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Kürşat KARACABEY
Editor in Chief

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The are a total of 9 research articles and analyses in this volume of International Refereed Academic Journal of Sports. Just like other volumes, we are happy to include research papers and analyses in this volume. We are of the opinion that these articles will be beneficial for the researchers in this field. We have faith in publishing many other volumes with the support of our valuable readers and authors. Our journal is indexed by national and international indices. We also continue to apply to many other indices. We hope that this journal will be ranked among the journals indexed in SCI among the international periodicals thanks to your support and qualitative research papers to be sent. Referees and the editor of the journal have great responsibilities in improving the scientific quality of a refereed journal in scientific periodical publishing. We thank our referees who spent their valuable time on evaluation of papers meticulously. One of our privileged principles is that every volume must be better than the previous one. We will try to make our journal more qualified with your suggestions and support. We extend sincere thanks and respect to the scientists who have just joined us, to authors who support us with their papers, readers, followers and to those who contributed efforts. Hope to meet you in next volume. Best regards.

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THE LEADERSHIP STYLES OF SCHOOL OF PHYSICAL EDUCATION AND SPORTS IN DEPARTMENT OF COACHING EDUCATION STUDENTS[1]

BEDEN EĞİTİMİ ve SPOR YÜKSEKOKULU ANTRENÖRLÜK EĞİTİMİ BÖLÜMÜ ÖĞRENCİLERİNİN LİDERLİK STİLLERİNİN İNCELENMESİ

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Öz: Amaç: Farklı yaş kategorilerindeki gruplara liderlik yapacak olan antrenörlük eğitimi bölümü öğrencilerinin iyi bir lider olabilmeleri, çalıştıkları spor kulüplerinde üstlerine düşen görevleri en iyi şekilde yerine getirebilmeleri açısından önemlidir. Bu yüzden çalışmamız antrenörlük eğitimi bölümü öğrencilerinin liderlik tiplerini belirleyebilmek amacıyla yapılmıştır. **Materyal ve Yöntem:** Bu çalışma, tarama (survey) modeli niteliğindedir. Veriler, Marmara Üniversitesi Beden Eğitimi ve Spor Yüksekokulu'nda okuyan Antrenörlük Eğitimi Bölümü öğrencilerinin liderlik ile ilgili görüş ve düşünceleri alınarak toplanmıştır. Çalışmamıza, 60'ı male, 50'si kız toplam 110 öğrenci gönüllü katılmıştır. Veri toplama aracı olarak, Richard Daft (2008) tarafından geliştirilen Liderlik Ölçeği kullanılmıştır. Antrenörlük Eğitimi Bölümü öğrencilerinin algılarına göre, davranışsal liderlik özelliklerinin farklılaşıp farklılaşmadığının incelenmesinde tanımlayıcı istatistik (frekans-yüzde) ve ki kare-testi kullanılmıştır. Araştırmada anlamlılık düzeyi 0.05 olarak kabul edilmiştir. **Bulgular:** Antrenörlük eğitimi bölümü öğrencilerinin cinsiyetlerine göre liderlik davranışları incelendiğinde genel olarak insan odaklı ve görev odaklı liderlik tiplerinin ikisine de uydukları ve cinsiyetler arasında fark olmadığı tespit edilmiştir ($p>0.05$). Branşlar arasındaki insan ve görev odaklı liderlik davranışının puanlaması değerlendirildiğinde görev odaklı davranış tipinde branşlar arasında istatistiksel açıdan fark olmadığı ($p>0.05$), ancak insan odaklı davranış tipinde branşlar arasında istatistiksel açıdan anlamlı fark olduğu ($p<0.05$)belirlenmiştir. **Sonuçlar:** Antrenörlük eğitimi bölümü öğrencilerinin davranışsal liderlik stilinde görev odaklı ve insan odaklı liderlik özelliğini hemen hemen eşit oranlarda sergiledikleri ve cinsiyetler arasında fark olmadığı belirlenmiştir. Liderlik stillerinin branşlara göre farklılıklarının incelenmesi sonucunda ise bazı branşlarda fark olmasına rağmen genel ortalamayı bozmadığı ve her iki tip liderlik özelliğini de taşıdıkları tespit edilmiştir. Bu tarz liderlik özelliği sportif anlamda başarının daha kolay ede edilmesini sağlayacağı düşünülmektedir.

Anahtar Kelimeler: Beden Eğitimi ve Spor, Antrenörlük Eğitimi, Davranışsal Liderlik, Liderlik Ölçeği

Abstract: Aim: It is really important for students of coaching education program who will lead different age groups in trainings to be good leaders in terms of accomplishing the tasks given by the sport clubs which they work in. Because of this, our research is done to find the leadership styles of students of coaching education program. **Material and Methods:** This research has the characteristic of survey model. Data is collected by asking the opinions and thoughts on leadership to the students from Marmara University School of Physical Education and Sports Department of Coaching Education. 110 students are participated in our research and while 60 of them are male students 50 of them are female. Leadership Questionnaire developed by Richard Daft (2008) is used as data collector. Descriptive statistics (frequency-percentage) and Chi-square-test are used to analyze if behavioral leadership qualifications become different or not according to perception of coaching education program. **Results:** When we analyze the leadership behaviors of coaching education students according to their gender, it is found that they are fit to both people oriented and job oriented leadership types and there is not a difference between genders ($p>0.05$). When the scoring of people oriented and job oriented leadership behaviors between branches is reviewed, it is found that there is not a significant difference in job oriented behavior between branches ($p>0.05$). However, a significant difference in people oriented behavior is found ($p<0.05$). **Conclusion:** It is found that Coaching Education students show equal rate of job oriented and people oriented leadership qualifications in behavioral leadership style and also it is found there is no difference between genders. In the result of analyzing the difference of leadership styles of according to branches, even though there are some differences between some branches, this difference does not disturb the general average and they carry two different type of leadership. This kind of leadership characteristics help to gain sportive success.

Key Words: Physical Education and Sport, Coaching Education, Behavioral Leadership, Leadership Scale

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INTRODUCTION

Leaders have been subjects of many studies that have always attracted attention since they influence the lives of societies and change the course of history. Leadership enables the effective functioning of an organization by influencing people in order to achieve organizational goals (Aydın, 1994:1-2) Not all managers have leadership abilities, but being a good manager requires having a leadership ability (Sabuncuoğlu, 2001).

It has been discussed for a long time whether leadership can be taught or not. It has been determined that the leadership abilities can be taught. An increasing demand has emerged in leadership training and development programs (Mole, 2004). It has been determined that the current training programs for developing leadership skills are not adequate and need to be developed (Elmuti *et al.,* 2005).

In explaining what qualities a successful leader should have, James and Eden (2001) mention the ability to see the future and to keep his/her horizons broad. They state that success-focused leaders proceed to achieve their targets, that they have the skill to always motivate others, that they should be guiding in how to reach a target they have set, and that following the achievement of the target, they should continue to back up the people they lead.

Behavioral approaches have been developed as a consequence of researchers' focusing on how leaders behave and what they do rather than concentrating on their personal characteristics because leadership analysis of the characteristics approach has quite shallow and reductionist aspects. The building block of this theory is constituted by the behaviors of the leaders rather than their personal characteristics. Therefore, the relationships of a leader with his/her audience are not based on leadership characteristics, but on whether his/her attitudes and behavior are accepted by his/her audience. Thus, leaders cannot be thought of separately and independently from the groups that they lead, and they must be evaluated in terms of their relationship with such groups (Gelatt, 2002).

This behavior-focused theory makes a distinction between effective and ineffective leaders. According to this theory, behaviors can be taught, and individuals can be trained and thus enabled to perform better leadership (Gelatt, 2002).

Successful leading coaches in sports recognize that the relationship between themselves and the environment positively affect the performance of athletes. Leadership in sports is an area that requires specialization in many personal and technical abilities. It is not an easy task to influence the actions and behaviors of different players in a team. Especially

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with the changes in the nature of sports in recent years, coaches have come to interact with many persons and groups (Donuk, 2007).

Those leaders who train teams should do their best in order to be perfect in every aspect. Perfect leadership and coaching is dependent on the ability to adequately use psychological skills and especially interpersonal communication skills (Konter, 1996).

Teachers of physical education and sports, coaches, and sports managers assume duties to achieve a certain goal by managing a group. The leadership behaviors of coaches, physical education teachers and sports managers resemble those leadership behaviors in other occupations (Laurent and Bradney, 2007).

Studies dealing with behavioral approach have determined that leadership behaviors are gathered around two main variables. These are the variable of initiating structure and the variable of consideration. The variable of initiating structure refers to task-related behaviors such as shaping the work environment, defining the responsibilities, and planning the tasks. The variable of consideration refers to the behaviors relate to individual relationships such as respect between leaders and followers, trust, and friendship. Based on these definitions, it can be suggested that the variable of initiating structure is related to the needs of an enterprise while the variable of consideration is related to the needs of workers (Northouse, 2004).

In his study, Stodgill states that successful leaders should focus both on workers – i.e. they should increase workers' skills – and on tasks (Davis, 1997). Considering all the characteristics, the leadership styles of coaches may vary by the characteristics of the athletes in their team and by other external factors (Temel, 2010).

Prospective coaches are expected to exhibit leadership behavior in order to become successful in their occupation. Therefore, the acquisition of leadership behaviors by the students of School of Physical Education and Sports will enable them to be successful in their occupational lives. This research was conducted for the purpose of detecting the opinions of the students from the coaching department and to make recommendations based on the results of the research.

MATERIAL and METHOD

This research employed the survey method. The data were collected by getting the views and opinions of the students of the Department of Coaching Education of the School of Physical Education and Sports of Marmara University.

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The research is significant for the students of the department of coaching education, who will be leading various groups with various age categories in the future, to become good leaders and to adequately fulfill their duties in the sports clubs they will work for.

Respondents of the Questionnaire

Students from the Department of Coaching Education of the School of Physical Education and Sports voluntarily participated in the research. Students were randomly selected.

Research Population and Design

The population of the research includes the students attending the School of Physical Education and Sports, and the sample is composed of 110 persons (60 males and 50 females) studying in the Department of Coaching Education. Questionnaire technique was employed for the research design.

Data Collection

Leadership Questionnaire, developed by Richard Daft (2008) was used as a data collection tool in the research. The questionnaire is made up of 38 questions; 3 of them are demographic questions, and 35 are Likert-type questions. Responses for the Likert-type questions were measured through a 5-point Likert scale (1 = strongly disagree; 5= strongly agree) (α=0.7627).

In the leadership scale developed by Richard Daft, the questions 1, 2, 4, 6, 8, 9, 11, 12, 13, 14, 16, 17, 20, 21, 23, 25, 27, 29, 30, 31 and 33 are related to task-oriented leadership, and the questions 3, 5, 7, 10, 15, 18, 19, 22, 24, 26, 28, 32, 34 and 35 are related to people-oriented leadership.

The questionnaire forms were filled in by the respondents themselves, who voluntarily took part in the study. An application was made to the Directorate of the School of Physical Education and Sports of Marmara University with the submission of the questionnaire form and the content of the study. The study was carried out with the permission of the directorate and with the support of the students from the mentioned department.

Statistical Methods Used

Descriptive statistics (frequency – percentage) and chi square test were used in the evaluation of the data obtained. The significance level was determined to be 0.05 in statistical calculations.

FINDINGS

The following tables present the findings related to the behavioral leadership skills of the students from the department of coaching education.

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Table 1. % Of Responses Related to Task-Oriented Leadership Behavior By Gender

	QUESTION	GENDER	Never		Seldom		Occasionally		Frequently		Always	
			F	%	F	%	F	%	F	%	F	%
1	I would most likely act as the spokesperson of the group	Female	1	2,0	8	16,0	25	50,0	4	8,0	12	24,0
		Male	0	0	1	1,7	31	51,7	12	20,0	16	26,7
2	I would encourage overtime work	Female	16	32,0	7	14,0	17	34,0	7	14,0	3	6,0
		Male	10	16,7	9	15,0	20	33,3	7	11,7	14	23,3
4	I would encourage the use of uniform procedures	Female	2	4,0	1	2,0	17	34,0	8	16,0	22	44,0
		Male	2	3,3	7	11,7	19	31,7	16	26,7	16	26,7
6	I would stress being ahead of competing groups	Female	8	16,0	0	0	20	40,0	10	20,0	12	24,0
		Male	9	15,0	7	11,7	13	21,7	17	28,3	14	23,3
8	I would speak as a representative of the group	Female	0	0	9	18,0	15	30,0	12	24,0	14	28,0
		Male	0	0	3	5,0	21	35,0	21	35,0	15	25,0
9	I would try out my ideas in the group	Female	3	6,0	8	16,0	1	2,0	24	48,0	14	28,0
		Male	0	0	10	16,7	14	23,3	20	33,3	16	26,7
11	I would be working hard for a promotion	Female	1	2,0	1	2,0	8	16,0	18	36,0	22	44,0
		Male	0	0	7	11,7	5	8,3	18	30,0	30	50,0
12	I would tolerate postponement and uncertainty	Female	21	42,0	11	22,0	10	20,0	8	16,0	0	0
		Male	29	48,3	13	21,7	12	20,0	5	8,3	1	1,7
13	I would speak for the group if visitors were present	Female	2	4,0	10	20,0	11	22,0	17	34,0	10	20,0
		Male	7	11,7	4	6,7	25	41,7	13	21,7	11	18,3
14	I would keep the work moving at a rapid pace	Female	0	0	0	0	8	16,0	10	20,0	32	64,0
		Male	2	3,3	1	1,7	7	11,7	18	30,0	32	53,3
16	I would settle conflicts when they occur in the group	Female	0	0	0	0	5	10,0	31	62,0	14	28,0
		Male	0	0	2	3,3	10	16,7	19	31,7	29	48,3
17	I would get swamped by details	Female	3	6,0	3	6,0	27	54,0	13	26,0	4	8,0
		Male	6	10,0	14	23,3	21	35,0	16	26,7	3	5,0
20	I would decide what should be done and how it should be done	Female	2	4,0	9	18,0	10	20,0	17	34,0	12	24,0
		Male	0	0	3	5,0	13	21,7	26	43,3	18	30,0
21	I would push for increased production	Female	0	0	5	10,0	16	32,0	17	34,0	12	24,0
		Male	0	0	0	0	13	21,7	28	46,7	19	31,7
23	Things would usually turn out as I had predicted	Female	0	0	1	2,0	15	30,0	21	42,0	13	26,0
		Male	0	0	0	0	7	11,7	30	50,0	23	38,3
25	I would assign group members to particular tasks	Female	5	10,0	0	0	20	40,0	14	28,0	11	22,0
		Male	11	18,3	6	10,0	21	35,0	14	23,3	8	13,3

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27	I would ask the members to work harder	Female	8	16,0	13	26,0	21	42,0	7	14,0	1	2,0
		Male	4	6,7	12	20,0	13	21,7	18	30,0	13	21,7
29	I would schedule the work to be done	Female	0	0	3	6,0	16	32,0	15	30,0	16	32,0
		Male	0	0	2	3,3	10	16,7	27	45,0	21	35,0
30	I would refuse to explain my actions	Female	9	18,0	8	16,0	16	32,0	12	24,0	5	10,0
		Male	9	15,0	15	25,0	20	33,3	15	25,0	1	1,7
31	I would persuade others that my ideas are to their advantage	Female	1	2,0	6	12,0	19	38,0	17	34,0	7	14,0
		Male	0	0	7	11,7	15	25,0	27	45,0	11	18,3
33	I would urge the group to beat its previous record	Female	7	14,0	1	2,0	13	26,0	21	42,0	8	16,0
		Male	2	3,3	2	3,3	10	16,7	26	43,3	20	33,3

X2 =5.071, P=.496, P>.05

No significant difference by gender was found with respect to the task-oriented leadership behavior.

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Table 2. % Of Responses Related to People-Oriented Leadership Behavior By Gender

	QUESTION	GENDER	Never		Seldom		Occasionally		Frequently		Always	
			F	%	F	%	F	%	F	%	F	%
3	I would allow members complete freedom in their work	Female	7	14,0	18	36,0	10	20,0	7	14,0	8	16,0
		Male	9	15,0	12	20,0	23	38,3	11	18,3	5	8,3
5	I would permit members to use their own judgment in solving problems	Female	3	6,0	5	10,0	15	30,0	11	22,0	16	32,0
		Male	1	1,7	4	6,7	25	41,7	18	30,0	12	20,0
7	I would needle members for greater effort	Female	8	16,0	16	32,0	4	8,0	16	32,0	6	12,0
		Male	4	6,7	4	6,7	25	41,7	0	0	0	0
10	I would let members do their work the way they think best	Female	0	0	2	4,0	16	32,0	16	32,0	16	32,0
		Male	3	5,0	0	0	21	35,0	27	45,0	9	15,0
15	I would turn the members loose on a job and let them go to it	Female	0	0	1	2,0	1	2,0	15	30,0	33	66,0
		Male	1	1,7	4	6,7	1	1,7	31	51,7	23	38,3
18	I would represent the group at outside meetings	Female	0	0	9	18,0	28	56,0	7	14,0	6	12,0
		Male	2	3,3	7	11,7	20	33,3	22	36,7	9	15,0
19	I would be reluctant to allow the members any freedom of action	Female	11	22,0	22	44,0	7	14,0	9	18,0	1	2,0
		Male	22	36,7	11	18,3	20	33,3	7	11,7	0	0
22	I would let some members have authority that I could keep	Female	2	4,0	1	2,0	26	52,0	16	32,0	5	10,0
		Male	2	3,3	6	10,0	22	36,7	14	23,3	16	26,7
24	I would allow the group a high degree of initiative	Female	2	4,0	1	2,0	17	34,0	24	48,0	6	12,0
		Male	3	5,0	3	5,0	24	40,0	21	35,0	9	15,0
26	I would be willing to make changes	Female	0	0	4	8,0	16	32,0	10	20,0	20	40,0
		Male	0	0	9	15,0	17	28,3	11	18,3	23	38,3
28	I would trust the group members to exercise good judgment	Female	2	4,0	2	4,0	13	26,0	16	32,0	17	34,0
		Male	0	0	1	1,7	33	55,0	18	30,0	8	13,3
32	I would permit the group to set its own pace	Female	0	0	3	6,0	6	12,0	24	48,0	17	34,0
		Male	5	8,3	1	1,7	17	28,3	23	38,3	14	23,3
34	I would act without consulting the group	Female	33	66,0	3	6,0	6	12,0	5	10,0	3	6,0
		Male	11	18,3	19	31,7	17	28,3	5	8,3	8	13,3
35	I would ask that group members follow standard rules and regulations	Female	0	0	3	6,0	3	6,0	19	38,0	25	50,0
		Male	4	6,7	2	3,3	8	13,3	23	38,3	23	38,3

X2 =4.103, P=.105, P>.05

No significant difference by gender was found with respect to the people-oriented leadership behavior.

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Table 3. % Distribution of Responses Related to Task-Oriented Leadership Behavior By Branch

	QUESTION	BRANCH	Never		Seldom		Occasionally		Frequently		Always	
			F	%	F	%	F	%	F	%	F	%
1	I would most likely act as the spokesperson of the group	Football	0	0	0	0	11	50.0	7	31.8	4	18.2
		Handball	0	0	0	0	16	72.7	1	4.5	5	22.7
		Basketball	0	0	6	27.3	7	31.8	4	18.2	5	22.7
		Volleyball	0	0	2	9.1	13	59.1	0	0	7	31.8
		Individual	1	4.5	1	4.5	9	40.9	4	18.2	7	31.8
2	I would encourage overtime work	Football	3	13.6	1	4.5	8	36.4	5	22.7	5	22.7
		Handball	8	36.4	4	18.2	6	27.3	0	0	4	18.2
		Basketball	7	31.8	0	0	13	59.1	2	9.1	0	0
		Volleyball	3	13.6	6	27.3	2	9.1	4	18.2	7	31.8
		Individual	5	22.7	5	22.7	8	36.4	3	13.6	1	4.5
4	I would encourage the use of uniform procedures	Football	0	0	1	4.5	8	36.4	7	31.8	6	27.3
		Handball	0	0	3	13.6	7	31.8	3	13.6	9	40.9
		Basketball	2	9.1	2	9.1	5	22.7	0	0	13	59.1
		Volleyball	2	9.1	0	0	13	59.1	4	18.2	3	13.6
		Individual	0	0	2	9,1	3	13.6	10	45.5	7	31.8
6	I would stress being ahead of competing groups	Football	5	22.7	3	13.6	2	9.1	6	27.3	6	27.3
		Handball	0	0	0	0	2	9.1	8	36.4	12	54.5
		Basketball	2	9.1	0	0	12	54.5	8	36.4	0	0
		Volleyball	4	18.2	0	0	9	40.9	2	9.1	7	31.8
		Individual	6	27.3	4	18.2	8	36.4	3	13.6	1	4.5
8	I would speak as a representative of the group	Football	0	0	2	9.1	9	40.9	5	22.7	6	27.3
		Handball	0	0	0	0	6	27.3	12	54.5	4	18.2
		Basketball	0	0	6	27.3	6	27.3	3	13.6	7	31.8
		Volleyball	0	0	0	0	6	27.3	9	40.9	7	31.8
		Individual	0	0	4	18.2	9	40.9	4	18.2	5	22.7
9	I would try out my ideas in the group	Football	0	0	2	9,1	5	22,7	11	50,0	4	18,2
		Handball	1	4,5	6	27,3	2	9,1	6	27,3	7	31,8
		Basketball	0	0	8	36,4	2	9,1	7	31,8	5	22,7
		Volleyball	0	0	0	0	0	0	15	68,2	7	31,8
		Individual	2	9,1	2	9,1	6	27,3	5	22,7	7	31,8
11	I would be working hard for a promotion	Football	0	0	1	4,5	1	4,5	7	31,8	13	59,1
		Handball	0	0	4	18,2	3	13,6	11	50,0	4	18,2
		Basketball	0	0	2	9,1	0	0	13	59,1	7	31,8
		Volleyball	0	0	0	0	6	27,3	3	13,6	13	59,1
		Individual	1	4,5	1	4,5	3	13,6	2	9,1	15	68,2

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12	I would tolerate postponement and uncertainty	Football	14	63,6	4	18,2	2	9,1	2	9,1	0	0
		Handball	6	27,3	7	31,8	6	27,3	3	13,6	0	0
		Basketball	15	68,2	2	9,1	5	22,7	0	0	0	0
		Volleyball	7	31,8	7	31,8	0	0	8	36,4	0	0
		Individual	8	36,4	4	18,2	9	40,9	0	0	1	4,5
13	I would speak for the group if visitors were present	Football	0	0	1	4,5	8	36,4	8	36,4	5	22,7
		Handball	1	4,5	5	22,7	7	31,8	5	22,7	4	18,2
		Basketball	3	13,6	6	27,3	4	18,2	4	18,2	5	22,7
		Volleyball	4	18,2	2	9,1	4	18,2	9	40,9	3	13,6
		Individual	1	4,5	0	0	13	59,1	4	18,2	4	18,2
14	I would keep the work moving at a rapid pace	Football	0	0	1	4,5	1	4,5	6	27,3	14	63,6
		Handball	0	0	0	0	4	18,2	3	13,6	15	68,2
		Basketball	2	9,1	0	0	3	13,6	2	9,1	15	68,2
		Volleyball	0	0	0	0	6	27,3	9	40,9	7	31,8
		Individual	0	0	0	0	1	4,5	8	36,4	13	59,1
16	I would settle conflicts when they occur in the group	Football	0	0	0	0	2	9,1	9	40,9	11	50,0
		Handball	0	0	2	9,1	6	27,3	7	31,8	7	31,8
		Basketball	0	0	0	0	0	0	13	59,1	9	40,9
		Volleyball	0	0	0	0	0	0	17	77,3	5	22,7
		Individual	0	0	0	0	7	31,8	4	18,2	11	50,0
17	I would get swamped by details	Football	1	4,5	8	36,4	6	27,3	4	18,2	3	13,6
		Handball	1	4,5	4	18,2	9	40,9	5	22,7	3	13,6
		Basketball	0	0	2	9,1	10	45,5	10	45,5	0	0
		Volleyball	4	18,2	0	0	12	54,5	6	27,3	0	0
		Individual	3	13,6	3	13,6	11	50,0	4	18,2	1	4,5
20	I would decide what should be done and how it should be done	Football	2	9,1	1	4,5	5	22,7	7	31,8	7	31,8
		Handball	0	0	1	4,5	10	45,5	8	36,4	3	13,6
		Basketball	0	0	8	36,4	0	0	5	22,7	9	40,9
		Volleyball	0	0	0	0	0	0	15	68,2	7	31,8
		Individual	0	0	2	9,1	8	36,4	8	36,4	4	18,2
21	I would push for increased production	Football	0	0	0	0	4	18,2	9	40,9	9	40,9
		Handball	0	0	1	4,5	8	36,4	11	50,0	2	9,1
		Basketball	0	0	0	0	8	36,4	7	31,8	7	31,8
		Volleyball	0	0	2	9,1	0	0	13	59,1	7	31,8
		Individual	0	0	2	9,1	9	40,9	5	22,7	6	27,3

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23	Things would usually turn out as I had predicted	Football	0	0	0	0	2	9,1	10	45,5	10	45,5
		Handball	0	0	1	4,5	5	22,7	11	50,0	5	22,7
		Basketball	0	0	0	0	6	27,3	9	40,9	7	31,8
		Volleyball	0	0	0	0	0	0	13	59,1	9	40,9
		Individual	0	0	0	0	9	40,9	8	36,4	5	22,7
25	I would assign group members to particular tasks	Football	3	13,6	0	0	4	18,2	10	45,5	5	22,7
		Handball	2	9,1	3	13,6	12	54,5	1	4,5	4	18,2
		Basketball	4	18,2	2	9,1	5	22,7	11	50,0	0	0
		Volleyball	4	18,2	0	0	8	36,4	4	18,2	6	27,3
		Individual	3	13,6	1	4,5	12	54,5	2	9,1	4	18,2
27	I would ask the members to work harder	Football	4	18,2	7	31,8	6	27,3	4	18,2	1	4,5
		Handball	2	9,1	7	31,8	1	4,5	8	36,4	4	18,2
		Basketball	2	9,1	0	0	15	68,2	2	9,1	3	13,6
		Volleyball	0	0	3	13,6	4	18,2	11	50,0	4	18,2
		Individual	4	18,2	8	36,4	8	36,4	0	0	2	9,1
29	I would schedule the work to be done	Football	0	0	1	4,5	6	27,3	8	36,4	7	31,8
		Handball	0	0	1	4,5	8	36,4	12	54,5	1	4,5
		Basketball	0	0	0	0	6	27,3	7	31,8	9	40,9
		Volleyball	0	0	0	0	2	9,1	6	27,3	14	63,6
		Individual	0	0	3	13,6	4	18,2	9	40,9	6	27,3
30	I would refuse to explain my actions	Football	6	27,3	8	36,4	3	13,6	2	9,1	3	13,6
		Handball	4	18,2	1	4,5	13	59,1	4	18,2	0	0
		Basketball	0	0	2	9,1	4	18,2	16	72,7	0	0
		Volleyball	3	13,6	4	18,2	10	45,5	3	13,6	2	9,1
		Individual	5	22,7	8	36,4	6	27,3	2	9,1	1	4,5
31	I would persuade others that my ideas are to their advantage	Football	0	0	1	4,5	7	31,8	9	40,9	5	22,7
		Handball	0	0	3	13,6	5	22,7	11	50,0	3	13,6
		Basketball	0	0	8	36,4	5	22,7	6	27,3	3	13,6
		Volleyball	0	0	0	0	6	27,3	13	59,1	3	13,6
		Individual	1	4,5	1	4,5	11	50,0	5	22,7	4	18,2
33	I would urge the group to beat its previous record	Football	4	18,2	1	4,5	3	13,6	9	40,9	5	22,7
		Handball	1	4,5	1	4,5	3	13,6	12	54,5	5	22,7
		Basketball	2	9,1	0	0	10	45,5	10	45,5	0	0
		Volleyball	0	0	0	0	3	13,6	8	36,4	11	50,0
		Individual	2	9,1	1	4,5	4	18,2	8	36,4	7	31,8

X2 =09.078, P=.133, P>.05

No significant difference by branch was found with respect task-oriented leadership behavior.

