

## Analysis of Peer Support Levels for Disabled Individuals with Demographic and Sports-Related Variables

Öner GÜLBAHÇE<sup>1</sup> Bülent TATLISU<sup>2</sup> Arzu GÜLBAHÇE<sup>1</sup> Mücahit DURSUN<sup>3</sup>

1. Atatürk University /Karabekir Faculty of Education ERZURUM-TURKEY

2. Provincial Directorate of Youth and Sports ERZURUM-TURKEY

3. Atatürk University /Institute of Educational Sciences ERZURUM-TURKEY

### Abstract

Considering the difficulties that disabled individuals of our society encounter in their daily lives, one can assume that the notions of cooperation and solidarity may be related to the support level. The aim of this study was to determine the level of peer support of disabled individuals and therewith analyse it across different variables including playing sports. The sample for the study included a total of 247 disabled students (117 female and 130 male) from different age groups in Erzurum. To recruit participants, special schools for sight-disabled and physically disabled individuals, and rehabilitation centers in Erzurum were visited. The data was collected via the questionnaire of "Peer Support Scale" which was developed by Çalışkan and Çınar (2012). The statistical methods of frequency distribution, t-test and analysis of variance (ANOVA) were used to analyse the data. Statistical significance ( $p < .05$ ) was considered in the interpretation of the results. The results showed that there were statistically significant differences among the participants' sub-scale means on the Peer Support Scale when the groups were compared on the basis of the disability level, the reason to disability, playing sports or not, the type of sports, the time spent on sports, and the number of siblings. It was found that the peer support level was higher for disabled individuals who played sports when compared to those who do not play sports. It is suggested that disabled individuals should be encouraged to participate in sports-related activities, which would facilitate their socialization, cooperation, interdependency and the level of peer support.

**Keywords:** disabled individuals, peer support, sports

### Introduction

Disabled individuals are persons who have difficulties in adjusting to the societal life and in meeting their daily needs, and who require protection, care, rehabilitation, consultation and support services due to any loss of their physical, cognitive, psychological or social abilities in varying degrees and reasons, either congenitally or acquired.

Peer support is one of the most popular interventions in every education level from primary schools to universities, hospitals and various institutions. Thus, behaviours related to peer support among students should be investigated with culturally appropriate and reliable tools in order to obtain accurate and valid information regarding the interactions among peers. Peer Support Scale was developed by Kuo et al. (2007) to assess cooperation levels among nurse school students.

Peer support is an act of help from a student to a fellow student or occasionally to adults (Nazlı, 2008). The practices of making the peers to do the work one does not want to do; professional consultancy or therapy; mentioning peer's past defense mechanisms, subconscious conflicts; or educational programs can not be listed as expressions of peer support (Cox, 1999).

Peer relationships are reciprocal and sustained interactions between individuals who are the same age or at the same level of development, and share similar histories, values, experiences, life styles and social context (Gülay, 2009).

Peer group is the mean of socialization for the individual. It enables individuals to interact with others who are experiencing new things, and also who are sharing similar histories. Individuals learn to get along with others via observation. They can compare their abilities and talents to the abilities and talents of those who share the same status with them. It is where the new norms and values are transferred to adults (Gander and Gardiner 2004; Çelen, 2007).

Peers have many meanings for adolescent individuals. It is important to emphasize the significance of peer relationships for adolescent individuals in the sense of peer support and gaining experience. These relationships may contribute to one's world view in their adulthood (Bayhan and Işıtan, 2010).

Disabled individuals are those who lose their ability to move, function, or sensory abilities completely or to any extent, due to a physical or cognitive reason. Disability could be congenital, develop during pregnancy, or acquired after an accident or an illness. Regardless of its reason, it is surely arduous for a disabled person to be isolated and require other people's help. Sports is a competitive, cooperative and cultural activity which enhances socialization, integration to the society and mental, physical and cognitive development; within pre-determined rules, with or without tools, individually or collectively, as a free-time activity or as a profession (Erkal, 1982).

## Material And Method

The purpose of this study is to determine disabled individuals' level of peer support, and investigate its relationship to playing sports and other variables.

