



ISSN:1306-3111  
e-Journal of New World Sciences Academy  
2007, Volume: 2, Number: 3  
Article Number: B0003

**HEALTH SCIENCES**

**PHYSICAL EDUCATION AND SPORT**

Received: February 2007

Accepted: July 2007

© 2007 www.newwsa.com

**Cemali Çankaya**

University of Uludag

cankaya@uludag.edu.tr

Bursa-Turkiye

**THE EFFECT OF THE REDUCED NUMBER OF WEIGHT CLASSES ON THE  
PARTICIPATION AND MEDAL COLLECTION IN THE WORLD FREE WRESTLING  
CHAMPIONSHIPS ACROSS THE CONTINENTS**

**ABSTRACT**

The study was carried out with the aim of finding out if the reduced number of wrestling weight classes (from 10 classes to 8 classes in the 1996 Olympic games) has had any effect on the number of the countries which participated in the senior men world wrestling championships and the medal collection regarding the continents. Finally, the reduction of weigh classes has shown positive participation effect since it increased the participation rates of countries located on five continents in the senior men world free wrestling championships, but has different effects on medal collection rates in the championships. In the medal collection rates, negative effect on America, positive effect on Europe, and no effect on Africa and Australia observed.

**Keywords:** Wrestling, Continents, Medal, FILA, Olympic Games

**SERBEST GÜREŞTE SIKLETLERİN 10'DAN 7'YE İNDİRİLMESİNİN  
DÜNYA ŞAMPİYONALARINDA KAZANILAN MADALYALARIN  
KITALARA GÖRE DAĞILIMLARINA ETKİSİ**

**ÖZET**

Çalışma, güreş sıkletlerinin 10 sıkletten 7 sıklete indirilerek, büyük erkekler dünya güreş şampiyonalarında uygulanmasının, bu şampiyonalara katılan ülke sayısı ve madalyaların kıtalara göre dağılımlarına etkisinin olup olmadığını ortaya çıkarmak amacı ile yapıldı. Sonuç olarak sıkletlerin azaltılması, beş kıtada bulunan ülkeleri ve dolayısı ile kıtaları, büyükler serbest güreş dünya şampiyonalarına katılımlarında önemli ölçüde arttırarak olumlu yönde, madalyaların kıtalara göre dağılımlarında Amerika'yı olumsuz, Avrupa'yı da olumlu yönde etkilemiş, Afrika, Okyanusya ve Asya kıtalarında önemli bir etkileme yapmamıştır.

**Anahtar Kelimeler:** Güreş, Kıtalar, Madalya, FILA,  
Olimpiyat Oyunları



## 1. INTRODUCTION (GİRİŞ)

Wrestling which is the most simple and natural way of struggling without weapons among people has as an old and long history as human history [1]. It survived until today and its various styles have been performed in various tribes and regions with different aims since it was first applied [2]. Wrestling sport which entered into Olympics first in 776 B.C. is one of the sports people attach most importance today like in the past [3]. The First World Free Wrestling Championship was held in Helsinki/Finland in 1951. It is known that it has been held every year apart from Olympics until today [4].

Although different wrestling styles are observed in many countries in the world, mat wrestling performed in all national and international competitions and held under the umbrella of Federation Internationale Des Luttes Associees (FILA) are called universal wrestling [5]. Today, wrestling competition is held in free style for men and women and Greco-roman style only for men and under adults, youth, stars and kids categories and as Olympics, world and continental championships as well as national championships.

One of the reasons regarding why universal (mat) wrestling is more common than traditional wrestling types countries have is that wrestling rules prepared by FILA which are the common language and constitution of world wrestling are adopted by the whole world. Managing world wrestling, FILA have made some alterations in wrestling rules to develop wrestling sport and to make people benefit from this sport more. Wrestling rules are determined and applied by FILA. Member countries of FILA have to comply with these rules [6].

One of the most important of these rules having been changed is that universal wrestling organized first in 1996 Olympics and with 10 weight classes was reduced to 8 weight classes and at the end of 2001 season to 7 weight classes. World countries from five continents [7] started championships with 2 weight classes in 1904 and continued to their competition with 10 weight classes in 1969, 8 weight classes in 1996 and with 7 weight classes since the end of 2001 due to the fact that wrestling competitions take long time [8].

