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# DETERMINATION OF LEVELS OF ANXIETY OF PARENTS OF THE INDIVIDIUALS WITH DOWN'S SYNDROME PARTICIPATING ATHLETICS CHAMPIONSHIP IN TURKEY

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#### **ABSTRACT**

The purpose of this research is to determine the level of continuous anxiety of parents of individuals with Down's syndrome joining in Athletics Championships in Turkey independently from their families after regular athletics trainings. The parents of 10 individuals with Down's syndrome(application group) who are between 10 and 15 years old and attend athletics regularly and The parents of 10 individiuals with Down's syndrome(conrol Group) who didnot participate in any physical activity were included in the study. The first-last questionnaire application was applied to the parents who participated in the research. Athletics work was carried out at the stadium under the control of athletics coaches between 15: 00-17: 00 hours 3 days a week (Monday, Wednesday and Friday). The individuals in the control group was

made to do no application. The individiuals with Down's syndrome who partcipated in the studies regularly participated in Athletics Championships in Turkey organized by the Federation of Turkish Special Athletes and remained separate from their families 7 days. The questionnaire application was applied to the parents of individuals who participated in athletics studies and who didnot participate in athletics studies before and after the 16-week program. In the statistical evaluation of the data obtained, An significant difference was observed in the anxiety level of the parents of the individuals who continued the athletics sport. This result is due to the expectation of their families.

Key Words: Athletics, Down's syndrome, Anxiety

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### **INTRODUCTION**

Today, an important part of the world's population consists of individuals who are intellectually, physically or emotionally disabled. According to the World Health Organization (WHO) statistics, 12% of developing countries and 10% of the population in developed countries consist of individuals who are disabled (Baykan, 2003). In 2000 in the world,12% of children aged between 5 and 17 years (about 6.6 million) are estimated to be disabled (Hogan et al., 1997). In Turkey, about 9 million children who are between 0 and 18 years old is estimated to be especially in need of assistance or disabled (Aslan and Senol, 2006). A disabled child is dependent on his parents in varying degrees. This is a very important source of stress for the family (Susan, 2003; Hastings, 2003; Sengul and Baykan, 2013). Studies show that parents who have mental or physical disabled children (especially mothers) are more stressed and have higher levels of depression than the parents who dont have disabled children (De Sousa, 2010). There are studies showing that families with disabled children have more physical and mental problems and have lower quality of life than families with normal children (Laurvick et al., 2006; Kaya et al., 2010; Benzies et al., 2011; Karaduman et al., 2010).

The positive effects of sports on disabled individuals have been determined by many studies. In order to provide the sporting needs of disabled individuals, game-based study programs are implemented by experts for their abilities, interests and sporting skills (Bruininks and Chvat, 1990; Özdemir et al., 2014). It can be said that without gender discrimination. Social adaptation and and skills of children with Down's syndrome who participate in regular sportive activities can be better than children with Down's syndrome who do not participate in regular sports activities. and sportive activities can be said to be very important for educable individuals with special needs and especially for the development of social adaptation and skills of children with Down Syndrome (Ilkım et al., 2018a).

Sportive activities do not only improve the physical characteristics of disabled individuals but also contribute to their spiritual and social development and facilitate their integration into society (Eichsteadt and Lavay, 1992; Özdemir et al., 2018). If individuals with mental retardation do not participate in physical activity programs regularly, they are faced with an inactive lifestyle (Özdemir et al., 2018). Athletics sport is a sports branch that should be done regularly due to its feature.