Peer Support Scale was developed by Çalışkan and Çınar (2012). It is a four-point likert-type scale, and includes 17 items and 3 sub-scales. The sub-scales are: physical help (9 items), academic help (4 items) and emotional help (4 items). The sub-scale of physical help includes the items of 1, 2, 3, 4, 5, 6, 7, 12 and 13; the sub-scale of academic help includes the items of 8, 9, 10 and 17; and the sub-scale of emotional help includes the items of 11, 14, 15 and 16. The four points on the scale are "I don't agree" (1 point), "I partially agree" (2 points), "I agree" (3 points), and "I completely agree" (4 points). All items are positively phrased. The minimum score on the scale is 17, and the maximum score is 68. Higher the test score is, the higher is the level of participant's peer support (Çalışkan and Çınar, 2012).

The internal reliability of the Peer Support Scale was calculated with Cronbach's Alpha value. Reliability coefficient was .89 for the physical help sub-scale, .77 for the academic help sub-scale, and .81 for the emotional help sub-scale. The reliability coefficient for the scale as a whole was .93. To evaluate, it was found that the scale has high internal reliability (Çalışkan and Çınar, 2012).

The scale was tested for its internal reliability with the data collected from 247 disabled individuals via the current study. It was found that the Cronbach Alpha value was .91 for the physical help sub-scale, .83 for the academic help sub-scale, and .87 for the emotional help sub-scale. It was .95 for the scale as a whole.

The current study included 117 female and 130 male disabled individuals (total of 247), who participated in the study voluntarily.

Statistical analyses were performed with Statistical Package for Social Science (SPSS) Version 16.0. Demographic characteristics were determined via frequency distribution analysis. The analysis of t-test was used for comparison between two independent variables, and ANOVA was used for analyses with more than two independent variables. Statistical significance level of  $p < .05$  was the criterion in the evaluation of statistical differences.

## Results

This section presents the results of the study and the evaluation of results. The demographic characteristics of the sample is presented in Table 1 and the frequencies of the participants who play sports and who does not are presented in Table 2. The results of t-test performed to investigate the relationship between the scores on the sub-scales and the independent variables are presented in Tables 3 and 4. The results of the ANOVA test are presented in Tables 5, 6, 7, 8, and 9.

**Table 1:** Demographic characteristics of the sample

Demographic Characteristics	Level	Frequency (N)	Percentage (%)
Sex	Female	117	47,4
	Male	130	52,6
	Total	247	100,0
Number of siblings	No siblings	21	8,5
	1-2 siblings	120	48,6
	3-4 siblings	85	34,4
	5 or more siblings	21	8,5
Type of disability	Sight	60	24,3
	Hearing	120	48,6
	Physical	67	27,1
Reason for disability	During birth	10	4,0
	After birth	134	54,3
	Before birth	103	41,7

The frequencies and percentages for levels of sex, number of siblings, type of disability and the reason for disability are presented in Table 1.

**Table 2:** Frequency of participants who play sports and does not play sports

Playing sports	Level	Frequency (N)	Percentage (%)
Do you play sports?	Yes	116	47,0
	No	131	53,0
	Total	247	100,0
Which type of sports?	Team sport	22	8,9
	Individual sports	55	22,3
	Both	39	15,8
	I don't play sports	131	53,0
How many hours do you play sports?	2 hours and less	29	11,7
	3 to 5 hours	54	21,9
	6 hours or more	33	13,4
	I don't play sports	131	53,0

The frequencies and percentages for participants' answers regarding playing sports are presented in Table 2. Though there is no major difference between the number of participants who play sports and the number of participants who does not, there is a considerable difference between the number of participants who play individual sports and the number of participants who play team sports.

**Table 3:** T-test results comparing females and males on the scores of Peer Support Scale sub-scale scores

Sub-scales	Sex	N	X	SD	t	p
Physical help	Female	117	26,47	5,79	,937	,744
	Male	130	25,76	6,06	,939	
Academic help	Female	117	11,83	2,64	1,213	,612
	Male	130	11,41	2,80	1,217	
Emotional help	Female	117	12,17	3,12	,552	,127
	Male	130	11,96	2,83	,549	

As seen in Table 3, any statistically significant ( $p < .05$ ) relation was not found between females and males on the scores of the sub-scales.

**Table 4:** T-test results comparing participants who play sports and who does not, on the scores Peer Support Scale sub-scale scores

Sub-scales	Do you play sports?	N	X	SD	t	p
Physical help	Yes	116	26,75	5,44	1,654	,066
	No	131	25,51	6,29	1,669	
Academic help	Yes	116	12,09	2,59	2,625	,466
	No	131	11,19	2,79	2,637	
Emotional help	Yes	116	12,70	2,66	3,276	,085
	No	131	11,48	3,12	3,308	

As seen in Table 4, any statistically significant ( $p < .05$ ) relation was not found between participants who play sports and who does not on the scores of the sub-scales.