One of the ways to measure success in sports is to win a medal. The number and color of medals which countries and continents win in world wrestling championships is one of the factors demonstrating their success in wrestling sport. Gold medal is given to those who rank first among countries which are most successful as a team as well as wrestlers who are the most successful individually, silver medal is given to those who rank second and bronze medal is given to those who rank third (also those who rank 4<sup>th</sup> since the beginning of 2005).

Questions such as will the rank and number of continents winning medals in wrestling change due to this alteration made by managers of FILA which manages world wrestling? If so, which countries and continents will participate with more sportsmen? Which countries will win the medals? draw attention of world wrestling public. The interest of world public is one of the reasons why we study this issue.

According to 2002 data, there are 6 continents in the world and 231 countries on these continents. Of these countries, 194 are independent and 37 are still not dependent. There are totally 231 countries of which 43 out of 44 countries are in Europe, 48 are in Asia, 53 out of 58 in Africa, 35 out of 51 in America, 15 out of 30 in Oceania and 0 (zero) in Antarctica [9].

## 2. RESEARCH SIGNIFICATION (ÇALIŞMANIN ÖNEMİ)

The study was carried out with the aim of finding out whether the fact that wrestling weight classes which were 10 until 1996



Olympic games (1993, 1994 and 1995) were reduced to 7 weight classes from 2001 (2002-2003-2004) to 2005 olympic years has had any effect on the number of the countries which participated in the senior men world wrestling championships and the medal distribution according to the continents. Countries having participated to senior men world wrestling championship and medal distribution according to continents for three years before 1996 (1993, 1994, 1995) when weight scale alteration was made in universal wrestling which covers the period when 10 weight classes were applied and three years after 2001 when 7 weight classes were applied were examined and compared. The fact that there are not similar studies in this field, that there is not any resource for future studies, that weight classes being changed frequently make compliance of countries' teams with these classes difficult and that medal distributions may vary due to the fact that different antropometric characteristics of people from different continents are not considered are considered highly important.

### **3. METHOD (YÖNTEM)**

Data regarding the study was obtained through archive research, observation and researcher's examination of the place of event (by participating to Istanbul championship on 24<sup>th</sup> August 1994 and Tehran/Iran championship on 5<sup>th</sup> September 2002). Prior to 1996 Olympics, distribution of 90 medals for three years in 10 weight classes of which 30 are gold, 30 are silver and 30 are bronze according to continents and distribution of 63 medals for three years after 2001 in 7 weight classes of which 21 are gold, 21 are silver and 21 are bronze were determined. This information was conveyed in tables and the total comparison of 3 years prior to 1996 and three years after 2001 was made. Data collected were evaluated in computers with statistic programs and average percentage calculations. Our study was discussed among its own findings since there is not another study on this issue.

The study is limited to three years prior to 1996 when weight classes for senior men world wrestling championship were reduced from 10 to 8 namely, 1993, 1994, 1995 and three years after 2001 when seven weight scales started to be applied namely, 2002, 2003 and 2005 (since there was olympics in 2004 world championship was not held in this year). Our study is limited to countries having participated to the said world championship and continents they belong to which are America (South and North), Africa, Europe, Asia and Oceania. Since no state exists on Antarctica, this continent was not taken into evaluation. 194 independent countries in our world expressed according to 2002 resources were taken as a basis for the periods when 10 and 7 weight classes were applied so as to provide homogeneity. Increase or decrease in the number of countries in these years and countries which could not gain their independence were not included in the evaluations since the first is thought not to affect the participation to championship and medal distribution.

### **4. FINDINGS AND DISCUSSIONS (BULGULAR VE TARTIŞMALAR)**

As can be seen in the tables below, the average of three years in relation to participation to World Freestyle Wrestling Championship applied according to 10 weight classes in 1993-1994-1995 from Africa which has 53 countries is 1.7 countries, from America which has 35 countries is 3.7 countries, from Asia which has 48 countries is 9.3, from Europe which has 43 countries is 21 countries and from Oceania which has 15 countries is 1 country. In addition, the average of percentage distribution of continents' participation to the said



championships for three years is as Africa 3.2%, America 10.5%, Asia 19.4%, Europe 49.5%, Oceania 6.7%.

