

Study and comparison the relationship of stress and marital satisfaction in parents of Down syndrome children and parents of normal children (Case study: Elementary school children of Tehran)

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ABSTRACT

Since the effect of mentally handicapped children on family system as an important issue has attracted the attention of specialists for many years, this research is carried out "to study and compare the relationship of stress and marital satisfaction in parents of Down syndrome children and parents of normal children". Casual-comparative method is used in this research. The research is done by visiting schools dependent on exceptional children's department and normal schools of Tehran, the study sample consisted of two groups of 40 patients (20 males and 20 females), consisting parents of Down syndrome children and parents of normal children, cluster selection and simple random selection method were used for first group (parents of Down syndrome children) and matching method was used for the latter one. Enrich marital satisfaction questionnaire and Friedrich Questionnaire on Resources and Stress (FQRS) were carried out. The results are analyzed by Independent T-Test, Pearson correlation, and Chi-squared test. Study results have confirmed the relationship of stress and marital satisfaction in parents of Down syndrome children at a level of $\alpha = 0/05$ and $P < 0/001$. It is also noted that parents of Down syndrome children experience more stress ($\alpha = 0/05$ and $P < 0/001$) than parents of normal children ($\alpha = 0/05$ and $P < 0/001$). Marital satisfaction in parents of Down syndrome children is less than parents of normal children ($\alpha = 0/05$ and $P = 0/021$). Subsequently, the relationship of stress and marital satisfaction in parents of Down syndrome children and parents of normal children have been confirmed at a level of ($\alpha = 0/05$ and $P < 0/001$). Study results indicate that there is a significant relationship between stress and marital satisfaction in parents of Down syndrome children at a level of ($\alpha = 0/05$ and $r = -/057$). Due to negative calculated correlation coefficient, it is concluded that by increasing stress, marital satisfaction scores significantly decreased.

KEY WORDS: Stress, Marital satisfaction, Parents of Down syndrome children.

1. INTRODUCTION AND LITERATURE REVIEW

Mentally retarded child care for family especially parents associated with stressful experiences. In this situation, the family does not experience normal functions such as children training, education, leisure, and marital satisfaction appropriately (Malekpoor and Jadidizadeh, 1998). Mental retarded children are weak in learning expected cases. Parents trying to teach new skills and inhibit inappropriate behavior of children usually resulted in desired outcome. Therefore, parents of Down syndrome children should try more to be compatible with this reality than parents of normal children. This effect may result in marital problems and worsen such issues (Floyd et al, 1998). Today, many families are suffering from mentally retarded child due to issues such as: heavy economic costs, marital conflicts, limitations in social relations, bearing compassionate behavior of others, behavioral incompatibility with other children, and difficulty in making decision for having baby again (Minuchin, 2009, translated by: Sanayi). The presence of this kind of children sometimes can damage to family health and balance and increasing the risk of family and parents malfunctioning. The presence of mentally retarded children can result in other specific psychological damages such as anxiety and depression. So, it can be concluded the mental health of couples, especially marital satisfaction, depends on the presence of mental retarded child in family (Tampli et al, 1998). The effect of mentally handicapped children on family system as an important issue has attracted the attention of specialists for many years. In this regards, a lot of ups and downs can be seen. In 1950, researches focused on the effect of parents' behavior on child, whereas in 1960s, negative effects of children on parents are more prominent. In 1970s, the effect of mental retarded child presence on brothers and sisters and also parents' relations has been focused, in this context; the negative effect on marital relations has not been neglected. In recent years, more comprehensive interactive views have been proposed about those families that have a disabled person among their members (Ahmadpanah, 2001). Parents should have sufficient patience and

