

Examination of psychological endurance and self-esteem levels of arm wrestling athletes according to different variables

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ABSTRACT

The aim of this study is to examine the psychological endurance and self-esteem levels of the arm wrestling athletes according to different variables. The study group of the research consists of 200 males and 66 females; a total of 266 people, who are between 18 and 45 years old and participated in Turkey arm-wrestling championship in 2018. In this study, as the data collection tools the self-esteem scale, developed by Rosenberg (1965) and adapted to Turkish by Çuhadaroğlu (1986) and the psychological endurance scale in adults which was developed by Friberg et al. (2005) and adapted to Turkish by Basim and Cetin (2011) were used. As a result of the normality test, non-parametric tests were used since the p values obtained for self-esteem level and psychological endurance were less than 0.05. Statistical Package for Social Sciences (SPSS) 17.0 package program was used for the analysis of the obtained data. In the analysis of the data; Mann-Whitney U Test was used in paired groups and Kruskal Wallis Tests were used in multiple groups. Pairwise Comparison Test was used to determine the differences between groups. The significance level was accepted as $p < 0.05$. As a result, it is concluded that there is a statistically significant difference in psychological endurance subscales in favor of 26-29 age group, there is a statistically significant difference in the social competence subscale in favor of the age group 35 and above, there is a significant difference in favor of primary school in the structural style subscale of the psychological endurance according to the educational level of the mother, there is also statistically significant difference in the perception of future, family harmony, self-perception, social competence and total endurance in favor of primary school, in the social resources subscales, it is concluded that there is a statistically significant difference in favor of secondary school, there is a statistically significant difference in favor of 501-1000 tl according to income level variable, when we look at the average of psychological endurance subscales according to income level variable, there is a statistically significant difference in favor of 501-1000 tl in self-perception subscale. However, it is concluded that there is no statistically significant difference in the self-esteem and psychological endurance subscales of the arm wrestling athletes according to gender, marital status, father's educational level, duration of sports, who was raised by and the interest variable in childhood.

Keywords: Arm wrestling, psychological endurance, self-esteem, Turkey championship.

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INTRODUCTION

Wrestling economic and political wars in the world put pressure on people. At the same time, the ever-changing living conditions and the migration of societies from rural areas to cities may cause them to feel this pressure more. When we consider all the elements in other areas of life (sporting activities, social activities, etc.) that affect

human life, we can accept that there are many negative conditions that affect human psychology. These various pressures on people can force them psychologically and influence their decisions and performances.

The ability to stand strong and overcome the difficulties, uncertainties and negative events that may be

encountered in our daily life at any moment is an important weapon for the individual. Therefore, it is possible to say that individuals who have psychological endurance in social life and especially in business life are more successful in their jobs and are happier and more peaceful in their lives (Diener, 2000; Buss, 2000).

In addition to dealing with physical difficulties, athletes may also face mental challenges and obstacles in order to achieve success in sports. In order to be able to struggle with difficulties, it is undoubtedly important for the athletes to accept their personalities and selves, and to be satisfied with their selves, as well as their psychological endurance. In the light of this information, this study aimed to show how self-esteem and psychological endurance levels of arm wrestling athletes are shaped according to different demographic characteristics.

Theoretical framework

Today, in the field of positive psychology, it has been observed that researches are focused on some subjects such as hope, happiness, optimism, forgiveness, well-being, subjective well-being (Gable and Haidt, 2005). One of these subjects is psychological endurance. Psychological endurance has been defined as a phenomenon that is perceived and learned and also involves a developmental process when faced with facts (Masten et al., 1990). Also Luthans has defined psychological endurance as the ability of a person to cope with many negative situations such as obstacle and uncertainty and to achieve success in the end (Luthans et al., 2006).