The average of medals for three years which sportmen ranking first, second and third in their weight classes acquired to their countries thus to their continents in World Freestyle Wrestling Championship in 1993, 1994 and 1995 is as follows: gold, silver and bronze medals of Africa and Oceania are zero (0). The average and percentage of gold medals America has won are 3.7 and 36.7 respectively, the average and percentage of silver medals are 1.33 and 13.3 respectively and the average and percentage of bronze medals are 2 and 20 respectively. In other words the average of medals in total is 7 and the percentage is 23.3. The average and percentage of gold medals Asia has won are 2.33 and 23.3 respectively, the average and percentage of silver medals are 4 and 40 respectively and the average and percentage of bronze medals are 4 and 40 respectively. In other words the average of medals in total is 10.33 and the percentage is 34.4 for Asia. The average and percentage of gold medals Europe has won are 4 and 40 respectively, the average and percentage of silver medals are 4.7 and 46.7 respectively and the average and percentage of bronze medals are 4 and 40 respectively. In other words the average of medals in total is 12.7 and the percentage is 42.2 for Europe.

Table 1. The number of countries from continents participating to world freestyle wrestling championships for males in 1993-1994-1995 when preliminary weight category was applied and the number of medals they won

(Tablo 1. On sıklet uygulamasının yapıldığı 1993-1994-1995 yıllarında büyük erkekler dünya serbest güreş şampiyonalarına kıtalardan katılan ülke ve kazandıkları madalya sayıları)

Continents	The Number of Countries Participating According to Years and Continents				Distribution of Medals Won According to Years and Continents							
	Weight Class	Total Country	Participatory Country		Gold-10		Silver-10		Bronze-10		Total-30	
			The number	%	The number	%	The number	%	The number	%	The number	%
Africa-1993	10	53	1	1,9	0	0	0	0	0	0	0	0
Africa-1994	10	53	3	5,7	0	0	0	0	0	0	0	0
Africa-1995	10	53	1	1,9	0	0	0	0	0	0	0	0
Total Average For Three Years	10	53	1,7	3,2	0	0	0	0	0	0	0	0
America-1993	10	35	3	8,6	5	50	2	20	2	20	9	30
America-1994	10	35	4	11,4	2	20	0	0	0	0	2	6,7
America-1995	10	35	4	11,4	4	40	2	20	4	40	10	33,3
Total Average For Three Years	10	35	3,7	10,5	3,7	36,7	1,33	13,3	2	20	7	23,3
Asia-1993	10	48	6	12,5	3	30	3	30	4	40	10	33,3
Asia-1994	10	48	10	20,8	3	30	5	50	5	50	13	43,3
Asia-1995	10	48	12	25,0	1	10	4	40	3	30	8	26,7
Total Average For Three Years	10	48	9,3	19,4	2,33	23,3	4	40	4	40	10,33	34,4
Europe-1993	10	43	10	25,3	2	20	5	50	4	40	11	36,7
Europe-1994	10	26	60,5	10	5	50	5	50	5	50	15	50
Europe-1995	43	27	62,8	10	5	50	4	40	3	30	12	40
Total Average For Three Years	43	21	49,5	10	4	40	4,7	46,7	4	40	12,7	42,2
Oceania-1993	15	0	0	10	0	0	0	0	0	0	0	0
Oceania-1994	15	1	6,7	10	0	0	0	0	0	0	0	0
Oceania-1995	15	2	13,3	10	0	0	0	0	0	0	0	0
Total Average For Three Years	15	1	6,7	10	0	0	0	0	0	0	0	0



As can be seen in Table 1, whether reduction of weight classes from 10 to 7 has an effect upon the participation of countries to senior men Freestyle world championship and the type and number of medals they win can be clearly understood. As regards Africa, there is an average 0.6 and 12% increase for three years in the period with 7 weight classes compared to the period with 10 weight classes and there is any change in both periods regarding medal distribution.

As regards America, there is an average 3.63 and 10.5% increase for three years in the period with 7 weight classes compared to the period with 10 weight classes and there is an average 0.37 and 31.9% decrease for gold medals for three years, an average 0.37 and 10.5% increase for silver medals and an average 1.67 and 19.89% decrease for bronze medals. In other words, there is an average 4.37 and 10.1% decrease in medals totally.

As regards Asia, there is an average 3 and 6.3% increase for three years in the period with 7 weight classes compared to the period with 10 weight classes and there is an average 0.63 decrease and 1 % increase for gold medals for three years, an average 1.7 and 6.7% decrease for silver medals and an average 1 decrease and 2.9% increase for bronze medals. In other words, there is an average 3.33 and 1.1% decrease in medals totally.