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Table 4. % Distribution of Responses Related to People-Oriented Leadership Behavior By Branch

QUESTION		BRANCH	Never		Seldom		Occasionally		Frequently		Always	
			F	%	F	%	F	%	F	%	F	%
3	I would allow members complete freedom in their work	Football	5	22,7	4	18,2	10	45,5	3	13,6	0	0
		Handball	6	27,3	7	31,8	5	22,7	3	13,6	1	4,5
		Basketball	0	0	11	50,0	4	18,2	0	0	7	31,8
		Volleyball	3	13,6	5	22,7	6	27,3	8	36,4	0	0
		Individual	2	9,1	3	13,6	8	36,4	4	18,2	5	22,7
5	I would permit members to use their own judgment in solving problems	Football	3	13,6	2	9,1	6	27,3	6	27,3	5	22,7
		Handball	1	4,5	1	4,5	9	40,9	5	22,7	6	27,3
		Basketball	0	0	0	0	12	54,5	2	9,1	8	36,4
		Volleyball	0	0	4	18,2	6	27,3	12	54,5	0	0
		Individual	0	0	2	9,1	7	31,8	4	18,2	9	40,9
7	I would needle members for greater effort	Football	5	22,7	3	13,6	7	31,8	5	22,7	2	9,1
		Handball	2	9,1	1	4,5	8	36,4	7	31,8	4	18,2
		Basketball	0	0	8	36,4	7	31,8	5	22,7	2	9,1
		Volleyball	0	0	5	22,7	0	0	17	77,3	0	0
		Individual	5	22,7	3	13,6	7	31,8	3	13,6	4	18,2
10	I would let members do their work the way they think best	Football	3	13,6	0	0	5	22,7	11	50,0	3	13,6
		Handball	0	0	2	9,1	5	22,7	6	27,3	9	40,9
		Basketball	0	0	0	0	2	9,1	12	54,5	8	36,4
		Volleyball	0	0	0	0	16	72,7	4	18,2	2	9,1
		Individual	0	0	0	0	9	40,9	10	45,5	3	13,6
15	I would turn the members loose on a job and let them go to it	Football	1	4,5	0	0	0	0	6	27,3	15	68,2
		Handball	0	0	0	0	0	0	13	59,1	9	40,9
		Basketball	0	0	0	0	0	0	5	22,7	17	77,3
		Volleyball	0	0	4	18,2	0	0	14	63,6	4	18,2
		Individual	0	0	1	4,5	2	9,1	8	36,4	11	50,0
18	I would represent the group at outside meetings	Football	0	0	1	4,5	9	40,9	8	36,4	4	18,2
		Handball	0	0	5	22,7	9	40,9	7	31,8	1	4,5
		Basketball	2	9,1	5	22,7	11	50,0	4	18,2	0	0
		Volleyball	0	0	0	0	9	40,9	7	31,8	6	27,3
		Individual	0	0	5	22,7	10	45,5	3	13,6	4	18,2
19	I would be reluctant to allow the members any freedom of action	Football	7	31,8	7	31,8	5	22,7	3	13,6	0	0
		Handball	4	18,2	7	31,8	5	22,7	6	27,3	0	0
		Basketball	7	31,8	6	27,3	9	40,9	0	0	0	0
		Volleyball	11	50,0	5	22,7	2	9,1	4	18,2	0	0
		Individual	4	18,2	8	36,4	6	27,3	3	13,6	1	4,5

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22	I would let some members have authority that I could keep	Football	3	13,6	2	9,1	8	36,4	7	31,8	2	9,1
		Handball	0	0	0	0	8	36,4	11	50,0	3	13,6
		Basketball	0	0	0	0	11	50,0	2	9,1	9	40,9
		Volleyball	0	0	4	18,2	13	59,1	2	9,1	3	13,6
		Individual	1	4,5	1	4,5	8	36,4	8	36,4	4	18,2
24	I would allow the group a high degree of initiative	Football	1	4,5	0	0	6	27,3	11	50,0	4	18,2
		Handball	1	4,5	1	4,5	8	36,4	8	36,4	4	18,2
		Basketball	2	9,1	0	0	10	45,5	10	45,5	0	0
		Volleyball	0	0	0	0	7	31,8	11	50,0	4	18,2
		Individual	1	4,5	3	13,6	10	45,5	5	22,7	3	13,6
26	I would be willing to make changes	Football	0	0	3	13,6	9	40,9	3	13,6	7	31,8
		Handball	0	0	5	22,7	5	22,7	9	40,9	3	13,6
		Basketball	0	0	2	9,1	0	0	4	18,2	16	72,7
		Volleyball	0	0	0	0	10	45,5	0	0	12	54,5
		Individual	0	0	3	13,6	9	40,9	5	22,7	5	22,7
28	I would trust the group members to exercise good judgment	Football	0	0	3	13,6	7	31,8	6	27,3	6	27,3
		Handball	0	0	0	0	12	54,5	4	18,2	6	27,3
		Basketball	0	0	0	0	9	40,9	7	31,8	6	27,3
		Volleyball	2	9,1	0	0	9	40,9	11	50,0	0	0
		Individual	0	0	0	0	9	40,9	6	27,3	7	31,8
32	I would permit the group to set its own pace	Football	0	0	0	0	4	18,2	14	63,6	4	18,2
		Handball	3	13,6	1	4,5	9	40,9	6	27,3	3	13,6
		Basketball	2	9,1	0	0	2	9,1	8	36,4	10	45,5
		Volleyball	0	0	2	9,1	3	13,6	13	59,1	4	18,2
		Individual	0	0	1	4,5	5	22,7	6	27,3	10	45,5
34	I would act without consulting the group	Football	7	31,8	6	27,3	6	27,3	1	4,5	2	9,1
		Handball	10	45,5	0	0	5	22,7	3	13,6	4	18,2
		Basketball	13	59,1	2	9,1	4	18,2	0	0	3	13,6
		Volleyball	5	22,7	8	36,4	3	13,6	4	18,2	2	9,1
		Individual	9	40,9	6	27,3	5	22,7	2	9,1	0	0
35	I would ask that group members follow standard rules and regulations	Football	1	4,5	2	9,1	3	13,6	6	27,3	10	45,5
		Handball	3	13,6	0	0	1	4,5	11	50,0	7	31,8
		Basketball	0	0	0	0	4	18,2	3	13,6	15	68,2
		Volleyball	0	0	2	9,1	2	9,1	14	63,6	4	18,2
		Individual	0	0	1	4,5	1	4,5	8	36,4	12	54,5

X2 =12.110, P=.088, P>.05

No significant difference by branch was found with respect task-oriented leadership behavior.

DISCUSSION

An examination of the leadership behavior of the students from the department of coaching education demonstrates that they generally fit both task-oriented and people-oriented types of leadership, and that there is no significant difference between the genders.

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In the leadership scale developed by Richard Daft (2008), the questions 1, 2, 4, 6, 8, 9, 11, 12, 13, 14, 16, 17, 20, 21, 23, 25, 27, 29, 30, 31 and 33 support task-oriented leadership. An examination of the students' leadership behavior by gender shows that they generally fit task-oriented type of leadership, and that there is no difference between the genders.

Kattat et al. (2004) determined that there was no difference by gender in the work-related leadership behavior of the general secretaries working for sports federations. Durukan et al. (2006) found no significant difference in their study comparing the leadership behaviors (establishing the structure) of female and male students of the schools of physical education and sports. In his study related to the leadership types of sports managers that are active at different levels of sports management, Gökçe (2005) concluded that there was no difference between genders. These studies are supportive of our study.

An examination of the leadership behavior of the coaching education students by branch indicates that they generally fit both task-oriented and people-oriented types of leadership, but there is difference between some branches in certain cases. This difference may be resulting from the characteristic features of the branches.

In our study, the volleyball branch responded "always" to the question "I would encourage overtime work"; handball and basketball branches responded "always" to the question "I would encourage the use of uniform procedures"; the handball branch responded "always" to the question "I would stress being ahead of competing groups", and these branches thus differed from other branches in these respects.

The resources we have reached through a review of the literature are supportive of our results, emphasizing that coaches exhibit both task-oriented and people-oriented types of leadership and stating that such leadership style facilitates success in sports (Davis 97, Temel 2010, Didari et al. 2008).

The basketball branch responded "seldom" to the question "I would try out my ideas in the group"; the volleyball branch responded "frequently" to the question "I would tolerate postponement and uncertainty"; the basketball branch responded "seldom" to the question "I would speak for the group if visitors were present" and these branches thus differed from other branches in these respects.

According to the theory of behavior, any person can be a leader by learning the behavior of an efficient leader. Therefore, leadership is not innate (Tiryaki, 2000). The main idea of the theory attempting to explain the process of leadership is that what makes leaders successful and efficient is not their characteristics but the behavior they exhibit in

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performing leadership. Leaders' way of communication with their subordinates, whether they give some powers to them or not, their way of planning and controlling, their way of determining the goals, and such other behavior have been considered as important factors determining the efficiency of leaders. Therefore, this theory has laid as much emphasis on the group members, who are the secondary variable, as it has laid on the leaders themselves (Koçel 1999).

According to Tamer and Pulur (2001), a recently-graduated physical education teacher confront such problems as overcrowded classrooms, poor environment, indifferent families, poor economic conditions, spoiled children, indifference of some students, students' unpreparedness for the classes, and absence as well as a great problem of discipline arising from the young appearance of the teacher and some students' desire to test him/her. Therefore, this situation can be expected to cause the young teachers to exhibit a more autocratic/oppressive behavior towards students in order to overcome this problem of discipline. However, young teachers' not exhibiting autocratic/oppressive behavior indicates that they have received appropriate education during their undergraduate education.

In their study examining the relation between the productivity and leadership styles of managers in public sports organizations, Didari et al. (2008) determined that there was no relation between productivity and leadership styles in people-centered and task-centered dimensions. It was determined, however, that leaders in public sports organizations should exhibit leadership behavior in both people-centered and task-centered dimensions in order to be effective.

A study on leadership behavior carried out in Ohio State University has shown that the pace of labor turnover and the level of absence (lack of attendance) decrease as the leaders' behavior of taking people into consideration increases. It has been also determined that an increase in structure-initiating behavior increases the success and performance of group members (Ataman, 2001). The two important universities with respect to behavioral approaches, Ohio and Michagen Universities, have been criticized in some aspects. Among the main aspects that are criticized are the limitation of leadership behavior to two dimensions, proposition of a leadership style presumed to be accepted as universally effective, and the fact that situational variables are not taken into consideration (Erçetin, 2000).

CONCLUSION and RECOMMENDATIONS

Since the concept of leadership is a personality trait, the students studying in the departments of coaching education and other departments of the Schools of Physical Edu-

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cation and Sports should be assigned responsibilities aimed at improving their leadership skills starting from their first years in these schools. It should be noted that the sports activities are one of the most important environments in which leadership characteristics develop. The results of this study confirm the idea that the students of the Department of Coaching Education have leadership orientations. It is thought that inclusion of practical activities in addition to theoretical courses in the curricula will contribute to the improvement of leadership characteristics.

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ANALYSIS ON THE SELF-CONFIDENCE PERCEPTIONS OF UNIVERSITY STUDENTS PLAYING TENNIS IN SPORTS[1]

TENİS SPORU İLE UĞRAŞAN ÜNİVERSİTE ÖĞRENCİLERİNİN SPORDA ÖZ-GÜVEN ALGILARININ İNCELENMESİ

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Öz: Bu çalışmada öğrenci sporcuların sporda öz-güven algılarının bazı değişkenler açısından incelenmesi amaçlanmıştır. Araştırmaya tenis branşı ile uğraşan 41 bayan, 42 erkek olmak üzere toplam 83 sporcu gönüllü olarak katılmıştır. Katılımcıların yaş ortalaması 21,3765 olup Standart sapması 1,60339'dur. Sporcuların öz-güven algılarının belirlenmesi için Akın'(2007) tarafından geliştirilen "Sporda Öz-Güven Ölçeği" kullanılmıştır. Kullanılan ölçek beş basamaklı Likert ("1" Hiçbir zaman, "2" Nadiren, "3" Bazen, "4" Genellikle, "5" Her zaman) bir dereceleme ölçeği şeklindedir. Ölçeğin gerekli geçerlilik ve güvenilirlik analizleri yapılmıştır. Verilerin analizinde SPSS 18.0 paket programından yararlanılmıştır. Betimleyici bilgiler için yüzde, frekans, ortalama, standart sapma değerleri, farklı grupların karşılaştırılmasında bağımsız t testi, çoklu grupların karşılaştırılmasında ise tek yönlü varyans analizi (ANOVA) ve fark oluştuğu durumlarda Tukey HSD post-hoc testi uygulanmıştır. Ayrıca değişkenler arasındaki ilişkinin belirlenmesi için korelasyon analizi uygulanmıştır. Anlam düzeyi p>0.05 ve güven aralığı 0.95 kabul edilmiştir parametrik olmayan yani homojen dağılmayan gruplar için ise Kruskal Wallis testi uygulanmıştır. Sonuç olarak; Araştırmaya katılan sporcuların öz güven algılarının çeşitli değişkenler açısından inceleniş değişkenler ve öz güven dalgı düzeyleri ile öz güven algılarına ilişkin alt boyutları arasında anlamlı farklılıklara rastlanmamıştır. Cinsiyet değişkeni ve özgüven algısının alt boyutları arasında ki ilişkiye bakıldığında P>0,05 düzeyinde anlamlı farklılığa rastlanmıştır. Ayrıca tenis sporu ile uğraşan sporcuların öz güven puan ortalamalarına göre genel öz güven puan ortalamaları ile alt boyutları açısından değerlendirildiğinde katılımcıların öz güven puan ortalamaları; cinsiyet, sportif başarı önemi, bölüm, sınıf, spor yapma süresi ve yaş değişkenlerine göre incelendiğinde yüksek özgüven puan ortalamalarına sahip oldukları görülmüştür.

Anahtar Kelimeler: Spor, Tenis, Özgüven

Abstract: The purpose of this study is to analyze the self-confidence perceptions of athlete-students in sports in terms of some variables. A total of 83 athletes composed of 41 females and 42 males playing tennis voluntarily participated in the research. Average age of the participants is 21,3765 and the standard deviation is 1,60339. In order to determine the self-confidence perceptions of athletes, "Self-Confidence Scale in Sports" developed by Akın'(2007) was used. The scale used is a five-step Likert scale ("1" Never, "2" Rarely, "3" Sometimes, "4" Generally, "5" Always). Required validity and reliability analyses of the scale were performed. SPSS 18.0 package program was used in the analysis of data. It was applied percentage, frequency, average and standard deviation values for descriptive statistics; independent t test for the comparison of different groups, one-way variance analysis (ANOVA) for the comparison of multiple groups and Tukey HSD post-hoc test for the occurrence of differences. Besides, correlation analysis was applied to determine the relation between the variables. Significance level was found to be p>0.05 and 0.95 was specified as confidence interval. Kruskal Wallis test was implemented for the nonhomogenously -nonparametricly- distributed groups. In conclusion, self-confidence perceptions of participant athletes were analyzed in terms of different variables, significant differences were not observed between the variables, levels of self-confidence perception and sub-dimensions regarding self-confidence perception. A significant difference of P>0,05 was observed in the relation between the sex variable and the sub-dimensions of self-confidence perception. Moreover, when the general self-confidence and sub-dimensions of athletes are analyzed by demographic variables, it can be stated that general self-confidence averages of athletes are high.

Key Words: Sports, Tennis, Self Confidence

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INTRODUCTION

People are always engaged in behaviors in a social environment. One of their most important features is that they are on the move constantly. These behaviors are observed in their social relations, subsistence efforts and activities of fun and relaxation. Every behavior has a certain goal. These goals can be expressed as the ability to subsist in a balance and harmony (Doğan, 2005). As the sports being a social phenomenon is a well-rounded concept, various scientists have put forth different definitions and expressions regarding the definition of sports. The reason is that the scope, branches, purposes, contents of sports and the ways of doing sports are perceived in different ways (Dalkılıç, 2011).

Although different notions are used in the definitions, the commonly accepted definitions specify that sports is a winning-oriented, technical and physical effort for athletes, an aesthetic process based on competition, a mirror reflecting the social characteristics and lastly a social phenomenon for audiences (Fişek, 1998).

Regarding the concept of self-confidence, there are many definitions for self-confidence in the literature. It can be stated that self-confidence that has become a research topic in recent years in many fields is effective in individuals' daily life, business and family life. Self-confidence can be expressed as the belief of the individual in herself/himself or believing in the capability to do a task or action. In line with the findings obtained in some researches, it is observed that some people confuse the concept of self-confidence with self-sufficiency.

According to Bandura and Adams (1977), the reason is that the concepts of self-confidence and self-sufficiency are different but similar in conceptual meaning, self-confidence can be specific to a field or general; however, self-sufficiency is only specific to a field.

Researchers have always been interested in determining success acquired in sports, attributing a meaning to this success and analyzing the factors for reaching accomplishment. It is stated that the main factor affecting performance directly which is accepted as the most important element of success in sports is self-confidence (Vealey, Hayashi, Garner-Holman and Giacobbi 1998). The statements playing for winning and playing for not losing are frequently used in sports. Actually, these statements can be defined as the athletes who are confident of themselves and of winning and who are not confident of winning and do not trust themselves due to the fact that they are not aware of their potential performance. However, those who are aware of their skills and performances and believe that they can achieve are self-confident athletes. There is

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an optimal self-confidence level for every athlete that will enable them to reach their potential performance even though it is not known yet how much that level is for which athlete. Possessing so little self-confidence poses an important problem as much as possessing so much self-confidence. The athlete should know and control this level, see the inadequacies in herself/himself and take the necessary precautions (Yeltepe, 2007). In addition, athletes should also improve their competence skills for all sub-components regarding their performances except from the general high confidence (Konter, 1998).

Confidence in sports can be stated as athlete's level of self-confidence and belief in maintaining the physical skills required for high-level performance. Furthermore, it is specified that self-confidence in sports is dependent not only on the confidence of athletes in their physical skills and showing high-level performance, but also their belief and confidence in mental competence abilities and the ability to use these skills efficiently and effectively as well as their belief and confidence in physical abilities. The definition of self-confidence in sports can be stated as; physical skills and level of confidence and belief in these skills and use of mental skills and abilities efficiently, effectively and sustainably (Vealey, 1986).

Vealey (1986) who has conducted many researches regarding self-confidence in sports states that self-confidence in sports is composed of three components. According to Vealey (1986), self-confidence components in sports are;

Self-Confidence and Trait (SC-Trait): In general terms, this trait can be explained as the confidence of an individual in her/his mental and physical skills and how much she/he is sure of herself/himself.

Self-Confidence and State (SC- State): This component is related to how the athlete is feeling that situation. However, this state is temporary.

Competitive Orientation: This component can be explained as athlete's defining success and effective use of mental and physical skills and abilities for success (Vealey, 1986).

Self-confidence in sports which is one of the important topics of sport psychology is known as a factor having direct effect especially on the performances of athletes. It can be said that self-confidence which has effect on such results is highly related and parallel with success in sports.

METHOD

A total of 83 athletes composed of 41 females and 42 males playing tennis participated in the research voluntarily. Average age of the

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participants is 21,3765 and the standard deviation is 1,60339.

It was benefitted from SPSS 18.0 packet program in the analysis of data. It was applied percentage, frequency, average and standard deviation values for descriptive statistics; independent t test for the comparison of different groups, one-way variance analysis (ANOVA) for the comparison of multiple groups and Tukey HSD post-hoc test for the occurrence of differences. Besides, correlation analysis was applied to determine the relation among the variables. Significance level was found to be $p<0.05$ and 0.95 was specified as confidence interval. Kruskal Wallis test was implemented for the nonhomogeneous; that is nonparametric distributed groups.

Data Collection Tools

In order to determine the self-confidence perceptions of athletes, "Self-Confidence Scale in Sports" developed by Akın (2007) was used. The scale used is a five-step Likert scale ("1" Never, "2" Rarely, "3" Sometimes, "4" Generally, "5" Always) and it is a gradation scale. The necessary validity and reliability analyses of the scale were performed. It was found 0.83 for the whole scale, 0.83 for internal self-confidence factor and 0.85 for external self-confidence factor. It was determined that test-retest reliability correlation coefficients of the scale were 0.94 for the whole scale, 0.97 for internal self-confidence and 0.87 for external self-confidence and item-total test correlations varied between 0.30 and 0.72 (Kandemir, 2015).

FINDINGS

Table 1. Self-Confidence Score Averages by the Variables in the Research

Variable	Self-confidence	Internal Self-confidence	External Self-confidence
Gender	4,1895	4,2218	4,1551
University	4,1895	4,2218	4,1551
Department	4,1895	4,2218	4,1551
Class	4,1895	4,2218	4,1551
Success in Sports State	4,1895	4,2218	4,1551
Duration of Playing Sports	4,1895	4,2218	4,1551
Age	4,1895	4,2218	4,1551
Total			

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According to Table 1, when score average of self-confidence levels and sub-dimension of genders is observed, it is seen that variables have high level self-confidence score averages.

Table 2. The Relation Between Importance of Success in Sports and Self-Confidence Levels

Score	Groups	N				P
Importance of Success in Sports	A little important Important	2 19	54,75 40,11	0,681	2	0,711
	Very important	62	42,17			
Total		83				

According to Table 2, when the relation between perception of success in sports and self-confidence levels of the athletes are observed, there is not any significant difference in P<0,05 level.

Table 3. Comparison of Self-Confidence Levels in Terms of Gender Variable

Self-confidence	Gender	N	M	SS	SD	T	P
Self-confidence General	Male Female	42 41	4,0729 4,3089	,30831 ,32356	81	-3,403	0,001
Internal Self-confidence	Male Female	42 41	4,1275 4,3185	,37630 ,33560	81	-2,439	0,017
External Self-confidence	Male Female	42 41	4,0149 4,2988	,36673 ,41210	81	-3,317	0,001
Total		83					

According to Table 3, when self-confidence values and internal and external self-confidence values which are sub-dimensions of self-confidence are compared with each other

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in terms of gender variable according to Independent samples t test, there are significant differences in p<0,05 level. Self-confidence levels of female participants were found to be higher than male participants.

Table 4. Comparison of Self-Confidence Levels in Terms of Department Variable

Self-confidence	Gender	N	M	Ss	Sd	T	P
Self-confidence General	*SPES Other	59 24	4,2080 4,1439	,34663 ,30945	81	0,786	0,434
Internal Self-confidence	SPES Other	59 24	4,2080 4,1520	,38520 ,31602	81	1,107	0,272
External Self-confidence	SPES Other	59 24	4,1631 4,1354	,40853 ,43170	81	0,276	0,783
Total		83					

**SPES = School of Physical Education and Sports*

According to Table 4, when self-confidence values and internal and external self-confidence values which are sub-dimensions of self-confidence are compared with each other in terms of department variable according to Independent samples t test, there are not significant differences in p<0,05 level.

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Table 5. Comparison of Self-Confidence Levels in Terms of Class Variable

		Sum of Squares	Sd	Average of Squares	F	P
	Intergroup	,360	3	0,120	1,066	0,368
Self-confidence	Intragroup	8,882	79	0,112		
	Total	9,241	82			
	Intergroup	,780	3	,260	1,997	0,121
Internal Self-confidence	Intragroup	10,288	79	,130		
	Total	11,068	82			
External Self-confidence	Intergroup	,243	3	,081	0,465	0,707
	Intragroup	13,737	79	,174		
	Total	**13,979**	**82**			

According to Table 5, when self-confidence values and internal and external self-confidence values which are sub-dimensions of self-confidence are compared with each other in terms of class variable according to Independent samples t test, there are not significant differences in p<0,05 level.

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Table 6. Comparison of Self-Confidence Levels in Terms of Duration of Playing Sports Variable

		Sum of Squares	Sd	Average of Squares	F	P
	Intergroup	1,298	15	,087	,730	0,746
Self-confidence	Intragroup	7,943	67	,119		
	Total	9,241	82			
	Intergroup	1,867	15	,124	,906	0,561
Internal Self-confidence	Intragroup	9,201	67	,137		
	Total	11,068	82			
External Self-confidence	Intergroup	2,151	15	,143	,812	0,661
	Intragroup	11,829	67	,177		
	Total	**13,979**	**82**			

According to Table 6, when the relation between duration of playing sports and self-confidence levels of the athletes and their sub-dimensions are observed, there is not any significant difference ($p<0,05$).

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Table 7. Evaluation of Self-Confidence Levels of the Athletes Attending the Research by Their Ages

		Sum of Squares	Sd	Average of Squares	F	P
	Intergroup	,018	2	,009	,077	0,926
Self-confidence	Intragroup	9,224	80	,115		
	Total	9,241	82			
	Intergroup	,149	2	,074	,545	0,582
Internal Self-confidence	Intragroup	10,919	80	,136		
	Total	11,068	82			
External Self-confidence	Intergroup	,243	2	,019	,109	,896
	Intragroup	13,737	80	,174		
Total		**13,979**	**82**			

According to Table 7, when the relation between ages of the athletes attending the research and their self-confidence levels and sub-dimensions are observed, there is not any significant difference (p>0,05).