In the researches, it has been stated that the physical fitnesses of the disabled individuals who participate in physical activities regularly develop and the risk factors are reduced (Pitetti and Tan, 1990; Draheim et al., 2003). When the risk factor is taken into consideration, the runnings section of the athletics sport is among the activities that disabled individuals can do without difficulty. Fine and gross motor skills of individuals with Down Syndrome are lower than those of healthy individuals and their development is slower (Altın, 2011). Fine and gross motor skills of these individuals develop with regular athletics. All families experience different concerns for their children without discriminating between healthy and disabled. Families who have disabled individiuals have a higher rate of anxiety compared to families who have healthy children. Children's education, having learning disabilities and their health status are among the biggest causes of anxiety of the families (Bailey, 1988). The fun of sporting activities is also important in terms of rehabilitation of individuals with down syndrome and social adaptation skills (Ilkım et al., 2018b). In this case, the families' anxiety in a negative way is going to be reduced. In some studies, it has been determined that there are changes in the anxiety levels of the families who send their children with mental disabilities to physical activities (Ilkım et al., 2017). The high level of anxiety of the families who send their children with Down's syndrome to athletics championships in Turkeyis due to have high expectations for their children. It can be counted among the causes of anxiety that there are no family members among the children, the long journey is tiring, negativenesses can occur in the itinerary, the failure to succeed in the competition. In a study, trait level of anxiety of families whose children participate in sportive activities were significantly found higher (Ilkım et al., 2017). The fact that families who do not send their children to physical activity have lower anxiety levels is because they do not have any expectation on behalf of their children.

Considering the data obtained from the researches and similar studies in the related field; The importance of regular physical activities comes to the fore. However, the families of disabled individuals have faced various difficulties while taking their children to physical activity areas. Environmental factors, urban traffic, different perspectives in society, economic structure of the family are some of the challenges. The obstacles which arise from both from the environment and from the system and bureaucracy families of disabled individuals that they encountered during the participation in regular physical activities have caused to increase the



levels of anxiety in families. Despite all these adversities, participation of individuals with disabilities in physical activities should be supported both in terms of their general health and self-confidence, learning, work, gaining courage and responsibility social values (Akyol and Ilkım, 2018).

#### **Material and Method**

In our study, 10 individuals with Down-Syndrome ranging from 10-15 years of age participated with special permission from their families. Down-Syndrome individuals participating in the study were prepared to Malatya Silent Steps Sports Club within the Special Sports Federation of Turkey Athletics Championships, which was held for 16 weeks. The preparatory work for the championship was carried out under the supervision of coaches at the facilities of Malatya Youth Services and Sports Provincial Directorate 3 days a week (Monday, Wednesday and Friday). In general, short distance training programs were implemented, 4x30 mt of work, 3x50 mt of work, 2x100 mt. Between the station work is given a 10-minute rest interval, each study is limited to a maximum of 2 hours. Studies have down-syndrome at the end of 10 family members with the condition being separate from the supervision of coaches will be held in Antalya province was taken to Turkey athletics championships. During this period, individuals with Down-Syndrome were allowed to socialize for 7 days, independent of their families. 20 Patients with Down-Syndrome (10 experimental groups, 10 control groups) were given continuous anxiety questionnaire (first questionnaire).

RESULTS

Table 1. Descriptive Statistics for Parents of Athletes with Down's Syndrome

Gender	Experiment		Control		Overall of Sample	
	f	%	f	%	f	%
Female	5	50	4	40	11	55
Male	5	50	6	60	9	45
Total	10	100	10	100	20	100

In Table 1, it is seen that 55% of the parents are women and 45% are men.

Scale Scores	Tests	N	X	Ss	Paired t testi	
					t	р
State nxiety score	Pre-test	10	48.20	3.39	-4.704	0.001*
	Post-test	10	40.10	4.86		
Trait anxiety score	<b>Pre-test</b>	10	60.20	2.20	-4.869	0.000*
	Post-test	10	50.90	2.68		
<b>Total of anxiety score</b>	<b>Pre-test</b>	10	108.40	4.19	-5.126	0.000*
	Post-test	10	91.00	5.04		

Table 2. Comparison of pre-test and post-test scores of the parents in the experimental group

When the table 2 is examined it is seen that there is a significant difference between the pre-test and post-test scores of the parents in the experimental group (p <0.05). According to these results, it can be said that the anxiety levels of the parents whose children deal with athletics and participate in Championships in Turkey are lower

Table 3. Comparison of pre-test and post-test scores of the parents in the control group

Scale Scores	Tests	N	X	Ss	Paired t testi	
					t	p
State anxiety score	Pre-test	10	57.70	1.76	0.000	1.000
	Post-test	10	57.70	2.90		
Trait anxiety score	<b>Pre-test</b>	10	62.80	2.04	-0.335	0.745
	Post-test	10	63.20	3.58		
Total of anxiety score	<b>Pre-test</b>	10	120.50	2.75	-0.267	0.796
	Post-test	10	120.90	3.34		

<sup>\*</sup>Significance at 0.05 level

In Table 3.,It is seen that there was no significant difference between the scores obtained from the pre-test and post-test scores which have been done to determine the state anxiety, trait anxiety and general anxiety levels of the parents in the experimental group (p> 0.05). The averages of pre-test and post-test of the parents in the control group were similar.

