family over time, such as: the crisis of change, the crisis of personal values, and the crisis of reality. Families of disabled children typically experience all three crises, however these are not necessarily equal. Some crises will last longer than others. If the family succeeds in rising to the challenge and enduring these crises it reaches the stage of acceptance, i.e. – acceptance of the child, as will be explained forthwith. In the process of acceptance the family is capable of beginning to care for itself and for the disabled child according to a professional plan, to solve the conflict, and to accept the child despite the limitations. The professional literature does not stress positive manners of coping, as it tends to describe negative aspects of the coping process. There are undoubtedly healthy parents who react appropriately to a situation in which they must live with a disabled child. These are parents who consciously adapt to their child. In order to reach the stage of acceptance and to facilitate the child's advancement and rehabilitation, the child's actual situation must be accepted and the problem must be acknowledged. In order to reach a balance between excessive expectations, which end in disappointment, and "giving up", it is necessary to create a fundamental change in approach. For this purpose it is very important to have basic faith in the child's potential, whatever the disability. At this stage the parents search for solutions to their

problem and ways to help their child advance. They learn to appreciate their inner strength to deal with the affliction and consider alternative solutions. They learn to understand the essence of the affliction and the limits within which the child may develop towards independence. They learn to use existing community services and benefit from them. Parents usually utilize the assistance of professionals and therapists for this purpose.

Families that accept their handicapped child are defined as being in a state of balance between recognition of the child's limitations and seeking to compensate for these limitations, while also avoiding burdening of intra-family communication processes (Wolfensberger and Kurtz, 1969).

According to one view, the presence of a child with special needs causes a crisis in the family. Most clinical observations show that parents often are portrayed as exhibiting guilt, ambivalence, disappointment, frustration, anger, shame, and sorrow (Schild, 1971). Friedrich and Friedrich (1981) studied the differences between parents of mentally handicapped and non-handicapped children. The results indicated that parents of handicapped children reported less satisfactory marriages, less social support, lower physical well-being than parents of non-handicapped children.

The purpose of the present study was to compare compatibility and distress tolerance in mothers of children with intellectual disabilities and mothers of normal children.

**Methods**

*Sample*

The sample consisted of 40 mothers of intellectual disabilities children and 40 mothers of normal children. Mothers of children with intellectual disabilities were randomly selected among mothers whose children were studying in exceptional schools. And mothers of normal children were selected through multistage sampling among mothers who lived in different regions of Yasouj city.

*Tools*

*1-Bell adjustment inventory*

This questionnaire is made by Bell and has 5 components of home-based adaptation, job matching, fitness adjustment, emotional adaptation and social adjustment. The whole test has 32 questions. And the options are good and I do not know. In Mikaeili and Emamzadeh's research, the reliability of this test was 0/84 and its reliability was /80.

**Table1.** Descriptive statistics of distress tolerance and adjustment variables in mothers of intellectual disabilities children and mothers of normal children

Variables	Components	Mothers	Mean	Std. Deviation	N
Distress Tolerance	Tolerance	mothers of intellectual disabilities children	7	1.16	48
		mothers of normal children	7.50	.96	48
		Total	7.25	1.09	96
	Absorption	mothers of intellectual disabilities children	5	1.16	48
		mothers of normal children	5.33	.95	48
		Total	5.16	1.07	96
	Evaluation	mothers of intellectual disabilities children	9.33	.95	48
		mothers of normal children	9.83	.90	48
		Total	9.58	.95	96
	Adaptation	mothers of intellectual disabilities children	9.50	.96	48
		mothers of normal children	10	.82	48
		Total	9.75	.92	96
Adjustment	Home	mothers of intellectual disabilities children	8.16	.69	48
		mothers of normal children	9.33	1.11	48
		Total	8.75	1.09	96
	Health	mothers of intellectual disabilities children	6.16	.69	48
		mothers of normal children	6.66	.75	48
		Total	6.41	.76	96
	Social	mothers of intellectual disabilities children	12.83	1.58	48
		mothers of normal children	14.50	1.39	48
		Total	13.66	1.70	96
	Emotional	mothers of intellectual disabilities children	9.50	.96	48
		mothers of normal children	10.83	1.07	48
		Total	10.16	1.21	96
	Job	mothers of intellectual disabilities children	8.50	.77	48
		mothers of normal children	9.66	1.26	48
		Total	9.08	1.19	96



**2-Simmons and Gahir Distress Tolerance Questionnaire (DTS)**

Simmons and Gahir Distress Tolerance Questionnaire (DTS) is an emotional distress tolerance self-evaluation index that developed by Simmons and Gahir in 2005. This scale has 15 items and 4 subscales of emotional distress tolerance, absorption by negative emotions, mental distress estimation, and adjustment efforts to relieve distress. In Azizi's research, the reliability of this test was 0/67 and its reliability was /70.