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sacrifice their personal goals to care mentally retarded child permanently. Perhaps many parents, who have mentally retarded children, consider their disabled child as a sign of failure. By arrival of mentally retarded newborn to life, those parents who expect children to follow their goals which they could not reach them in life experience disappointment and their feelings hurt more (Seif, 1989). Our country believes that supporting from social system including supporting all members of family. Families with mentally retarded children should not be neglected in this context. It is estimated that mentally retarded persons including 3/2 % of society population (Seif Naraghi and Naderi, 2003). According to statistics in 1996, around 1/500./000 of total population of country are suffering from mental retardation, children and teenagers consisting vast majority of this population. Knowing the relationship between stress and marital satisfaction in parents of mentally retarded children will offer psychologist useful information to improve counseling sessions with parents of exceptional children. Understanding the problems of mentally retarded children to teach not only children's parents but also specialists who work with these children to change their attitudes towards educational programming. In addition, any planning in this regard regardless of considering family and parental role, results in failure. So, believe in recognizing severity and kind of marital satisfaction of parents with mentally retarded children and its relationship with stress they feel, can offer necessary infrastructural information to counselors and psychologists who deal with these parents and children (Afrooz, 1996).

Research hypothesis:

1. Parents of children with Down syndrome experience more stress than parents of normal children.
2. Parents of children with Down syndrome experience less marital satisfaction than parents of normal children.
3. There is a significant relationship between the amounts of stress among parents of Down syndrome children and the level of their marital satisfaction.
4. Mothers of children with Down syndrome can experience more stress than their fathers.
5. Mothers of children with Down syndrome can experience less marital satisfaction than their fathers.
6. In terms of stress, there is a difference between parents of boys and girls with Down syndrome.
7. In terms of marital satisfaction, there is a difference between parents of boys and girls with Down syndrome.
8. There is a statistical significant relationship between stress and marital satisfaction of parents with Down syndrome children and parents of normal children.

Method of research

Statistical population of this research consist of all parents of children with Down syndrome studying at elementary school affiliated to organization of exceptional children of Tehran Ministry of Education and all parents of normal children studying at normal schools of Tehran in academic year during 2009-89. Parents as a sample of research were selected randomly in a form of cluster selection from regions 1, 5, 15, and 18. The study sample consisted of two groups of 40 patients (20 males and 20 females), consisting parents of Down syndrome children studying at elementary school affiliated to organization of exceptional children of Tehran Ministry of Education and parents of normal children studying at normal schools of Tehran. Enrich marital satisfaction questionnaire and Friedrich Questionnaire on Resources and Stress (FQRS)⁴ were used to collect data. Friedrich⁵ Form (1983) consisting 52 items has been prepared from revised Holroyd⁶ form (1974) which consists of four subscales as follows:

- 1- Parents and family problems
- 2- Pessimistic attitude of parents towards the child's future
- 3- Stress resulted from child's characteristics
- 4- Child's disability and physical limitations

The questionnaire is an important psychometric tool in a field of psychometric stress of disabled parents (Dyson⁷ 1991). Reliability of this test has been reported 93% by Friedrich. In Iran, this questionnaire is normalized by Hosseinneshad (Hosseinneshad, 1375) and its validity and reliability have been approved. To determine the reliability coefficient, questionnaire is conducted by two methods of test-retest with 10-day intervals on a sample consisting 12 parents of children with physical- mobility disabilities (6 fathers and 6 mothers) and the amount of correlation coefficient for sub scales one, two, three, and four is estimated respectively 69%, 79%, 85%, and 75% (Hosseinneshad, 1375). Marital satisfaction questionnaire consists of 115 closed questions and sub scales, there are 5 choices to answer questions: (Strongly agree - Agree - Neither agree nor disagree-Strongly disagree - Completely disagree). Olson et al (1989) have reported validity of this method (92%) by using alpha correlation coefficient. In Soleimani study, the amount of correlation coefficient of the questionnaire form which consists of 47 questions is estimated 95% (Soleimani, 1373). The correlation coefficient of "Enrich Questionnaire" by considering family satisfaction and life satisfaction scales have been estimated respectively 41% to 61%, and 32% to 41%, this

statistics indicate questionnaire validity. All sub-scales of “Enrich Questionnaire” distinct happy and unhappy couples and this indicates that this questionnaire has a good validity (Sanaei, 1379). After selecting samples, in order to start carrying out questionnaires, an invitation was sent to parents by school principal in two shifts and in first step, parents were invited to come to school, after creating trust questionnaires were distributed. In second step, fathers were invited to school and they answer to questionnaires according to standardized criteria. To analyze data, Independent T-Test, Pearson Correlation and Chi-Squared Test were used.

