COMPARISON OF TRAIT ANXIETY LEVELS OF PARENTS

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The objective of this study is to analyze the trait anxiety levels of parents. Trait anxiety levels of families who had mentally disabled children were compared with trait anxiety levels of families who had children with normal development participating/not participating in physical activity and exercise.

A total of 147 volunteer parents, 34 mothers and 39 fathers who had children without disability participating in physical activity and exercise, 13 mothers and 25 fathers who had children without disability not participating in physical activity and exercise and 31 mothers and 5 fathers who had mentally disabled children not participating in physical activity and exercise in the cities of Samsun and Sakarya participated in the study. A demographic information form and State-Trait Anxiety Inventory with 20 items developed by Spielberger were applied to the participants. The data obtained were analyzed with SPSS 21.0 package program.

No significant difference was found between the anxiety levels of parents with mentally disabled children and parents who had children without disability not participating in physical activity and exercise. However, the anxiety levels of parents who had children without disability not participating in physical activity and exercise were found to be significantly lower than those of the other two groups (p=0,01).

It was concluded that physical activity and exercise decreases children's' anxiety and thus indirectly affects parents' anxiety and decreases the level of anxiety. In addition, we believe that parents

accompanying their children to physical activity and exercise will have a positive influence on anxiety levels.

Keywords: trait anxiety, disabled, exercise, physical activity, parent

Introduction. Anxiety is a stress type of tension feeling disorder that is perceived subjectively by a person and which results from a conflict between what a person wants to realize or have (a subject or situation) and existing and/or probable conditions that may negate this. Functionally, anxiety is being alerted against a probable danger or threat and to set the defense mechanism into motion [1].

When studies related with anxiety and physical activity-exercise are examined, it can be seen that physical activity and exercise are components that decrease. Physical activity and exercise are known to cause very significant improvements on all development areas of children [7]. One of these developmental areas is the affective area and mood. Physical activity is a very important stabilizer of social and psychological emotional changes for all individuals, mainly disabled individuals.

For disabled individuals who cannot maintain their own vital (daily needs) skills by themselves (such as groups with severe autism or mentally disabled), anxiety and worries about the future are much more important. Although anxiety is worrying for all families in terms of the child, it is much higher in families with disabled children [6], however, it shows a proportional change with the degree of disability.

Children's' future is worrisome for all families. Families have an anxiety about the future of their child(ren). Of course, if a "special child" (with disability) is in question, it is inevitable fort his anxiety to increase. It has been reported that anxiety and stress for future is significantly high in families with a disabled child, in addition the responsibilities of the disabled child have been reported to cause compulsory changes within

the family and they have been reported to have negative effects on the participation of family members in social life [4,5,6]. Mothers with disabled children have been found to have high trait anxiety levels and their anxiety levels have been found to decrease based on some factors [7].

The objective of this study is to analyze the trait anxiety levels of parents who have mentally disabled children in comparison with other families (with children who do not have disability participating/not participating in physical activity) during the course of life. Another objective is to examine the effect of physical activity and exercise on parents' trait anxiety levels. The study aims to make recommendations in favor of the disadvantaged group in line with the findings.

The principal material statement. A total of 147 volunteer parents, 34 mothers and 39 fathers who had children without disability participating in physical activity and exercise, 13 mothers and 25 fathers who had children without disability not participating in physical activity and exercise and 31 mothers and 5 fathers who had mentally disabled children not participating in physical activity and exercise in the cities of Samsun and Sakarya participated in the study.

The parents were given a 5-item personal information form prepared by the author that included questions about gender, age, occupation, monthly income, social security and the number of children as independent variables and they were asked to fill in this form.

In order to measure the level of anxiety, trait anxiety scale including 20 questions which is a self assessment type of State-Trait Anxiety Inventory-STAI developed by Spielberger et al. in 1964 was used. The items of the scale were Likert type scored between 1 and 4. In the scale, there are direct and reverse expressions. The total score of reverse expressions are subtracted from direct expressions, fixed values are added and thus trait anxiety scores are found. High scores show high

levels of anxiety. After anxiety scores were calculated, the association between these scores and the other variables were assessed. The data obtained were analyzed with SPSS 21.0 package program by using One-way ANOVA test for comparisons between groups.