**Results and Discussion**

Multivariate variance was applied to find out the mean difference of the distress tolerance and adjustment variables among mothers of intellectual disabilities children and mothers of normal children.

Table 1 shows that the mean of all components of variables distress tolerance and adjustment mothers of intellectual disabilities children is lower than mothers of normal children.

Hypothesis 1: There is a significant difference between the components of distress tolerance of mothers of intellectual disabilities children and normal children's mothers.

**Table 2.** Box test results for homogeneity of variance-covariance distress tolerance components

Sig	F	Box's M
0.97	0.34	3.58

Table 2 shows that the homogeneity condition of the variance-covariance matrix is well-observed (F = 0.34, P>0.05).

In order to check the equality of distress tolerance components variances, the Levene's test was used.

The table above shows that the variances of the components of distress tolerance in the two groups are equal and there is no significant

difference between them, which suggests the reliability of the next results.

To determine the significance of the effect of the group on the components of distress tolerance, Wilks' Lambda test was used, the results are reported in Table 4:

**Table 3.** Levene's Test results for homogeneity of variance distress tolerance components

Levene's Test of Equality of Error Variances				
	F	df1	df2	Sig.
Tolerance	2.350	1	94	.129
Absorption	3.760	1	94	.055
Evaluation	.367	1	94	.546
Adaptation	2.938	1	94	.090

**Table 4.** The results of Wilks' Lambda test in multivariate analysis of variance distress tolerance components

Multivariate Tests						
Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Wilks' Lambda	0.352	41.91	4	91	0.001	0.648

The results of the Wilks' Lambda test show that there is a significant difference between the two groups in at least one of the components of distress tolerance (tolerance, absorption, evaluation, and adjustment, F (4,91) = 41.91, p<0.001).

Based on the results of the Box, Wilks' Lambda and Levene's Tests, The effects of the interactions between the subjects were analyzed. The results are shown in table 5:

According to Table 5, there is a significant difference between the two groups of mothers of intellectual disability children and mothers of normal children in the tolerance component, F (1, 94) = 5.22, (P<0.05). In this way, the tolerance component score of the mothers of intellectual disability children is significantly lower than mothers of normal children. The variable of the group explains 5, 3 % of the tolerance component variance.

**Table 5.** Results of multivariate analysis of variance of group effects on distress tolerance components

Tests of Between-Subjects Effects							
Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Mothers	Tolerance	6.000	1	6.000	5.22	.025	.053
	Absorption	2.667	1	2.667	2.35	.12	.024
	Evaluation	6.000	1	6.000	6.94	.01	.069
	Adaptation	6.000	1	6.000	7.42	.008	.073
Error	Tolerance	108.000	94	1.149			
	Absorption	106.667	94	1.135			
	Evaluation	81.333	94	.865			
	Adaptation	76.000	94	.809			



There is no significant difference between the two groups of mothers of intellectual disability children and mothers of normal children in the absorption component,  $F(1,94) = 2.35$ , ( $P = 0.12$ ). There is a significant difference between the two groups of mothers of intellectual disability children and mothers of normal children in the evaluation component,  $F(1,94) = 6.94$ , ( $P \leq 0.01$ ). In this way, the evaluation component score of the mothers of intellectual disability children is significantly lower than mothers of normal children. The variable of the group explains 6, 9 % of the evaluation component variance. There is a significant difference between the two groups of mothers of intellectual disability children and mothers of normal children in the adaptation component,  $F(1, 94) = 7.42$ , ( $P < 0.01$ ). In this way, the Adaptation component score of the mothers of intellectual disability children is significantly lower than mothers of normal children. The variable of the group explains 7, 3% of the adaptation component variance.

In explaining this result, we must say that the family is a social system in which a disorder in each of its members can disrupt the entire family system and causing new problems in the family. Intellectual disability can have adverse effects on the structure and function of the family and mother and father are subjected to physical, psychological, social and economic stress, to the extent that lose the normal course of life and lead to the collapse of the family system, all of which has caused stress and pressure on the family, especially on mother. The mother may feel uneasy in a stressful, excessive anxiety and careful attitude that she should spend her life on caring for the sick child. Mother with unreasonable pressure, concerned, high anxiety and more careful attitude feels that he should spend his life on caring for a sick child. At the same time, it is possible he become sick in physical, psychological, social, and other dimensions or neglects these dimensions. The existence of a mentally disabled child strongly affects the physical and mental health of the mother and reduces their resistance to the disease and thus increases the proportion of the disease in them. Mother, who plays a special role in the maintenance and upbringing of her children, suffers from excessive stress and pressure. Mothers with a mentally retarded child are more likely to encounter problems and are more likely to be involved with child behavioral problems, thus experiencing more stress. Therefore, distress tolerance in mothers of

intellectual disabilities children is less than mothers of normal children.