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Table 8. Evaluation of Self-Confidence Levels of the Athletes Attending the Research by Their Universities

		Sum of Squares	Sd	Average of Squares	F	P
	Intergroup	1,298	15	,087	,730	0,746
Self-confidence	Intragroup	7,943	67	,119		
	Total	9,241	82			
	Intergroup	1,867	15	,124	,906	0,561
Internal Self-confidence	Intragroup	9,201	67	,137		
	Total	11,068	82			
External Self-confidence	Intergroup	2,151	15	,143	,812	,661
	Intragroup	11,829	67	,177		
	Total	**13,979**	**82**			

According to Table 8, when the relation between universities of the athletes attending the research and their self-confidence levels and sub-dimensions are observed, there is not any significant difference (p>0,05).

DISCUSSION and CONCLUSION

When the results of the study were examined, the relation of various variables with self-confidence perception levels for the athletes playing tennis in terms of self-confidence perceptions were observed and it was seen that the athletes had significant difference only in the variable of gender (p<0,05). Furthermore, significant differences were also found between internal and external self-confidence states which were sub-dimensions of self-confidence within the gender variable.

In the comparison made within the scope of the study in terms of gender variable and self-confidence perception states and sub-dimensions, it was seen that female athletes had higher self-confidence levels than male athletes. In another study titled "The Relationship of Playing Sports and Self-Confidence in High School Students" which was conducted by Arslan et al., (2015) regarding self-confidence, there was not any significant difference in terms of gender variable and self-con-

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fidence perception state (p>0,05). Moreover, self-confidence perception score averages of male participants were found to be higher than female participants. This result does not show parallelism with the result of our study. When the answers given to importance of success in sports which was among the demographic variables asked to the athletes in our study were examined, there was not any significant difference among genders and departments. It could not established a relationship between expectation of success taking place in the nature of sports and the perception of self-confidence in sports depending on the given answers; however it can be stated that athletes should believe in themselves, be aware of their skills and believe that they can be successful (Yeltepe, 2007).

In the study conducted by Feltz (1988) regarding success in sports, it is specified that the athlete can increase her/his performance in sports with self-confidence and competencies in spite of the complex nature of sports and changes in the conditions for being successful. When the relation between class which was another variable of the study and self-confidence perception levels was observed, it was not found any significant differences between class variable and self-confidence perception levels and its sub-dimensions (p>0,05). In the study conducted by Arslan et al., (20159, significant differences were found between internal self-confidence perception level and class variable and statistical findings were found among class variables; therefore we can say that it differs from our study with this aspect. However, when external self-confidence levels are observed, it is seen that it is in the same direction with our study (p>0,05). When the relation between Department and Self-confidence Perception levels were observed in the study, there was not any significant differences among departments in terms of self-confidence perception levels (p>0,05). However, it does not show parallelism with another study (Kandemir, 2015) titled "Self-Confidence Perceptions of Faculty of Science and Letters Geography Department Students" comprising the studied program variable and self-confidence level. There is a significant difference between department variable and self-confidence perception levels in the study (p<0,05).

There is not any difference between variables such as university, age, duration of playing sports and importance of success in sports for the athlete, which are other variables of the study and self-confidence perception.

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ASSESSMENT OF HEALTH MANPOWER AT ORAL AND DENTAL HEALTH CENTERS IN TURKEY WITH REGARD TO HUMAN RESOURCES AND WORKLOAD[1]

TÜRKİYE'DE AĞIZ VE DİŞ SAĞLIĞI MERKEZLERİ'NDE ÇALIŞAN DİŞ HEKİMLERİNİN SAĞLIK İNSAN GÜCÜ VE İŞ YÜKÜ AÇISINDAN DEĞERLENDİRİLMESİ

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Öz: Amaç: Türkiye'de, sağlık hizmetlerinin verilmesinde başta insan kaynakları ve ulaşım sorunları olmak üzere çeşitli güçlüklerle karşılaşılmaktadır. Bu çalışmada, Ağız ve Diş Sağlığı Merkezleri(ADSM) ile Ağız ve Diş Sağlığı Hastaneleri(ADSH)'nde hizmet veren diş hekimi sayılarında, yıllara ve bölgelere göre görülen değişikliklerin sağlık insan gücü açısından değerlendirilmesi amaçlanmaktadır. Ağız ve diş sağlığı ile ilgili hizmetlerin doğru bir şekilde planlanabilmesi için bu analizler gereklidir. **Materyal ve Yöntem:** Bu kesitsel çalışmada, 2010-2014 yılları arasında, Türkiye'nin tüm illerinde hizmet veren ADSM-ADSH'lerinden elde edilen veriler karşılaştırılmaktadır. **Bulgular:** Türkiye'de Ağız ve Diş Sağlığı Merkezleri(ADSM) ile Ağız ve Diş Sağlığı Hastaneleri(ADSH)'nde 2010-2014 yılları arasında diş hekimi sayısı %10,2 oranında artmıştır. ADSM-ADSH'lerde 100.000 kişiye düşen diş hekimi sayısı ise, %0,46 artmıştır. ADSM-ADSH'lere başvuru sayısı, kişi başına %60 artmıştır ve böylece poliklinik iş yükü de %49 oranında artmıştır. Ülke genelinde diş hekimlerinde insan gücü alanında önemli artışlar görülmesine rağmen, iş yükünde de buna paralel artış meydana gelmiştir. **Sonuçlar:** Elde edilen bu analiz sonuçları, yıllar itibari ile artan nüfus ve yıllar itibari ile "Sağlıkta Dönüşüm Programı" kapsamında artan hizmet sunumuna paraleldir. Türkiye'de ağız ve diş sağlığı hizmetlerini iyileştirmek ve tedavi maliyetlerini azaltmak için, ağız ve diş sağlığı hizmeti veren tüm sektörler arasında entegrasyonun sağlanması ve toplum temelli ağız ve diş programlarının uygulanması zorunludur. Diş hekimi sayısındaki artışlara rağmen, istenilen kalitedeki hizmet standartlarını yakalamak zaman alacaktır. Hizmet entegrasyonunun sağlanması, sevk zincirinin tesisi ve sağlık düzeyi göstergelerinin artırılması açısından aile hekimliği uygulaması umut vermektedir.

Anahtar Sözcükler: Türkiye, Diş Hekimi, Ağız ve Diş Sağlığı Merkezi, İşyükü, İnsangücü

Abstract: Aim: Turkey has problems starting with manpower shortage and transportation problems to deliver health care services.In this study, we aimed to evaluate the numbers of dentists working at Oral and Dental Health Centers (ODHCs) and Hospitals (ODHHs) according to years as the health manpower in these institutes, and to investigate the admission rates regarding health transition projects in our country. Material and **Methods**: This cross-sectional retrospective study compares the data obtained from ODHCs/ ODHHs countrywide between 2010-2014. **Results**: The number of the dentists working at ODHCs/ODHHs has increased by 10,2% between 2010-2014. The number of dentists per 100,000 persons has risen by 0.46%. The number of admissions per capita has increased by 60% and thereby the outpatient clinic workload has also increased by 49%. An improvement has been observed in human resources regarding dentists countrywide; however, a significant increase has occurred in the workload parallel to the increase in admissions. **Conclusion**: The results of this analysis are consistent with the increased population and increased provision of services in the context of "Health Transformation Program". The efforts for increasing the quality and quantity of health workers, mainly dentists in ODHCs/ODHHs, eliminating the differences between regions, and the integration of oral and dental health services into family medicine practice are promising. It is required to introduce community-based oral and dental health programs to make an integration between all sectors providing oral and dental health services to improve oral and dental health and reduce treatment costs in Turkey. Still, it would take time to achieve the desired high quality service standards despite the increase in number of dentists. Family medicine practice is promising for the integration of services, institution of referral chain system and improvement of health level indicators.

Key Words: Turkey, Dentists, Dental Health Services, Workload, Manpower

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INTRODUCTION

With growing awareness not only that Access to health care is a basic human right but that health is a valuable national asset, a primary aim of social development, and an essential means to sound economic and social progress, the crucial question that decision-markers at the highest level have to consider is not whether it can afford not to do so. Since health industry is essentially labour-intensive, manpower constitutes a critical component. (Hall, et al.1978:5) Health manpower planning involves the correct employment and distribution of healthcare staff in sufficient number and of the highest quality. Suitable timing is essential if we are to provide health services to both at the present time and in the future. (Hogart, 1975). Non-realistic or insufficient planning leads to a decrease in system performance, an increase in cost and an imbalanced distribution of resources, resulting in serious damage to the operation of the system. It is therefore essential to provide society with the required quality health services wherever and whenever necessary. It is not possible to say that there is efficent and rational manpower planning either in our own country or in the rest of the world. (Gümrükçüoğlu et al. 2008:11). Turkey has problems starting with manpower shortage and transportation problems to deliver health care services(Üstü et al. 2011:55)

The main purpose of health systems is to optimize the health service level as much as possible and to minimize the health status differences between individuals, groups and regions despite varying health requirements and sources (Boelen et al. 202:11)

Within the context of "Health Transformation Program", the Ministry of Health of the Turkish Republic has conducted some studies with the aim of improving health services, generalizing patient-centered approach, facilitating the availability of health services and eliminating the differences between regions. In the recommended new oral and dental health practices, sufficient flexibility is presented for providing these services and more sources are promised for improving oral and dental health services (Akdağ, 2011:180-208).

Dental and periodontal problems are among the most common health problems worldwide. Besides, these diseases are neglected as they are not mortal. However, oral and dental healthcare is an important public health issue and it also comprises an integral part of the general health (Yazıcığlu, 2006).

The 2003 report of the World Health Organization indicates that the oral and dental health burden is most common in developing countries especially in the lower social classes in these countries. Studies investigating the relationship between oral and dental health

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and the socio-economic variables indicate more significant disparities in oral and dental health compared to the other fields of health (Petersen, 2003:3-24; Petersen 2005:661-9).

While the costs of oral and dental health services used to be paid out of the pocket mostly by the patients until 2002, they began to be mainly covered in public institutions in 2015 in accordance with the "Health Transformation Program" (Akdağ, 2011:180-208; Stratejik Plan, 2012).

Healthcare manpower is of critical importance for health systems and the changes in health systems have increased the importance of it (Üstü et al. 2011:55).

Although the studies on manpower in healthcare are old, they have gained momentum during the health projects period and have rapidly developed since 2006 (Akdağ, 2011:180-208).

Human resources in health is one of the main components of health services in all countries. Effectiveness and quality of health services are directly proportional to the performance of healthcare workers. About 60-80% of the overall health expenses are paid for human resources in healthcare in any country. Therefore, the human resources in healthcare, which is also defined as the human face of health systems, has a very important role in health services. An equitable, effective, efficient and accessible health service should be provided in order to achieve better health outcomes. Human resources for healthcare should be improved for better health service outcomes. The effectiveness of health systems and the quality of health services are available through human source outcomes; such as performance, knowledge, skill and motivation (Yazıcığlu, 2006).

The Turkish Republic is one of the important countries in its region, which has a population of 77,7 million in 2014. Of the young population, 24.3% are below the age of 14 years, 67.8% are between 15-64 years, and 8.0% are above 65 years of age. The population in rural areas is 6.409.722 (8,2%). The under-five mortality rate and the infant mortality rate are 13.3/1000 and 11.1/1000, respectively (TUİK, 2014). Under the light of these data, Turkey is among the moderate level countries with regard to health status.

The rate of economic sources for oral and dental health services increased to 5.3% in 2013, while it was 4.8% in 2002. While the health expenses increased by 349.5%, the expenses for oral and dental health have increased by 403% during this period (Atasever et al. 2015). At least one ODHC has been opened in every province in accordance with the Health Transformation Program conducted between 2002-2013. While there were 14 ODHCs, 1 ODHH and 3211 dentists in

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2002, these numbers increased to 137, 6 and 7750, respectively in 2014. The total number of dentists in all sectors was 21404 in 2012, 22295 in 2013 and 22996 in 2014 (Table 1) (Başara et al. 2015).

Table 1. Distribution of Dentists According to Sectors in 2014

Ministry of Health		University		Private Sector		Others		Total
n	%	n	%	n	%	n	%	n
7640	33.22	1370	5.96	13801	60.01	185	0.81	22996

The aim of this study is to investigate the status and the workload of dentists who play the major role in oral and dental health services according to years. These analyses are required for making an effective plan for oral and dental health services. Hence, various approaches could be developed in order to optimize the future supply and need balance.

MATERIAL and METHOD

The data of oral and dental health services were collected from ODHCs/ ODHHs countrywide between 2012-2014 and compared in this retrospective cross-sectional study. ODHCs/ODHHs, which work under the umbrella of the Ministry of Health and provide the main services, were included in the study. There was a total of 18070 dentistry units in Turkey in 2014. Of these, 7659 (42,39%) belong to the Ministry of Health. ODHCs have the capacity of 4.872 units and ODHHs have the capacity of 846 units. In Turkey's dental practice, ODHCs are the institutions where primary dental care is provided. The dental clinics working within the Ministry of Health and the units from which the data could not be obtained (university, private sector and the other institutions), were excluded from the study. A total of 37925956 dentistry outpatient clinic visits had been made in 2014. Of these visits, 24204277 visits had been made to ODHCs and ODHHs. In conclusion, ODHCs and ODHHs comprise 42.39% of all dental units in Turkey and 63.82% of the dental outpatient clinic visits. The whole universe was included in the study, and a sample selection was not performed.

Data collection

The data were collected monthly from 137 ODHCs and 6 ODHHs in 81 provinces during 5 years, beginning from 2010 till the end of

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2014. The data began to be analyzed in 2015. The data of 2010 and 2011 were excluded in the analysis of human resources in health.

Approval was obtained from the Institutions of Public Hospitals of Ministry of Health prior to the study. The ethics committee approval was obtained from the Yıldırım Beyazit University (Date: 28.08.2015, Session number: 04/20, Project number: 109).

This study was designed considering the Statistical Classification of Territorial Units-1 (NUTS-1). The main purpose of NUTS-1, which was established by Eurostat (European Union Statistics Office) in mid-1970s in order to provide detailed data for European Union, is to collect regional statistics, to perform socio-economic analyses and to form the framework of community-oriented regional policies. NUTS-1 was defined as a result of the classification of Statistical Territorial Units and included 12 items. All regional studies are based on the NUTS-1 study (Table 2) (DPT, 2016).

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Table 2. Nomenclature of Territorial Units for Statistics and Provinces

NUMBER	LEVEL 1	LEVEL 2	LEVEL 3
1	Istanbul	Istanbul Subregion	Istanbul
2	Western Anatolia	Ankara Subregion	Ankara
		Konya Subregion	Konya, Karaman
3	Eastern Marmara	Bursa Subregion	Bursa, Eskişehir, Bilecik
		Kocaeli Subregion	Kocaeli, Sakarya, Düzce, Bolu, Yalova
4	Aegean	İzmir Subregion	İzmir
		Aydın Subregion	Aydın, Denizli, Muğla
		Manisa Subregion	Manisa, Afyon, Kütahya, Uşak
5	Western Marmara	Tekirdağ Subregion	Tekirdağ, Edirne, Kırklareli
		Balıkesir Subregion	Balıkesir, Çanakkale
6	Mediterranean	Antalya Subregion	Antalya, Isparta, Burdur
		Adana Subregion	Adana, Mersin
		Hatay Subregion	Hatay, Kahramanmaraş, Osmaniye
7	Western Blacksea	Zonguldak Subregion	Zonguldak, Karabük, Bartın
		Kastamonu Subregion	Kastamonu, Çankırı, Sinop
		Samsun Subregion	Samsun, Tokat, Çorum, Amasya
8	Central Anatolia	Kırıkkale Subregion	Kırıkkale, Aksaray, Niğde, Nevşehir, Kırşehir
		Kayseri Subregion	Kayseri, Sivas, Yozgat
9	Eastern Blacksea	Trabzon Subregion	Trabzon, Ordu, Giresun, Rize, Artvin, Gümüşhane
10	Southeastern Anatolia	Gaziantep Subregion	Gaziantep, Adıyaman, Kilis
		Şanlıurfa Subregion	Şanlıurfa, Diyarbakır
		Mardin Subregion	Mardin, Batman, Şırnak, Siirt
11	Mideastern Anatolia	Malatya Subregion	Malatya, Elazığ, Bingöl, Tunceli
		Van Subregion	Van, Muş, Bitlis, Hakkari
12	Northeastern Anatolia	Erzurum Subregion	Erzurum, Erzincan, Bayburt
		Ağrı Subregion	Ağrı, Kars, Iğdır

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Statistical Method Used

Data processed were presented as uni-dimensional and two-dimensional tables, and the statistical analyses were performed using the IBM-SPSS for Windows Version 22.0 package program. The number of dentists working at ODHCs/ ODHHs, and the number of dentists per 100000 individuals were given according to years and regions, and changes within the years were calculated.

Admissions to ODHCs/ODHHs were calculated as admission per capita considering the population of the region. Distribution of the estimated admissions per capita according to years and regions was deduced.

The numbers of outpatient clinic visits per dentist working at ODHCs/ODHHs were calculated using the number of visits and the number of dentists according to years.

Neither hypothesis testing was applied nor comparisons were made because the data were mass data; in other words, no sample selection was made. The results were interpereted as an 'increase' or 'decrease' compared to the previous year.

FINDINGS

While 4838 dentists were working at ODHCs/ ODHHs in 2012, the numbers became 5005 and 5330 in 2013 and 2014, respectively. The number of dentists increased by 10.2% between 2012-2014 (Table 3).

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Table 3. Distribution of the Number of Dentists Working at ODHCS/ODHHS According to Years and NUTS-1

Regions	2012	2013	2014	Difference between 2012-2014 (%)
Mediterranean	562	557	583	+3.6
Western Blacksea	396	376	387	-2.3
Western Anatolia	827	746	825	-2.4
Northeastern Anatolia	107	121	156	+45.8
Southeastern Anatolia	347	425	443	+27.7
Aegean	663	713	706	+6.5
Eastern Marmara	548	527	557	+1.6
Western Marmara	238	275	261	+9.7
Eastern Blacksea	146	166	176	+20.5
Istanbul	580	594	701	+20.9
Mideastern Anatolia	160	228	241	+50.6
Central Anatolia	264	277	294	+4.9
ODHC/ODHH	**4838**	**5005**	**5330**	**+10.2**
Ministry of Health[15]	**7291**	**7997**	**7640**	**+4.8**
All sectors, Turkey[15]	**21404**	**22295**	**22996**	**+7.4**

The numbers of dentists working at ODHCs/ODHHs per 100000 persons was 6.40, 6.53 and 6.68, respectively in years 2012, 2013 and 2014. The number of dentists working at ODHCs/ODHHs per 100.000 people increased by 0.46% from 2012 to 2014 (Table 4).

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Table 4. Distribution of t Number of Dentists Working at ODHCS/ODHHS per 100.000 People According to Years and NUTS-1

Regions	2012	2013	2014	Difference between 2012-2014 (%)
Mediterranean	5.85	5.89	5.88	+0.03
Western Blacksea	8.83	8.36	8.61	-0.22
Western Anatolia	11.40	10.13	11.00	-0.40
Northeastern Anatolia	4.81	5.48	7.07	+2.26
Southeastern Anatolia	4.36	5.25	5.37	+1.01
Aegean	6.78	7.20	7.04	+0.26
Eastern Marmara	7.76	7.32	7.60	-0.16
Western Marmara	7.33	8.39	7.79	+0.46
Eastern Blacksea	5.74	6.50	6.86	+1.12
Istanbul	4.19	4.19	4.88	+0.69
Mideastern Anatolia	4.26	6.04	7.77	+3.51
Central Anatolia	6.85	7.15	7.57	+0.72
ODHC/ODHH	**6.40**	**6.53**	**6.86**	**+0.46**
All sectors, Turkey[15]	**28**	**29**	**30**	**+7.14**

The numbers of admissions to ODHCs/ ODHHs per capita were 0.20, 0.32 and 0.32, respectively in years 2012, 2013 and 2014 (Table 5).

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Table 5. Number of Admissions to ODHCS/ODHHS per Capita According to NUTS-1

Regions	ODHC/ODHH			All Sectors
	2012	2013	2014	**2014**
Mediterranean	0.18	0.29	0.27	**0.42**
Western Blacksea	0.27	0.44	0.41	**0.65**
Western Anatolia	0.29	0.43	0.42	**0.71**
Northeastern Anatolia	0.22	0.29	0.35	**0.56**
Southeastern Anatolia	0.18	0.27	0.29	**0.40**
Aegean	0.21	0.33	0.31	**0.48**
Eastern Marmara	0.26	0.40	0.38	**0.57**
Western Marmara	0.23	0.41	0.37	**0.55**
Eastern Blacksea	0.17	0.29	0.28	**0.49**
Istanbul	0.12	0.19	0.20	**0.34**
Mideastern Anatolia	0.17	0.32	0.33	**0.48**
Central Anatolia	0.22	0.36	0.36	**0.60**
ODHC/ODHH	**0.20**	**0.32**	**0.32**	
All sectors, Turkey[15]	**0.46**	**0.49**	**0.49**	**0.49**

The numbers of outpatient clinic visits per dentist were 2690.21, 4047.89, 3998.39 in 2012, 2013 and 2014, respectively (Table 6).

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Table 6. Distribution of the Number of Outpatient Clinic Visits per Dentist According to Years and NUTS-1

Regions	2012	2013	2014	Difference Between 2012-2014 (%)
Mediterranean	2394.40	4516.76	4231.72	+76
Western Blacksea	2307.31	3917.96	3684.44	+72
Western Anatolia	1873.18	3756.72	3535.76	+89
Northeastern Anatolia	3816.65	4230.60	5210.00	+37
Southeastern Anatolia	3865.74	4430.39	4893.51	+27
Aegean	2420.43	3926.70	4254.29	+76
Eastern Marmara	2634.11	4275.89	4059.65	+54
Western Marmara	2814.81	4440.30	4691.22	+67
Eastern Blacksea	2048.81	3441.81	3144.48	+53
Istanbul	4175.79	4117.13	3998.08	-4
Mideastern Anatolia	3629.55	4384.52	4075.84	+10
Central Anatolia	2078.86	3437.81	3052.51	+47
ODHC/ODHH	**2690.21**	**4047.89**	**3999.36**	**+49**

DISCUSSION

Provision of primary health care, improvement of physical conditions and human resources, funding for services and investment, data collection for planning and policy development should be the priority for oral and dental health as in all health systems. Coordination and direction of these independent functions would improve the achievement of the system (Üstü et al. 2011:55).

The increase in the number of dentists was 7.4% in Turkey between 2012-2014, and this rate was 4.8% for dentists working within the Ministry of Health and 10.2% at ODHCs/ODHHs, which are also within the Ministry of Health. This increase in the number of dentists who work at ODHCs/ODHHs is striking. The regions with the maximum increase were; Central Anatolia (50.6%), Northeastern Anatolia (45.8%) and Southeastern Anatolia (27.7%). The increase in dentist numbers was limited in the west, where there are already

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sufficient amount of dentists, but the increase in the east was significant.

While the number of dentists in all sectors was 16371 in 2002, this number reached 21404 in 2012, 22295 in 2013 and 22996 in 2014 (Başara et al. 2015; T.C.T.K.H.K. 2014).

Dentists who work at ODHCs/ODHHs stand for approximately 24% of the dentists who work in all sectors and 72% of the dentists who work within the Ministry of Health. ODHCs/ODHHs also include 42.39% of all dental units in Turkey and provide 63.82% of the outpatient clinic services (Başara et al. 2014).

In 2014, 7640 of 22996 (33,22%) dentists in Turkey were working within the Ministry of Health, 1370 (5,96%) were working at universities and 13801 (60,01%) were working privately (Table 1). In 2014, of the 7640 dentists within the Ministry of Health, 2265 were working at hospitals, 5375 were at other institutions (such as ODHCs), and no dentists worked at primary health units. Dentists who worked out of hospitals are the second health personnel group following general practitioners (Başara et al. 2014; T.C.T.K.H.K. 2014).

The numbers of dentists per 100.000 people have also increased within years, and this increase in the number of dentists was greater than the increase in population. This increase was maximum in the east; namely, in Mideastern Anatolia, Northeastern Anatolia and the Black Sea regions. A decrease was observed in Western Anatolia, Western Black Sea and the Eastern Marmara regions in which the numbers of dentists per 100000 people were the highest. In conclusion, between 2012-2014, the numbers of dentists have increased in the regions where these numbers were the lowest.

In 2014, the number of dentists per 100000 people was 30 in Turkey; this number was 28 worldwide, 65 in the countries with higher incomes, 57 in the WHO European Region and 37 in countries of middle and higher income groups (Başara et al. 2014).

Coming to the admission numbers per capita; the admissions to ODHCs/ODHHs per capita was 0.20 in 2012. This rate increased by 60% and reached 0.32 in 2013 and 2014 (Table 5). Namely, the use of ODHCs/ ODHHs has significantly increased. Western Anatolia, Western Black Sea and Central Anatolia are the regions where the number of admissions is the highest. However, the number of admissions is minimum in Istanbul region. We strongly think that most of the admissions are to the private sector in Istanbul.

The number of outpatient clinic visits per dentist was 2690,21 in 2012, it has been 4047,89 in 2013 and 3998,39 in 2014 (Table 6). The significant increase in outpatient clinic vis-

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its per dentist from 2012 to 2013 suggests that the accessibility and demand highly increased in 2013. This condition may be associated with introducing Association of Public Hospitals in accordance with the declaration No. 663 at the end of 2012.

Outpatient clinic admissions per dentist at ODHCs-ODHHs have increased by 49% between 2012-2014. This increase was maximum in Western regions such as; Western Anatolia, Mediterranean and Aegean regions due to the limited increase in the number of dentists. The increase in the number of dentists in eastern regions has relatively decreased the average outpatient clinic admissions. The minimum increase in outpatient clinic admissions was in Istanbul, Central Anatolia and Southeastern Anatolia. The regions where outpatient clinic admissions per dentist was minimum were; Eastern Black Sea, Central Anatolia and Western Anatolia, and the regions where outpatient clinic admissions per dentist was maximum were; Southeastern Anatolia, Istanbul and Central Anatolia regions. This condition is consistent with Istanbul and Southeastern Anatolia where the number of dentists per 100000 persons was the lowest. Western Anatolia, where the number of dentists per 100000 persons was the highest, also had the highest number of outpatient clinic admissions. The most important goal of health policies has been reported to include the minimization of differences between regions with regard to health services (Stratejik Plan, 2012).