As regards Europe, there is an average 2.3 and 4.8% increase for three years in the period with 7 weight classes compared to the period with 10 weight classes and there is an average 1 and 31.4% increase for gold medals for three years, an average 1.7 and 3.8% decrease for silver medals and an average 0.3 decrease and 12.4% increase for bronze medals. In other words, there is an average 1 decrease and 14.4% increase in medals totally.

As regards Oceania, the average for three years is 0.33 and 2.2% in relation to participation in the period with 7 weight classes compared to 10 weight classes and the reduction of weight classes has not had any effect upon medal distribution.

According to this, the reduction of weight classes has had a positive effect upon America with an average of 3.63 and 10.5% increase most and upon Oceania with an average of 0.33 and 2.2% increase least.



Table 2. The number of countries from continents participating to world freestyle wrestling championships for males in 2002-2003-2005 when seven weight categories were applied and the number of medals they won

(Tablo 2. Yedi sıklet uygulamasının yapıldığı 2002-2003-2005 yıllarında büyük erkekler dünya serbest güreş şampiyonalarına kıtalardan katılan ülke ve kazandıkları madalya sayıları)

Continents	The Number of Countries Participating According to Years and Continents				Distribution of Medals Won According to Years and Continents							
	Weight Class	Total	Participant		Gold-7		Silver-7		Bronze-7		Total:21	
			The number	%	The number	%	The number	%	The number	%	The number	%
Africa-2002	7	53	2	3,8	0	0	0	0	0	0	0	0
Africa-2003	7	53	3	5,7	0	0	0	0	0	0	0	0
Africa-2005	7	53	2	3,8	0	0	0	0	0	0	0	0
Total Average for Three Years	21	53	2,3	4,4	0	0	0	0	0	0	0	0
America-2002	7	35	5	14,3	1	14,3	2	28,6	0	0	3	42,9
America-2003	7	35	7	20,0	0	0	3	42,9	0	0	3	42,9
America-2005	7	35	10	28,6	0	0	0	0	1	0,33	1	14,3
Total Average for Three Years	21	35	7,33	21,0	0,33	4,8	1,7	23,8	0,33	0,11	2,33	11,1
Asia-2002	7	48	11	22,9	1	14,3	3	42,9	3	42,9	7	33,3
Asia-2003	7	48	11	22,9	2	28,6	1	14,3	4	57,1	7	33,3
Asia-2005	7	48	15	31,3	2	28,6	3	42,9	2	28,6	7	33,3
Total Average for Three Years	21	48	12,3	25,7	1,7	23,8	2,3	33,4	3	42,9	7	33,3
Europa-2002	7	43	19	44,2	5	71,4	2	28,6	4	57,1	11	52,4
Europa-2003	7	43	28	65,1	5	71,4	3	42,9	3	42,9	11	52,4
Europa-2005	7	43	23	53,5	5	71,4	4	57,1	4	57,1	13	61,9
Total Average for Three Years	7	43	23,3	54,3	5	71,4	3	42,9	3,7	52,4	11,7	55,6
Oceania-2002	7	15	0	0	0	0	0	0	0	0	0	0
Oceania-2003	7	15	2	13,3	0	0	0	0	0	0	0	0
Oceania-2005	7	15	2	13,3	0	0	0	0	0	0	0	0
Total Average for Three Years	21	15	1,33	8,9	0	0	0	0	0	0	0	0



Table 3. The number of countries from continents participating to world freestyle wrestling championships for males which are organized every three years with 10 and 7 weight categories and the differences between distribution averages of medals

(Tablo 3. On ve 7 sıklıetli üçer yıllık dönemlerde yapılan büyük erkekler serbest güreş dünya şampiyonalarına kıtalardan katılan ülke sayıları ve madalya dağılım ortalamalarının farkları)