**Table 5:** The Analysis of Variance on Peer Support Scale sub-scale scores by the type of sports that participants play

Sub-scale	Type of sports	N	X	SD	t	P	f
Physical help	Team sport	22	26,68	5,89	,928	,428	
	Individual sports	55	26,90	5,29			
	Both	39	26,58	5,52			
	I don't play sports	131	25,51	6,29			
	Total	247	26,09	5,93			
Academic help	Team sport	22	12,00	2,41	2,406	,015*	2>4
	Individual sports	55	12,25	2,57			
	Both	39	11,92	2,75			
	I don't play sports	131	11,19	2,79			
	Total	247	11,61	2,73			
Emotional help	Team sport	22	13,18	2,17	3,985	,006*	1>4
	Individual sports	55	12,78	2,77			
	Both	39	12,33	2,75			
	I don't play sports	131	11,48	3,12			
	Total	247	12,06	2,97			

As seen in Table 5, statistically significant ( $p < .05$ ) relations were found between the means of Peer Support Scale sub-scales when the participants were compared on types of sports. For the sub-scale of academic help, those who play individual sports scored significantly higher than those who do not play sports; and for the sub-scale of emotional help, those who play team sports scored significantly higher than those who do not play sports.

**Table 6:** The Analysis of Variance on Peer Support Scale sub-scale scores by the duration of sports

Sub-scale	Duration	N	X	SD	t	P	f
Physical help	2 hours and less	29	26,31	5,73	1,524	,209	
	3 to 5 hours	54	26,27	4,93			
	6 hours or more	33	27,93	5,94			
	I don't play sports	131	25,51	6,29			
	Total	247	26,09	5,93			
Academic help	2 hours and less	29	12,06	2,89	2,640	,050	
	3 to 5 hours	54	11,87	2,42			
	6 hours or more	33	12,48	2,61			
	I don't play sports	131	11,19	2,79			
	Total	247	11,61	2,73			
Emotional help	2 hours and less	29	11,93	2,71	4,711	,003*	3>4
	3 to 5 hours	54	12,77	2,59			
	6 hours or more	33	13,27	2,63			
	I don't play sports	131	11,48	3,12			
	Total	247	12,06	2,97			

As seen in Table 6, statistically significant ( $p < 0.05$ ) results were found between the means of Peer Support Scale sub-scales when the participants were compared on duration of sports. For the sub-scale of emotional help, those who play sports 6 or more hours scored significantly higher than those who do not play sports.

**Table 7:** The Analysis of Variance on Peer Support Scale sub-scale scores by the number of siblings

Sub-scale	Number of Siblings	N	X	SD	t	P	f
Physical help	No siblings	21	28,38	4,08	1,681	,051	
	1-2 siblings	120	25,64	6,00			
	3-4 siblings	85	26,47	6,23			
	5 or more siblings	21	24,90	5,46			
	Total	247	26,09	5,93			
Academic help	No siblings	21	12,66	2,03	1,919	,032*	1>4
	1-2 siblings	120	11,74	2,81			
	3-4 siblings	85	11,36	2,69			
	5 or more siblings	21	10,85	2,81			
	Total	247	11,61	2,73			
Emotional help	No siblings	21	13,61	2,03	2,399	,015*	1>4
	1-2 siblings	120	12,00	2,95			
	3-4 siblings	85	11,92	3,15			
	5 or more siblings	21	11,38	2,80			
	Total	247	12,06	2,97			

As seen in Table 7, statistically significant ( $p < 0.05$ ) results were found between the means of Peer Support Scale sub-scales when the participants were compared on number of siblings. For the sub-scale of academic help, those with no siblings scored significantly higher than those with 5 or more siblings. For the sub-scale of emotional help, those with no siblings scored significantly higher than those with 5 or more siblings.