RESULTS and SUGGESTIONS

When the distribution dentist numbers according to years and sectors was analyzed, it was seen that while the rate of dentists working within the Ministry of Health was 19.6% in 2002, it has reached 35.9% in 2013. Unlikely, the rate of dentists working at universities was 76.2% in 2002, it has reduced to 59,8% in 2013. Despite the decrease in the rate of dentists working in the private sector, dentists are the second leading healthcare workers following pharmacists working in the private sector (Başara et al. 2015). It may be stated that the number of dentists should increase more rapidly depending on the increase in admission numbers to ODHCs/ODHHs.

In Turkey, dentists get a university education for 5 years. In 2012-2013, the number of faculties of dentistry was 37, the number of students registered at these faculties was 2908, and the overall number of students was 11133. The estimated number of dentists at the end of 2023 would be 44800 projected with the same number of new registrations (Akdağ et al. 2011).

The requirement for dentists in 2023 has been determined as 28000 according to Human Re-

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sources 2023 vision of the Ministry of Health. However, the requirement in the public sector has been determined as 38000, by an increase of 10000 more, due to the possible more active position of ODHCs/ODHHs. In that case, the number of dentists per 100000 people will be 45 in 2023. Of the targeted 38000 dentists for 2023, 16500 are estimated to be in the private sector. The number of students that should be registered in faculties of dentistry has been projected by the Ministry of Health according to the targeted 38000 students for 2023. Considering the population growth rate, the number of new students required to keep the personnel number constant per 1000 people has been determined as 990. The Ministry of Health has endorsed some recommendations for the number of students that should be registered to universities according to these data. Approximately a further 6000 dentists would have been trained according to the 2023 target, if matriculations would continue in the same way. Therefore, matriculations should be reviewed again (Akdağ et al. 2011).

Over a span of more than 25 years following the Alma Ata Declaration in 1978, the concept of "health for everyone" has played an important role in the development of health policies and determination of priorities of the health system and thereby giving priority to primary health care has been accepted. The declaration aims at carrying out immediate and effective studies for developing and establishing the primary care with technical collaboration in accordance with the economic status worldwide, particularly in developing countries (Korukluoğlu et al. 2006:160-167).

Although detailed studies on human resources are required from the dentists' perspective, a comprehensive human resources planning is also required for the other healthcare workers such as nurses, oral and dental health technicians, denture technicians, and radiographers, who work together with dentists (Akar, 2014).

The family dentistry system should be prioritized to generalize oral-dental health services, to decrease the proportion of patients at secondary and tertiary centers and to avoid higher costs because of advanced treatments. This model which at the first glance reminds ''family medicine implementation", will complete the deficiencies in preventive dentistry in Turkey (Demiralp et al., 2012:60-70).

In order to achieve better human resources outputs, planning about human resources in health, policy development, contribution and participation of the stakeholders, management and leadership, education and health programs should be evaluated together. Difficulties during application affect the success. Besides the other components of the health system, oral-dental health services and man-

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power are affected by the characteristics of the country itself (Yazıcıoğlu, 2006).

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A SCALE DEVELOPMENT STUDY TO DETERMİNE COUPLES' ATTİTUDES TOWARDS THE WİTHDRAWAL METHOD OF FAMİLY PLANNİNG[1]

ÇİFTLERİN GERİ ÇEKME YÖNTEMİNE İLİŞKİN TUTUMLARININ BELİRLENMESİNE YÖNELİK ÖLÇEK GELİŞTİRME ÇALIŞMASI

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Öz: Geri çekme yöntemi bir çok toplumda doğurganlığı kontrol etmek için çiftler tarafından bilinen ve kullanılan en eski aile planlaması yöntemidir. Veriler, veri toplama formu aracılığı ile 198 çifte (396 kişi) uygulanarak toplanmıştır. Geri Çekme Yöntemi Tutum Ölçeği, 36 madde ve beş alt boyuttan (i-güvenilirlik, ii-cinsel eylemin niteliği, iii-kullanılabilirlik, iv-sağlığa etkisi ve v-dini ve sosyal etkenler) oluşmaktadır. Ölçeğin tüm maddeleri arasında istatistiksel olarak anlamlı fark olduğu belirlenmiştir ($p<0.01$). Ölçeğin, Kaiser Meyer Olkin (KMO) değerinin 0,875 olduğu, ölçeğin beş alt boyutunun, ölçeği açıklama oranı toplam %46.079 ve Cronbach Alfa Güvenilirlik Katsayısı 36 madde için "0.86" olarak bulunmuştur. Faktör analizi sonuçları, tutum ölçeğinin yararlı ve kullanılabilir, faktör yapısının güçlü olduğunu göstermektedir. Aynı zamanda bu ölçek, çiftlerin geri çekme yöntemine ilişkin tutumlarını belirlemede istenen düzeyde geçerli ve güvenilir bir ölçme aracıdır.

Anahtar Sözcükler: Ölçek Geliştirilmesi, Geri Çekme Yöntemi, Aile Planlaması, Çiftler, Tutum

Abstract: The oldest and most widely-known and used family planning strategy in many societies is the withdrawal method of contraception. Data was collected using a questionnaire filled out by 198 couples (396 individuals). The Attitude Scale for Withdrawal Method consists of 36 items and five sub dimensions (i- reliability; ii- the nature of the sexual activity; iii- usability; iv- effect on the health and v- religious or social influences). A meaningful difference in statistical terms among all items of the scale was determined ($p<0,01$). For instance, where the Kaiser Meyer Olkin (KMO) value was 0.875 and the Cronbach Alfa Reliability Coefficient was found as "0.86" for 36 items. The results of factor analysis indicate that the scale is beneficial and usable and its factor structure is strong. At the same time, this scale is a valid and reliable measurement tool for determining the attitudes of couples towards the withdrawal method.

Key Words: Scale Development, Withdrawal Method, Family Planning, Couples, Attitude

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INTRODUCTİON

The United Nations reported that the most widely used family planning method among couples was withdrawal with a rate of 3.1%. The withdrawal method of contraception is especially high in the countries of West Asia (14.5%) and South Europe (14.4%) (World Contraceptive Use 2011). Couples in Turkey use this method at a higher rate of 26.2%. According to the data of the TNSA (Turkish Population and Health Research), 67% of married women in Turkey do not want another child. The same study revealed that 22% of married women had deliberately caused a miscarriage during their period of fertility (Turkey Demographic and Health Survey 2008).

The studies demonstrated that the last method used before deliberate miscarriage by nearly 40% of the women was the withdrawal method 39% (Kitapçıoğlu and Yanıkkerem 2008: 87-92), 38% (Finger 1996: 15-6, 24). Study results also found that one of three women 32.3% (Goldberg and Toros 1994: 122–8), 31% (Kitapçıoğlu and Yanıkkerem 2008: 87-92), did not use any family planning after the miscarriage, and about one of four women 21.7% (Turkey Demographic and Health Survey 2008), 26% (Goldberg and Toros 1994: 122–8) continued to use the withdrawal method.

In recent years, although women have been encouraged to use more modern methods of birth control, couples continue to use the withdrawal method. This accounts for an increase in the number of studies which suggest providing withdrawal method information in family planning programs and supporting couples in the correct use of this method method (Ergöçmen et al. 2004: 221-224; Ortaylı et al. 2005: 164-173). Some studies have indicated that couples using the withdrawal method believe that the method is effective and has several other positive aspects. For example, couples find it natural, harmless, in accordance with Islamic beliefs and practices, and they also believe it prevents undesired pregnancies. In addition, couples emphasized the negative aspects of modern methods which they believe are detrimental to health and do not provide effective protection (Cebeci et al. 2004:94-101).

The opinions, feelings and beliefs of both users and health personnel about the use of the withdrawal method directly affect whether they adopt positive or negative attitudes towards this contraceptive method (Ergöçmen et al. 1998; Yılmaz 2001). The current literature on this topic emphasizes that societal values, beliefs and attitudes regarding family planning influence the method used by the individuals (Sable and Libbus 1998: 262-275; Family Planning and Unwanted Pregnancies

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2009). Therefore the attitude scale for the withdrawal method will give health professionals or particularly nurses and midwives, a better understanding of the individuals they serve. It will also be beneficial in planning needed services and in assessing the presentation and results. The objective is to be able to provide family planning services which offer couples up-to-date information and support.

The Study Aim: To develop a valid and reliable measurement tool for determining the attitudes of couples towards the withdrawal method.

Development of the Withdrawal Method Attitude Scale

In order to identify the attitudes of couples towards the withdrawal method (WMAS), the literature on this topic was first researched and the items thought to express attitudes towards the use of the withdrawal method were determined. At that point a semi-structured interview form was prepared for the couples using the withdrawal method. The form was then tested on 25 couples (50 individuals) who practice the withdrawal method of family planning. In the interview form, the items which were believed to convey an "expression of attitude" were added to the item pool.

The expressions included in the item pool which concerned attitudes towards the use of the withdrawal method were then referred to experts in the fields of Obstetrics and Maternal Health Nursing, Measurement and Assessment and Turkish Language. The experts assessed these expressions for appropriateness for the use of the withdrawal method, expression of attitude, fitness for purpose, and Turkish language grammar rules. These expert assessments resulted in the addition of 52 items to the withdrawal method scale. The items on attitudes of couples towards the withdrawal method were then resent to a team of nine experts which included one each in the departments of Public Health Nursing, School of Medicine Public Health, Social Services, Measurement and Assessment, and one Turkish Language and four Obstetrics and Maternal Health Nursing experts. The experts indicated their opinions for each item as "totally appropriate", "correction is necessary" or "not appropriate." The experts' input contributed greatly to improving the structural validity of scale. Consequently, five items were added to the 52-item scale, and the scale with 57 items was used in the validity and reliability study. The 36-item scale was developed as a result of the validity and reliability analyses.

Attitude Scale for Withdrawal Method

The scale developed for determining couples' attitudes towards the withdrawal method is a "5 point Likert scale." This scale assigns a value for the sentences reflecting a couple's

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positive attitude as "5" if the couples totally agree, as "4" if the couples agree, as "3" if they are indecisive, as "2" if they don't agree and finally as "1" if they absolutely don't agree. Scoring for the sentences reflecting a couple's negative attitude, in contrast to the aforementioned scoring, gave "1" point for couples' total agreement, "2" points, if they agree, "3" points, if they are indecisive, "4" points, if they don't agree, and "5" points if they absolutely don't agree (Tezbaşaran 1997).

METHOD

The research sample consisted of 198 couples (396 individuals) who were using the withdrawal method of family planning. They ranged in age from 15 to 49.

Selection and Training of Interviewers

The research data was compiled by the researchers and interviewers. The interviewers were selected from students of the third and fourth classes of various health departments at the university of the selected province (4 female and 5 male students), and they were trained using the interviewer's hand book developed by the researchers. The hand book provided basic information about family planning, aim of the research, characteristics of the survey, and explanations of the scale items.

Application of the Research

The survey form and the scale were applied to 198 couples (396 individuals) living in a northeastern Turkish province and using the withdrawal method as a means of contraception. Researchers collected the data between May 21, 2011 and July 15, 2011. Couples were selected by a simple random sampling method and researchers telephoned them to determine an interview date. During the home visits, female participants were interviewed by females, and male participants were interviewed by males. This process was carried out in different rooms at the same time. The gathering of the data lasted about 45-60 minutes.

Data Analysis

To determine the inherent consistency of the scale, the Pearson Moments Multiplying Correlation Coefficient was used. A substance analysis was conducted based on the differences of sub-super group averages. This was done to determine the extent of the contribution to the assessment instrument and the relationship to it. Varimax factor analysis was used to determine the compliance of the scale's structural validity.

In order to test whether or not the results of factor analysis are beneficial and usable and whether or not they are convenient for implementing factor analysis of data, the Kaiser

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Meyer Olkin (KMO) and Barlett Sphericity tests were applied. The variance explanation rates of the WMAS and the five sub dimensions were analyzed. The "Scree Test Graphic" was created to see the distribution of items of scale in terms of their full meaning. In order to determine whether or not the 36-tem scale was divided into independent and meaningful factors, the basic components converted according to principal axis analysis was applied. Since the WMAS would be a Likert-type rating scale, the Cronbach Alfa Reliability Coefficient (Cr μ) was used to calculate its reliability.

Ethical Considerations: Written permission was obtained from the departments where the research was conducted and from the Hacettepe University Board of Ethics.

RESULTS

Demographic Features

The average age of women in our study was 32.60 (SD=7.499), and the average age of the men was 36.68

(SD=7.759). Thirty-five percent of the women and 42.4% of the men had received a high school education.

Table 1. İtem-Total Test Correlations Of The Scale

n=396

İtem No	**r**	**p**
"The Withdrawal Method;..."		
A. Reliability		
İ1. Absolutely prevents pregnancy.	**0,4**	**0,000****
İ4. Prevents unintended pregnancy	**0,47**	**0,000****
İ5. Ineffective in contraception.	**0,42**	**0,000****
İ9. Does not have an adverse effect when compared to the other contraceptive methods (pill, intra uterine device, condom, etc…).	**0,4**	**0,000****
İ12. Is more effective than the other contraceptive methods (pill, intra uterine device / wireless / antenna, condom / preservative, etc…).	**0,44**	**0,000****
B. The Nature Of The Sexual Activity		
İ11. Prevents the active participation of women in the sexual intercourse.	**0,38**	**0,000****
İ13. Interrupts the sexual intercourse.	**0,3**	**0,000****

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İ17.Results in sexual frigidity.	**0,5**	**0,000****
İ19. Results in stress in sexual intercourse.	**0,4**	**0,000****
İ22.Lowers my sexual desire.	**0,44**	**0,000****
İ24.Results in nervousness after the sexual intercourse.	**0,35**	**0,000****
İ25.Results in sexual a incompatibility between spouses.	**0,5**	**0,000****
İ28Lowers the interest in sexual life.	**0,35**	**0,000****
İ31.Shortens the duration of sexual intercourse.	**0,39**	**0,000****
İ32.Its use is irritative for the spouses.	**0,51**	**0,000****
İ35.Prevents the enjoyment sexual intercourse.	**0,45**	**0,000****
C. Usability		
İ2. Is easy to use when compared to the other contraceptive methods (pill, intra uterine device / wireless / antenna, condom / preservative, etc…).	**0,42**	**0,000****
İ7.Involves experience for a successful application.	**0,35**	**0,000****
İ10.Is at no cost.	**0,32**	**0,000****
İ14.Is used by experienced men.	**0,21**	**0,000****
İ21.Is used by men who have self-control.	**0,5**	**0,000****
İ23.Increases the trust between spouses.	**0,52**	**0,000****
İ26.Is easy to use.	**0,37**	**0,000****
İ29.Develops the communication between spouses.	**0,45**	**0,000****
İ30.Is used by men who know the women's value.	**0,46**	**0,000****
İ36.Satisfy the spouses who use it.	**0,62**	**0,000****
D.Religious or Social İnfluences		
İ18.Is a shame to use.	**0,28**	**0,000****
İ15.Indicates that women are not valued.	**0,36**	**0,000****
İ16.Required vaginal flushing.	**0,21**	**0,000****
İ27.Is wrong in religious terms.	**0,28**	**0,000****
İ33.Its use is disgusting.	**0,51**	**0,000****
E. Effect on the Health		
İ13.Results in pain in men's legs.	**0,25**	**0,000****
İ6.Results in infertility.	**0,21**	**0,000****

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İ18.Results in pain in men's waist.	**0,28**	**0,000****
İ20.Disorders the mental health.	**0,54**	**0,000****
İ34.Disorders the health of men who use it.	**0,39**	**0,000****

:** p<0,05, *:** p<0,01

Validity of Withdrawal Method Attitude Scale

In order to test the structural validity of the WMAS scale, item analysis and Varimax factor analysis were applied. For the item analysis the Pearson Moments Multiplying Correlation Coefficient and item-total score correlations were calculated. When the item-total score correlations of the scale were investigated, the correlation coefficients were between (r= 0.21-0.62), which were considered statistically meaningful (p<0.01, Table 1). As a result of such analysis, the three items were removed from the scale, since their total test correlation was less than 0.20. Thus the number of items decreased to 54.

The analysis of unconverted basic components and basic components divided by principal axis was used to calculate the factor loads for each or the items were decided to remove eighteen items from the scale which these items were inconsistent in terms of the scope validity, and they do not fall into any dimension After the factor analysis and deletion of the aforementioned items, the scale had 36 items. The results are shown in Table 1.

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Table 2. ”t” and ”p” Values For Coiparing Results Of The Upper And Lower Groups Constituting 27% Of The Scale

n=396

İtem No	**r**	**p**
“The Withdrawal Method;...”		
A. Reliability		
İ1. Absolutely prevents pregnancy.	**7,08**	**0,000****
İ4. Prevents unintended pregnancy	**9,396**	**0,000****
İ5. Ineffective in contraception.	**9,147**	**0,000****
İ9. Does not have an adverse effect when compared to the other contraceptive methods (pill, intra uterine device, condom, etc…).	**7,986**	**0,000****
İ12. Is more effective than the other contraceptive methods (pill, intra uterine device / wireless / antenna, condom / preservative, etc…).	**8,812**	**0,000****
B. The Nature Of The Sexual Activity		
İ11. Prevents the active participation of women in the sexual intercourse.	**6,278**	**0,000****
İ13. Interrupts the sexual intercourse.	**3,783**	**0,000****
İ17.Results in sexual frigidity.	**9,492**	**0,000****
İ19. Results in stress in sexual intercourse.	**6,846**	**0,000****
İ22.Lowers my sexual desire.	**8,438**	**0,000****
İ24.Results in nervousness after the sexual intercourse.	**5,807**	**0,000****
İ25.Results in sexual a incompatibility between spouses.	**9,099**	**0,000****
İ28Lowers the interest in sexual life.	**6,61**	**0,000****
İ31.Shortens the duration of sexual intercourse.	**7,495**	**0,000****
İ32.Its use is irritative for the spouses.	**11,661**	**0,000****
İ35.Prevents the enjoyment sexual intercourse.	**8,591**	**0,000****
C. Usability		
İ2. Is easy to use when compared to the other contraceptive methods (pill, intra uterine device / wireless / antenna, condom / preservative, etc…).	**6,068**	**0,000****
İ7.Involves experience for a successful application.	**7,909**	**0,000****

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İ10.Is at no cost.	**6,513**	**0,000****
İ14.Is used by experienced men.	**4,467**	**0,000****
İ21.Is used by men who have self-control.	**10,139**	**0,000****
İ23.Increases the trust between spouses.	**10,537**	**0,000****
İ26.Is easy to use.	**5,707**	**0,000****
İ29.Develops the communication between spouses.	**8,424**	**0,000****
İ30.Is used by men who know the women's value.	**9,352**	**0,000****
İ36.Satisfy the spouses who use it.	**12,289**	**0,000****
D.Religious or Social İnfluences		
İ18.Is a shame to use.	**5,71**	**0,000****
İ15.Indicates that women are not valued.	**4,649**	**0,000****
İ16.Required vaginal flushing.	**6,133**	**0,000****
İ27.Is wrong in religious terms.	**5,299**	**0,000****
İ33.Its use is disgusting.	**11,771**	**0,000****
E. Effect on the Health		
İ13.Results in pain in men's legs.	**4,293**	**0,000****
İ6.Results in infertility.	**3,013**	**0,003****
İ18.Results in pain in men's waist.	**5,112**	**0,000****
İ20.Disorders the mental health.	**12,177**	**0,000****
İ34.Disorders the health of men who use it.	**8,301**	**0,000****

:** $p<0,05$, *:** $p<0,01$

During the second stage of the item analyses, the items were analysed based on the averages of the lower-upper group. According to the results of these analyses, the 'p' values calculated for the lower and upper groups of 27% were found to be associated on a meaningful level ($p<0.01$, Table 2).

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Table 3. Factor Loadings And Distribution Of The 36 İtems According To Sub Dimensions Constituting Withdrawing Method Attitude Scale For Couples n=396

	İtem No	Attitudes Relatet To Nature Of The Sexual Activity	Attitudes Related To Usability	Attitudes Toward The Reliability	Attitudes Relatet To Effect On The Health	Attitudes Dependent To Religious or Social İnfluences
		F1	F2	F3	F4	F5
Attitudes Toward The Reliability	İ1			0,743		
	İ4			0,768		
	İ5			0,64		
	İ9			0,444		
	İ12			0,603		
Attitudes Relatet To The Nature of The Sexual Activity	İ11	0,464				
	İ13	0,492				
	İ17	0,665				
	İ19	0,597				
	İ22	0,623				
	İ24	0,712				
	İ25	0,719				
	İ26	0,701				
	İ31	0,643				
	İ32	0,506				
	İ35	0,568				
Attitudes Related To Usability	İ2		0,472			
	İ7		0,652			
	İ10		0,609			
	İ14		0,567			
	İ21		0,635			
	İ23		0,567			
	İ26		0,609			
	İ29		0,429			
	İ30		0,573			
	İ36		0,389			

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Attitudes Relatet To Religious or Social İnfluences	İ8					0,581
	İ15					0,577
	İ16					0,558
	İ27					0,423
	İ33					0,546
Attitudes Relatet To Effect on the Health	İ3				0,576	
	İ6				0,511	
	İ18				0,504	
	İ20				0,511	
	İ34				0,386	

The factor load of all items other than the one item was above "0.30". However, it was decided to remove the items from the scale including one item and other seventeen item these were inconsistent in terms of the scope validity, and they do not fall into any dimension. The scale removed totally eighteen items. After the factor analysis and deletion of the aforementioned items, the scale had 36 items. It was determined that the factor loads of items varied between "0.386 and 0.768" (Table 3).

Table 4. The Results of Testes KMO and Bartlett

n=396

Kasiyer Meyer Olkin (KMO)		**0,875**
Bartlett Sphericity Test	X^2	4696,209
	Sd	630
	P	**0,000***

Nevertheless, as a result of the Withdrawal Method Attitude Scale and Barlett Sphericity test, meaningfully high correlations between the variances were found and the data were appropriate for applying factor analysis. (X^2:4696,209, Sd:630 P<0,05). This means that there are high correlations between the variances and the data derived from multiple normal distribution. Apart from this, the Kasier Meyer Olkin (KMO) value was found to be 0.875 (Table 4). Furthermore, the variance explanation rate of five sub dimensions of the scale was 46.079%.

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Table 5. Cronbach's Alpha Reliability Coefficients For The Sub Dimensions Of With-drawing Method Attitude Scale For Couples

n=396

Sub Dimension	Total Number of İtem	N	Cronbach Alfa	Level Of Reliability
1. Reliability	5	396	0,73	Quite Reliable
2. The Nature of The Sexual Activity	11	396	0,88	Highly Reliable
3. Usability	10	396	0,82	Highly Reliable
4. Effect on The Health	5	396	0,65	Quite Reliable
5. Religious or Social İnfluences	5	396	0,60	Quite Reliable

The WMAS scale consists of 36 items and five sub dimensions. The sub dimension of "Attitudes Towards Reliability" consists of 5 items; the sub dimension of "Attitudes Towards Naturel of the Sexual Activity" consists of 11 items; the sub dimension of "Attitudes Towards Usability" consists of 10 items, the sub dimension of "Attitudes Towards Effect on the Health" consists of 5 items, and the sub dimension of "Attitudes Towards Religious or Social Effect" consists of 5 items (Table 5).

Reliability of Withdrawal Method Attitude Scale

The reliability of the scale was measured with the reliability coefficient of Cronbach α. The Cronbach c reliability coefficient of the scale was found to be 0.86 for 36 items. When the sub dimensions were evaluated in terms of the inherent consistency analyses, it was found that the sub dimension of "Attitudes Towards Reliability" was highly reliable (α =0.73), the sub dimension of "Attitudes Towards The Nature of the Sexual Activity" was highly reliable (α =0.82), the sub dimension of "Attitudes Toward Effect on the Health" was quite reliable (α =0.65), and the sub dimension of "Attitudes Towards Religious or Social Effect" was quite reliable (α =0.60). The average of total scores obtained from all items of the scale was 194.12 (minimum 134 and maximum 265), while the standard deviation was 22.60. All items were found to

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have a statistically meaningful correlation (Table 5).

DISCUSSION and CONCLUSION

Validity of Withdrawal Method Attitude Scale

As a result of such analysis, the three items were removed from the scale, since their total test correlation was less than 0.20. Other items were high correlations with the scale scores (Table 1). The meaningful correlation coefficients among the scale items are regarded as indicator or consistency. The fact that the items' total test correlation coefficient was positive and high demonstrates that the related item is highly appropriate for the measures structure and that the inherent consistency of the scale is also high. On the other hand, an item's negative total correlation coefficient requires it to be removed from the scale, as it disrupts the summability feature of the scale (Tavşancıl 2006; Streiner and Norman 2003). An item's total correlation coefficient remaining below "0.20" indicates that it should be removed from the scale (Tavşancıl 2006; Nahcıvan 1993). For this application most of the researchers used the "0.20" sub level as the correlation coefficient (Eryılmaz 1999: 114-18; Alpar 2003).

It is recommended to conduct/use item analysis based on the differences of the lower-upper group average to determine the extent to which the scale items contribute to the measurement tool and also their correlations with the measurement tool (Alpar 2003; Büyüköztürk 2004). In terms of the items being distinguishable, it is desired that the difference between these groups are statistically significant and that the t value is not with (-) mark (Büyüköztürk 2004). In our study, the calculated "t" and "p" values were used as "selectivity power coefficient" for scale items. Based on the results of this analysis, it was decided not to take out any item which was included in the scale (Table 2).

The factor analysis method is the procedure whereby the items measuring the same factor in the scale are brought together to constitute the sub dimensions of the scale. As a result of the analyses conducted, the items whose factor load remain below "0.30" had to be removed from the scale (Büyüköztürk 2004; Özdamar 2004; Field 2005). In order to determine the appropriateness of the responses given by couples to the items of scale with the structural validity of the scale, the Varimax factor analysis was applied. The analysis of unconverted basic components and basic components divided by principal axis was used to calculate the factor loads for each or the items were decided to remove total eighteen item. According to, for remain below 0,30 factor load of one item of the scale which other seventeen items were inconsis-

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tent in terms of the scope validity, and they do not fall into any dimension After the factor analysis and deletion of the aforementioned items, the scale had 36 items (Table 3). This reveals that the structure validity of the Withdrawal Method Scale is appropriate. Results of this analysis showed that the factor loads of items ranged between "0.386 and 0.768", and that the scale consisted of five sub dimensions.