CONTINENTS	*Period	Total	Participant		Gold		Silver		Bronze		Total-30	
	*Weight Classes	Country	The number	%	The number	%	The number	%	The number	%	The number	%
Africa	10	53	1,7	3,2	0	0	0	0	0	0	0	0
Africa	7	53	2,3	4,4	0	0	0	0	0	0	0	0
Period Difference		0	-0,6	-1,2	0	0	0	0	0	0	0	0
America	10	35	3,7	10,5	3,7	36,7	1,33	13,3	2	20	7	23,3
America	7	35	7,33	21,0	0,33	4,8	1,7	23,8	0,33	0,11	2,33	11,1
Period Difference		0	-3,7	-10,5	3,37	31,9	-0,37	-10,5	1,67	19,89	4,37	10,1
Asia	10	48	9,3	19,4	2,33	23,3	4	40	4	40	10,33	34,4
Asia	7	48	12,3	25,7	1,7	23,8	2,3	33,3	3	42,9	7	33,3
Period Difference		0	-3	-6,3	0,63	-1	1,7	6,7	1	-2,9	3,33	1,1
Europe	10	43	21	49,5	4	40	4,7	46,7	4	40	12,7	42,3
Europe	7	43	23,3	54,3	5	71,2	3	42,9	3,7	52,4	11,7	55,6
Period Difference		0	-2,3	-4,8	-1	-31,4	1,7	3,8	0,3	-12,4	1	-14,4
Oceania	10	15	1	6,7	0	0	0	0	0	0	0	0
Oceania	7	15	1,33	8,9	0	0	0	0	0	0	0	0
Period Difference		0	-0,33	-2,2	0	0	0	0	0	0	0	0

\*Period weight classes mentioned in the table refer to championships held in the period with 10 weight classes in (1992-1993-1994) and the period with 7 weight classes in (2002-2003-2005).

Table 4. Types and percentage distribution of medals continents having won in world freestyle wrestling championships for males

(Tablo 4. Büyük erkekler dünya serbest güreş şampiyonalarında kıtaların kazandıkları madalya türleri ve yüzde dağılımları)

Years/ Continents	Acquired Medal Distributions (3 Years)				Total Medals % Values			
	Gold	Silver	Bronze	Total	Gold	Silver	Bronze	Total
1993-1994-1995 Averages	10	10	10	30	0%	0%	0%	0%
Africa	0	0	0	0	0%	0%	0%	0%
America	3,7	1,33	2	7	36,7%	13,3%	20%	23,3%
Asia	2,33	4	4	10,33	23,3%	40%	40%	34,4%
Europe	4	4,7	4	12,7	40%	46,7%	40%	42,3%
Oceania	0	0	0	0	0%	0%	0%	0%
Total Average for Three Years	10	10	10	30	100%	100%	100%	100%
Years/ Continents	Acquired Medal Distributions (3 Years)				Total Medals Values %			
	Gold	Silver	Bronze	Total	Gold	Silver	Bronze	Total
2002-2003-2005 Averages	7	7	7	21	0%	0%	0%	0%
Africa	0	0	0	0	0%	0%	0%	0%
America	0,33	1,7	0,33	2,33	4,7%	23,8%	4,7%	11,1%
Asia	1,7	2,3	3	7	24,1%	33,3%	42,9%	33,3%
Europe	5	3	3,7	11,7	71,2%	42,9%	52,4%	55,6%
Oceania	0	0	0	0	0%	0%	0%	0%
Total Average for Three Years	7	7	7	21	100%	100%	100%	100%



Table 2, 3 and 4 indicate whether the reduction of weight classes from 10 to 7 has had any effect upon types and the number of medals which countries having participated to senior men world freestyle wrestling championship have won. Since Africa and Oceania could not win any medals in both championships with 10 weight classes and 7 weight classes, the reduction of weight classes has not had any effect upon their medal distribution. Although America won 23.3% of all medals with an average of 7 medals each year in championship with 10 weight classes, it has won 11.1% of all medals with an average of 2.33 medals each year in the period with 7 weight classes. Asia won 34.4% of all medals with an average of 10.33 medals each year in championship with 10 weight classes and it has won 33.3% of all medals with an average of 7 medals each year in the period with 7 weight classes. Europe won 42.3% of all medals with an average of 12.7 medals each year in championship with 10 weight classes and it has won 55.6% of all medals with an average of 11.7 medals each year in the period with 7 weight classes.

##### 5. CONCLUSION AND SUGGESTIONS (SONUÇ VE ÖNERİLER)

Data obtained by us indicate that the reduction of 10 wrestling weight classes applied in wrestling to 7 has not had any negative effect upon the participation of 194 countries from five continents to senior men world freestyle wrestling championship. On the contrary, it was determined that the participation of Africa which was 3.25 in the period with 10 weight classes increased to 4.4% after it was reduced to 7, the participation of America increased from 10.5% to 21.0%, the participation of Asia increased from 19.4% to 25.7%, the participation of Europe increased from 21% to 23.3% and the participation of Oceania increased from 1% to 1.33%. It was observed that the reduction of weight classes in freestyle wrestling has had a positive effect upon the participation of countries from continents to senior men world freestyle wrestling championships (Table 3). As weight classes reduce in senior men world freestyle wrestling championships, the participation of countries from continents increase. It is seen that countries' interest in these championships increase.