RESULTS

In marital satisfaction questionnaire, low score of parents indicates marital dissatisfaction and in stress resource questionnaire, high score of parents indicates more stress.

Table 1: Status of marital satisfaction of parents with Down syndrome children and parents of normal children

Parents of normal children		Parents of Down syndrome children		Sample groups
Percent	Frequency	Percent	Frequency	Parents satisfaction status
1/2	1	8/8	7	Severe dissatisfaction
8/8	7	15	12	Less dissatisfaction
76/2	61	68/7	55	Relative satisfaction
13/8	11	7/5	6	High satisfaction
0	0	0	0	Extra satisfaction
100	80	100	80	Total

As you can see, 8/8% of parents with Down syndrome children against 2/1% of parents with normal children have severe dissatisfaction from marital life and extra satisfaction is not seen in any groups. If you want to integrate numbers, you will see that 76/2 % of parents with Down syndrome are satisfied from their marital life and 23/8% of them are dissatisfied. Also 90% of parents with normal children are satisfied from their marital life and just 10% of them are dissatisfied.

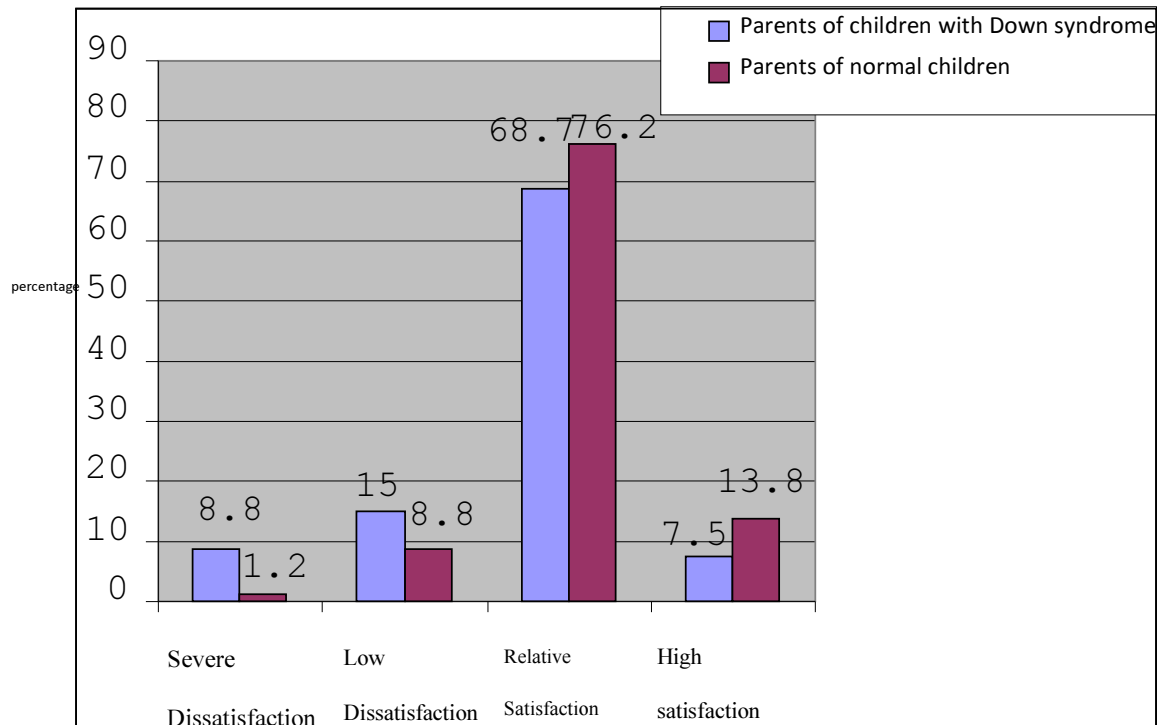
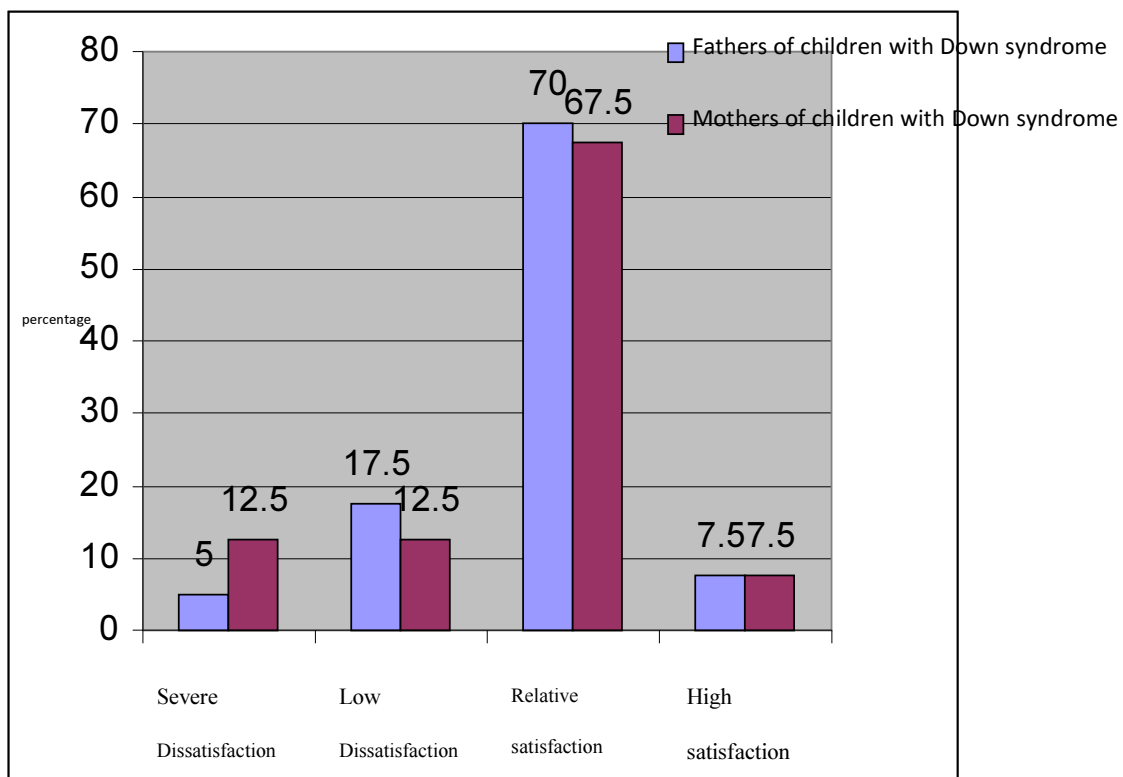


Chart 1: Comparison the level of marital satisfaction among parents with Down syndrome children and parents of normal children

Table (2): Comparison the level of marital satisfaction among fathers and mothers with Down syndrome children

Mothers of Down syndrome children		Fathers of Down syndrome children		Satisfaction status
Percent	Frequency	Percent	Frequency	
12/5	5	5	2	Severe dissatisfaction
12/5	5	17/5	7	Low dissatisfaction
67/5	27	70	28	Relative satisfaction
7/5	3	7/5	3	High satisfaction
0	0	0	0	Extra satisfaction
100	40	100	40	Total

As you can see, 5% of fathers with Down syndrome children against 12/5% of their mothers have severe dissatisfaction from marital life and extra satisfaction is not seen in any groups. If you want to integrate numbers, you will see that 77/5% of fathers with Down syndrome children are satisfied from their marital life and 22/5 % of them are dissatisfied. And also 75% of mothers with Down syndrome children are satisfied from their marital life and 25% of them are dissatisfied.

