

# **ORIGINAL ARTICLE**

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## **Examination of the Health Perception Levels of Elite Level Judoists**

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#### ABSTRACT

ÖΖ

Objective: Health perception includes individuals' physical, physiological and psychological characteristics. Health perception is extremely important for athletes' quality of life and sports performance, especially in elite level athletes, due to intense competition and training pace. The objective of this research was carried out to reveal the health perception levels of elite judokas. Materials and Methods: The research group's sample group consisted of 91 (35 Female, 56 Male) volunteer athletes who were actively licensed in the judo branch at the elite level. In the study, the "Personal Information Form" was applied online to determine the demographic information of the participants, and the "Health Perception Scale" developed by Diamond et al., (2007) and adapted into Turkish by Kadıoğlu and Yıldız (2012) was applied online to determine their health perception levels. For data analysis, the SPSS package program was utilized, and significance was set at p<0.05. Results: According to the research findings, athletes' health perception levels were found to be medium, with male athletes' health perception levels being higher than female athletes. It has been discovered that as athletes' ages and years of participation in sports increase, so do their health perception levels. Furthermore, athletes who consume enough and balanced diet, athletes who drink more fluids and athletes who receive nutrition training have higher levels of health perception. Conclusion: Ultimately, it was revealed that the research group's health perceptions were on the medium level, and that sports years, age nutrition, and fluid consumption were crucial for health.

Keywords: Health, Health Perception, Judo.

## Elit Düzeydeki Judocuların Sağlık Algı Düzeylerinin İncelenmesi

Amaç: Sağlık algısı bireylerin fiziksel, fizyolojik ve psikolojik özelliklerini içermektedir. Yoğun rekabet ve antrenman temposu nedeniyle özellikle elit seviyedeki sporcularda sağlık algısı sporcuların yaşam kalitesi ve spor performansı açısından son derece önemlidir. Bu araştırmanın amacı elit judocuların sağlık algı düzeylerini ortaya koymaktır. Gereç ve Yöntem: Araştırma grubunun örneklem grubunu judo bransında aktif olarak elit düzevde lisanslı 91 (35 Kadın, 56 Erkek) gönüllü sporcu olusturmustur. Araştırmada katılımcıların demografik bilgilerini belirlemek için "Kişisel Bilgi Formu" ile sağlık algı düzeylerini belirlemek için Diamond ve ark., (2007) tarafından geliştirilen, Kadıoğlu ve Yıldız (2012) tarafından Türkçe'ye uyarlanan "Sağlık Algısı Ölçeği" çevrimiçi olarak uygulandı. Verilerin analizinde SPSS paket programından yararlanıldı ve anlamlılık p<0,05 olarak belirlendi. Bulgular: Araştırma bulgularına göre sporcuların sağlık algı düzeyleri orta düzeyde olup, erkek sporcuların sağlık algı düzeyleri kadın sporculara göre daha yüksek bulunmuştur. Sporcuların yaşı ve spora katılım süresi arttıkça sağlık algı düzeylerinin de arttığı belirlenmistir. Avrıca veterli ve dengeli beslenen sporcuların, daha fazla sıvı tüketen sporcuların ve beslenme eğitimi alan sporcuların sağlık algısı daha yüksek düzeyde olduğu görülmüştür. Sonuc: Araştırma grubunun sağlık algılarının orta düzeyde olduğu, spor yılı, yaş, beslenme ve sıvı tüketiminin sağlık açısından önemli olduğu belirlenmiştir.

Anahtar Kelimeler: Sağlık, Sağlık Algısı, Judo.

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### **INTRODUCTION**

Health is a crucial concept that defines a person's quality of life while also expressing physical, mental, and social well-being and is regarded as one of people's most valued assets (Avci et al., 2004). From this vantage point, health plays a critical role in people's ability to enjoy and shape their lives. People's health views, therefore, not only affect their lives favorably, but also contribute to them living a happy, productive, and meaningful existence (Hayran, 2011).