Results. The results of our study are presented below in tables.

Table 1

Anxiety levels between groups in terms of demographic variables

Variables	Group	n	Average	S.D.	Min.	Max.	F	p	Difference
Number of children (2 children)	Mentally disabled[1]	11	46.81	5.30	41	58	4.79	**0.01**	2<3-1
	Participating in sports[2]	40	44.57	7.52	27	60			
	Not participating in sports [3]	15	51.06	6.23	43	64			
	Total	66	46.42	7.33	27	64			
Number of children (3 and more)	Mentally disabled[1]	14	49.64	6.19	40	58	4.80	**0.01**	2<3-1
	Participating in sports[2]	18	45.11	5.75	36	56			
	Not participating in sports [3]	18	50.33	4.32	43	57			
	Total	50	48.26	5.82	36	58			
Social security (yes)	Mentally disabled[1]	31	48.96	5.90	40	60	8.48	**<0.001**	2<1<3
	Participating in sports[2]	59	45.27	6.71	32	60			
	Not participating in sports [3]	36	50.19	4.89	43	64			
	Total	126	47.58	6.39	32	64			
Monthly income (1000-2000 TL)	Mentally disabled[1]	30	48.90	6.13	40	60	12.46	**<0.001**	2<1<3
	Participating in sports[2]	43	42.86	7.74	12	54			
	Not participating in sports [3]	14	52.00	4.91	44	62			
	Total	87	46.41	7.69	12	62			
Mother's occupation (Housewife)	Mentally disabled[1]	29	49.86	5.98	40	60	6.64	**0.003**	2<1<3
	Participating in sports[2]	19	44.26	5.77	27	52			
	Not	7	51.42	4.49	45	57			

	participating in sports [3]								
	Total	55	48.12	6.38	27	60			
Father's occupation (Self-employed)	Mentally disabled[1]	4	44.00	2.94	41	48	8.73	**0.002**	2<1-3
	Participating in sports[2]	9	36.55	10.57	12	48			
	Not participating in sports [3]	7	53.00	4.39	49	62			
	Total	20	43.80	10.51	12	62			
Gender (Woman)	Mentally disabled[1]	31	49.45	5.99	40	60	4.08	**0.021**	2<1-3
	Participating in sports[2]	34	45.67	6.41	27	56			
	Not participating in sports [3]	13	49.92	4.85	43	57			
	Total	78	47.86	6.25	27	60			
Gender (Men)	Mentally disabled[1]	5	44.60	4.33	40	50	8.25	**0.001**	2<1-3
	Participating in sports[2]	39	43.12	8.79	12	60			
	Not participating in sports [3]	25	50.80	5.05	43	64			
	Total	69	46.01	8.16	12	64			

According to the results of our study, it can be seen that physical activity and exercise are very important factors in decreasing anxiety. Significant differences were found in the comparison of gender, self-employment, number of children (2 and more) and levels of anxiety between groups ($p<0.05$) and the group whose children participated in physical activity were found to be less anxious when compared with the other two groups (2<1-3). The levels of anxiety between groups and the options of social security, monthly income and housewife were also found to be significantly different ($p<0.05$), while the group whose children participated in physical activity had the lowest levels of anxiety, the group whose children did not participate in physical activity had the highest levels of anxiety (2<1<3).

Table 2

Comparison of Levels of Anxiety between Groups

Group	n	Average	S.D.	Min.	Max.	F	P	Difference
Mentally disabled[1]	36	48,77	5,99	40,00	60,00	12.105	**<0.001**	2<1-3
Participating in sport[2]	73	44,31	7,83	12,00	60,00			
Not participating in sport[3]	38	50,50	4,94	43,00	64,00			
Total	147	47,01	7,25	12,00	64,00			

When the anxiety levels of parents between groups were analyzed, it can be seen in Table 2 that the group whose children participated in physical activity and exercise[2] had significantly lower levels of anxiety when compared with the other two groups ($p<0.05$). No significant difference was found between the anxiety levels of parents who had mentally disabled children[1] and those of parents whose children did not participate in physical activity and exercise[3](2<1-3).