**Chart 2: Comparison the level of marital satisfaction among fathers and mothers with Down syndrome children****Results regarding hypothesis****Study results showed the following:**

1. The mean score of stress in parents with Down syndrome children is 24/9 and in parents with normal children is 8/2, statistically, this difference is significant at a level of ($\alpha=0.05$) $P<0/001$.

Table 3: Comparison of stress in parents with Down syndrome children and parents with normal children according Independent T-Test

Probability	Freedom degree	T amount	Standard deviation	Mean scores	Frequency	Variable
<0/001	158	16/02	8/6	24/9	80	Parents of Down syndrome children
			3/4	8/2	80	Parents of normal children

2. Mean score of marital satisfaction in parents with Down syndrome children is 171/4 and in parents with normal children is 180/6. Statistically, there is a significant difference between mean scores of two groups at a level of ($\alpha = 0/05$) $P = 0/021$.

Table 4: Comparison of marital satisfaction in parents with Down syndrome children and parents with normal children according Independent T-Test

Probability	Freedom degree	T amount	Standard deviation	Mean scores	Frequency	Variable
0/021	158	2/24	22	171/4	80	Parents of Down syndrome children
			27/3	180/6	80	Parents of normal children

3. The correlation between stress and marital satisfaction of parents with Down syndrome children at a level of ($\alpha = 0/05$) is equal to ($r = -0/57$). Statistically, there is a significant relationship between them $P < 0/001$.

Table 5: The correlation between stress and marital satisfaction of parents with Down syndrome children according Pearson –Test

Probability	Correlation coefficient	Frequency
<0/001	-0/574	80

4. The correlation between stress and marital satisfaction of parents with Down syndrome children and parents with normal children at a level of ($\alpha = 0/05$) is ($r = -0/43$). Statistically, there is a significant relationship between them $P < 0/001$.

Table 6: The correlation between stress and marital satisfaction of parents with Down syndrome children and parents with normal children

Probability	Correlation coefficient	Frequency
<0/001	-0/426	160

- The mean score of marital satisfaction in mothers with Down syndrome children according Independent T-Test is 168/2 and in their fathers is 174/6. Statistically, this difference at a level of ($\alpha = 0/05$) is not significant $P = 0/26$.

- The mean score of stress in mothers with Down syndrome children according Independent T-Test is 25/7 and in their fathers is 23/9. Statistically, this difference at a level of ($\alpha = 0/05$) is not significant $P = 0/34$.

- The mean scores of stress in parents with Down syndrome children (Boys and girls) according Independent T-Test are respectively, 25 and 24/6. Statistically this difference at a level of ($\alpha = 0/05$) is not significant $P = 0/87$.

- The mean scores of marital satisfaction in parents with Down syndrome children (Boys and girls) according Independent T-Test are respectively 169/2 and 173/6. Statistically this difference at a level of ($\alpha = 0/05$) is not significant $P = 0/48$.

DISCUSSION

In a section of results, we conclude from result (1) that based on the possibility obtained from T-Test, $P < 0/001$, It is observed that at a level of ($\alpha = 0/05$), there is a significant relationship between mean scores of stress in two groups, in another word, the stress of parents with Down syndrome children is significantly more than the stress of parents with normal children. Thus, the existence of mentally retarded children causes more stress in family environment especially for parents. There is a similarity among these results and findings of Tunali and Power⁹(1993) Dyson (1991), Kazak¹⁰(1987), Bersford¹¹(1994), Salisbury¹²(1987) and Hosseinnazhad¹³(1975). On the other hand, the study results is inconsistent with Kazak and Christakis¹³(1994). They have found that there is not a significant difference at a level of stress and psychological functioning between parents with Down syndrome children and parents with normal children. To explain this phenomenon, it must be said that studies on these families' stress and their findings in some cases are contradictory. These contradictions are related to various variables such as different type of parental beliefs in Iranian society and western countries, the type of instrument used in study and variables control.