Dursun et al. (2019) describe health perception as the notion that represents individuals' perceptions on their own health as well as health issues in general. Individuals' health-related knowledge, experiences, and personal beliefs all contribute to this view. Health perception is known to have a significant influence in people's lives when they make health-related decisions, seek health services, and adopt healthy lifestyles (Açıksöz et al., 2013). Furthermore, how people perceive their health might have an indirect impact on their health habits and awareness of their obligations (Tugut, 2008). Apart from all other factors, whether people's perceptions of health are positive or bad influences their health and lives (Klein Velderman et al., 2010).A positive attitude toward health may motivate people to take more preventative health measures, visit the doctor more frequently, or live healthier lives. A negative health perception, on the other hand, may lead to neglected health concerns, unhealthy habits, and issues such as access to health services (Alkan et al., 2017). According to this knowledge, athletes can combat stress and psychological difficulties through frequent involvement in sports activities as well as proper and balanced nutrition. According to research conducted in this regard, participating in sports on a regular basis provides numerous health benefits (Köse, 2020; Crowson et al., 2013; Metsios et al., 2009). Furthermore, frequent sports activities help people live a healthier lifestyle by raising their awareness of their own bodies and health (Hünük and Demirhan, 2003). Aside from these aspects, those who develop the habit of participating in sports have a better understanding of how their bodies react (Heper et al., 2012). Sports, in addition to being an essential component of a healthy lifestyle, can be stated to aid in the development of a healthy quality of life in the coming years (Erşahin, 2023). Athletes with good sports health and physical fitness levels can take their sports performance to the next level in this setting. Individual and team sports have different conceptions of health, although they both contribute to human health. Individual sports are known to increase personal motivation, contribute positively to personal development, and are important in terms of stress management. While team sports are important in strengthening social bonds, gaining discipline, and encouraging competition in the desired direction, individual sports are known to increase personal motivation, contribute positively to personal development, and are important in terms of stress management. Athlete health is prioritized alongside

athletic performance, and training should aim to improve and safeguard athletes' health. (Dogan, 2001). According to this knowledge, criteria such as health perception and keeping a healthy lifestyle in judo, one of the individual sports, are vital for the growth of athletes' sports performance and health. Athletes engaging in this sport must have advanced technical knowledge that integrates physical, physiological, psychological, and mental skills, as well as be in good physical and mental health (Kavlu, 2002; Franchini et al., 2011). Additionally, judokas must accurately assess their own health status and enhance their health perception. It is well recognized that determining and enhancing judokas' health perception levels will improve both their athletic performance and their quality of life. The main objective of this research was conducted to find out the levels of health perception of elite judoists.

### MATERIALS AND METHODS

### **Research group**

The research population comprises of licensed judo athletes in the Eastern and Southeastern Anatolia Region, and the sample group formed with 91 (35 Female, 56 Male) volunteer judo athletes who are actively licensed at the elite level.

#### **Collection of data**

The researchers created a survey including the "Personal Information Form" and "The health Perception Scale" to collect data for the study.

### **Data collection tools**

The Personal Information Form encapsulates descriptive questions including students' gender, age, height, body weight, income status, nutrition and physical activity status.

### Health perception scale

Diamond et al. (2007) improved it, and Kadioglu and Yildiz (2012) conducted a Turkish validity and reliability research, with a Cronbach's alpha value of 0.77. The scale has 15 items and is divided into four sub-dimensions: "Control Base, Personal awareness, Assurance, and Importance of Health." The "Health Perception" score is the sum of the scores received from the sub-dimensions. Positive expressions are rated directly on the scale, whereas negative expressions are assessed in reverse. The scale's lowest possible score is 15 points, and its highest possible score is 75 points. Control Base (min=5, max=25), Personal awareness (min=3, max=15), Assurance (min=4, max=20), and Significance of Health (min=3, max=15) are the subcategories. The scale's Cronbach's alpha coefficient was found to be 0.77. Cronbach's alpha coefficients for the subscales range from 0.60 to 0.76.

### Analysis of data

The SPSS statistics tool was applied to analyze the data. The demographic information and health perception levels of the research group were described using descriptive statistics such as percentage, frequency, arithmetic mean, and standard deviation. The skewness and kurtosis values of the data were examined to see if they indicated a normal distribution. The data is deemed properly distributed if the skewness and kurtosis values are between +2 and -2 (George and Mallery, 2010).

After ensuring that the data had a normal distribution, intra-group comparisons were made using the

Independent Samples t and One-Way ANOVA tests. The level for significance had been established at p<0.05.

## Ethical considerations

In addition, Bitlis Eren University Ethical Principles and Ethics Committee approval was obtained before starting the study (2023/09-19).

Table 1. Mean, standard deviation, skewness and kurtosis values for the health perception level scale and its subdimensions.

Variables	Mean	Standard Deviation	Skewness	Kurtosis
Aqs+	8.58	4.04	.976	.425
Certainty Sub Dimension	14.20	4.11	.249	026
Importance of Health Sub Dimension	10.20	2.90	348	259
Self Awareness Sub Dimension	10.04	2.89	213	417
Health Perception Scale Total Score	43.04	2.89	.639	1.753