## **DISCUSSION**

In Table 1, it is seen that 55% of the parents parrticipating in the research are women and 45% are men. Sports; It is one of the best methods of adapting the disabled people to society and environment, eliminating their fears of damage from the environment and contributing to having a more independent life (Magill, 1980; O'Conneu, 2000). Parents fear

<sup>\*</sup>Significance at 0.05 level

anxiety and stress when sending their children to the sport with the fear of getting harmed from the environment and at bringing disabled individuals to the society (Ilkım et al., 2017).

The high level of happiness of the parents whose children participate in sportive activities has a positive effect on the active lifestyle and regular physical activity, children with disabilities and therefore on families (Ilkım et al., 2017). While participation of individuals with disabilities in regular physical activity, maintaining a healthy and quality life, is similar to the results in table 2 which we have studied, In the study by Calık et al. (2015), it is stated that trait anxiety scores of the parents whose children don't do sports are higher at significant level. This result also differs from the results of our research.

Ersoy (1997), in his study has stated that the low anxiety levels of mothers of individiuals with mental inadequacies and the starting recommendations given within the education to be implemented by mothers immediately are effective on getting positive results from children. It is suggested that planned education is effective in coping with both stress and depression at lowering the depression level (Akyol and Ilkım, 2018; Yıldırım and Conk, 2005) in their study have stated that the parents are willing for their children to participate in sportive activities and that mentally retarted individuals see the sportvive activities as games affects children 's desire to participate in games positively considering age groups. Giving information to the parents about the content of activities to be attended in the participation of disabled individuals in education and sporting activities reduces the state anxiety of parents (Uyaroğlu and Bodur, 2009).

It is stated that trait state anxieties of the parents of the individuals with Down's syndrome and autistic are higher than the parents of the individuals who have normal development (Kuloğlu, 2001). The reason why parents who have disabled children have higher anxiety may be that they cannot control their feelings when it comes to children (Doğru and Arslan, 2008).

In Table 3. It is seen that there was no significant difference between the scores obtained from the pre-test and post-test to determine state anxiety, trait anxiety and general anxiety levels of the parents in the experimental group (p>0.05). The averages of pre-test and post-test of the parents in the control group were similar.

In families sending their children to physical activity, it is possible to think that there is not a high level of trait anxiety and the increase of social life and self-sufficiency of their children.

According to this finding which is also expected, it is possible to say that the level of trait anxiety decreases as the level of social support perception of mothers increases and in other words they feel less trait anxiety when supported and they arenot left alone. When the literature is examined, inSencar's, (Sencar, 2007) master's study it is observed that the trait anxiety levels of mothers who have autistic children are also similar (Coşkun and Akkak, 2009).

In Ilkim and ark's study, (Ilkim et al., 2017) the trait anxiety levels of the partents whose children partcipate in sportive activities were found at significant level. This result is different from our study. While children's participation in sportive activities increases parents' happiness levels and It is thought that there is an increase in anxiety levels due to failure.

Low levels of anxiety of families of disabled individuals participating in sportive activity are because that recomemdations given within education are implemented immediately by mothers and getting positive results from children are thought to be effective. It is seen that regular and planned training and physical activities are effective in both coping with stress and lowering the level of depression. As Akyol and Ilkim (2018), stated in their work, the willingness of children of parents to participate in sporting activities and that mentally retarded individuals should consider sporting activities as a game and considering age groups affect children 's willingness to participate in games positively . Giving information to parents about the content of activities to be done in the participation of disabled people in education and sportive activities decreases the anxiety state of parents.

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