Hypothesis 2: There is a significant difference between the components of adjustment of mothers of intellectual disabilities children and normal children's mothers.

Table 6 shows that the homogeneity condition of the variance-covariance matrix is well-observed ( $F = 1.10$ ,  $P > 0.05$ ).

**Table 6.** Box test results for homogeneity of variance-covariance adjustment components

Sig	F	Box's M
0.34	1.10	17.57

In order to check the equality of adjustment components variances, the Levene's test was used.

**Table 7.** Levene's Test results for homogeneity of variance adjustment components

Levene's Test of Equality of Error Variances				
	F	df1	df2	Sig.
Home adjustment	0.10	1	94	0.74
Health adjustment	2.112	1	94	0.149
Social adjustment	0.095	1	94	0.759
Emotional adjustment	0.254	1	94	0.615
Job adjustment	0.06	1	94	0.80

The table above shows that the variance of the adjustment components in the two groups are equal and there is no significant difference between them, which suggests the reliability of the next results.

To determine the significance of the effect of the group on the components of adjustment, Wilks' Lambda test was used, the results are reported in Table 7:

**Table 8.** The results of Wilks' Lambda test in multivariate analysis of variance adjustment components

Multivariate Tests						
Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Wilks' Lambda	.432	23.643	5	90	.001	.568

The results of the Wilks' Lambda test show that there is a significant difference between the two groups in at least one of the components of adjustment (home adjustment, health adjustment, social adjustment, emotional adjustment, and job adjustment,  $F(5, 90) = 23.64$ ,  $p < 0.001$ ).

Based on the results of the Box, Wilks' Lambda and Levene's Tests, the effects of the



**Table 9.** Results of multivariate analysis of variance of group effects on adjustment components

Tests of Between-Subjects Effects							
Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Mothers	Home adjustment	32.667	1	32.667	37.75	.001	.287
	Health adjustment	6.000	1	6.000	11.43	.001	.108
	Social adjustment	66.667	1	66.667	29.74	.001	.240
	Emotional adjustment	42.667	1	42.667	40.64	.001	.302
	Job adjustment	32.667	1	32.667	29.90	.001	.241
Error	Home adjustment	81.333	94	.865			
	Health adjustment	49.333	94	.525			
	Social adjustment	210.667	94	2.241			
	Emotional adjustment	98.667	94	1.050			
	Job adjustment	102.667	94	1.092			

interactions between the subjects were analyzed. The results are shown in Table 9:

According to Table 9, there is a significant difference between the two groups of mothers of intellectual disability children and mothers of normal children in the home adjustment,  $F(1, 94) = 37.35$ , ( $P < 0.001$ ). In this way, the home adjustment score of the mothers of intellectual disability children is significantly lower than mothers of normal children. The variable of the group explains 28, 7% of the tolerance component variance. There is a significant difference between the two groups of mothers of intellectual disability children and mothers of normal children in the health adjustment,  $F(1, 94) = 11.43$ , ( $P \leq 0.01$ ). In this way, the health adjustment score of the mothers of intellectual disability children is significantly lower than mothers of normal children. The variable of the group explains 10, 8 % of the health adjustment variance. There is a significant difference between the two groups of mothers of intellectual disability children and mothers of normal children in the social adjustment,  $F(1, 94) = 29.74$ , ( $P < 0.001$ ). In this way, the social adjustment score of the mothers of intellectual disability children is significantly lower than mothers of normal children. The variable of the group explains 24 % of the social adjustment variance. There is a significant difference between the two groups of mothers of intellectual disability children and mothers of normal children in the emotional adjustment,  $F(1, 94) = 40.64$ , ( $P < 0.001$ ). In this way, the emotional adjustment score of the mothers of intellectual disability children is significantly lower than mothers of normal children. The variable of the group explains 30.2% of the emotional adjustment variance. There is a significant difference between the two groups of mothers of intellectual disability children and mothers of normal children in the job adjustment,  $F(1, 94) =$

29.90, ( $P < 0.001$ ). In this way, the job adjustment score of the mothers of intellectual disability children is significantly lower than mothers of normal children. The variable of the group explains 24.1% of the job adjustment variance. As we know, ordinary humans to maintain their compatibility with environment gets help through a variety of self-conscious methods and defense mechanisms. But every person has thresholds of tolerance against the pressures and factors that cause tension and psychological pressure on him/her, and if his environmental pressures exceeded, he will be at risk in his psychological balance. With the birth of an impotent child, there are pressures on the parents, which affects the composure and coherence of the family, thus affecting their adjustment. Pressures such as, postponing the psychological transformation of other children, restriction of family progress, crisis such as marital problems, divorce, and depression of parents, sentimental appearances such as anger, disappointment, and guilty feelings cause mothers of mentally disabled children in health, emotion, social and home environment aspects have less adjustment level.

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