### RESULTS

When Table 2 is examined, 38.5% are female, 61.5% are male, 57.1% are 12-16 years old, 22.0% are 17-21 years old, 20.9% are 21 years old and over. 23.1% are 140-150 cm 29.7% are 151-160 cm 20.9% are 161-170cm 26.4% are 171 cm and above 41.8% are 40-50 kg % It was observed that 18.7% of them were 51-60 kg, 19.8% were 61-70 kg and 19.8% were 71 kg and above. In addition, 18.7% have low income, 67.0% have medium income, 14.3% have high income, 40.7% have received nutrition education, 59.3% have not received nutrition education and 5.5% have chronic diseases. 94.5% have no chronic disease, 25.3% have been exercising for 1-3 years, 53.8% have been doing sports for 4-6 years, 20.9% have exercising for 6 years or more, 12.1% have been exercising for 6 years or more. 1 day 18.7% 2 days 16.5% 3 days 52.7% 4 days or more weekly exercise 12.1% 1 liter or less 45.1% 1, 5 liters 22.0% 2 liters 20.9% consume 2.5 liters or more of liquid daily 9.9% 1 meal 28.6% 2 meals 48.4% 3 meals % It was observed that 13.2% consumed 4 or more meals, 31.9% did not skip meals, 58.2% skipped morning meals and 9.9% skipped lunch (Table 2). When Table 3 is assessed, the items "I will stay healthy if I exercise and eat right" and "I consider about my wellbeing too much and it is based on me whether I am healthy or not" are 3.78±1.20, 3.48±1.27, 3.34± respectively. It was monitored that they agreed at a high rate with an average of 1.26. The items "being healthy is a matter of luck", being healthy is largely a matter of luck and I cannot change my health no matter what I do were  $2.12 \pm 1.33$ ,  $2.09 \pm 1.22$ , 2, It was observed that they participated at a low level with an average of 08±1.15. The Control Base sub-dimension is 8.58, the Assurance sub-dimension is 14.20±4.11, the importance of health

sub-dimension is 10.20±2.90, the personal awareness sub-dimension is  $10.04\pm2.89$  and the total health perception scale is 43.04. It was determined that it has an average of  $\pm 8.90$ . (Table 3). When Table 4 is examined, it is determined that there is a statistically important difference between the mean scores of the Control Base sub-dimension and personal awareness sub-dimensions according to the nutrition education variable (p<0.05), yet no statistically important difference was observed between the mean scores of the total, Assurance, and importance of health subdimensions of the health perception scale (p>0.05). Furthermore, no statistically important difference was found between the gender and persistent illness factors and the average health perception scale total, Control Base, Assurance, value of health, and personalawareness subscale scores (p>0.05) (Table 4). When Table 5 was reviewed, it was determined that there was a statistically important difference between the age and daily fluid consumption variables, as well as the health perception scale total and importance of health subdimension mean scores (p<0.05), but no significant difference between the Control Base, assurance, and personal awareness sub-dimension mean scores (p>0.05). While the height variable, the athlete's year variable, and the average score of the importance of health sub-dimension were found to be statistically important (p<0.05), there was no significant difference between the health perception scale total, Control Base, assurance, and personal-awareness sub-dimensions (p>0.05). Besides, there was no statistically important difference found between body weight, income status, weekly physical activity, and number of main meals per day and the average score of the health perception scale total, Control Base, assurance, importance of health, and personal-awareness subscales (p>0.05) (Table 5).

## Table 2. Demographic characteristics of judoists.

Variables		Frequency	Percentage (%)
Conden	Female	35	38.5
Gender	Male	56	61.5
Age	12-16 years old	52	57.1
	17-21 years old	20	22.0
	21 years old and over	19	20.9
	140-150 cm	21	23.1
Height	151-160 cm	27	29.7
inight	161-170 cm	19	20.9
	171 cm and over	24	26.4
	40-50 kg	38	41.8
Body Weight	51-60 kg	17	18.7
Doug Weight	61-70 kg	18	19.8
	71 kg and over	18	19.8
	Low	17	18.7
Income Status	Middle	61	67.0
	High	13	14.3
Have you received nutrition training?	Yes	37	40.7
g.	No	54	59.3
Have you got a chronic Illness?	Yes	5	5.5
Have you got a chrome finless.	No	86	94.5
	1-3 years	23	25.3
How long Have you been doing sports?	4-6 years	49	53.8
	6 years and over	19	20.9
	1 day	11	12.1
Hammann dans a such da sur da shuriad a stirit. 9	2 days	17	18.7
How many days a week do you do physical activity?	3 days	15	16.5
	4 days and over	48	52.7
	1 liter and below	11	12.1
	1.5 liters	41	45.1
How many liters is your daily fluid consumption?	2 liters	20	22.0
	2.5 liters and over	19	20.9
	1 course	9	9.9
How many main meals per day?	2 courses	26	28.6
	3 courses	44	48.4
	4 courses and more	12	13.2
	I do not skip any courses	29	31.9
Main meal you skipped?	Morning	53	58.2
	Lunch	9	9.9