Friborg et al. (2005) stated that individual competence, social competence, family adaptation, social resources and structural styles should be expressed in explaining psychological endurance. When explaining these 5 dimensions, Friborg et al. defined individual competence as self-confidence, self-sufficiency, self-love, hope for the future, and realistic orientation to life. In this definition, Friborg et al. who evaluated individual competence as a two-dimensional structure; one is self-perception and the other one is future perception of the individual, expressed social competence as an individual's social adaptation, extroversion and desire to engage in social activities. Friborg, who explained family harmony as an individual's cooperation with the family and the support she/he received from her/his family, explained the social resources as support she/he received from her close friends and relatives. Finally, they defined the structural style as the ability of an individual to maintain, plan and organize their daily work, and they stated that these five dimensions form the psychological endurance of the individual.

While psychological endurance has an important place in human life, we can assume that the self-esteem of individuals who resist under pressure and stress will

develop positively. Self-esteem is an important part of personality and it is one of the most important indicators of personality development. Accepting self-esteem as an important dimension of personality and a positive personality trait, Copersmith defined it as an individual's degree of perceiving himself as capable, important, successful and valuable. Although self-esteem is explained in many different ways in different sources, it is basically defined in two ways as high self-esteem and low self-esteem (Coopersmith, 1967).

Kaya and Saçkes (2005) defined high self-esteem as finding ourselves and our inner world valuable. On the other hand, Wells defined an individual with low self-esteem as someone who has "weak self-confidence" (Wells and Marwell, 1976). Wells stated that those who have low self-esteem are dependent and bored than others, and are not researchers and creatives.

Psychological endurance is a personality trait that reduces the negative effects of stress and prevents tension. Thus, individuals with a high level of psychological endurance are more engaged in daily activities and work, keep their lives under control, and see unexpected changes as opportunities for improvement. It is emphasized that these individuals have a structure that is internally controlled, have problem solving skills, have good interpersonal communication, have high self-esteem, have a positive self-design, never give up when face with difficulties, always struggle, have a self-developing and empathetic structure. In individuals with low endurance levels, there is resistance to alienation, external focus of control and change (Gürkan, 2006). The aim of this study is to examine the psychological endurance and self-esteem levels of arm wrestling athletes according to different variables.

METHODOLOGY

Aim of the research

The aim of this study is to examine the psychological endurance and self-esteem levels of arm –wrestling athletes who participated in Turkey championship.

For this purpose, the following question is sought answer:

- Is there a significant difference between endurance and self-esteem levels of arm-wrestling athletes who participated in Turkey championship according to different variables?

Model of the research

This research is a descriptive type based on relational model. In this research, survey methods and techniques were used. Survey method is the first step in all branches

of science. The purpose of the survey method is to explain and describe the situation of the person or group, also to identify, illuminate and introduce the characteristics of the individual who belong only to the research group. However, the qualifications seen in a selected individual or group and thought to belong to that group may be the same for other groups (Kaptan, 1998).

Survey method is applied with interview, survey, observation and test techniques. Especially survey and interview techniques are among the most preferred in the researches (Şen, 2005).

Limitations of the research

This study is limited to 266 people (200 males and 66 females) who participated in Turkey arm-wrestling championship in 2018.

MATERIALS AND METHODS

Study group

The study group is made up of researchers who attended the Turkey arm wrestling championship in 2018; 200 men and 66 women between 18-45 years which makes up a total of 266 athletes.

Table 1. Results of normality test.

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Psychological endurance	.072	266	.002	.960	266	.000
Self-esteem	.085	266	.000	.969	266	.000
a. Lilliefors Significance Correction						
	Cronbach's alpha					
Self-esteem	.760					
Structural style	.745					
Future perception	.746					
Family harmony	.727					
Self-perception	.719					
Social competence	.728					
psychological endurance	.892					

FINDINGS

When we looked at the sub-dimensions of psychological endurance in structural style, family harmony, self-perception and social resources, there was significant difference in favor of 26-29 age group among 26-29, 35 and older, 22-25, 30-34 and 18-21 age groups ($p < 0.05$)

Data collection

In this study, to collect data on psychological endurance Psychological Endurance Scale for Adults, consisting of 33 items and six dimensions (structural style, future perception, family harmony, self-perception, social competence, social resources) and which was developed by Friberg et al. (2003) and adapted to Turkish by Basim and Cetin (2011) was applied. Also in order to collect data about self-esteem levels, the 10-item Rosenberg Self-Esteem Scale which was developed by Rosenberg (1965) and adapted to Turkish by Çuhadaroğlu (1986) was applied. In addition, the Personal Information Form developed by the researcher was used to obtain information about the various characteristics of the students.