According to result (2), with respect to the probability obtained through T-test ($P = 0/021$), statistically, in a field of marital satisfaction there is a significant difference between mean scores of two groups at a level of ($\alpha = 0/05$). In other words, comparing the mean scores of parents with Down syndrome children and parents with normal children indicates that parents with Down syndrome children experience less marital satisfaction. So, it can be concluded that the existence of mentally retarded children in family has a negative

significant effect on parents' marital satisfaction. There is a similarity between this result and findings of some researches like Floyed et al (1998), Taanila et al¹⁴ (1996), Flaherty and Masters¹⁵ (2000) Nasershariati and Davarmanesh (1375) Barent & Boyce¹⁶ (1995) Ramezani (1382) and side effect of Ahmad nezhad's research (1380), in a field of the effect of mentally retarded children on compatibility and parents' marital satisfaction.

According to result (3), with respect to the probability obtained through correlation Test $P < 0/001$, it is observed that at a level of ($\alpha = 0/05$), there is a significant relationship between two variables (Stress and marital satisfaction) in parents with Down syndrome children ($r = -0/574$). Regarding negative amount of calculated correlation coefficient, it is concluded that by increasing stress, the mean scores of marital satisfaction significantly decreased. There is a similarity between these results and researchers' findings like Salisbury (1987), Dyson (1991), Floyd & Zmich¹⁷ (1991) and Masaeli (1378). The similarity of researches carried out by external and internal researchers is that, in all studies parents of mentally retarded children are suffering from some problems about these kinds of children such as: Economic costs, marital disputes and family conflicts, limitations in social relations, tolerating others' compassionate, behavior alin compatibility with other children, difficulty in making decisions for having baby again, and other stresses that they experience in family environment. Mentally retarded children due to range of issues including behavioral disorders and slow learning, prevent their parents to teach them new skills and inhibit inappropriate behavior. So, it is difficult and stressful for parents to accept this situation and cope with it and therefore this situation results in marital satisfaction decrease. Some problems result from parents' intrapersonal issues and others from characteristics of mentally retarded children. Present study focuses on the effect of the latter category (characteristics of mentally retarded children) on parents' marital satisfaction.

According to result (4), with respect to the probability obtained through correlation Test $P < 0/001$, it is observed that at a level of ($\alpha = 0/05$), there is a significant relationship between two variables (Stress and marital satisfaction) in parents with Down syndrome children and parents with normal children ($r = -0/43$). Regarding negative amount of calculated correlation coefficient, it is concluded that by increasing stress, the mean scores of marital satisfaction significantly decrease. There is a similarity between this research result and findings of Floyed et al (1998), Von Gontard¹⁸ (2002), Serebriacova¹⁹ (1996).

Conclusion:

The results indicate that the existence of mentally retarded children (Down syndrome) in family has a significant effect on parents' marital satisfaction. As mentioned, the results obtained through test (Mean scores of marital satisfaction) of parents with Down syndrome children and parents with normal children indicate this difference. The existence of mentally retarded children in family creates more stress in family environment. As the results obtained through test (Mean scores of stress) of parents with Down syndrome children and parents with normal children indicate this difference and explain the issue. However, there is a significant relationship between stress and marital satisfaction of parents with Down syndrome children, by increasing stress, the mean scores of marital satisfaction significantly decrease. As the correlation between stress and marital satisfaction of parents with Down syndrome children has indicated the significance of this relationship.

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