As regards medal distribution, the reduction of weight classes affected Europe most with an average of 1 and 31.4% increase and America least with an average of 3.37 and 31.9% decrease in relation to gold medal, America most with an average of 0.37 and 10.5% increase and Asia least with an average of 1.7 and 6.7% decrease in relation to silver medal and Europe most with an average of 0.3 and 12.4% increase and America least with an average of 1.67 and 19.89% decrease in relation to bronze medal. When general total of medal distribution is considered, although total average is 1, Europe is affected positively most with 14.4% increase and America is negatively affected with an average of 4.37 and 10.1% decrease in medal distribution (Table 3).

The change in weight classes has negatively affected America by decreasing its 23.3% of all medals and 7 medals when weight classes were 10 to 11.1% and 2.33 medals in the period with 7 weight classes and Asia by decreasing its 34.4% of all medals and 10.33 medals when weight classes were 10 to 33.3% and 7 medals in the period with 7 weight classes and it positively affected Europe by increasing its 42.3% of all medals and 12.7 medals when weight classes were 10 to 55.65 and 11.7 medals in the period with 7 weight classes (Table 4).

In the period with 10 weight classes, countries of Europe rank first with 12.7 medals in average, Asia ranks second with 10.33 medals and America ranks third with 7 medals. The averages of medals which continents have won in the period with 7 weight classes are as



follows: Europe ranks first with 11.7 medals, Asia ranks second with 7 medals and America ranks third with 2.33 medals.

In conclusion, the reduction of weight classes from 10 to 7 has not affected the total medal ranking of countries in both periods. The reduction of weight classes has positively affected countries thus five continents in relation to participation to world freestyle wrestling championship and has affected America negatively and Europe positively in relation to medal distribution and has not had a considerable effect upon Africa, Oceania and Asia. Considerable investments should be made for wrestling education in underdeveloped and developing countries and continents so as to develop wrestling in continents and in the world, to enable its spread and to provide participation of more countries to championships. The number of weight classes should be increased to ten as previously and its number should not be changed frequently. The number of weight classes should be distributed among light, medium and heavy in a stable way by considering antropometric characteristics of continents [10].

#### REFERENCES (KAYNAKLAR)

1. Başaran, M., (1989). Serbest ve Grekoromen Güreş. Ankara: T.C. Gençlik ve Spor Genel Müdürlüğü Yayın No: 84, Uzman Matbaacılık.
2. Petrof, R., Dobrev, D., Berberov, N., and Makaveev, O., (1977). Svobodna i klasiçeska Borba (Serbest ve Grekoromen Güreş). Sofya: Meditsina i fizkultura.
3. Petkov, K., and Angelov, G., (1978). Metodiçesko Rıkovodstvo po borba (Güreşin Metodik Yönetmeliği). Sofya: Meditsina i fizkultura.
4. İğrek, M.M., ve Karataş, A., (2000). Son Yıllarda Türk Güreşi. İstanbul: Step ajans Matbaacılık Reklamcılık hizmetleri.
5. Kuter, M., and Öztürk, F., (2000). Sporda Kısaltmalar Sözlüğü. Bursa: Kuter Yayıncılık, 1. Baskı.
6. Eryiğit, G., (1996). Türk ve Dünya Güreşi 1896-1996. Ankara: Türk Güreş vakfı yayını.
7. Lukanov, A., Bojinov, N., and Dimitrov, S., (2002). Stranite v Sveta, Spravoçnik, İzdatelstvo: (Dünyadaki Ülkeler). Sofya: Gloriya Palas.
8. Şit, B., (2002). FILA Kilolarla Yine Oynadı. Güreşimiz Dergisi: Topkapı-İstanbul, Sayı:4, ss:54.
9. Atasoy, E., (2004). Kıtalar ve Ülkeler Coğrafyası. Bursa: Ezgi Kitapevi.
10. Kış, T., and Yıldırım, E., (1975). Antrenör Eğitim Kursu. Ankara: Türkiye Güreş Federasyonu Yayınları.