Analysis of data

As a result of the normality test, non-parametric tests were used since the p-values obtained for self-esteem and psychological endurance level were less than 0.05 (Table 1). Statistical Package for Social Sciences (SPSS) 17.0 package program was used for the analysis of the obtained data. Mann-Whitney U in paired groups, Kruskal Wallis Test in three and above groups and Pairwise Comparison test was used to determine the significant differences among the groups in the result of Kruskal Wallis Test.

(Table 2).

When we looked at the sub-dimension of social competence, there was a statistically significant difference in favor of the 35 and older age group, among 35 and older, 22-25, 26-29, 30-34 and 18-21 age groups ($p < 0.05$) (Table 2).

There was no statistically significant difference in the

Table 2. Kruskal Wallis test results of Self-esteem and psychological endurance according to age.

	Age	N	M	X ²	SD	p	Differences
self-esteem	18-21	164	30.50	2.843	4	.584	
	22-25	48	30.91				
	26-29	21	32.23				
	30-34	11	30.81				
	35+	22	32.22				
Structural style	18-21	164	14.11	16.780	4	.002	18-21, 22-25, 26-29, 35
	22-25	48	15.56				
	26-29	21	16.66				
	30-34	11	15.27				
	35+	22	15.81				
Future perception	18-21	164	14.40	8.342	4	.080	
	22-25	48	15.06				
	26-29	21	16.42				
	30-34	11	15.27				
	35 +	22	14.82				
Family harmony	18-21	164	21.60	14.271	4	.006	18-21, 22-25 26-29, 35+
	22-25	48	23.35				
	26-29	21	24.76				
	30-34	11	22.00				
	35 +	22	24.68				
Self-perception	18-21	164	21.74	12.070	4	.017	18-21, 22-25, 26-29
	22-25	48	23.75				
	26-29	21	24.66				
	30-34	11	23.45				
	35 +	22	23.81				
Social competence	18-21	164	21.46	14.296	4	.006	18-21, 22-25 35+
	22-25	48	23.75				
	26-29	21	23.66				
	30-34	11	22.18				
	35 +	22	24.18				
Social resources	18-21	164	25.21	10.435	4	.034	18-21, 22-25 26-29
	22-25	48	27.52				
	26-29	21	28.19				
	30-34	11	27.27				
	35 +	22	27.63				
Psychological endurance	18-21	164	118.55	15.015	4	.005	18-21, 22-25, 26-29, 35+
	22-25	48	129.00				
	26-29	21	134.38				
	30-34	11	125.45				
	35 +	22	131.81				
	Total	266					

self-esteem and psychological endurance sub-scales of arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to gender (Table 3).

There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to the marital status (Table 4).

When we looked at the sub-dimensions of psychological endurance according to the mother's education level, there was a significant difference in structural style sub-dimension among primary, secondary, high school and bachelor's degree groups in favor of primary school ($p < 0.05$) (Table 5). There was a statistically significant difference in favor of primary school in terms of future perception, family harmony, self-perception, social competence and total endurance ($p < 0.05$). Also there was a statistically significant difference in social resources sub-dimension in favor of secondary school ($p < 0.05$).

There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to the father's education level (Table 6).

When we looked at the average self-esteem levels

according to the income level variable, there was a statistically significant difference among 501-1000, 1001-1500 and 2000 TL and above income groups in favor of 501-1000 TL ($p < 0.05$) (Table 7).

When we looked at the average psychological endurance subscales according to income level, a statistically significant difference was found among 501-1000, 1001-1500 and 2000 tl and above income groups in favor of 501-1000 tl in the self-perception subscale ($p < 0.005$) (Table 7)

There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to the duration of sports (Table 8).

There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to the variable of who was raised by in childhood (Table 9).

There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to the interest in childhood (Table 10).

Table 3. Mann-Whitney U results of self-esteem and psychological endurance according to gender.