Conclusions. When “having disability” is discussed sociologically, it can be seen that “disability” is not caused by the social constraints a person experiences because of his disability, but because of the constraints brought to disabled individuals by societies [8]. Under such a circumstance, it can be seen that families are exposed to the constraints of the society rather than the child’s own constraints and that they cannot find a place for themselves with their children within the society. With the stress and uncertainty of the situation that they are in and also because of not having a place within the society and the presence of the condition that can be defined as ‘**auto-exclusion**’[1], high levels of anxiety in disabled

[1] *Different from Stigma,’auto-exclusion’ can be defined as the involuntary exclusion of a disabled individual by a person because of not knowing how to behave, or because of withdrawal as a result of feeling anxious or having problems in communication-interaction.*[1]

individuals and their families are inevitable. The results of our study also show that one of the important factors of having high levels of anxiety for families with disabled children is the restriction of disabled individual by the society in terms of social role.

In terms of the number of children, no difference was found between group comparisons for parents with an only child. When the anxiety levels of parents with 2 or more children were compared, the trait anxiety scores of parents whose children participated in physical activity and exercise^{2} had significantly low levels of anxiety scores when compared with the other two groups ($p<0.05$). The difference in the level of anxiety between the group whose children did not participate in physical activity and exercise^{3} and the group who had mentally disabled children was not significant (2<1-3). In their study they conducted to compare state and trait anxiety levels of mothers with disabled children, no significant difference was found in terms of the age of the child[9]. In a study conducted by Akbaş (2003) on the mothers of mentally disabled children, it was found that having more than one child increased anxiety and depression and it was concluded that the number of children were effective on anxiety and depression [10]. In our study, it was found that having more than one child increase families' responsibilities which in turn caused increase in financial and emotional burden causing increases in the trait anxiety of parents.

No significant differences were found between the anxiety levels of parents with no social security. There is no significant difference between the trait anxiety levels of parents with social security. Within the trait anxiety levels of the groups which included children participating in the physical activity and exercise^{2}, the lowest level scores belong to the group whose children participated in physical activity and exercise have the lowest score ($P<0.05$).

The anxiety scores of parents who had children with mental disability[1] were found to be significantly lower than those of parents whose children did not participate in physical activity and exercise[3](P<0.05), (2<1<3). In Coşkun and Akkaş's study, social security was not found to be a determinant on trait anxiety level [7]. In this study, having social security can have caused the parents to feel more relaxed and thus can have caused lower anxiety levels. Low levels of anxiety in the group whose children participated in physical activity and exercise can be assessed as a result of positive developments caused by participating in physical activity and exercise.

Within parents whose monthly income was between 1000 and 2000 TL, those who had the lowest anxiety levels was the group whose children participated in physical activity and exercise[2]. In our study, it can be seen that the families that have low income level (1000-2000 TL) had high anxiety levels; however, when the anxieties of parents whose children participated in physical activity and exercise were compared with other groups, it can be seen that despite the low income, physical activity and exercise are factors that decrease anxiety. In addition, anxiety levels of the group with mentally disabled children[1] were lower than the group whose children did not participate in physical activity and exercise[3](p<0.001). (2<1<3)

Families with disabled children have too much financial and emotional responsibilities and they are associated [11]. With the increase in income, financial possibilities about fulfilling the needs of disabled children increase and this is an important factor that decreases trait anxiety [7]. The reason why parents of mentally disabled children have lower levels of anxiety than parents whose children do not participate in physical activity can be the financial support from the government. The

results of our study supports the assumption that high income level will decrease anxiety and it is in line with the literature.

In the analysis of anxiety levels in terms of occupation, the difference between anxiety levels of parent groups whose occupations were “housewife” or “self-employed” were significant($p<0.05$). In both occupation groups, the group that showed low anxiety levels was the group whose children participated in physical anxiety and exercise[2]. In terms of the anxiety levels of housewives, anxiety levels of mothers who had mentally disabled children, the group with mentally disabled children[1] had lower anxiety groups than the group whose children did not participate in physical anxiety and exercise[3] ($p<0.05$), (2<1<3). No significant difference was found between the self-employed with mentally disabled children[1] and the group whose children did not participated in physical anxiety and exercise[3] (2<1-3). When the data were analyzed in terms of the occupations, anxiety levels of mothers who were housewives and fathers who were self-employed whose children participated in physical anxiety and exercise were found to be lower than or equal to families of mentally disabled children who did not participate in physical anxiety and exercise. No statistically significant difference was found between the other occupation groups in our study. ın the light of this information, it can be said that participating in physical activity decreases levels of anxiety.