To determine the sufficiency of data obtained from the sample, the Kasier Meyer Olkin (KMO) test was conducted (Field 2005; Nakip 2003). According to the KMO, if the value approaches 1, it is perfect (Field 2005); if the value is lower than 0.50, it is unacceptable; if the value is 0.50, it is weak; if the value is 0.60, it is mediocre; if the value is 0.70, it is good; if the value is 0.80, it is very good; and if the value is 0.90, it is perfect (Field 2005; Altunışık et al. 2005). Indeed, the results of the KMO test (0,875) for this research showed it to be beneficial and usable (Table 4).

The Bartlett test is used to determine whether the data derive from normal distribution with multiple variance. The higher the result of the Barlett test, the higher the possibility of meaningfulness (Field 2005). Analysis results using the Barletti Sphericity test on the Withdrawal Method Attitude Scale show meaningfully high correlations between the variances. In addition, the data are appropriate for applying factor analysis (X^2:4696,209, Sd:630 P<0,05) (Table 4). This means that there are high correlations between the variances and the data derive from multiple normal distribution.

The higher the variance rates obtained as a result of the analysis, the stronger the factor structure of the scale. In social areas, this level is accepted as sufficient, if it is between 40% and 60% (Field 2005). In sensitive sectors such as medicine and medication, such rates can be as high as 95 percent (Nakip 2003). In our study, the scale explanation rate of five dimensions was found to be a total of 46.079%. This result indicates that the factor structure of the scale is strong.

Reliability of Withdrawal Method Attitude Scale

There are not any scales in Turkey or across the world which have been developed to determine the attitudes of couples towards the withdrawal method. This study is the first one conducted on the subject matter. The Cronbach α value of the WMAS was found to be high (0.86). Cronbach's α reliability coefficient indicates the internal consistency (homogeneity) of items constituting a scale. Linn and Gronlund (1995) state that the internal consistency coefficient is important in scales which are developed for the purpose of

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measuring features such as attitude (Linn and Gronlund 1995). The Cronbach's α coefficient shows that the items constituting the scale are consistent with each other and yield stable measurement (Tezbaşaran 1997;Dempsey and Dempsey 2000). If the Cronbach reliability coefficient is below 0.40, the scale is regarded as "unreliable"; if it is between 0.40 and 0.59, the scale is regarded as "poorly reliable"; if it is between 0.60 and 0.79, the scale is regarded as "reliable"; and finally, if it is between 0.80 and 1.00, it is regarded as "highly reliable" (Tezbaşaran 1997; Streiner and Norman 2003). The scale items have high internal consistency with each other high reliability. Research results indicate that the scale and its sub dimensions are reliable.

As a result this scale is important in that it is the first measurement tool developed on this subject matter, which can give an accurate picture of couples' attitudes toward the withdrawal method. Our study findings suggest that the scale is a valid and reliable measurement tool on the desired level for determining the attitudes of couples towards the withdrawal method, and it can be used with confidence for future studies on this subject matter.

Competing Interests

The authors declare that they have no competing interests.

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EVALUATION OF TREATMENT SERVICES AND REFERRAL RATES AT ORAL AND DENTAL HEALTH CENTERS IN TURKEY[1]

TÜRKİYE'DE AĞIZ VE DİŞ SAĞLIĞI MERKEZLERİNDE YAPILAN TEDAVİLERİN VE SEVK İŞLEMLERİNİN DEĞERLENDİRİLMESİ

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Öz: Amaç: Türkiye'de ağız ve diş sağlığı hizmetlerinin sunulmasında, verilen hizmetlerin niceliksel ve niteliksel olarak yeterliliği, sağlık insan gücü kaynakları, iş yükü, erişebilirlik ve sürdürülebilirlik gibi konular başta olmak üzere çeşitli güçlüklerle karşılaşılmaktadır. Bu çalışma ile ülkenin ağız ve diş sağlığı hizmet sunumunda büyük bir paya sahip olan Ağız ve Diş Sağlığı Merkezleri(ADSM) ile Ağız ve Diş Sağlığı Hastaneleri(ADSH)'nde sunulan hizmetlerin, yapılan tedavilerin değerlendirilmesi ve bu merkezlerdeki sevk hızları ile ilişkilendirilmesi amaçlanmaktadır. Ağız ve diş sağlığı ile ilgili hizmetlerinin etkili bir şekilde planlanabilmesi için bu analizler gereklidir. **Materyal ve Yöntem:** Bu kesitsel çalışmada, 2010-2014 yıllarında, Türkiye bütününde hizmet veren ADSM-ADSH'lerinden elde edilen veriler karşılaştırılmaktadır. **Bulgular:** ADSM-ADSH'ler için kişi başı diş hekimine başvuru sayıları 2010 yılında 0,12, 2011 yılında 0,21, 2012 yılında 0,20, 2013 ve 2014 yılında ise 0,39 olmuştur Kişi başına diş hekimine başvuru sayıları 2012 den 2013 ve 2014 e geçildiğinde gözle görülür bir şekilde artmıştır. ADSM-ADSH'lerden yapılan sevklerde en iyi durumda olan bölgeler sırasıyla, İstanbul, Doğu Marmara, Batı Anadolu, Kuzeydoğu Anadolu, Ege ve Batı Marmara'dır. Sevk sayıları en az olup ilk altıya giren bu bölgeler, poliklinik sayılarında ve tüm tedavi uygulamalarında sayısal olarak en iyi durumda olan ilk altı bölge arasına girmektedir. Bölgede yapılan poliklinik sayısı ve verilen ağız ve diş sağlığı hizmetlerinin nüfusa göre yüzde oranı arttıkça bölgenin sevk hızı da düşmektedir. **Sonuçlar:** Elde edilen bu analiz sonuçları, yıllar itibari ile artan nüfus ve yıllar itibari ile "Sağlıkta Dönüşüm Programı" kapsamında artan hizmet sunumuna paraleldir. Başta diş hekimleri olmak üzere, ADSM-ADSH'lerdeki sağlık çalışanlarının kalitatif ve kantitatif artışının sağlanması, bölgeler arası farkların giderilmesi, ağız ve diş sağlığı hizmetlerinin aile hekimliği pratiğine entegre edilmesi yolundaki çalışmalar umut vermektedir. Türkiye'de, ağız ve diş sağlığını geliştirmek için, toplumsal ağız ve diş sağlığı programlarının yürürlüğe konması, ülkede ağız ve diş sağlığı alanında hizmet sunan tüm sektörlerin arasındaki entegrasyonun sağlanması gerekmektedir. Böylece, ağız ve diş sağlığı hizmetlerinde ulaşılabilirliğin arttırılabileceği ve tedavi maliyetlerinin de düşürülebileceği aşikardır.

Anahtar Kelimeler: Türkiye, Ağız ve Diş Sağlığı Merkezi, Tedavi, Sevk Sistemi

Abstract: Aim: Oral-dental health services in Turkey have several difficulties like qualitative and quantitative service provision, health manpower sources, workload, accessibility and maintainability. This study's aim is to evaluate the treatment services and to associate these parameters with the referral rates at Oral-Dental Health Centers and Oral-Dental Health Hospitals which constitute a large proportion of the mentioned service presentation in our country and to plan these services more effectively. **Material and Methods:** In this cross-sectional study, the data were collected from ODHCs and ODHHs, which provide oral-dental health services in Turkey, between years 2010 and 2014. **Results:** The numbers of admissions to a dentist per capita at ODHCs/ODHHs were 0.12 in 2010, 0.21 in 2011, 0.20 in 2012 and 0.39 in 2013 and 2014. The regions which had the lowest referral rates from ODHCs/ ODHHs were Istanbul, Eastern Marmara, Western Anatolia, Northeastern Anatolia, Aegean and Western Marmara. Oppositely, Southeastern Anatolia, Mideastern Anatolia, Eastern Blacksea, Central Anatolia and Mediterranean Regions had the highest referral rates. These six regions which had the fewest referral numbers were the highest regarding the number of outpatient clinic numbers for all treatments evaluated, except for the Istanbul region. If the number of outpatient clinics and the percentage of oral-dental health services in the population increase, the referral rates of the region decrease. **Conclusion:** These results are parallel with the growing population and increasing service delivery within the Health Transition Project over the years. The studies give hope about ensuring the qualitative and quantitative increase of health providers, primarily dentists at ODHCs/ ODHHs, eliminating differences between the regions as well as integrating the oral-dental health care services into family medicine practice. Oral-dental health care programmes for the community should be put into place and improved accessibility to oral-dental health services and a decrease in treatment costs would appear to be feasible.

Key Words: Turkey, Oral-Dental Health Center, Treatment, Referral System

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INTRODUCTION

The main aim of health systems is to optimize health standards where possible and to decrease any statute differences between individuals, groups and regions, although health necessities are extensive and the sources are limited (Üstü, et all., 2011:55-61).

Modern health systems should provide services to 'everyone, everywhere and at all times'. National health systems regardless of development standards, have been trying to solve problems such as inequalities in health services, a qualitative and quantitative lack of health manpower and have been improving several strategies in this field(Boelen, et all., 2002:11). The philosophy of the developed world and the progress priorities of a country should be considered when designing a new system (Şahin et all, 2002:2-3) (Figueras, et all., 2005:170-1)

The basic targets of health services are to increase accessibility to health services, to provide a balanced health service which ensures equal benefits and to improve the life quality of individuals. Health services are included in the planning and inspection of public authorities concerning their basic characteristics (Üstü, et all., 2011:55-61).

The Turkish Republic is one of the important countries of its geographical region which covers a large area and has a population of 77695904. The population of rural areas (towns and villages) is 6409722 (8.2%). Turkey is defined as an intermediate country in terms of health standards. The infant mortality rate stands at 11.1% while 23% of the population are under 14 years of age and the elderly make up for 9% (DİE, 2014).

The Turkish Ministry of Health has been studying several problems within Health Transition Project (HTP) including a general improvement of health services, dissemination of patient centered health service, easy access to health services and a reduction in regional differences. Enough flexibility has been shown in Turkey concerning recommended new oral-dental health practice, how to provide such services and further sources have promised to improve oral-dental health services (Akdağ, 2011).

Dental and periodontal diseases are commonly seen all over the world as well as in Turkey; however, these diseases are not given enough attention because they are not mortal. In fact, oral-dental health is a part of general health and is an important subject in public health (Yazıcıoğlu, 2006).

The burden of oral-dental diseases is commonly seen in developing countries and is especially among the lower classes according to the World Health Organization Report of 2003. Studies on the relationships be-

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tween oral-dental health and socio-economic changes have shown that there were significant inequalities when compared with other health fields (Petersen, 2003:3-24) (Petersen, 2005:661-9).

Oral-dental health services in Turkey had been largely left to the market conditions in 2003. Citizens had to meet their health needs mostly from private dentists and had to pay the costs. Although there were 16371 dentists in Turkey in 2002, the number of dentists who were employed by the Ministry of Health was only 3211 (20%) (Atasever, 2014). Oral-dental health service delivery had on the whole been transferred to public institutions by the HTP in 2015. The HTP started in 2003 is a modern step to provide a reorganization of health standards. The aim of the HTP is to provide, organize and finance health services effectively and efficiently(DİE, 2014) (Atun et all., 2013:65-99) (Atasever, et all., 2015:56).

During this period, completing the set-up for treatments are aimed at a raised awareness in society on subjects concerning oral-dental health, education and preventive medicine as a whole.

Despite the proportion of resources for oral-dental health services in health charges being 4.8% in 2002, it had increased to 5.3% in 2013. Health charges have increased by 349.5% in this period while oral-dental health services charges have increased by 403% (Atasever, et all., 2015).

At least one ODHC was opened in every city between the years 2002-2013 by the HTP. There were 14 ODHCs, 1 ODHHs and 3211 dentists in 2002; these numbers increased over the years and there were 137 ODHCs, 6 ODHHs and 7750 dentists by 2014(Başara at all., 2013).

Oral-dental health services performed at ODHCs/ ODHHs are; fillings, root canal therapies, fixed and removable dental prostheses, exodontias, pedodontic treatments and exodontias, scalings, orthodontic treatments and periodontal operations.

Dental caries is caused by dental plaque which accumulates due to the lack of oral care and includes microorganisms. Plaque initiates caries with a loss of mineral on the tooth face. When the loss of mineral persists, inside of the tooth is also affected resulting in dental caries. The next step would be to remove the decayed tissue and to place a filling (Aydın, 2010). Teeth with orthodontic abnormalities decay more easily because they do not have normal interdental contacts and are affected by food residues deposited here. Exodontia is another indirect reason for the acceleration of decay. If a tooth is removed from the dental arch, the other teeth in con-

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tact with the removed tooth move to the space freely. Optimal contact points of these teeth are damaged and food deposits occur causing dental caries.

Untreated dental caries causes intense pain in the long term and it may cause an intraoral or extraoral abcess. Periapical cysts may occur. In this case, root canal therapy or exodontia is required(Aydın, 2010)

Root canal therapy is an intervention when dental pulp is irreversibly infected. It involves the removal of the pulp which includes vessels and nerves. Canal therapy is the last intervention to save a tooth. The tooth with canal therapy may stay healthy for years according to the status of the tooth, the patient and the quality of the treatment.

Pedodontia is an area of dentistry which ensures oral-dental health care and improvement in healthy children or children who need special treatment (mentally or physically disabled, having systemic diseases etc.) in the period from infancy to youth. It presents several treatment opportunities regarding preventive and curative oral-dental health applications.

All artificial restorations which are used to reconstruct missing teeth for esthetic and functional needs are prostheses (Aydın, 2010). Fixed prostheses can not be removed by the patients. They are generally more natural and more esthetic than removable prosthesis. Removable prostheses are used if anchored teeth can not carry the load when several teeth are missing or in cases of unilateral or bilateral free end ridges.

Orthodontic therapy is another treatment method provided at ODHCs/ODHHs. Orthodontic therapy is a branch of dentistry in which teeth are set in the correct position onalveolar crests, as well as diagnosinge and treating face abnormalities.

Periodontology is the field of diagnosing and treating periodoncium. Periodontal diseases are infections of the gingiva and other tissues that support teeth._Periodontal diseases are responsible for the loss of teeth in 70% of adults. These diseases can be treated easily and successfully if they are diagnosed at an early stage. Scaling is the most common and preventive treatment method for gingival diseases. It removes tartar or plaque to clean the teeth.

The aim of this study is to analyse the treatments provided by oral-dental health services quantitatively and to determine referral rates. In this way, it would be possible to improve the supply and demand equilibrium in the future.

MATERIAL and METHOD

In this cross-sectional retrospective study, data about oral-dental health services were

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extracted from ODHCs/ODHHS in Turkey between 2012 and 2014. ODHCs/ODHHs which are the main organizations of oral-dental health services and connected to the Ministry of Health were included in the study. There were 18070 dental units in 2014. Of these, 7650 (42.39%) were connected to the Ministry of Health. ODHCs had 4872 dental units and ODHHs had 846 dental units (Başara, 2014). ODHCs provide primary care concerning oral-dental health in Turkey. Dental units of public hospitals and other sectors such as university hospitals and private hospitals from which healthy data could not be obtained were not included in this study. The total number of outpatients treated at dental clinics was 37925956 in 2014 in Turkey, 24204277 of these were treated at ODHCs/ ODHHs. As a result ODHCs/ODHHs in Turkey represented 42.39% of the dental unit numbers and 63.82of all dental outpatient clinic numbers in the country. All of the population was included in the study as there was no sampling.

Data Collection

The data were collected monthly by our study group from ODHCs/ ODHHs over a 5-year period beginning from 2010. The data began to be analyzed in 2015. The data were collected from 137 ODHCs and 6 ODHHs in 81 provinces. Approval for the study was given by the Public Hospital Institution of Ministry of Health.

This study was approved by the Local Ethical Committee of Yıldırım Beyazıt University in its 04/21-24 session on 28.08.2015 (Number:110-113).

Our study was designed regarding the Nomenclature of Territorial Units for Statistics and Provinces-1 (NUTS-1). This was structured in the middle of the 1970s to present detailed data to the European Union (EU) by Eurostat (EU Statistics Office) and its primary goals were to collect statistics locally, provide socio-economic analyses and to structure regional policies for the society. The provinces were classified as Level-3 according to NUTS-1, neighboring provinces which had economic, social and geographical similarities were classified as Level-1 and Level-2 regarding their local development plans and population, then hierarchical NUTS was structured. Level-1 Statistical Regional Units were defined after Level-2 Statistical Regional Units had been grouped. There are twelve Level-2 regions and the NUTS-1 study is taken as a basis in all regional studies in the governmental sector (Başara, 2015).

Statistical Method Used

The data were recorded on the computer and presented as one-dimensional and two-dimensional tables. IBM-SPSS for Windows

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Version 22.0 statistical package was used to analyse the data. The admissions to ODHCs/ ODHHs were calculated as admissions per capita regarding the population. The distribution of admissions per capita were given as to years and regions. The major services presented at ODHCs/ODHHs were; tooth filling, root canal therapy, exodontia, pedodontic exodontia and treatment, fixed and removable dental prostheses, scaling and periodontal operations and orthodontic treatments. The number of services given and their proportions in terms of outpatient clinic numbers were calculated as to years.

The distribution of services presented at ODHCs/ODHHs per unit and per dentist by year were calculated. The classification of referrals from ODHCs/ ODHHs according to NUTS-1 and years were rated and distribution rates by years were calculated.

No hypothesis testing or comparisons were used because no sampling was performed and the data were mass data. The results were commented as 'increased' or 'decreased' compared to the previous years; the regions were compared by numbers and rates.

FINDINGS

The numbers of admissions to dentists in ODHCs/ODHHs per capita are shown in Table 1.

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Table 1. The Number of Admissions per Capita According to NUTS-1

Regions	ODHCs/ODHHs					All sectors, Turkey
	2010	2011	2012	2013	2014	2014
Mediterranean	0.09	0.17	0.18	0.29	0.27	0.42
Western Blacksea	0.12	0.28	0.27	0.44	0.41	0.65
Western Anatolia	0.16	0.28	0.29	0.43	0.42	0.71
Northeastern Anatolia	0.13	0.25	0.22	0.29	0.35	0.56
Southeastern Anatolia	0.11	0.19	0.18	0.27	0.29	0.40
Aegean	0.12	0.22	0.21	0.33	0.31	0.48
Eastern Marmara	0.20	0.29	0.26	0.40	0.38	0.57
Western Marmara	0.10	0.19	0.23	0.41	0.37	0.55
Eastern Blacksea	0.12	0.18	0.17	0.29	0.28	0.49
Istanbul	0.07	0.14	0.12	0.19	0.20	0.34
Mideastern Anatolia	0.14	0.22	0.17	0.32	0.33	0.48
Central Anatolia	0.12	0.19	0.22	0.36	0.36	0.60
ODHCs/ODHHHs	0.12	0.21	0.20	0.32	0.32	
All sectors. Turkey[15]	0.34	0.40	0.46	0.49	0.49	

The numbers of treatment types evaluated and their proportions in outpatient clinic services at ODHCs/ according to years are shown in Table 2.

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Table 2. The Number of Treatments in Odhcs/Odhhs and the Proportion of Treatments in Outpatient Clinic Services

Regions	2010		2011		2012		2013		2014	
	Number	%	Number	%	Number	%	Number	%	Number	%
Outpatient clinic	8633688	-	15640080	-	14982652	-	24251448	-	24204277	-
Filling	1577924	18.28	3590629	22,96	1704372	11.38	6904310	28.47	6879398	28.42
Root canal therapy	25809	2.99	708618	4,53	288380	1.92	1622138	6.69	1700128	7.02
Fixed prothesis	131168	15.19	3095496	19,79	1719044	11.47	4573890	18.87	4334476	17.91
Removable prothesis	429893	4.98	618767	3,96	35.849	2.36	913728	3.77	909784	3.76
Exodontia	2350891	27.23	3465276	22,15	4618569	30.83	519984	2.14	5506120	22.75
Pedodontic treatment	461596	5.35	1003656	6,42	1100201	7.34	1941801	8.01	1960881	8.10
Pedodontic exodontia	484376	5.61	753875	4,82	27827	0.19	1282294	5.29	1246461	5.15
Scaling	161646	18.69	3398281	21,73	764024	5.10	2031589	8.38	1025931	4.24
Orthodontic treatment	3152	0.40	40159	0,26	42342	0.28	80001	0.33	82063	0.34
Periodontal operation	60861	0.70	50773	0,32	36612	0.24	102816	0.42	104274	0.43
Referral	71976	0.83	156065	1,00	159593	1.07	102827	0.42	100427	0.41

The number of primary services provided at ODHCs/ ODHHs per unit and per dentist and the distribution by years are shown in Table 3.

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Table 3. The Distribution of Services per Unit and per Dentist at Odhcs/ Odhhs According to Years

Regions	2012		2013		2014	
	Per unit *	Per dentist	Per unit	Per dentist	Per unit	Per dentist
Outpatient clinic	-	2394.40	3.721.88	4.516.76	3563.34	4231.72
Filling	-	218.09	989.80	1072.26	962.45	1077.68
Root canal therapy	-	36.81	230.86	252.63	230.26	259.91
Fixed prothesis	-	255.72	614.13	670.72	566.69	636.55
Removable prothesis	-	56.77	145.30	158.83	139.64	156.27
Exodontia	-	94.30	296.92	297.52	160.85	169.56
Pedodontic treatment	-	5182.63	440.09	393.46	6317.06	5862.24
Pedodontic exodontia	-	0.00	270.23	292.24	267.04	296.94
Scaling	-	5.63	220.26	221.75	199.66	216.05
Orthodontic treatment	-	28.27	0.00	0.00	4.04	5.48
Periodontal operation	-	1.78	9.15	8.75	5.97	5.96

The number of units in 2012 could not be extracted.

The rate of referrals from ODHCs/ODHHs according to years and regions are shown in Table 4.

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Table 4. The Distribution of Referrals According to Years and NUTS-1(%)

Regions	Referral Rates*				
	2010	2011	2012	2013	2014
Mediterranean	1.33	3.02	3.36	1.21	0.31
Western Blacksea	2.31	1.56	1.25	1.11	0.63
Western Anatolia	0.17	0.25	0.81	0.70	0.10
Northeastern Anatolia	0.98	0.98	0.80	0.62	0.14
Southeastern Anatolia	1.05	1.11	1.04	0.52	1.20
Aegean	0.87	0.74	1.41	0.40	0.19
Eastern Marmara	0.49	0.52	0.25	0.20	0.01
Western Marmara	0.66	0.47	0.19	0.20	0.20
Eastern Blacksea	1.95	1.26	0.83	0.20	0.71
Istanbul	0.00	0.02	0.05	0.10	0.01
Mideastern Anatolia	0.92	2.01	1.08	0.10	1.12
Central Anatolia	0.32	1.22	0.88	0.01	0.51
ODHCs/ODHHs	0.83	1.00	1.07	0.42	0.41

*Orthodontic referrals were excluded.

DISCUSSION

The numbers consulting a dentist at ODHCs/ ODHHs per capita were 0.12 in 2010, 0.21 in 2011, 0.20 in 2012 and 0.39 in 2013 and 2014 (Table 1). The numbers were 0.34 in 2010, 0.40 in 2011, 0.46 in 2012 and 0.49 in 2013 and 2014 including all sectors in Turkey (Başara, 2014). The numbers have increased visibly by 2013 and 2014 when compared with 2012. Decree-Law 663, dated 2 November 2011 in the official journal concerning the Establishment and Duties of the Ministry of Health and its affiliated institutions, the Public Hospital Institution which became functional by a new formation and restructuring of the General Secretariat which started working in 2012, has led to these changes. The Turkish Public Hospital Institution (TPHI) connected to the Ministry of Health was designed to open and manage hospitals, ODHCs and similar health centers for secondary and tertiary prevention by Decree-Law 663. The TPHI has authorizations and duties including the setting up and management of hospitals connected to the Ministry of Health; associating, separating or closing health institutions; evaluating perfor-

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mance; performing appointments, transfers, personnel affairs, payment and retirement of employees; performing purchases, rentals, care and repairs of institutions. Public Hospital Unions based on the TPHI were set up in the provinces (Atasever, et all., 2015). The first six regions using ODHCs/ODHHs the most were Western Anatolia, Western Blacksea, Eastern Marmara, Western Marmara, Central Anatolia and Northeastern Anatolia. The regions using at the least frequency were Istanbul, Mediterranean, Eastern Blacksea, Southeastern Anatolia, Aegean and Mideastern Anatolia Regions. When all sectors were evaluated, the results were found to be the same in the first and last sixth regions regarding admissions to ODHCs. The Istanbul Region was the worst of all sectors regarding the use of ODHCs/ODHHs and oral-dental health services.

According to TPHI data, the number of outpatients being treated in clinics in oral-dental health services was 4651716 in 2002. This increased to 32203511 in 2013 and 3179075 in 2014. The number of treatments increased in parallel with the number of outpatient clinics(Başara et all, 2014).

The numbers of root canal therapies were 31989, 219699, 268087, 524207, 162998 and 2053886 in 2002, 2005, 2007, 2009, 2013 and 2014 respectively, according to TPHI data. The numbers of fillings performed were 329449 in 2002, 1837046 in 2005, 2559367 in 2007, 2492383 in 2009, 8463888 in 2013 and 8382384 in 2014. The number of exodontias were 1377014 in 2002, 7994535 in 2013 and 7395928 in 2014. Fixed dental prosthesis totalled 261902, 5778493 and 5648983 in years 2002, 2013 and 2014, respectively while the numbers were 112446, 1256420, 5648983 for removable prosthesis for exactly the same years. Orthodontic therapies totalled 23772 in 2002, 121529 in 2013 and 83836 in 2014. The numbers of periodontal operations were 6870, 118655, 115162 in 2002, 2013 and 2014, respectively.

Oral-dental health services within TPHI have been provided in ODHCs/ ODHHs as well as in the dental units of public hospitals. The number of treatments and the proportion of treatments in outpatient clinics at ODHCs/ ODHHs are shown in Table 3 and all of these treatments are considered for the performance of dentists at ODHCs/ODHHs. The number of major services per unit and per dentist at ODHCS/ODHHs have increased over the years (Table 4).

Referrals transfer patients to another health center (hospital service of higher specialization) for the provision of necessary health services. Referral rates (%) of all health services at primary care institutions in Turkey were 0.4 in 2010, 0.7 in 2011, 2.1 in 2012 and 0.3 in 2013 and 2014.

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The referral rates at ODHC and ODHH were 0.83% in 2010, 1% in 2011, 1.07 in 2012, 0.45% in 2013 and 0.11% in 2014. The referral rates have decreased by 2013 and 2014 (Başara et all, 2014).