	Gender	N	M	S.O	U	z	p																																																																																					
Self-esteem	Male	200	30.68	26163.00	6063.000	-.993	.321																																																																																					
	Female	66	31.42	9348.00				Structural style	Male	200	14.57	25906.50	5806.500	-1.471	.141	Female	66	15.36	9604.50	Future perception	Male	200	14.73	26192.50	6092.500	-.940	.347	Female	66	15.10	9318.50	Family harmony	Male	200	22.17	25714.50	5614.500	-1.822	.068	Female	66	23.27	9796.50	Self-perception	Male	200	22.30	25854.50	5754.500	-1.563	.118	Female	66	23.42	9656.50	Social competence	Male	200	22.01	25804.00	5704.000	-1.657	.098	Female	66	23.19	9707.00	Social resources	Male	200	25.82	25789.50	5689.500	-1.683	.092	Female	66	27.15	9721.50	Psychological endurance	Male	200	121.60	25706.50	5606.500	-1.833	.067	Female	66	127.51	9804.50	Total
Structural style	Male	200	14.57	25906.50	5806.500	-1.471	.141																																																																																					
	Female	66	15.36	9604.50				Future perception	Male	200	14.73	26192.50	6092.500	-.940	.347	Female	66	15.10	9318.50	Family harmony	Male	200	22.17	25714.50	5614.500	-1.822	.068	Female	66	23.27	9796.50	Self-perception	Male	200	22.30	25854.50	5754.500	-1.563	.118	Female	66	23.42	9656.50	Social competence	Male	200	22.01	25804.00	5704.000	-1.657	.098	Female	66	23.19	9707.00	Social resources	Male	200	25.82	25789.50	5689.500	-1.683	.092	Female	66	27.15	9721.50	Psychological endurance	Male	200	121.60	25706.50	5606.500	-1.833	.067	Female	66	127.51	9804.50		Total		266									
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Table 4. Mann-Whitney U results of self-esteem and psychological endurance according to marital status.

	Marital status	N	M	S.o	U	z	p																																																																																				
Self-esteem	Married	38	31.15	5139.50	4265.500	-.152	.879																																																																																				
	Single	228	30.82	30371.50				Structural style	Married	38	15.10	5396.00	4009.000	-.739	.460	Single	228	14.71	30115.00	Future perception	Married	38	15.18	5401.50	4003.500	-.751	.453	Single	228	14.76	30109.50	Family harmony	Married	38	22.15	4844.50	4103.500	-.522	.602	Single	228	22.49	30666.50	Self-perception	Married	38	22.94	5263.00	4142.000	-.434	.665	Single	228	22.51	30248.00	Social competence	Married	38	22.63	5213.00	4192.000	-.320	.749	Single	228	22.25	30298.00	Social resources	Married	38	25.73	4833.00	4092.000	-.547	.584	Single	228	26.22	30678.00	Psychological endurance	Married	38	123.76	5113.50	4291.500	-.092	.926	Single	228	122.95	30397.50
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Table 5. Kruskal Wallis Test results of self-esteem and psychological endurance according to mother's education level.

	Mother's education level	N	M	X ²	SD	p	Differences
Self-esteem	Primary School	103	31.66	8.004	4	.091	
	Secondary School	72	31.41				
	High School	54	29.40				
	Bachelor	20	28.75				
	Master Degree	17	30.82				
Structural style	Primary School	103	15.12	12.873	4	.012	
	Secondary School	72	15.59				
	High School	54	13.66				
	Bachelor	20	13.70				
	Master Degree	17	13.82				
Future perception	Primary School	103	15.30	10.366	4	.035	High school - Primary school
	Secondary School	72	15.43				
	High School	54	13.70				High school - secondary school
	Bachelor	20	13.80				
	Master Degree	17	14.11				
Family harmony	Primary School	103	22.98	14.779	4	.005	High school - Primary school
	Secondary School	72	23.40				
	High School	54	20.81				High school - secondary school
	Bachelor	20	21.30				
	Master Degree	17	21.64				

Table 5. Continues.