**Table 8:** The Analysis of Variance on Peer Support Scale sub-scale scores by the type of disability

Sub-scale	Type of Disability	N	X	SD	t	P	f
Physical help	Sight	60	27,50	4,30	2,317	,048*	1>3
	Hearing	120	25,77	6,22			
	Physical	67	25,41	6,50			
	Total	247	26,09	5,93			
Academic Help	Sight	60	12,13	2,18	3,521	,012*	1>3
	Hearing	120	11,75	2,73			
	Physical	67	10,91	3,05			
	Total	247	11,61	2,73			
Emotional help	Sight	60	12,70	2,24	4,796	,003*	1>3
	Hearing	120	12,24	2,98			
	Physical	67	11,16	3,34			
	Total	247	12,06	2,97			

As seen in Table 8, statistically significant ( $p < 0.05$ ) results were found between the means of Peer Support Scale sub-scales when the participants were compared on the type of disability. For all three sub-scales, sight-

disabled participants scored significantly higher than physically-disabled participants.

**Table 9:** The Analysis of Variance on Peer Support Scale sub-scale scores by the reason for disability

Sub-scale	Reason for Disability	N	X	SD	t	P	f
Physical help	During birth	10	25,70	7,27	1,229	,294	
	After birth	134	25,58	6,38			
	Before birth	103	26,79	5,13			
	Total	247	26,09	5,93			
Academic help	During birth	10	11,50	3,71	1,514	,084	
	After birth	134	11,35	2,87			
	Before birth	103	11,97	2,40			
	Total	247	11,61	2,73			
Emotional help	During birth	10	11,70	3,86	4,449	,003	3>2
	After birth	134	11,58	3,12			
	Before birth	103	12,71	2,55			
	Total	247	12,06	2,97			

As seen in Table 9, statistically significant ( $p < 0.05$ ) results were found between the means of Peer Support Scale sub-scales when the participants were compared on the reason for disability. For the sub-scale of emotional help, those with a disability caused before birth scored significantly higher than those with a disability acquired after birth.

### Discussion And Conclusion

In accordance with the purpose of current study, the relation of demographic characteristics of the participants and sports-related variables with the level of peer support was investigated. The results of the t-test showed that there was no statistically significant ( $p < .05$ ) relation between female and male participants on the scores of Peer Support Scale sub-scales. In the study of Çırpan (2013), "Sağlık Hizmetleri Meslek Yüksekokulu Öğrencilerinde Akran Desteği ile Akademik Başarı Arasındaki İlişkinin Değerlendirilmesi" [Investigation of the relationship between peer support and academic success for Health Services Vocational High School students], there was not a statistically significant difference between males and females. Nevertheless, in the study of Tozoğlu et al. (2015), "Akran Desteği Düzeyine Sporun ve Farklı Değişkenlerin Etkisi" [The effect of sports and other variables on the level of peer support], it was found that there was a statistically significant difference between male and female participants on scores of the sub-scales of academic and emotional help. This results differs from the findings of the current study.

Any statistically significant ( $p < .05$ ) relation was not found between participants who play sports and who does not, on the scores of the sub-scales of Peer Support Scale. Tozoğlu et al. (2015) also found no relation between participants who play sports and who does not. This result is in accordance with the findings of the current study.

There were statistically significant ( $p < .05$ ) relations between the means of Peer Support Scale sub-scales when the participants were compared on types of sports. For the sub-scale of academic help, those who play individual sports scored significantly higher than those who do not play sports; and for the sub-scale of emotional help, those who play team sports scored significantly higher than those who do not play sports.

There was a statistically significant ( $p < 0.05$ ) relation was found between the means of Peer Support Scale sub-scales when the participants were compared on duration of sports. For the sub-scale of emotional help, those who play sports 6 or more hours scored significantly higher than those who do not play sports. Tozoğlu et al. (2015) found in their study that for the emotional help sub-scale, there were statistically significant differences between levels of the variable of duration of sports. This result is also in accordance with the findings of the current study.

There were statistically significant ( $p < 0.05$ ) relations between the means of Peer Support Scale sub-scales when the participants were compared on number of siblings. For the sub-scale of academic help, those with no siblings scored significantly higher than those with 5 or more siblings. For the sub-scale of emotional help, those with no siblings scored significantly higher than those with 5 or more siblings.

There were statistically significant ( $p < 0.05$ ) relations between the means of Peer Support Scale sub-scales when the participants were compared on the type of disability. For all three sub-scales, sight-disabled participants scored significantly higher than physically-disabled participants.

There was a statistically significant ( $p < 0.05$ ) relation between the means of Peer Support Scale sub-scales when the participants were compared on the reason for disability. For the sub-scale of emotional help, those with a disability caused before birth scored significantly higher than those with a disability acquired after birth.

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