The Ministry of Health has invested for the capacity and variety of oral-dental health services within the HTP in 2010.[6] After these changes, public dental services were restructured following Official Approval dated 06 October, 2010 (number 39929) by the Health Ministry Treatment Services General Management. The first ODHC was opened in 1998, the number of ODHCs was 14 in 2002 and had increased to 137 by the end of 2014.

Outpatient clinics and other services have increased and referrals decreased over the years. The regions in the best condition for referrals have been Istanbul, Eastern Marmara, Western and Northeastern Anatolia, Aegean and West Marmara, respectively. The worst regions are Southeastern Anatolia, Mideastern Anatolia, Eastern Blacksea, Central Anatolia and Mediterranean, respectively. These six better regions, on the other hand, have the least referral numbers and also have a higher number of outpatient clinics and treatments. If the number of outpatient clinics and percentage of oral-dental health services increases, the number of referrals decreases.

The number of dentists and dental clinics per 100000 people are also higher and referral numbers are also lower in these same six regions.

In contrast, although Istanbul region has a lower number of dentists and dental clinics per 100000 people, it also has a lower referral rate. It is thought that oral-dental health services in Istanbul have been provided mostly by private clinics(Korukluoğlu et all., 2006:26).

CONCLUSION

During the years after the Alma-Ata Declaration in 1978, the idea of 'health for all' has played an important role in developing the health policies and determining the priorities of health systems and by this way, basic health services have been prioritized. This declaration has suggested that basic health should be developed and implemented both urgently and effectively all over the world and especially in developing countries in a spirit of technical cooperation and suited to the local economic status (Atasever et all., 2015). "Health for all" means providing accessible and sustainable health care with enough oral-dental health services and qualified manpower. Therefore, the main aim is to evaluate the current status of oral-dental health services then to complete any deficiencies between

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the regions and finally to improve all services countrywide.

In a study, the treatment needs among people aged 5-74 years in Turkey have reportedly changed from 20.3% to 73.0% and the proportion of people above 65 years who had total edentulism and needed prosthesis was 48% (Gökalp et all., 2007:3-10) (Gökalp et all., 2007:8-11) .

The prior target of oral-dental health services is to determine the present status of these services, the awareness and current status of the population. Currently, 90% of the population have oral-dental problems. Therefore the number of oral-dental health services and providers should be increased and policies improving knowledge and awareness of the general population about oral-dental health should be structured(İstanbul Diş Hekimleri Odası, 2015:26-30).

The family dentistry system should be prioritized to generalize oral-dental health services, to decrease the proportion of patients at secondary and tertiary centers and to avoid higher costs because of advanced treatments. This model which at the first glance reminds ‘’family medicine implementation’’, will complete the deficiencies in preventive dentistry in Turkey(Demiralp et all., 2012:60-70)

Appropriate policies should be developed, essential regulations should be structured to attain the desired quality in oral-dental health services. Difficulties during application affect the success. Besides the other components of the health system, oral-dental health services and manpower are affected by the characteristics of the country itself

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EVALUATION OF INDIVIDUAL SOCIAL RESPONSIBILITY LEVEL OF UNIVERSITY STUDENTS FOR SPORT AND OTHER DIFFERENT VARIABLES[1]

ÜNİVERSİTE ÖĞRENCİLERİNİN BİREYSEL SOSYAL SORUMLULUK DÜZEYLERİNİN SPOR VE FARKLI DEĞİŞKENLER AÇISINDAN İNCELENMESİ

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Öz: Araştırmanın amacı, üniversite öğrencilerinin bireysel sosyal sorumluluk düzeylerinin belirlenmesi ve kişisel özelliklerine göre bireysel sosyal sorumluluk düzeyleri arasındaki farklılıkların incelenmesidir. Araştırma grubunu, 2014-2015 eğitim ve öğretim yılında Erzurum Atatürk Üniversitesinde öğrenim gören, 182'si kadın 255'i erkek olmak üzere toplam 437 öğrenci oluşturmaktadır. Araştırmada veri toplama aracı olarak; 33 maddelik 'Bireysel Sosyal Sorumluluk Ölçeği (Eraslan, 2011)' kullanılmıştır. İlgili ölçek, 5'li Likert Skalası tipindedir. Elde edilen bulgulara göre; üniversite öğrencilerinin bireysel sosyal sorumluluk düzeyleri ile spor yapma durumu, spor yapma süresi ve haftalık spor yapma süreleri bakımından değerlendirildiğinde anlamlı sonuçlara ulaşıldığı ve spor yapan öğrencilerin bireysel sorumluluk düzeylerinin yüksek olduğu tespit edilmiştir. Cinsiyet, yaş, aile yapısı, kişisel aylık gelir ve yapmış olduğu spor türü değişkenleri bakımından değerlendirildiğinde ise anlamlı sonuçlara ulaşılmadığı görülmektedir. Öğrencilerin toplumsal sorunlara ve kişisel sorunlara yönelik bilinçlilik düzeylerinin yüksek olması toplum ve birey açısından olumlu sonuçlar sağlaması düşünülmektedir. Çıkan sonuçlar incelendiğinde, sporun bireylerde sosyal sorumluluk üzerinde olumlu etkisinin olması, gençlerinin spor yapması için yönlendirilmesi ve imkânların sağlanması önem arz ederek, çalışmamızın da önerisi olarak ifade edilebilir.

Anahtar Kelimeler: Bireysel Sosyal Sorumluluk, Üniversite Öğrencileri, Spor

Abstract: The aim of the present study is to determine individual social responsibility levels of university students and to evaluate differences between them depending on their individual characteristics. Study group consists of 437 subjects (182 females and 255 males) among the students attending Ataturk University in 2014-2015 education term. Individual Social Responsibility Scale (Eraslan, 2011) with 33 items was used as the data gathering tool. Scale in question is in the 5 – grade Likert Scale. It was determined from the results that relationship between individual social responsibility levels of university student sand the state of performing sportive activities, time length of sportive activities and time length of weekly sportive activities was significant and individual social responsibility levels of sport playing students were higher than others. Relationship between individual social responsibility levels and gender, age, family structure, monthly income and type of sport was found to be insignificant. High awareness level of students towards social and individual problems is thought to cause positive results for society and individuals. It may be stated when the results of the study are evaluated that sports have positive effects on individual social responsibility and it is important that the youth should be directed to sport by providing them opportunities.

Key Words: Individual Social Responsibility, University Students, Sport

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Introduction

Humans, as a social creature, have different responsibilities and duties from the moment they are born to the end of their lives. Some of these responsibilities are for the individual himself and some of them are for the social environment he lives. As a member of the society, a sense of responsibility is of higher importance that the individual should fulfill his/her tasks towards the society, s/he intends to be a beneficial for both himself/herself and the society (Yontar and Yurtal, 2009: 146).

It can be seen that there are different definitions about the responsibility in the literature that is developed through practicing and repeating like all the other skills the individual learns through his/her life. Dodurgalı (2010:191) defines responsibility as the human gains an individual personality and he comprehends his tasks towards himself and the society and develops appropriate behaviors, and Cüceloğlu (2002: 198) defines responsibility as the individual is ready to account for the events he consider them within his limits.

Responsibility is the obligation that the individual should fulfill the duties he is accounted for himself and others at the right time. It also means that the individual takes on the effects of his event on others, respects the rights of the others and embraces the results of his own behaviors.[1]

Responsibility is divided into two as social and individual responsibility. Individual responsibility is that the individual is aware of the attitudes and the behaviors that the society expect from him and fulfills these duties both for the society and himself. People who have individual responsibilities are the people who can use their own resources, are self-sufficient, makes their own decisions, takes responsibility of their actions, act independently, meet their own needs without spoiling the rights of others, can criticize themselves, are prone to collaboration, can use time efficiently. And the social responsibility is that the individual act in a way that will develop and protect the interests of the society as well as his own interests. People who have social responsibility are the people who respect the nature and the environment, are sensitive to social problems, have organizational citizenship and moral values. Individuals with higher sense of responsibility complete the tasks and duties they take on even they are very difficult and face the consequences of their actions. These individuals are generally the individuals who are chosen by others to complete a task when there is a task to be done (http://webportal.robcol.k12.tr ; Nelson ve Low, 2004: 84) and these individuals are

1 (http://webportal.robcol.k12.tr)

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hardworking and they are a good parent and a good neighbor (Lucker, 1994: 15).

Whether it is an individual or a social responsibility, there are some factors affecting the development of responsibility. Among these; family, school, traditions-customs and cults are the most important factors that affect the development of responsibility.

For a child to have sense of responsibility, he needs to be grown up in an environment where he can take responsibility. If the child is not given the right to choose and he is not held responsible for consequences of the actions he has done, sense of responsibility in the child will not develop. Thus, the child will not get mature as he is not allowed to express his own ideas and has the opportunity to decide his own actions. The parents should lay a burden to their children appropriate to their ages and physical developments and should support them in discharging these responsibilities (Durmuş, 2006: 145).

For the parents, that the children have responsibility becomes at their agenda when the children start school. When a child who has been given responsibility since childhood starts school, he does not have any problems in doing his homework on time, studying, obeying the rules in the school. The parents should be better role models to their children in raising children who has the sense of responsibility.

The school is responsible for correcting different deficiencies and mistakes originating from the family. The school and the teachers have tremendous responsibilities. It is very important that the children participate in different activities to develop successful identity instead of unsuccessful identity in the school. The children need to feel that they are loved and valued. If they do not meet these needs in the school from their teachers in the schools, they will develop unsuccessful identity (Hayta Önal, 2005: 39).

Each individual learns to respect to the culture of the society he lives in and the values related to this culture, social norms that the society has formed. Individuals constituting the society are obliged to act and organize their lives according to these social norms, know these social norms, and fulfill the enforcement of these norms. Social norms, that is traditions and customs, give some responsibilities to the individuals and requires them to fulfill the requirements. In this context, people with strong personality and sense of responsibility become individuals who blend with the values of the society and experience the basic elements like religion, language, traditions, customs, history etc. which are fields of the culture, and can understand the

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internal relation of these values with one another (Tozlu, 1991: 137).

It is thought that doing sports, engaging in sportive activities is another factor which affects the individual and social responsibility in addition to family, school and traditions. It is seen that sport can play a role as an instrument in developing and spreading particularly social responsibility in today's world. Prompting sport as a correct instrument towards social responsibility activities is considered to be an important opportunity for both the organizations related to sports and for contributing to the society (Smith and Westerbeeck, 2007). With reference to the fact that particularly individual sports can be effective in developing individual responsibility and team sports can be effective in developing social responsibility in addition to the contributions of the sports to physical, emotional, psychologic and social developments, it is aimed in this study to analyze the individual and social responsibility levels of the undergraduates who do sports and who don't in terms of different variables.

Method

In this study, descriptive method is used in order to reveal a present situation.

Research Group

The work group of the study consists of 437 students, 182 females and 255 males, who get educated in different departments of Kazım Karabekir Faculty of Education, University of Erzurum Atatürk in 2014-2015 academic years.

Data Collecting Instruments

"Individual-Social Responsibility Questionnaire" is used to collect data in the study.

Personal Information Form: "Personal Information Form" developed by the researcher includes questions related to independent variables of gender, age, family structure, personal monthly income and doing sports in order to collect data about the students who get educated in subject university.

The Questionnaire

"Individual Responsibility Questionnaire" developed by Eraslan to evaluate attitudes towards individual and social responsibility includes 33 items. The instrument developed to measure the sense of individual responsibility levels of the university students is a 5-likety type scale. The highest score that can be got from the scale is 225, and the lowest one is 45. Higher scores indicate high level of individual responsibility.

Findings

In this section, findings obtained through the study and interpretations related to these findings are presented. Table 1 and 2 indicate the frequency distributions related to the de-

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mographic characteristics and doing sports situations of the university students. In the study, t test is used to compare gender and scores from the individual-social responsibility questionnaire, doing sports situations and the type of the sports variables, and the statistical results are indicated in Table 3, 7 and 8. ANOVA variance analysis test is used in the comparison of the variables of age, family structure, personal monthly income, doing sport time, and weekly doing sport span with the values obtained from the individual-social responsibility questionnaire, and the statistical results are indicated in Table 4, 5, 6, 9 and 10.

Table 1. The Distribution of the Demographic Characteristics of the Students

	Variable	Number (N)	Ratio
Gender	Famele	182	41,6
	Male	255	58,4
	Total	437	100,0
Age	20 and below	101	23,1
	Between 21-24	265	60,6
	25 and above	71	16,2
Family Structure	Nuclear Family	317	72,5
	Extended Family	106	24,3
	Broken Family	14	3,2
Personal Monthly Income	300 tl and below	136	31,1
	Between 301-600 tl	182	41,6
Spor Tesislerinden Yararla*nma*	Between 601-1200 tl	85	19,5
	1201 tl and above	34	7,8

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Table 2. The Distribution of the Student's Doing Sports Situation

	Variable	Number (N)	Ratio
Doing Sport Situation	Doing Sports	248	56,8
	Not Doing Sports	189	43,2
	Total	437	100,0
What kind of sports do you do?	Individual	149	34,1
	Team Sports	99	22,7
	Not doing sports	189	43,2
How long have you been doing sports?	1 year and below	33	7,6
	Between 2-4 years	71	16,2
	5 years and above	144	33,0
	Not doing sports	189	43,2
How many hours do you do sports in a week?	1 hour and below	60	13,7
	Between 2-4 hours	104	23,8
Spor Tesislerinden Yararlan*ma*	5 hours and above	84	19,2
	Not doing sports	189	43,2

Table 3. The Average of the Scores of the Male and Female Students From the Individual-Social Responsibility Questionnaire and Values of the Differences Between Standard Deviation and Averages

Gender	N	X	Ss	t	p
Female	182	149,01	17,613	1,305	,406
Male	255	148,00	18,828	1,179	

On analyzing the Table 3, it can be seen that there is no significant differences in p:0,05 level between the scores of the male and female students from the individual-social responsibility questionnaire. In addition, it is determined that the scores of the female students are higher than the scores of the male students in terms of the average scores from the individual responsibility questionnaire.

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Table 4. The Averages and Standard Deviation Values of the Scores of the Students in Different Age Groups from Individual-Social Responsibility Questionnaire

Age	N	X	Ss	F	P	Fark
20 year-old and below	101	147,29	17,790	,326	,722	------
Between 21-24 year-old	265	148,96	18,750			
25 year-old and above	71	148,01	17,572			
Total	437	148,42	18,318			

When Table 4 is analyzed, it can be seen that there is no significant difference at p: 0,05 level between the scores got from the individual-social responsibility questionnaire of the students in different age groups.

Table 5. The Average and Standard Deviation of the Scores of the Students Who Have Different Family Structure

Family Structure	N	X	Ss	F	P	Difference
Nuclear Family	317	148,09	17,834	,255	,775	------
Extended Family	106	149,09	19,423			
Broken Family	14	150,93	21,485			
Total	437	148,42	18,318			

On analyzing Table 5, it is seen that there is no significant difference at p:0,05 level between the scores got from the individual-social responsibility questionnaire of the students who have different family structure.

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Table 6. The Average and Standard Deviation of the Scores of the Students Who Have Different Personal Monthly Income

Personal Monthly Income	N	X	Ss	F	P	Difference
300 tl and below	136	146,90	17,202	,650	,583	------
Between 301-600 tl	182	148,46	19,398			
Between 601-1200 tl	85	149,99	17,207			
1201 tl and above	34	150,38	19,628			
Total	437	148,42	18,318			

When Table 6 is analyzed, it is seen that there is no significant difference at p: 0, 05 level between the scores got from the individual-social responsibility questionnaire of the students who have different personal monthly income.

Table 7. The Averages and Standard Deviation and t Values of the Differences Among the Averages of the Students who do Sports and the Students who Don't

Gender	N	X	Ss	t	p
Doing Sports	248	151,16	18,157	1,152	,000
Not Doing Sports	189	144,83	17,950	1,305	

On analyzing Table 7, it can be seen that there are significant differences at p:0,05 level between the scores got from the individual-social responsibility questionnaire of the students doing sports and the students not doing sports. It is determined that the average scores of the students doing sports from the individual-social responsibility questionnaire is higher than those of the students not doing sports.

Table 8. The Averages and Standard Deviation and t Values of the Differences of the Averages of the Students From the Individual-Social Responsibility Questionnaire According to the Type of the Sports They Do

Type of the Sport	N	X	Ss	t	p
Individual	149	151,10	18,858	1,544	,416
Team	99	151,24	17,141	1,722	

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On analyzing Table 8, it is seen that there is no significant difference at p:0,05 level between the scores got from the individual-social responsibility questionnaire of the students who do individual and team sports.

Table 9. The Average and Standard Deviation of the Scores of the Students According to the Sport Span

Sport Span	N	X	Ss	F	P	Difference
1 year and below	33	148,03	18,647			
Between 2-4 years	71	150,62	17,768			
5 years and above	144	152,14	18,267	4,870	,002	4-2,3
Not doing sports	189	144,83	17,950			
Total	437	148,42	18,318			

On analyzing Table 9, it can be seen that there are significant differences at p:0,05 level between the scores got from the individual-social responsibility questionnaire and the sports span of the students. It is determined that the average scores of the students not doing sports are lower than those of the students who do sports for between 2-4 years and 5 years and above.

Table 10. The Averages and Standard Deviation Values of the Scores of the Students from Individual-Social Responsibility Questionnaire According to the Weekly Sport Span

Weekly Sport Span	N	X	Ss	F	P	Difference
1 hour and below	60	150,85	17,508			
Between 2-4 hours	104	149,90	17,517			
5 hours and above	84	152,93	19,421	4,818	,003	4-1,2,3
Not doing sports	189	144,83	17,950			
Total	437	148,42	18,318			

On analyzing Table 10, it can be seen that there are significant differences at p:0,05 level between the scores got from the individual-social responsibility questionnaire and the weekly sports span of the students. It is determined that the average scores of the students not doing sports are lower than those of the

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students who do sports weekly for different hours.

DISCUSSION and CONCLUSION

In the study, the relations of the individual-social responsibility levels of 437 undergraduates, 182 females and 255 males, with different variables are analyzed. As a result of the study, the relations between the individual-social responsibility levels of the undergraduates and different variables have been analyzed and evaluations have been done according to the obtained findings.

As a result of the conducted analyses, it is seen that there is no significant difference at p:0,05 level on analyzing the t values of the difference of the scores and average and the standard deviation of the scores from the individual-social responsibility scale of the male and female undergraduates. Even though there is no significant difference, it has been determined that the social responsibility levels of the female students are numerically higher than those of the male students. In the study conducted by Özalp et al. (2008), it was determined that the social responsibility perception levels of the female students are higher than those of the male students.

It is seen that there is no significant difference at p:0,05 level between the scores of the students in terms of different age group, different family structure and different monthly income variables.

It is seen that there is no significant difference at p:0,05 level on analyzing the standard deviation and averages of the scores got from individual-social responsibility scale of the students and the t values of the differences among the averages in terms of doing sports variable. It has been determined that the average score of the students who do sports are higher than those of the students who do not do sports. Güven (2006) stated that engaging in sportive activities develop the senses of helping, working together, respecting other members of the group and formation of the game in children and young. Based on the related results, doing sports reveals the necessity of individual responsibility in both individual and team sports. We can say that sportive activities are the most appropriate environment for individual responsibility training.

It is seen that there is no significant difference at p:0,05 level when analyzing the standard deviation and averages of the scores from the individual-social responsibilities scale and the t values of the differences of the scores in terms of sport type variable. In the study conducted by Yıldırım and Özcan, it was determined that there is no significant difference between the social skill levels of the students who do sports and who don't. However, it has

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been found that there is a significant difference and the social skill levels of the students who do individual and team sports than those of the students who don't do any sports. As the individual responsibility is at the forefront in the individuals who do individual and team sports, it is evaluated as normal that there is no difference.

It is seen that there is significant difference between the scores from the individual-social responsibility scale and the sports span of the students at p:0,05 level. It has been determined that the average scores of the students who don't do any sports are lower than those of the students who do sports for 2-4 years and 5 years and above. Sports span and individual-social responsibility increase in parallel with each other. Depending on this, sports training span should be evaluated as individual responsibility training span.

It is seen that there is significant difference at p:0,05 level between the scores from the individual-social responsibility scale and the weekly sports span of the students. It has been determined that the average scores of the students who don't do any sports are lower than those of the students who do sports at different times a week. Reynolds et al. (1990) stated that regular physical activities affect life quality and other psychological variables positively and exercises have positive effects on social competence expectations, stress and social factors. The facts that the sports have in its origin such as participating in group activities, orientating to the leader, leading, obeying the rules contributes to the individual to take individual and social responsibility and his personal development.

Depending on these obtained findings, the contribution of the sports to individual, social and personal development should not be ignored. It can be said that the fact that the students utilize the sports opportunities and sports facilities in the school, participate in the activities consciously and steadily, are directed to sportive activities according to their talents and interests can increase their individual and social responsibility levels. In the light of this information, the necessity to ensure that the students participate in sportive activities forms the recommendations part of our study.

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EFFECTS OF THE PREPARATION PERIOD TRAININGS ON BIOMOTORIC FEATURES OF 10-12 AGE MALE TENNIS PLAYERS[1]

HAZIRLIK DÖNEMİ ANTRENMANLARININ 10-12 YAŞ ERKEK TENİSÇİLERİN BİYOMOTORİK ÖZELLİKLERİ ÜZERİNE ETKİSİ

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Öz: Amaç: Bu çalışmanın amacı, 10-12 yaş erkek tenisçilere uygulanan hazırlık dönemi antrenmanlarının biyomotorik özelliklerine etkisinin incelenmesidir. Araştırmaya Isparta ilinde bulunan, düzenli olarak tenis turnuvalarına ferdi katılan 10-12 yaş arası 20 erkek tenisçi katıldı. Tenisçilere 8 hafta, haftada 4 gün, günde en az 90 dakika uygulanan teknik ve koordinasyon geliştirici antrenman sürecinin başında ve sonunda sporculara kuvvet (şınav, mekik, dikey sıçrama, durarak uzun atlama), sürat (5, 10, 20 m), dayanıklılık (Shuttle Run) ve esneklik testleri uygulandı. Elde edilen veriler SPSS 18.0 istatistik programında "Paired t Testi" kullanılarak karşılaştırıldı. Tenisçilerin yaş ortalaması 11.05±.88 yıl, boy ortalaması 144.50±7.87 cm, vücut ağırlığı ortalaması ön test 38.72±9.51 kg, son test 38.83±9.35 kg olarak hesaplandı. Tenisçilere uygulanan tüm biyomotorik testlerin karşılaştırılması sonucunda istatistiksel olarak önemli derecede fark bulundu ($p<0,05$). Literatüre bakıldığında araştırmamızı destekleyen birçok araştırma bulunmaktadır. Küçük yaş gruplarına uygulanan ve doğru yüklenme şiddetleri içeren teknik ve koordinasyon geliştirici antrenman drillerinin çocukların biyomotorik performansını artırdığı görülmüştür. İleride yapılacak olan çalışmalarda seçilecek antrenman modeli, kapsamı ve şiddeti bakımından araştırmamız antrenörlere ve spor bilimcilere öneriler sunmaktadır.

Anahtar Kelimeler: Tenis, Antrenman, Biyomotorik

Abstract: The aim of this study is to investigate the preparation period trainings' effects on biomotoric features of 10-12 age male tennis players. 20 male tennis players between age of 10-12 were joined to the study who are in Isparta and join tennis tournaments as individual regularly. At the beginning and ending of the trainings that applied 8 weeks, 4 day a week, at least 90 minutes a day; strength (push up, sit up, vertical jump, standing long jump), speed (5, 10, 20 m), endurance (Shuttle Run) and flexibility tests were applied to the players. Handled datas were compared by using "Paired t Test" at SPSS 18.0 statistic programme. These were calculated from tennis players' mean of age was 11.05±.88 year, mean of length was 144.50±7.87 cm, mean of pre weight was 38.72±9.51 kg, mean of post weight was 38.83±9.35 kg. As a result of comparing all tests applied to the players, differences were found to be statistically significiant ($p<0,05$). Referring to literature, there are many studies that support our research. It was defined that technic and coordination improvement training drills applied to small age groups and contained true loading densities, increased the biomotoric performance of children. Our study offers trainers and sport scientists suggestions with regard to choose training model, content and density for studies in future.

Key Words: Tennis, Training, Biomotoric

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INTRODUCTION

All sports activities requires different levels of physical, physiological and biomotoric qualification during both applying and learning. These qualifications means using the force with required format in the implementation of sporting activities. This use represents doing the movement accurately with experience and learning (Mengütay, 1999: 3-6). Athletic skills must be trained in order to develop them (Gelen et al., 2009: 2-4).

Biomotoric features occurs from strength, speed, endurance, flexibility, agility, coordination. In gameplay and combat sports (tennis, football, judo, boxing), techniques and tactics are used with conditional attributes. To improve these properties, various training drills of specisific styles are applied. Implementation of specific branches of the style and to be considered during the implementation of individual differences are the most important details. These details are made without taking into account the practice increases the risk of occurrence of disability or inadequate development of athletes as biomotoric (Ölçücü, 2010: 2-3).

Tennis is a sport that has interested by individuals from each category either recreational or professional and has a continuous growth in the world. Participation of sports is the most important element and also applied early age in other sports, plays a major role in selecting talented children in tennis. To develop biomotoric features besides basic strokes, ability of athletes are important for coaches who want to achieve success. Strength, coordination, speed and agility of children can be improved with appropriate training programs. Players that have well biomotoric features, have advantages over their competitors. They can move and think faster than their competitors, have quick recovery after a long period of time they score, they are less tired, less risk of injury and the continuity of strength. In other words, the difference between winning and losing depends on the biomotoric features (Çalışkan, 2014: 2-3).

In light of these informations obtained from the literature, the purpose of our study was to investigate the preparation period trainings' effects on biomotoric features of 10-12 age male tennis players.

MATERIALS and METHODS

20 male athletes participated to the study who were 10-12 age in Isparta. "Informed Consent Form" were taken from parents of students, then the explanation was done that personal informations and datas obtained before and after the research, strictly to be kept. The research group were trained tennis and coordination trainings as 8 weeks, 4 days a week, 90 minutes a day. All training and measurements

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of the study group were taken at Süleyman Demirel University Tennis Center Building.