Self-perception	Primary School	103	23.22	14.180	4	.007	High school - Primary school
	Secondary School	72	23.58				
	High School	54	20.59				
	Bachelor	20	22.00				
	Master Degree	17	21.41				
Social competence	Primary School	103	22.67	14.634	4	.006	High school - Primary school
	Secondary School	72	23.37				
	High School	54	20.31				
	Bachelor	20	22.10				
	Master Degree	17	22.05				
Social resources	Primary School	103	26.62	10.798	4	.029	High school - secondary school
	Secondary School	72	27.20				
	High School	54	24.68				
	Bachelor	20	24.50				
	Master Degree	17	5.47				
Psychological Endurance	Primary School	103	125.93	16.625	4	.002	High school - Primary school
	Secondary School	72	128.59				
	High School	54	113.77				
	Bachelor	20	117.40				
	Master Degree	17	118.52				
	Total	266					

Table 6. Kruskal Wallis test results of self-esteem and psychological endurance according to father's education level.

	Father's education level	N	M	X ²	SD	p
Self-esteem	Primary School	77	31.77	5.749	4	.219
	Secondary School	71	30.11			
	High School	59	29.76			
	Bachelor	35	31.68			
Structural style	Master Degree	24	31.70	3.611	4	.461
	Primary School	77	15.25			
	Secondary School	71	14.19			
	High School	59	14.83			
	Bachelor	35	14.34			
Future perception	Master Degree	24	15.33	7.316	4	.120
	Primary School	77	15.49			
	Secondary School	71	13.94			
	High School	59	14.86			
	Bachelor	35	15.00			
Family harmony	Master Degree	24	14.91	5.589	4	.232
	Primary School	77	22.81			
	Secondary School	71	21.45			
	High School	59	22.28			
	Bachelor	35	22.85			
	Master Degree	24	23.95			

Table 6. Continues.

Self perception	Primary School	77	23.58	8.512	4	.075
	Secondary School	71	21.23			
	High School	59	22.54			
	Bachelor	35	22.74			
	Master Degree	24	23.16			
Social competence	Primary School	77	22.70	6.382	4	.172
	Secondary School	71	21.54			
	High School	59	22.22			
	Bachelor	35	23.66			
	Master Degree	24	22.30			
Social resources	Primary School	77	26.75	8.808	4	.066
	Secondary School	71	24.84			
	High School	59	25.79			
	Bachelor	35	26.31			
	Master Degree	24	28.75			
Psychological endurance	Primary School	77	126.61	7.300	4	.121
	Secondary School	71	117.22			
	High School	59	122.54			
	Bachelor	35	123.42			
	Master Degree	24	129.79			
	Total	266				

Table 7. Kruskal Wallis test results of self-esteem and psychological endurance according to income level.

	Income level	N	M	X ²	SD	p	Differences
Self-esteem	500 TL and below	12	29.00	18.583	3	.000	501-1000 to 1001-1500-2000 TL and above
	501-1000 TL	32	27.31				
	1001-1500 TL	77	31.05				
	2000 TL and above	145	31.71				
Structural style	500 TL and below	12	14.08	5.367	3	.147	
	501-1000 TL	32	14.06				
	1001-1500 TL	77	14.35				
	2000 TL and above	145	15.20				
Future perception	500 TL and below	12	15.16	7.683	3	.053	
	501-1000 TL	32	13.31				
	1001-1500 TL	77	14.58				
	2000 TL and above	145	15.25				
Family harmony	500 TL and below	12	20.00	4.639	3	.200	
	501-1000 TL	32	21.28				
	1001-1500 TL	77	22.27				
	2000 TL and above	145	22.99				
Self perception	500 TL and below	12	21.75	8.728	3	.033	501-1000 to 1001-1500-2000 TL and above
	501-1000 TL	32	20.31				
	1001-1500 TL	77	22.59				
	2000 TL and above	146	23.13				

Table 7. Continues.