When the anxiety levels of groups were compared with the variable of gender, the difference between the anxiety levels of groups is significant in both mothers and fathers ($p<0.05$). When the mothers’ anxiety levels were compared, it was found that the group whose children participated in physical activity and exercise[2] had low anxiety levels ($p<0.05$). There was no significant difference between the group whose children did not participate in physical activity and exercise[3] and the group whose children were mentally disabled[1] (2<1-3). When the mothers’

anxiety levels were compared, similar to mothers, it was found that the group whose children participated in physical activity and exercise[2] had significantly lower anxiety levels than the other two groups ($p<0.05$). anxiety levels of parents whose children were mentally disabled[1] were not different from those of the group whose children did not participate in physical activity and exercise[3](2<1-3). When the comparisons in terms of gender were analyzed, the fact that parents whose children were mentally disabled and parents whose children did not participate in physical activity and exercise had similar levels of anxiety but different sources of anxiety shows that similar levels of anxiety were formed about different subjects. Here, the factor that creates difference for both genders is the participation of children to exercise. Children's participation to exercise can be seen to have an effect that lowers anxiety on both mothers and fathers.

The effective result of our study was that the anxiety levels of families whose children participated in physical activity and exercise were significantly lower when compared with the other two groups (parents with mentally disabled children and the parents of children who did not participate in physical activity and exercise) ($p<0.05$).

The low levels of anxiety in families who participated in physical activity and exercise was thought as the result of these families' participating in social life and consequently as a positive contribution of this because mother (mostly) or the father participate in physical activity or exercise with the children and they decrease their own stress and anxiety.

As a secondary factor, all developmental areas of children who participate in physical activity and exercise are influenced by this [12] and the children's affective areas and moods are balanced more than their peers. In addition to having an effect on all areas, mood will also have positive influence on behavior and control areas, too. A child with negative mood and high levels of anxiety will also be a source of stress for those

around him. It has been put forward that physical activity and exercise are directly or indirectly stabilizers of the moods of parents and they are a significant factor that decreases anxiety levels.

Physical activity and exercise and being disabled have different effects on an individual in terms of social isolation. This effect either increases or decreases the problems in an individual's life. Being disabled causes an individual to get away from social life and creates an isolated environment, thus the individual becomes lonely. Physical activity and exercise are mostly done in social areas or as a part of group activities. An individual's being in society breaks the social isolation. As a conclusion, physical activity and exercise is one of the most effective ways of coming out of isolation [13]. Accordingly, positive effects will be seen on psychological problems and anxiety levels.

An interesting result here is the result that there are no significant differences between the anxiety levels of parents whose children did not participate in physical activity and exercise and the parents who had mentally disabled children. Higher scores are an expected result in families with mentally disabled children. In our study, no significant difference was found between the anxiety levels of families who had mentally disabled children and the families whose children did not participate in physical activity and exercise. We think that the primary factor in the absence of such a difference is the fact that families have different anxieties about the futures of their children whether they are disabled or not. As a conclusion, it can be said that all families have anxieties about the futures of their children and the participation of children in physical activity and exercise decreases families' anxieties significantly.

As a conclusion, physical activity and exercise are factors that decrease a child's anxiety. A child whose anxiety and stress are

decreased means a family positively affected by this because stress in a child means stress for the whole family. In addition, the child's good mood will also affect the moods of family members positively. We believe that recommending physical exercise to families with disabled children will decrease the level of anxiety in these families since the results of our study showed that anxiety levels were low in families with normal children who participated in physical activity and exercise.

Trainable mentally disabled make up about 85% of all mentally disabled [13]. Physical activity and exercise should be a part of these children's education life during their whole live because although this creates positive changes (such as level of anxiety) and results in various areas for families, we know that the most significant effect occurs in these children and in their life quality.

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