Table 1. Weekly Training Content

	MONDAY	TUESDAY	THURSDAY	SATURDAY
1. & 2. WEEKS **Loading Density %50**	-20 min warm up -60 min technic drill trainings -10 min cool down-strecthing	-20 min warm up -30 min velocity trainings (3x2 sets -5 min rest bet. sets) -10 min cool down-strecthing	-20 min warm up -40 min technic drill trainings -25 min rally -5 min cool down-strecthing	-20 min warm up -60 min rally at minicourt and baseline -5 min cool down-strecthing
3. & 4. WEEKS **Loading Density %60**	-20 min warm up -40 min technic drill trainings -20 min. rally -10 min cool down-strecthing	-20 min warm up -30 min velocity trainings - work out trainings 2 x3 set - 5 min rest bet. sets - 3x100 rope jump - 5 min rest bet. sets - 10 min cool down-strecthing	-20 min warm up -40 min technic drill trainings) -20 min rally at baseline -10 min cool down-strecthing	-20 min warm up -40 min technic drill trainings -20 min rally at baseline -10 min cool down-strecthing
5. & 6. WEEKS **Loading Density %70**	-20 min warm up -40 min technic drill trainings -20 min rally -10 min cool down-strecthing	-20 min warm up -30 min velocity trainings -stair training (50 steps) 3x3 sets -6 min rest bet. sets -theraband trainings (forehand-backhand) 4x20 -5 min rest bet. sets -10 min cool down-strecthing	-20 min warm up -15 min rally at minicourt -45 min match -10 min cool down-strecthing	-20 min warm up -40 min technic drill trainings -20 min rally at baseline -10 min cool down-strecthing
7. & 8. WEEKS **Loading Density %80**	-20 min warm up -15 min minicourt rally -20 min rally at baseline -30 min match -10 min cool down-strecthing	-20 min warm up -30 min velocity trainings -6 min rest bet. sets - foot velocity drills 3x3 set - 6 min rest bet.sets -10 min cool down-strecthing	-15 min warm up -15 min rally at minicourt -50 min match -10 min cool down-strecthing	-20 min warm up -15 min rally at minicourt -50 min rally -10 min cool down-strecthing

Strength Test: Athletes' number of push-ups and sit-ups in 30 seconds were recorded as they could do.

Vertical Jump Test: Free vertical jump test was applied to athletes. The best results were recorded as "cm" from tool measuring digitally. "Takei jumper meters" was used with measurement capacity between 5 cm to 99 cm, showing the distance digitally by leaping with waist stuck.

Standing Long Jump Test: The Jump was told to athletes to be precipitating with the open position squat down, half feet shoulder width, and then back to the arm supporting the thrust of the forward movement of the leg, as far as possible away (forward). The best jump value was recorded as "cm" after the starting point drop from heel and foot.

Speed Test: 5, 10 and 20 m sprint tests were applied to the athletes based on standart half

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the size of a tennis court. Scores recorded with Casio (USA) brands stopwatch precision 1/1000 sec.

Endurance Test (Shuttle Run): Marks were put the beginning and the end of tennis court based on the trail adapted 20 m half of the field and the athletes were given audio signal tool. It was required to be within two meters in each volume of the athletes in front of the start and finish line. Athletes were built 20 minutes warming up before starting the test.

Flexibility Test: The most remote spots flexibility distances were recorded with students' sit-reach flexibility test. General warm-up was done for athletes with leg and back muscles before this test. Measurements were repeated 3 times and the value was recorded.

Data Analysis: Analysis of datas statistically were made by using "Paired t Test" in SPSS 18.0 programme (Statistical Package for Social Sciences). Results were evaluated based on "***p<0.05, **p<0.01, *p<0.001" the significance levels.

FINDINGS

Table 2. Physical Features of Tennis Players

PARAMETERS (n=20)	Minimum	Maximum	Mean±SD	p
Age (year)	10.00	12.00	11.05±.88	
Height (cm)	127.00	156.00	144.50±7.87	
Weight (kg)	Pre Test		38.72±9.51	**.037*** **
	Post Test		**38.83±9.35**	

*****p<0.05 , **p<0.01 , *p<0.001**

Players' mean of age was 10.26±1.27 years, mean of height was 143.33±8.02 cm and mean of weight in pre-test 37.96±9.77 kg; in post-test 38.03±9.56 kg. As a result of comparison weight, differences found to be statistically significant (p<0.05).

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Table 3. Paired t Test Results of Players' Strength Pre and Post Test Means

STRENGTH TESTS	Test Sequence	Mean±SD	t	p
Push-up (number/30 sec)	Pre Test	24.45±7.63	-13.76	**.000***
	Post Test	**28.60±7.99**		
Sit-up (number/30 sec)	Pre Test	22.60±3.64	-13.48	**.000***
	Post Test	**26.85±4.15**		
	Post Test	**153.80±11.94**		

***p<0.05 , **p<0.01 , *p<0.001

There were found differences statistically as a result of comparison of players' strength pre and post test values (p<0.05).

Table 4. Paired t Test Results of Players' Speed Pre and Post Test Means

SPEED TESTS	Test Sequence	Mean±SD	t	p
5 meters (sec)	Pre Test	1.23±.10	8.18	**.000***
	Post Test	**1.18±.10**		
10 meters (sec)	Pre Test	2.25±.13	15.98	**.000***
	Post Test	**2.20±.13**		
20 meters (sec)	Pre Test	3.99±.27	10.64	**.000***
	Post Test	**3.92±.27**		

***p<0.05 , **p<0.01 , *p<0.001

Differences found to be statistically significant as a result of comparison of players' speed pre and post test values (p<0.05).

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Table 5. Paired t Test Results of Players' Velocity Pre and Post Test Means

VELOCITY TESTS	Test Sequence	Mean±SD	t	p
Vertical Jump (cm)	Pre Test	28.15±5.48	-10.37	**.000***
	Post Test	**29.85±5.47**		
Standing Long Jump (cm)	Pre Test	149.50±12.09	-6.79	**.000***
	Post Test	**153.80±11.94**		

***p<0.05 , **p<0.01 , *p<0.001

Differences found to be statistically significant as a result of comparison of players' velocity pre and post test values (p<0.05).

Table 6. Paired t Test Results of Players' Endurance Pre and Post Test Means

ENDURANCE TEST	Test Sequence	Mean±SD	t	p
Shuttle Run Test (number/20 m)	Pre Test	22.70±6.20	-8.5	**.000***
	Post Test	**26.80±6.89**		

***p<0.05 , **p<0.01 , *p<0.001

There was found significant difference as a result of comparison of players' endurance pre and post test values (p<0.05).

Table 7. Paired t Test Results of Players' Flexibility Pre and Post Test Means

FLEXIBILITY TEST	Test Sequence	Mean±SD	t	p
Sit and Reach Test (cm)	Pre Test	16.00±7.01	-15.28	**.000***
	Post Test	**19.40±7.17**		

***p<0.05 , **p<0.01 , *p<0.001

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Differences found to be statistically significant as a result of comparison of players' flexility pre and post test values ($p<0.05$).

DISCUSSION

The purpose of this study was to investigate the preparation period trainings' effects on biomotoric features of 10-12 age male tennis players. 20 male tennis players joined to the study whose ages were between 10 and 12 in Isparta. As results of comparison of players' weight, strength (push-up, sit-up, vertical jump, standing long jump), speed (5, 10, 20 m), endurance (Shuttle Run) and flexiblity (sit and reach) tests; differences found to be statistically significant in all measurements ($p<0.05$).

Aktaş et al. (2011) aimed to investigate the effects of strength trainings on some motoric features of 12-14 age male tennis players. Significant differences found in some strength and endurance (Shuttle Run) pre and post-test values ($p<0.05$).

Ölçücü et al. (2011) investigated the effects of movement education with or without ball on physical fitness value of children. As results of weight, speed, vertical jump and strength tests, significant differences found in all tests ($p<0.05$).

In a research of Gökgönül (2008) was to investigate the changes of power and some physiological parameters in competition period for seasonal changes at little tennis players (9 - 12 years); differences between pre and post-tests results found to be statistically significant ($p<0.05$).

In the study of Kızılet et al. (2011) aimed to investigate the effects of different strength trainings on velocity and jump skills of 12-14 age basketball players. As results of comparison of vertical jump and standing long jump values, differences found to be statistically sifnificant ($p<0.05$).

Suna (2013) investigated the effects of aerobic, anaerobic, combine, technique trainings in tennis players on their performances. It was identified that significant differences found in pre and post strength tests ($p<0.05$).

In Çalışkan (2014)'s research aimed to investigate the effects of technique and strength trainings on performances of 12-14 age tennis players, it was observed that trainings effected cihldren's strength, speed and coordination features statistically ($p<0.05$).

In Faigenbaum et al. (2002)'s research aimed comparison of 1 and 2 days per week of strength training in children, differences found to be statistically significant in strength tests ($p<0.05$).

In the research of Filipčič et al. (2015) aimed to identify the differences in physical fitness

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among young tennis players in between 1992 and 2008, significant differences found in strength pre and post-tests ($p<0.05$).

In Yıldırım (2012)'s study aimed to investigate the effects of quick power trainings on 12-14 age basketball beginners' speed, push-up and speed tests were applied to students. As results of these tests, differences found to be statistically siginificant ($p<0.05$).

Most of researches, it has been seen that preparation trainings done in earlier ages effected motoric skills of children. It is possible in order to provide the best performance that physical, physiological and psychological backgrounds must been achieved in earlier ages.

RESULTS

Our study investigated the preparation period trainings' effects on biomotoric features of 10-12 age male tennis players. Significant differences identified from all tests. Players' achievements in the tournaments allowed us to see the efficiency of training and the development of their performances.

It was observed that training drills of technique and coordination for improvement which applied to younger age groups and contented the correct loading densities, developped children's biomotoric features. Considering that biomotoric features are the important factors to effect the performance, we think that the results of our work will contribute a reference value to the tennis coaches and athletes in terms of performance monitoring. Our research offers advices to coaches and sports scientists in terms of training model, content and density to be selected in the studies to be conducted in the future.

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ORGANIZATIONAL TRUST IN HOSPITALS: A MODEL STUDY[1]

HASTANELERDE ÖRGÜTSEL GÜVEN: BİR ÖRNEK UYGULAMA

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Öz: Bu çalışma sağlık çalışanlarının örgütsel güven düzeylerini belirlemek, örgütsel güven düzeyi ile sosyo-demografik özellikleri arasındaki ilişkilerin belirlenmesine yönelik hazırlanmıştır. Araştırma sağlık çalışanlarının sosyo-demoğrafik özeliklerini tanımlayan bir anket formu ile örgütsel güven ölçeğinden oluşmuş tanımlayıcı bir çalışmadır. Veriler, araştırmaya katılmaya istekli, iki özel hastaneden, toplamda 534 sağlık çalışanından elde edilen, 409 adet geçerli anket ile yapılmıştır. Örneklem seçimi tesadüfi olarak belirlenmiştir. Örgütsel güven boyutları ile ilgili bulgular değerlendirildiğinde; her güven boyutunun bölümlere göre farklılık gösterdiği, yöneticiye güvenin en çok acil yoğun bakım bölümde, kuruma güvenin çocuk hastalıkları bölümünde, çalışma arkadaşlarına güvenin ise cerrahi bilimlerde en yüksek olduğu belirlenmiştir. Çalışma arkadaşlarına güven en yüksek kadın çalışanlarda çıkmıştır. Yöneticiye güven kuruma ve yaşa göre farklılaşmaktadır. Kuruma güven mesleki deneyime göre en yüksek ortalama 1-5 yıl grubuna aittir. Yöneticiye güven çalışma şekline göre en yüksek sadece gündüz çalışanlarına aittir. Kuruma güven çalışma şekline göre en yüksek nöbet usulü çalışanlarda yüksek çıkmıştır.

Anahtar Kelimeler: Güven, İlişki, Örgüt, Boyut, Sağlık, Çalışan, Hastane, Kurum, Düzey

Abstract: This study was conducted to determine the levels of organizational trust of health workers and to determine the relations between their levels of organizational trust and socio-demographic characteristics. This is a descriptive study comprising of the organizational trust scale and a questionnaire form identifying the socio-demographic characteristics of health workers. Data were collected through 409 valid questionnaires obtained from 534 health workers from two private hospitals, who volunteered to participate in the research. The sample was randomly selected. An evaluation of the findings related to the dimensions of organizational trust demonstrates that each dimension of trust varies by department, with the highest trust in supervisor being in the department of emergency intensive care, the highest trust in the institution being in the department of pediatrics, and the highest trust in coworkers being in the department of surgical sciences. The highest trust in coworkers was found to be among female workers. Trust in supervisor varies by institution and age. The highest average trust in institution belongs to the group with an occupational experience of 1-5 years. Trust in supervisor varies by mode of work, with those who work only during daytime having the highest average. The highest trust in institution was found to be among those working in shifts as a mode of work.

Key Words: Trust, Relation, Organization, Dimension, Health, Worker, Hospital, Institution, Level

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INTRODUCTION and THEORETICAL FRAMEWORK

Trust is a building block of organizations. There is no other variable that by itself influences individual's behavior as much as the concept of trust does (Hosmer and Tone, 1995: 379-381). It is one of the factors affecting the quality of interpersonal relations and organizational functioning to a significant extent. As "Trust, which is a social reality", as emphasized by Lewis (Lewis et al., 1985: 965-68), forms the basis for all bilateral relations. Trust is an internal movement resembling a behavioral intention or a choice (Colquitt et al., 2007: 910-925). Trust is composed of expectations, assumptions or beliefs that the future actions of another party will be favorable, beneficial, or at least, harmless (Kramer, 1999: 559-598). Researchers studying the concept of trust have usually defined it through such words as expectation, belief, risk-taking, predictability, vulnerability and dependence (Pain, 2007). The concept of trust is considered as a condition for social relations and stability in the light of interpersonal collaboration and solidarity (Demir, 2015: 624).

Organizational trust has been one of the major research topics of the management science for over three decades (Wahlstrom and Louis, 2008: 458). Organizational trust is defined as the willingness of an organization's employees to remain vulnerable to the actions of the organization (Tan and Lim, 2009: 45). In other words, it is the trust and support felt by everyone working in an organization (Yılmaz and Atalay, 2009: 341). Within the scope of this study, organizational trust is addressed under three dimensions, namely trust in institution, trust in supervisor, and trust in coworkers. These factors are related to and precursors of each other. Trust in institution is defined as the belief of workers in the coherence of the organization's behavior when they face a risky situation (Demircan and Ceylan, 2003, 142); trust in supervisor refers to their belief in the explanations and promises made by their supervisor (Deluga, 1994, 315), and trust in coworkers is defined as the belief of workers in the actions, honesty and good will of their fellow workers (Tokgöz and Aytemiz Seymen, 2003: 63). Developments acquired through high organizational trust can be listed as follows: The level of organizational justice increases; job satisfaction enhances; conflicts and job stress decrease, and the levels of organizational commitment and organizational citizenship escalate (Aykan, 2007; Polat, 2009). Perception of high trust enables the easy development of the organizational culture within the organization, and it keeps the communication channels more open and the behavior of engagement in collaboration at a higher level (Polat, 2009: 3-12). Employees with higher levels of trust have fewer intentions to quit their jobs and lower levels of ab-

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sence and labor turnover. Organizational trust enhances workers' morale, increases communication, strengthens the sharing among workers, and develops team spirit and team work. Conflict, job stress, and exhaustion decrease through organizational trust to be provided in the environment of an organization. It provides an observable increase in participation in decision making processes, problem-solving skills, creativity, social responsibility, and risk-taking behavior (Polat, 2009: 3-12 (Aykan, 2007: 159).

Organizations with higher levels of organizational trust have higher advantages in terms of productivity, individual performance of workers, organizational performance, and workers' commitment to the organization (Fard et al., 2010: 30). Trust is an institutional value that constructively develops individual relationships (Puusa and Alvanen, 2006: 2). Workers' trust in their organizations can cause them to be emotionally committed to their organizations, to have higher job satisfaction, not to complain about their organizations, and to be unwilling to leave quit their jobs (Dirks and Ferrin, 2002: 611-612; Chen et al., 2012: 409). If workers' sense of trust is harmed, this weakens their commitment to the organization, which may thereby cause them to quit their jobs or result in absence or lower performance (Mete and Aksoy, 2015: 234-237). A high level of organizational trust is found to cause high satisfaction and productivity among the staff (Schnake, 1991: 740-742). Organizational trust increases the motivation of the staff, ensures effective team work, and encourages open communication (DeFrank and Ivancevich, 1998: 55-62). Members of staff with high organizational commitment consider themselves as important players of the team (Jones and George, 1998: 531-540). In most cases, a high level of organizational trust has brought success in creating various organizational forms and organizational structures, strategic partnerships, harmonious and responsive teams, and effective crisis management (Zalabak et al., 2009: 35-37). Trust in organization refers to workers' belief in the coherence of their organization's commitments and behaviors when they are faced with an ambiguous or risky situation (Rodgers and Waymond, 2009: 83-90). In other words, it is a worker's perception of the support provided by his/her organization (Mishra et al., 1990: 443-450). It is quite important to create a culture based on an environment of trust in hospitals, where interpersonal relations are considered as relatively more influential on the organization's functioning. Workers' interaction with each other and with their supervisors is one of the most important factors affecting their satisfaction in such organizations as hospitals where functional dependence is high. For such interaction to be positive and for health workers to produce services with ex-

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pected levels of quality and productivity, they should be, first of all, managed professionally and feel a sense of trust in their organization, supervisors and coworkers. In the health sector, there is a positive relation between organizational trust, organizational commitment and job satisfaction (Liou, 2008: 116-118). Increasing the organizational trust to higher levels in hospitals is only possible through the creation of an organizational structure that supports this condition. There is a need for the creation and implementation of personnel policies that will enable health managers and health workers to work in a more satisfied and productive way (Dursun, 2015: 134-155). Organizational trust, which has numerous positive outputs, should be kept sustainable and transformed into an organizational culture (Ayden and Özkan, 2014: 151). Otherwise, organizational distrust may cause many elements that will negatively affect the management process (Shouksmith, 1994). Therefore, hospital managements should systematically measure and evaluate the organizational trust among their staff and implement necessary policies and instruments to increase the level of trust (Tanner, 2007).

Purpose

409 health workers participated in this study, which aimed to measure organizational trust among health workers in a practical way. The study employed a questionnaire which included demographic and Likert-scaled questions. The data obtained from the questionnaire were analyzed through the SPSS Statistics 18 software, and the results and findings from the analysis are provided in the final part of the study.

Analysis

Descriptive statistics, reliability analysis, Factor Analysis, Man Whitney U, Kruskal Wallis, ANOVA, and t-test techniques were used for analysis. Cronbach's Alpha coefficient was calculated to be 0.957.

Method

The target population of this study includes all the health workers working in private hospitals in the province of Istanbul. Five private institutions were randomly selected for the study, and only two of these institutions confirmed their participation. In the selection of the sample, respondents were required to have been working in their institutions for at least 6 months and to be high school graduates at minimum. Both institutions included 573 health workers meeting the requirements for this sample. Questionnaire forms were distributed to all of them, but 409 questionnaire forms were properly and completely filled in and received back.

Data Collection Tools

Survey method was employed as a tool for data collection. The questionnaire used for survey

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is made up of two parts. The first part questioned the sociodemographic and occupational characteristics of the health workers. This part includes 13 questions including "hospital of employment, position, department, mode of work, duty, duration of working in the workplace, total occupational experience, age, marital status, educational status, duty as a supervisor, management position of the supervisor, satisfaction from the job, status of considering to quit the job if deemed possible, gender, mode of working, working pattern, level of satisfaction from the job, and the status of considering to quit the job". The second part of the questionnaire is made up of the organizational trust scale. Organizational Trust Scale (OTS) is a 6-point Likert scale composed of 43 items with the options "strongly agree: 6, agree: 5, somewhat agree: 4, somewhat disagree: 3, disagree: 2, strongly disagree: 1". Organizational Trust Scale is composed of 3 sub-dimensions, namely trust in superiors, trust in organizational management and trust in coworkers. In our study, we adapted these three sub-dimensions as trust in supervisor, trust in institution and trust in coworkers.

OTS was developed by Altuntaş in 2008. Altuntaş used this scale in his doctoral study titled "relation between nurses' levels of organizational trust, and personal-occupational characteristics and organizational citizenship behaviors".

Research Hypotheses

H1: Organizational trust factors of health workers do not vary by department.

H2: Organizational trust factors of health workers do not vary by gender.

H3: Organizational trust factors of health workers do not vary by institution.

H4: Organizational trust factors of health workers do not vary by age.

H5: Organizational trust factors of health workers do not vary by occupational experience.

H6: Organizational trust factors of health workers do not vary by mode of work.

H7: Organizational trust factors of health workers do not vary by educational status.

Implementation and Analyses

Reliability Analysis

Table1. Reliability Analysis

Cronbach's Alpha	Number of Items
,957	43

The results of the reliability analysis show that the 43 items included in the analysis have a very high level of reliability.

Demographic and Descriptive Statistics

Demographic and descriptive statistics of the participants are provided below:

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Table 2. Demographic and Descriptive Statistics		Frequency	Column N %
Your department	Internal medicine	19	5%
	Surgical sciences	31	8%
	Radiology	16	4%
	Emergency intensive care	77	19%
	Pediatrics	20	5%
	Orthopedics	6	1%
	Laboratory	16	4%
	Administrative units	29	7%
	Psychiatry	2	0%
	Gynecology	22	5%
	other	171	42%
Mode of work	Only daytime	229	56%
	In shifts	172	42%
	Only nighttime	6	1%
	Daytime and in case of necessity	1	0%
You position	Physician	51	12%
	Nurse	70	17%
	Technician	42	10%
	EMT	53	13%
	Supervisor	10	2%
	Civil servant	33	8%
	Servant	32	8%
	Midwife	7	2%
	Other	43	11%
	Medical secretary	40	10%
	Aesthetician / beautician	4	1%
	Security officer	5	1%
	Laboratorian	13	3%
	Ambulance driver	6	1%
Duration of work in the workplace	Less than 1 year	132	32%
	1-5 years	246	60%
	6-10 years	30	7%
	11 or more	1	0%

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Total occupational experience	Less than 1 year	68	17%
	1-5 years	181	44%
	6-10 years	89	22%
	11 or more	71	17%
Your age	Younger than 25	150	37%
	25-29 years	96	23%
	30-34 years	76	19%
	35 or older	87	21%
Your marital status	Married	192	47%
	Single	217	53%
Your educational status	Vocational high school of health	202	49%
	Associate degree	91	22%
	Bachelor's degree	62	15%
	Specialization in medicine	39	10%
	Master's degree-doctorate	15	4%
Are you at a management position?	Yes	58	14%
	No	347	86%
If you are a manager (supervisor)	Chief physician	4	1%
	Chief nurse	1	0%
	Deputy director	1	0%
	Supervisor	2	0%
	Supervisor nurse	17	4%
	Chief manager	8	2%
	Other	28	7%
	Not manager	348	85%
Are you satisfied with your job?	Yes	352	86%
	No	57	14%
Would you consider quitting your job if you had the opportunity?	Yes	199	49%
	No	210	51%
Your gender	Female	260	64%
	Male	149	36%
Province	Ordu	409	100%
Institution	Meditech	219	54%
	Medicalpark	190	46%

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FACTOR ANALYSIS

The responses of the respondents were evaluated, and a factor analysis was applied. Following factors were obtained in consequence of the analysis. A total of 43 items, responded by the health workers in relation to organizational trust, were grouped into 3 factorial dimensions in consequence of the factor analysis:

1. Trust in supervisor
2. Trust in institution
3. Trust in coworkers

Table 3. Factor Analysis	Component		
	1	2	3
Trust in supervisor	.827		
Trust in supervisor	.799		
Trust in supervisor	.797		
Trust in supervisor	.783		
Trust in supervisor	.779		
Trust in supervisor	.764		
Trust in supervisor	.761		
Trust in supervisor	.752		
Trust in supervisor	.750		
Trust in supervisor	.740		
Trust in supervisor	.724		
Trust in supervisor	.718		
Trust in supervisor	.717		
Trust in supervisor	.708		
Trust in supervisor	.707		
Trust in supervisor	.704		
Trust in supervisor	.679		
Trust in supervisor	.672		
Trust in supervisor	.661		
Trust in supervisor	.648		
Trust in supervisor	.622		

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Trust in supervisor	.482		
Trust in institution		.801	
Trust in institution		.791	
Trust in institution		.790	
Trust in institution		.774	
Trust in institution		.728	
Trust in institution		.709	
Trust in institution		.708	
Trust in institution		.664	
Trust in institution		.651	
Trust in institution		.633	
Trust in institution		.536	
Trust in institution		.418	
Trust in coworkers			.793
Trust in coworkers			.791
Trust in coworkers			.788
Trust in coworkers			.779
Trust in coworkers			.769
Trust in coworkers			.654
Trust in coworkers			.650
Trust in coworkers			.468
Trust in coworkers			.402

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ANALYSES

Table 3. Analyses			Communication with superiors/supervisors			Communication within the institution			Communication with coworkers		
Department	**N**	**%**	**Anova**	**SD**	**p**	**Anova**	**SD**	**p**	**Anova**	**SD**	**p**
Internal medicine	19	5%									
Surgical sciences	31	8%									
Radiology	16	4%									
Emergency intensive care	77	19%									
Pediatrics	20	5%									
Orthopedics	6	1%	1.961	1	0.036	0.418	1	0.038	1.315	1	0.022
Laboratory	16	4%									
Administrative units	29	7%									
Psychiatry	2	0%									
Gynecology	22	5%									
Other	171	42%									
Gender	**N**	**%**	**Man Whitney U**	**SD**	**P**	**Man Whitney U**	**SD**	**P**	**Man Whitney U**	**SD**	**P**
Female	260	64%									
Male	149	36%	-1.51	1	0.131	-1.066	1	0.286	-0.556	1	0.008
Institution	**N**	**%**	**t-test**	**SD**	**P**	**t-test**	**SD**	**P**	**t-test**	**SD**	**P**
Hospital A	219	54%									
Hospital B	190	46%	0.067	1	0.047	-0.757	1	0.045	-0.678	1	0.498
Age	**N**	**%**	**Anova**	**SD**	**P**	**Anova**	**SD**	**P**	**Anova**	**SD**	**P**
Younger than 25	150	37%									
25-29 years	96	23%									
30-34 years	76	19%									
35 or older	87	21%	1.945	3	0.022	0.769	3	0.012	1.743	3	0.016
Occupational experience	**N**	**%**	**Kruskal Wallis**	**SD**	**P**	**Kruskal Wallis**	**SD**	**P**	**Kruskal Wallis**	**SD**	**P**
Less than 1 year	68	17%									
1-5 years	181	44%									
6-10 years	89	22%									
11 or more	71	17%	1.979	3	0.577	11.974	3	0.007	4.986	3	0.173
Mode of work	**N**	**%**	**Anova**	**SD**	**P**	**Anova**	**SD**	**P**	**Anova**	**SD**	**P**

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Only daytime	229	56%									
In shifts	172	42%									
Only nighttime	6	1%									
Daytime and in case of necessity	1	0%	1.955	3	0.001	0.873	3	0.048	0.025	3	0.999
Educational status	**N**	**%**	**Kruskal Wallis**	**SD**	**P**	**Kruskal Wallis**	**SD**	**P**	**Kruskal Wallis**	**SD**	**P**
Vocational high school of health	202	49%									
Associate degree	91	22%									
Bachelor's degree	62	15%									
Specialization in medicine	39	10%									
Master's degree-doctorate	15	4%	2.244	4	0.691	3.982	4	0.408	2.097	4	0.718

H1: Organizational trust factors of health workers do not vary by department.