Social competence	500 TL and below	12	21.41	2.156	3	.541
	501-1000 TL	32	21.62			
	1001-1500 TL	77	21.87			
	2000 TL and above	145	22.75			
Social resources	500 TL and below	12	24.00	3.003	3	.391
	501-1000 TL	32	24.78			
	1001-1500 TL	77	26.19			
	2000 TL and above	145	26.61			
Psychological endurance	500 TL and below	12	116.41	5.506	3	.138
	501-1000 TL	32	115.37			
	1001-1500 TL	77	121.87			
	2000 TL and above	145	125.95			
Total		266				

Table 8. Kruskal Wallis Test results of self-esteem and psychological endurance according to the duration of sports.

	Duration of sport	N	M	X ²	SD	p
Self-esteem	0-3 years	82	30.92	2.320	3	.509
	4-7 years	70	30.80			
	8-11 years	57	31.57			
	12 years and above	57	30.15			
Structural style	0-3 years	82	14.30	1.397	3	.706
	4-7 years	70	14.97			
	8-11 years	57	15.05			
	12 years and above	57	14.89			
Future perception	0-3 years	82	15.02	.541	3	.910
	4-7 years	70	14.75			
	8-11 years	57	14.54			
	12 years and above	57	14.82			
Family harmony	0-3 years	82	22.48	.237	3	.971
	4-7 years	70	22.15			
	8-11 years	57	22.73			
	12 years and above	57	22.43			
Self perception	0-3 years	82	22.56	.802	3	.849
	4-7 years	70	22.42			
	8-11 years	57	22.31			
	12 years and above	57	22.44			
Social competence	0-3 years	82	22.50	.600	3	.896
	4-7 years	70	22.25			
	8-11 years	57	22.07			
	12 years and above	57	22.31			
Social resources	0-3 years	82	25.97	.255	3	.968
	4-7 years	70	25.92			

Table 8. Continues.

	8-11years	57	26.70			
	12 years and above	57	26.14			
Psychological Endurance	0-3 years	82	122.85	.142	3	.986
	4-7 years	70	122.50			
	8-11 years	57	123.42			
	12 years and above	57	123.07			
	Total	266				

Table 9. Kruskal Wallis test results of self-esteem and psychological endurance according to who was raised by in childhood.

	Who was raised by in childhood	N	M	X ²	SD	p
Self-esteem	Mother	27	31.22	8.579	4	.073
	Father	12	30.00			
	Baby Sitter	16	27.93			
	Parents	198	31.26			
	Other	13	28.53			
Structural style	Mother	27	15.29	2.513	4	.642
	Father	12	14.25			
	Baby Sitter	16	14.68			
	Parents	198	14.79			
	Other	13	13.76			
Future perception	Mother	27	15.03	3.969	4	.410
	Father	12	14.00			
	Baby Sitter	16	14.18			
	Parents	198	15.00			
	Other	13	13.15			
Family harmony	Mother	27	22.14	3.695	4	.449
	Father	12	21.08			
	Baby Sitter	16	21.87			
	Parents	198	22.78			
	Other	13	19.76			
Self perception	Mother	27	22.62	2.583	4	.630
	Father	12	21.41			
	Baby Sitter	16	22.87			
	Parents	198	22.72			
	Other	13	20.92			
Social competence	Mother	27	22.14	1.517	4	.824
	Father	12	21.08			
	Baby Sitter	16	21.93			
	Parents	198	22.50			
	Other	13	21.15			
Social resources	Mother	27	26.03	4.986	4	.289
	Father	12	25.41			
	Baby Sitter	16	24.68			

Table 9. Continues.

	Parents	198	26.57			
	Other	13	22.53			
	Mother	27	123.29			
	Father	12	117.25			
Psychological endurance	Baby Sittr	16	120.25	4.086	4	.394
	Parents	198	124.39			
	Others	13	111.30			
	Total	266				

Table 10. Kruskal Wallis test result of self-esteem and psychological endurance according to the interest in childhood.

	Interest in childhood	N	M	χ^2	SD	p
Self-esteem	Excessive interest	38	30.16	1.755	2	.416
	Enough interest	208	31.13			
	Lack of interest	20	29.90			
Structural style	Excessive interest	38	15.88	3.276	2	.194
	Enough interest	208	14.61			
	Lack of interest	20	14.65			
Future perception	Excessive interest	38	15.38	.353	2	.838
	Enough interest	208	14.77			
	Lack of interest	20	14.55			
Family harmony	Excessive interest	38	24.05	4.440	2	.109
	Enough interest	208	22.39			
	Lack of interest	20	20.40			
Self perception	Excessive interest	38	23.11	.329	2	.848
	Enough interest	208	22.62			
	Lack of interest	20	21.60			
Social competence	Excessive interest	38	23.94	3.944	2	.139
	Enough interest	208	22.14			
	Lack of interest	20	20.85			
Social resources	Excessive interest	38	27.66	2.437	2	.296
	Enough interest	208	26.18			
	Lack of interest	20	23.80			
Psychological endurance	Excessive interest	38	130.05	2.293	2	.318
	Enough interest	208	122.74			
	Lack of interest	20	115.85			
	Total	266				

DISCUSSION

When we looked at the sub-dimensions of psychological endurance, in structural style, family harmony, self-perception and social resources, there was significant

difference in favor of 26-29 age group among 26-29, 35 and older, 22-25, 30-34 and 18-21 age groups. When we looked at the sub dimension of social competence, there was a statistically significant difference in favor of the 35 and older age group, among 35 and older, 22-25, 26-29,

30-34 and 18-21 age groups.

In his study, Sarıkaya (2015) concluded that self-esteem scores decreased with age. In other words; as age increases self-esteem level increases. This result is in parallel with our study results. In addition, Gür (1996) found that self-esteem level increased with age. These findings support our research. Despite these findings, Yüksekaya (1995) and Durak (1997) found no significant difference between age and self-esteem in their research.

There was no statistically significant difference in the self-esteem and psychological endurance sub-scales of arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to gender. Kılıç and Alver (2017) found that there was no significant difference among the psychological endurance average scores of the structural style, self-perception and social competence sub-dimensions according to the gender of university students. Similarly, Aydoğdu (2013) concluded that the psychological endurance scores of university students did not show a significant difference according to gender. These results are in parallel with the results of our study. In their study, Demir and Tarhan (2001) and Aksakal (2008) found that loneliness scores did not differ significantly according to gender in adolescents. On the other hand, Duyan et al. (2008) found that male students experienced more intense feelings of loneliness than female students. In their study called "The examination of the relationship between psychological endurance and self-fiction in adolescents" Yıldırım et al. (2015) found that although there was a negative relationship between psychological endurance and self-fiction, there was a significant positive correlation between the relational and autonomous-relational self-fiction and psychological endurance. In addition, girls' psychological endurance was higher, boys were more autonomous, while girls were more relational and autonomous-relational.

There was a negative relationship in the family support subscale. In our study, no significant difference was found between self-esteem and psychological endurance levels according to gender.

There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to the marital status. Altıok et al. (2010) examined the effects of marital status of university students on self-esteem and found that marital status did not cause a statistically significant difference on self-esteem. Yılmaz (2000), in his study, found that the self-esteem levels of the single ones were higher than the married ones but there was no statistically significant difference. These results support our study results.

When we looked at the sub-dimensions of psychological endurance according to the mother's education level, there was a significant difference in

structural style sub-dimension among primary, secondary, high school and bachelor's degree groups in favor of primary school. A statistically significant difference was found in favor of primary school in terms of future perception, family adjustment, self-perception, social competence and total endurance.

In the social resources sub-dimension, a statistically significant difference was observed in favor of secondary school. There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to the father's education level. In his study, Sarıkaya (2015) found that mother's educational status did not create a statistically significant difference on self-esteem.

However, Yiğit (2010) concluded that children's self-esteem levels increased as mother education level increased. In the same study, it was found that father's educational status did not create a significant difference on self-esteem. Again in Sarıkaya's (2015) study, no significant relationship was found between mother's and father's education level and self-esteem. These results support our study.