A review of the organizational trust factors of health workers by department indicates that The sig values of all factors were found to be smaller than 0.05; therefore the hypotheses regarding these factors will be rejected. Accordingly,

- Trust in supervisors varies by department. The department of emergency intensive care has the highest average.
- Trust in institution varies by department. The department of pediatrics has the highest average.
- Trust in coworkers varies by department. The department of surgical sciences has the highest average.

H2: Organizational trust factors of health workers do not vary by gender.

A review of the organizational trust factors of health workers by gender indicates that only the 3rd factor has a Sig value smaller than 0.05; therefore, the hypothesis regarding this factor will be rejected. Accordingly,

- Trust in supervisors does not vary by gender.
- Trust in institution does not vary by gender.
- Trust in coworkers varies by gender. The female group has the highest average.

H3: Organizational trust factors of health workers do not vary by institution.

A review of the organizational trust factors of health workers by institution indicates that 1st and 2nd factors have Sig values smaller

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than 0.05; therefore, hypotheses regarding these factors will be rejected. Accordingly,

- Trust in supervisor varies by institution. Hospital A has the highest average.
- Trust in institution varies by institution. Hospital A has the highest average.
- Trust in coworkers does not vary by institution.

H4: Organizational trust factors of health workers do not vary by age.

A review of the organizational trust factors of health workers by age indicates that the sig values of all factors were found to be smaller than 0.05; therefore, the hypotheses regarding these factors will be rejected. Accordingly,

- Trust in supervisor varies by age. The highest average belongs to the group aged below 25.
- Trust in institution varies by age. The highest average belongs to the age group 25-29.
- Trust in coworkers varies by age. The highest average belongs to the age group 25-29.

H5: Organizational trust factors of health workers do not vary by occupational experience.

A review of the organizational trust factors of health workers by occupational experience indicates that the sig values of all factors were found to be smaller than 0.05; therefore the hypotheses regarding these factors will be rejected. Accordingly,

- Trust in supervisor does not vary by occupational experience.
- Trust in institution varies by occupational experience. The highest average belongs to the group of 1-5 years.
- Trust in coworkers does not vary by occupational experience.

H6: Organizational trust factors of health workers do not vary by mode of work.

A review of the organizational trust factors of health workers by mode of work indicates that the 1st and 2nd factors have Sig values smaller than 0.05; therefore, hypotheses regarding these factors will be rejected. Accordingly,

- Trust in supervisor varies by mode of work. The highest average belongs to the group working only during daytime.
- Trust in institution varies by mode of work. The highest average belongs to the group working in shifts.
- Trust in coworkers does not vary by mode of work.

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H7: Organizational trust factors of health workers do not vary by educational status.

A review of the organizational trust factors of health workers by educational status indicates that the sig values of all factors were found to be greater than 0.05; therefore, the hypotheses regarding these factors will be accepted. Accordingly,

- Trust in supervisor does not vary by educational status.
- Trust in institution does not vary by educational status.
- Trust in coworkers does not vary by educational status.

CONCLUSION and ASSESSMENT

- A total of 43 items, responded by the health workers in relation to organizational trust, were grouped into 3 factorial dimensions in consequence of the factor analysis:

1. Trust in supervisor
2. Trust in institution
3. Trust in coworkers

- Trust in supervisor varies by department. The highest average belongs to the department of emergency intensive care. Trust in institution varies by department. The department of pediatrics has the highest average. Trust in coworkers varies by department. The department of surgical sciences has the highest average.
- Trust in supervisor does not vary by gender. Trust in institution does not vary by gender. Trust in coworkers varies by gender. The female group has the highest average.
- Trust in supervisor varies by institution. Hospital A has the highest average. Trust in institution varies by institution. Hospital A has the highest average. Trust in coworkers does not vary by institution.
- Trust in supervisor varies by age. The highest average belongs to the group aged below 25. Trust in institution varies by age. The highest average belongs to the age group 25-29. Trust in coworkers varies by age. The highest average belongs to the age group 25-29.
- Trust in supervisor does not vary by occupational experience. Trust in institution varies by occupational experience. The highest average belongs to the group of 1-5 years. Trust in coworkers does not vary by occupational experience.
- Trust in supervisor varies by mode of work. The highest average belongs to the group working only during daytime. Trust in institution varies by mode of work. The highest average belongs to the group

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working in shifts. Trust in coworkers does not vary by mode of work.

- Trust in supervisor does not vary by educational status. Trust in institution does not vary by educational status. Trust in coworkers does not vary by educational status.

Managers should raise awareness about the concept of trust, which is recognized as the precondition of many positive developments for organizations; they should make improvements to support and sustain organizational trust at every opportunity, and they should carefully evaluate every aspect of organizational trust. Hospital management should treat health workers as a strategic element and create an organizational culture in which the interests of workers are protected and every worker is valued as an individual. Hospital managements must be able to keep the trust attitudes of their employees at high levels in order to provide successful management and to contribute to patient satisfaction, profitability and image of the hospital. For this purpose, the workers' responsibilities and duties should be clearly defined; the communication within the organization should be accurate, punctual and frequent; there should be a trust in the intra-organizational skills and capabilities for the works to be performed; shared goals should be clear and comprehensible, and the organization should have a vision and goal. There should be consistency and integrity in managers' behaviors in order to gain employees' trust.

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ADDITIONAL TABLES

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
	Row N %	Row N %	Row N %	Row N %	Row N %	Row N %
I believe that my superior will keep the promises he/she makes	8,3%	7,6%	11,2%	26,2%	28,1%	18,6%
My superior is an expert in his/her job	6,6%	9,0%	8,1%	20,3%	33,7%	22,2%
My superior has knowledge enough to check the work I do	5,4%	8,1%	7,8%	17,6%	35,9%	25,2%
I trust that my superior will make appropriate decisions	6,1%	7,1%	8,3%	24,0%	35,5%	19,1%
My superior can develop team spirit	7,1%	8,6%	8,8%	21,0%	35,0%	19,6%
My superior can produce solutions for the problems I face in my work	5,4%	6,1%	8,8%	24,2%	35,2%	20,3%
My superior defends me before the management when I make a mistake	9,3%	9,0%	9,5%	26,7%	29,1%	16,4%
I can share my personal problems with my superior	11,0%	14,2%	9,0%	20,8%	27,4%	17,6%
My superior does not criticize me in my absence	10,5%	16,1%	9,3%	21,5%	26,9%	15,6%
My superior does not show my work as his/her own work	7,8%	7,8%	4,9%	13,2%	38,1%	28,1%
My superior behaves honestly to me	5,6%	7,1%	7,6%	19,8%	35,5%	24,4%
My superior does not hide information from me	10,3%	8,8%	9,5%	21,8%	31,3%	18,3%
My superior informs me about the decisions he/she makes	7,1%	7,1%	7,3%	22,5%	36,4%	19,6%
I trust that my superior will not tell to others the information I share with him/her	8,6%	8,1%	8,3%	22,7%	30,8%	21,5%
My superior tries to understand my thoughts	7,1%	8,3%	9,5%	24,7%	34,2%	16,1%
I know that my superior will approach constructively when I tell him/her my problems	5,4%	8,3%	9,5%	22,5%	35,9%	18,3%
My superior clearly expresses his/her expectations about my occupational development	5,4%	8,8%	8,8%	20,8%	35,9%	20,3%
I always get feedback from my superior about the quality of my work	8,6%	11,2%	11,0%	26,4%	30,3%	12,5%
My superior is ready for help when I need him/her	6,6%	6,4%	10,0%	20,8%	34,5%	21,8%
I have the freedom to disagree with my superior's views	7,1%	8,6%	9,5%	20,8%	31,1%	23,0%
My superior asks for my opinion when he/she will make a decision	11,2%	12,5%	10,5%	24,4%	27,6%	13,7%
My superior views me as a human, rather than as a tool to achieve the organization's goals	8,6%	8,6%	12,0%	18,3%	31,3%	21,3%
All the workers in our hospital tell the reality even if hearing it will be displeasing	19,6%	13,7%	13,2%	26,4%	18,3%	8,8%
The managers of our hospital are honest	12,5%	10,0%	12,0%	27,9%	25,4%	12,2%
I trust that the managers of the hospital will make appropriate decisions about the future of our hospital	10,5%	9,8%	11,5%	28,4%	26,2%	13,7%
Managers of our hospital clearly share the information about the projects of the institution	13,4%	14,9%	13,4%	26,4%	22,5%	9,3%
The hospital management behaves fairly with respect to our personal rights	13,9%	14,7%	12,7%	24,9%	26,2%	7,6%
Managers of the hospital have trust in all workers	12,2%	13,4%	16,4%	29,3%	20,5%	8,1%
The working hours and schedules in our hospital provide sufficient time for the social lives of the workers	20,3%	13,9%	14,9%	23,0%	18,1%	9,8%
The institutional policies in our hospital are created in consideration of the workers' opinions	17,6%	17,8%	14,9%	27,1%	16,1%	6,4%
Everybody in this hospital communicates openly with each other	13,4%	16,6%	13,7%	24,2%	22,5%	9,5%
Employees do not refrain from expressing their suggestions about institutional policies	9,5%	16,1%	14,4%	28,1%	23,7%	8,1%
In this hospital, everything functions transparently, and there are no hidden activities	19,1%	17,6%	15,2%	21,5%	18,1%	8,6%
I know that my coworkers will help me whenever I face a challenge in my job	4,4%	5,6%	8,8%	19,1%	35,0%	27,1%
There are positive relations among the employees in the hospital	8,6%	11,2%	9,0%	28,1%	31,1%	12,0%
My coworkers keep the promises they make	4,9%	7,1%	9,0%	25,7%	34,2%	19,1%
I trust in the skills of my coworkers	3,9%	4,4%	7,6%	27,1%	37,7%	19,3%
There is cooperation among my coworkers	7,1%	5,1%	6,9%	25,0%	38,0%	17,9%
My coworkers ask for each other's opinions when necessary	5,9%	5,1%	6,9%	24,3%	39,5%	18,4%
My coworkers help each other without any expectation in return, in order reach their common goals	7,1%	8,6%	7,3%	22,7%	36,4%	17,8%
My coworkers do not refrain from asking for help when they need it	4,6%	3,4%	7,1%	18,6%	42,3%	24,0%
My coworkers do not refrain from sharing the knowledge they have about their work	6,4%	5,9%	8,3%	19,6%	40,1%	19,8%
If needed, my coworkers place the achievement of the team goals above their own interests	10,8%	10,8%	8,8%	27,4%	29,6%	12,7%

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INVESTIGATION OF EMPATHIC TENDENCY AND PROBLEM SOLVING SKILLS OF JUDO ATHLETES (SAMPLE OF CENTER OF OLYMPIC PREPERATION IN TRABZON)[1]

JUDO SPORCULARININ EMPATİK EĞİLİM VE PROBLEM ÇÖZME BECERİLERİNİN İNCELENMESİ (TRABZON OLİMPİYAT HAZIRLIK MERKEZİ ÖRNEĞİ

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Öz: Bu araştırmanın amacı, Trabzon Olimpiyat Hazırlık Merkezindeki Judocuların empatik eğilim ve problem çözme becerilerinin incelenmesidir. Araştırma grubunu, Trabzon Olimpiyat Hazırlık Merkezindeki aktif olarak judo sporu ile uğraşan 60 sporcu oluşturmaktadır. Veri toplama aracı olarak Dökmen (1988) tarafından geliştirilmiş olan Empatik Eğilim Ölçeği ve Heppner ve Peterson (1982) tarafından geliştirilen, Türkçeye uyarlaması ise Şahin, Şahin ve Heppner (1993) tarafından yapılan Problem Çözme Ölçeği kullanılmıştır. Elde edilen verilere tanımlayıcı istatistik işlemler yapıldıktan sonra, Bağımsız Örneklem T-Testi, Tek Faktörlü Varyans Analizi ve Pearson Korelasyon Testi uygulanmıştır. Araştırma sonucunda; Judocuların empatik eğilim düzeyi puanlarına baktığımızda ise, değişkenlerin hiçbirinde anlamlı bir farklılık bulunmamıştır (P>0.05). Judocuların cinsiyet ve milli sporcu olma değişkeni üzerinden problem çözme becerileri puanlarına bakıldığında, cinsiyet değişkeni üzerinde anlamlı bir fark bulunmuştur (P<0.05). Yine yaş, eğitim durumu, antrenman yaşı ve antrenör ile çalışma yılına baktığımızda ise eğitim durumu değişkeninde anlamlı farklılık söz konusudur (P<0.05).

Anahtar Kelimeler: Judo, Empatik Eğilim, Problem Çözme

Abstract: In this study, the purpose of research is judo athletes investigation of empathic tendency and problem solving skills levels at Center of Olympic Preparation in Trabzon. The research group is constitutes of 60 judo athletes. As data collection tools, consisting, Empathic Tendency Scale that developed by Dökmen (1988). Problem Solving Scale developed by Heppner and Peterson (1982), and adapted to Turkish by Şahin, Şahin and Heppner (1993) was used. The data was analyzed using Descriptive Statistic, Independent Samples T-Test, One Way Anova and Pearson Correlation Test. As a result of this study, judo athletes empathic tendency was compare according to all of variables, its no found statistically significant all of variables (P>0.05). Also, problem solving skills was compared according to the gender and being a national team athlete. While it was founding statistically significant of gender(P<0.05), it wasn't found being a national team athlete(P>0.05). If we compare age, training background, year of training with a trainer and education background, While it was found statistically significant of education background(P<0.05), it wasn't found other variables (P>0.05).

Key Words: Judo, Empathic Tendency, Problem Solving

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INTRODUCTION

Communication is one of the most essential components of living together and it is not possible to imagine a world without it (Balçık 2000: 1-3). Communication is of critical importance in terms of interpersonal interaction of man as a social being that affects all fields of human life. It is a must to know people in order to communicate. At this point, the term "empathy" that we have often come across in recent years gains importance (Güleç, Doygun 2012: 1124-1129).

Empathy is a significant notion in psychiatry and psychology. Research studies on empathy have been conducted in both psychiatry and several fields of psychology especially in clinical and social psychology in the fields of developmental, counselling, school and communication psychology and a great deal of data have been gathered (Dökmen 2005: 152-154). Carl Rogers, who became famous in psychotherapy field for the skill to communicate empathetically, defines empathy as the process in which a person puts himself in another's place and understands the events from that person's perspectives, correctly interprets and feels that person's emotions and thoughts and conveys this situation to that person (Dökmen 2005: 339-341).

The origin of empathy is consciousness. The more open an individual is to another person's feelings, the more he can read that person's feelings. The fact that the person has no idea about his own feelings causes that person not to understand other people's feelings around him. People rarely put their feelings into words. Mostly, the key to perceive what other people feel is to be able to understand their tone of voice, mimics, gestures, facial expressions and similar nonverbal expressions (Goleman 1995: 126).

Thanks to showing empathy, a person gets the chance to become a trustworthy friend in another person's life. To be an empathic person requires to come into the other person's life without judging him. When empathy is used in communication properly and sensibly, the person who is shown empathy would feel more comfortable and express his own feelings deep inside, senses and make his interpretation of events more freely (Vincent 2002: 35-44).

Problem solving is defined as the process with cognitive and psychological dimensions that includes a series of attempts to eliminate problems occurring while reaching a definite goal (Oğuzkan 1989: 7-30).

Problem solving skill is what we do in times when we have a goal but don't know how to reach it. In addition, it is an enjoyable engagement that includes generating new ideas to solve the problem and developing strategies. Also, problem solving is a basic starting point to develop the first adaptation behaviours related to human creation. (Düzakın 2004). In certain times of his life, an individual faces lots of different types of

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problems either big or small and the reactions given to these problems vary from person to person. Many different people attempt to solve the same problem in different ways and while some are successful, some others are not. When the point in question is problem, it is not only the mathematical problems that come to our minds. Life requires the solution of a serious of problems. Problems come out when there are obstacles that prevent the individual from reaching his goal (Cüceloğlu 2004: 219-277). Problem solving skill is the state in which a person acquires the rules that will lead to the solution and makes use of them when necessary in case of a problem (Bilen 2006).

Judo, one of the oldest martial arts, is similar to wrestling in some points. Japanese Jigoro Kano formed the sport judo in 1882 by eliminating some techniques of Jiu-jiutsu, a traditional martial art, as these techniques give harm to people. Judo combat is a physical effort that includes one to one struggle, is noncyclical and has intervals and high levels of violence, in which two judo athletes, in accordance with the same goal, try to pin the opponent down to the ground or control him on the ground and apply various chokeholds or joint locks until submission (Hernandez-Garcia et al. 2009: 145-151).

Accordingly, in order to increase performance in sports and become successful, sports scientists should have the aim of understanding human behaviours. Also, we should help sportsmen to become individuals who can correctly interpret events occurring out of their own control and can interact and communicate with the people around; and with all these approaches, by emphasizing the notions ideal man, ideal sportsman, we should struggle to increase the awareness of sportsmen.

METHODS

The sample of the study consists of a total of 60 sportsmen, 24 female and 36 male, who are occupied with judo sport actively in Trabzon Olympic Preparation Centre. The data was analyzed using Descriptive Statistic, Independent Samples T-Test, One Way Anova and Pearson Correlation Test.

Materials

In order to measure their potential level of showing empathy in their daily life, a scale developed by Dökmen (1988) namely Empathic Tendency Scale was used. The scale is a likert type scale consisting of 20 items.

In the study, Problem Solving Scale developed by Heppner and Peterson (1982), and adapted to Turkish by Şahin, Şahin and Heppner (1993) was used. The scale is a 6 point likert scale consisting of 35 questions. Individuals answer each item considering how often they behave as in the item. Some of the items consist of positive expressions while some others are negative.

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RESULTS

Table 1. Demographic Information of The Sample Group

Variables	Sub categories	N	%	Total
Age	14-16	35	58,3	60-100
	17-19	20	33,3	
	20+	5	8,3	
Gender	Female	26	43,3	60-100
	Male	34	56,7	
Education Background	Secondary School	11	18,3	60-100
	High School	44	73,3	
	University	5	8,3	
Being a National Team Athlete	Yes	41	58,3	60-100
	No	19	31,7	
Training Background	1-4	17	28,3	60-100
	5-8	33	55,0	
	9+	10	16,7	
Year of training with a trainer	1-4	44	73,3	60-100
	5-8	14	23,3	
	9+	2	3,3	

As seen in Table 1, the age range of 58,3% of the athletes in the sample group of the study is between 14 and 16 while 8,3% of them are 20 and above. 43,3% of these athletes are female and 56,7% are male. %18,3 of the athletes are graduates of secondary school, 73,3% of them high school and 8,3% university. While %58,3 of the athletes are national team athletes, 31,7% of them are not. 28,3% of athletes have 1-4 years of training, 55,0% of them 5-8 years, 16,7% of them 9 year and above. When it comes to the year of training with a trainer, 73,3% of the athletes have been working with the same trainer for 1-4 year, 23,3% of them for 5-8 years, 3,3% of them 9 years and above.

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Table 2. T-Test Table of Empathic Tendency Levels of The Judo Athletes According to Being A National Team Athlete and Gender Variables

		N	M	SS	F	P
Being a national team athlete	Yes	41	65,93	7,811	,016	,101
	No	19	62,53	7,035		
Gender	Female	26	65,96	7,681	,004	,332
	Male	34	64,00	7,687		

Table 2 shows that no significant difference was found in the Judo athlete's Empathic Tendency Levels according to being national sportsman and gender variables (P>0.05).

Table 3. One-Way Analysis of Variance of The Judo Athletes' Empathic Tendency Levels According to Age, Education, Year of Training and Year of Training with A Trainer

		KT	Sd	KO	F	P
Age	Inter group	298,964	2	149,482	2,677	,077
	In-group	3182,686	57	55,837		
Educational Background	Inter group	60,055	2	30,027	,500	,609
	In-group	3421,595	57	60,028		
Year of Training	Inter group	66,721	2	33,361	,557	,576
	In-group	3414,929	57	59,911		
Year of Training with a trainer	Inter group	96,527	2	48,263	,813	,449
	In-group	3385,123	57	59,388		

Table 3 demonstrates that no significant difference was found in Judo athletes' Empathic Tendency Levels according to Age, Education, Year of Training and Year of Training with a trainer (P>0.05).

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Table 4. T-Test Results of The Judo Athletes' Problem Solving Skills According to Being A National Team Athlete and Gender Variables

		N	M	SS	F	P
Being a National Team Athlete	Yes	41	95,07	16,230	2,566	,427
	No	19	99,63	21,998		
Gender	Female	26	90,165	20,104	3,374	,034*
	Male	34	101,00	15,410		

Table 4 displays that while there is no significant difference in problem solving skills of the Judo athletes according to being a national team athlete (P>0.05), a significant difference was found according to gender variable (P<0.05).

Table 5. One-Way Analysis of Variance of The Judo Athletes' Problem Solving Skills According to Age, Education, Year of Training and Year of Training with A Trainer

		KT	Sd	KO	F	P
Age	Inter groups	477,612	2	238,806	,715	,494
	In-group	19039,371	57	334,024		
Education Background	Inter groups	4527,388	2	2263,694	8,608	,001*
	In-group	14989,595	57	262,975		
Year of Training	Inter groups	1074,915	2	537,457	1,661	,199
	In-group	18442,069	57	323,545		
Year of Training with a trainer	Inter groups	182,837	2	91,419	,270	,765
	In-group	19334,146	57	339,196		

As can be seen in Table 5, while there is no significant difference in problem solving skills according to age, year of training and year of training with a trainer (P>0.05), a significant difference was found according to educational background (P<0.05

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Table 6. Correlation Between Empathic Tendency and Problem Solving Skills of Judo Athletes

	N	Mean	SS	F
Empathic Tendency	60	64,85	7,682	,004
Problem Solving	60	96,52	18,188	

Table 6 shows that there is no relationship between empathic tendency and problem solving skills of Judo Athletes (P>0.01).

DISCUSSION and CONCLUSION

The study was conducted in order to investigate the empathic tendency levels and problem solving skills of judo athletes. The results suggest that no significant difference was found in empathic tendency levels of Judo athletes according to being a national team athlete and gender. Also, there was no significant difference in the athletes' empathic inclination levels according to age, educational background, year of training and year of training with a trainer.

In the study conducted by Güleç and Doygun (2012: 1124-1129), in which empathic tendency levels of 7th and 8th grade students were investigated according to different variables, it was found that no significant difference was found in empathic tendency according class, gender, parent education status and working status of parents.

Karabulut et al. (2014: 238-242), in their study on the investigation of empathic tendency levels of active football referees, found no significant difference according to gender variable. However, in the same study, a significant difference was found according to refereeship level and the year of refereeship.

No significant difference according to gender, age and department variables was found in the study carried out by Erkmen (2007) in which empathic tendency and leadership behaviour of Physical Training and Education faculty students were analysed.

In the study, while there is no significant difference in problem solving according to being a national team athlete, a significant difference was found according to gender variable. The average point of problem solving skills according to gender is 101, 00±15,410 in male athletes, it is 90,165±20,104 in female athletes. Accordingly, the average problem solving point of male athletes is higher compared to female judo athletes and a significant difference was found in problem solving skills for the benefit of male athletes. The reason underlying this situation can stem from the fact that female athletes approach events more sensitively and because of the nature of this sport, since it is based on combating and

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tests the endurance and physical limits, it can be expected that male athletes have higher problem solving skills than females.

In the study, it can be seen that while there is no significant difference in problem solving skills of the judo athletes according to age, year of training and year of training with a trainer, a significant difference was found according to educational background. Therefore, it can be inferred that when a person has higher educational background, he or she can have a wider perspective and interpret events from different viewpoints. That is, higher education level means that individuals can overcome problems easily and have better problem solving skills. That's why, this significant difference according to educational background is a meaningful one.

In his study with taekwondo trainers, Bezci (2010) reported that he found a significant difference according to gender variable, so problem solving skills of female taekwondo trainers is higher than male taekwondo trainers.

In their study conducted on university students, Şahin, Şahin and Heppner (1993: 379-383) investigated if there is a significant difference between female and male university students in terms of Problem Solving Inventory and its subdimensions with the effect of culture and as a result of the study, they found out that American males are more confident while Turkish males have more inclinations towards their problem. The inclination, compromise and personal control points of Turkish females and their total problem solving inventory points are found to be lower compared to American females. Accordingly, they reported that American females have better problem solving skills than Turkish females, and so they show more inclinations towards their problems and they have more powerful personal control. On the other hand, when Turkish males are compared with Turkish females, it was seen that although their points showed similarity, females have more confidence in problem solving. The reason underlying this finding is just because Turkish female students that continue their education are more positive and they are a selected group who are more self confident compared to other Turkish females.

In the study conducted on problem solving skills of Turkish Military Academy students, problem solving skill perception and problem solving attitudes of students were investigated according to class variable and no significant difference was found (Ferah 2000).

In the study, no relationship between empathic tendency and problem solving skills of Judo athletes was found. This finding indicates that empathic inclination and problem solving skills are not correlated with each other.

As a result, this study is on Judo, an individual sport, and so with other individual sports different findings can be obtained. If a variety of differ-

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ent psychological factors that are an important component to increase sports performance are applied to different branches, age groups and so on and necessary analyses are carried out, different results can be obtained.

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Example Table: Create the table in the following format according to the statistical analysis to be made (F / t or Variable / Group). Create it in descriptive statistics in the following format.

Table 1 indicates …….

Table 1. ……results.

Variable / Group

N

Xort.

Ss

F / t

p

……

…..

…..

…..

…..

…..

……

…..

…..

…..

*Meaningfulness Value

When Table 1 is analyzed, it is seen that …… (Interpretation).

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