When we looked at the average self-esteem levels according to the income level, there was a statistically significant difference among 501-1000, 1001-1500 and 2000 TL and above income groups in favor of 501-1000 TL. When we looked at the average psychological endurance subscales according to income level, a statistically significant difference was found among 501-1000, 1001-1500 and 2000 tl and above income groups in favor of 501-1000 tl in the self-perception subscale. Aktaş's (2011) study whose aim was examining of the relationship between adolescents' self-esteem and perceived parental attitudes in two different high schools in terms of some variables; revealed that the self-esteem of the students did not differ in terms of gender, number of siblings and type of school; on the other hand, students with high income, doing sports and hobby activities had high self-esteem. The result that individuals with high income levels had also high self-esteem, does not show parallelism with our study results. Sarıkaya (2015) stated that there was a significant relationship between self-esteem and income level. Also it must be planned that the income level should be at least at a level that can meet the needs of children and not feel overwhelmed.

There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to the duration of sports. Yavuzer (2000) concluded that doing sports was effective on self-esteem. This result is not parallel with the results of our study. However, Certel et al. (2012) in their study about self-esteem and continuous anger

and anger expression style relationship among team athletes concluded that there was no significant difference between self-esteem, continuous anger and anger expression styles; gender, sport, sports year and being national. But significant relationships were found among self-esteem and trait anger and anger expression styles. While there was no significant difference in self-esteem, self-confidence, self-sufficiency, total anger, anger-in and anger control according to the duration of sports, there was a statistically significant difference in anger-out dimension. Kizmaz (2004) in his study concluded that as the athlete's duration of sport increases, the characteristics of social maturity and social skills (recognize the rights of others, self-confidence, avoidance of harm to others) are also increased. However, in our study, no statistically significant difference was found between the self-esteem and psychological endurance levels of arm wrestling athletes according to the duration of doing sports.

Sarıkaya (2015), who examined the relationship between self-esteem and psychological endurance levels of adolescents between the ages of 14-18, found a significant relationship between self-esteem and psychological endurance. The results of the study showed that the higher the self-esteem is, the higher the level of psychological endurance become. In addition, significant correlations were found between the variables of age, gender, parental status and socio-economic level and self-esteem level. In our study, a significant difference was found between the variables of age and income level and the levels of self-esteem and psychological endurance.

There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to who was raised by in childhood. On the other hand, in the study of Sarıkaya (2015), it was found that the self-esteem of the children who were raised with their parents, was higher than the children who were raised in a divorced family. This result can be considered as a positive contribution of parental love and feeling of being a family on the child's sense of trust and self-knowledge. The existence of the relationship between self-fiction and healthy family functioning, which was also revealed in Mesutoğlu's (2012) study, supports the relationship between autonomous-relational self-structuring and psychological endurance. In our study, a statistically significant difference was found according to variable with whom he/she lives at home, among the ones living with their spouse and child, alone, only lovers, parents and other groups in favor of those living with their spouse and child.

There was no statistically significant difference in the self-esteem and psychological endurance sub-dimensions of the arm wrestling athletes (structural style, future perception, family harmony, self-perception, social competence, social resources) according to the interest

in childhood. When the self-esteem and psychological endurance were examined according to Mesutoğlu's (2012) child rearing styles and coping with problems, a significant difference was found in favor of yes in all sub-dimensions of self-esteem level and psychological endurance levels.

As a result, it is concluded that there is a statistically significant difference in psychological endurance subscales in favor of 26-29 age group, there is a statistically significant difference in the social competence subscale in favor of the age group 35 and over, there is a significant difference in favor of primary school in the structural style subscale of the psychological endurance subscales according to the educational level of the mother, there is also statistically significant difference in the perception of future, family harmony, self-perception, social competence and total endurance in favor of primary school, in the social resources subscales, it is concluded that there is a statistically significant difference in favor of secondary school, there is a statistically significant difference in favor of 501-1000 tl according to income level variable, when we look at the average of psychological endurance subscales according to income level, there is a statistically significant difference in favor of 501-1000 tl in self-perception subscale. However, it is concluded that there is no statistically significant difference in the self-esteem and psychological endurance subscales of the arm wrestling athletes according to gender, marital status, father's educational level, duration of sports, who was raised by in childhood and the interest in childhood.

SUGGESTIONS

- Studies can be done on different working groups.
- Different results can be obtained with different variables.
- Different results can be obtained in studies conducted by increasing the number of participants in the study group.
- Studies with different data collection tools can contribute to the field.

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