## Table 3. Health perception of judoists.

	x	Sd
Being healthy is a matter of luck	2.12	1.33
Being healthy is largely a matter of luck	2.09	1.22
No matter what I do. whether I'm healthy or sick. it happens anyway.	2.27	1.18
No matter what I do. I can't change my health	2.08	1.15
If I am healthy. it is a blessing from God	2.96	1.42
There is so much different information on the types of foods that protect health that I don't know what to do.	2.94	1.20
I'm often confused about what I need to do to stay healthy	2.76	1.11

## Table 3 (Continued). Health perception of judoists.

	$\overline{\mathbf{X}}$	Sd
I want to be healthier. but I can't do what I need to do yet	2.93	1.21
I can't understand everything I read about healthy eating	2.59	1.14
I think about my health a lot.	3.48	1.27
My health is the most important consideration in my life	3.50	1.19
I'm willing to spend more money on things that are healthy for me	3.21	1.32
I can be as healthy as I want	2.92	1.21
Whether I'm healthy or not is up to me.	3.34	1.26
I stay healthy if I exercise and eat right	3.78	1.20
Control Center Sub Dimension	8.58	4.04
Certainty Sub Dimension	14.20	4.11
Importance of Health Sub Dimension	10.20	2.90
Self-Awareness Sub Dimension	10.04	2.89
Health Perception Scale Total Score	43.04	8.90

## Table 4. Health perception t test analyzes of judoists regarding demographic information.

Variables	Scale of Health Perception mean±sd	Control Base mean±sd	Assurance mean±sd	Significance of Health mean±sd	Personal Awareness mean±sd
Gender					
Female	42.31±8.59	8.40±4.36	13.40±3.80	10.31±2.37	10.20±2.81
Male	43.50±9.14	8.69±3.86	14.71±4.24	10.14±3.21	9.94±2.96
Statistics	t=616	t=339	t= -1.493	t= .292	t= .404
	p=0.54	p= 0.73	p=0.13	p=0.77	p=0.68
Nutrition Training					
Yes	44.05±10.57	10.32±4.53	14.62±4.07	9.70±3.24	9.29±2.87
No	42.35±7.58	7.31±3.11	13.92±4.15	10.55±2.62	10.55±2.82
Statistic	t=.894	t= 3.888	t= .791	t= -1.381	t= -2.071
	p=0.37	<b>p</b> = 0.00	p=0.43	p=0.17	p=0.04
Chronic Illness					
Yes	38.60±6.54	9.20±3.27	12.20±4.32	7.80±2.16	9.40±3.78
No	43.30±8.98	8.54±4.09	14.32±4.09	10.34±2.89	10.08±2.86
Statistic	t= 1.150	t=350	t= 1.125	t= 1.934	t= .509
	p= 0.25	p= 0.72	p=0.26	p=0.05	p=0.61

## Table 5. Variance analysis of judoists' health perception regarding demographic information.

Variables	Scale of Health Perception mean±sd	Control Base mean±sd	Assurance mean±sd	Significance of Health mean±sd	Personal Awareness mean±sd
Age					
12-16 years old	40.84±8.74	8.00±3.57	13.90±4.15	9.42±2.85	9.51±2.68
17-21 years old	44.00±8.18	8.65±4.54	14.25±4.24	10.75±2.59	10.35±3.28
21 years old and over	48.05±8.23	$10.10 \pm 4.49$	$15.00 \pm 3.98$	11.78±2.69	11.15±2.83
Statistic	F= 5.133	F= 1.931	F= .490	F= 5.564	F= 2.444
	Sig= 0.00	Sig= 0.15	Sig=0.61	Sig=0.00	Sig=0.09
Height					
140-150 cm	41.14±9.91	8.14±3.69	15.00±4.38	9.00±3.06	9.00±2.82
151-160 cm	44.00±9.10	9.11±4.58	$14.22 \pm 3.88$	10.44±2.35	10.22±3.09
161-170 cm	41.84±4.58	8.89±2.40	13.84±3.32	9.57±2.52	9.52±2.22
171 cm and over	44.58±10.33	8.12±4.79	13.79±4.79	11.50±3.18	11.16±2.94
Statistic	F= .771	F= .396	F= .384	F= 3.394	F= 2.459
	Sig= 0.51	Sig= 0.77	Sig=0.76	Sig=0.02	Sig=0.06

### Table 5 (Continued). Variance analysis of judoists' health perception regarding demographic information

Variables	Scale of Health Perception mean±sd	Control Base mean±sd	Assurance mean±sd	Significance of Health mean±sd	Personal Awareness mean±sd
Body Weight					
40-50 kg	42.26±9.74	8.68±4.12	14.36±4.16	9.81±2.97	9.39±2.89
51-60 kg	42.64±5.29	7.76±2.94	14.64±3.33	9.88±2.66	10.35±3.06
61-70 kg	41.55±9.05	7.88±3.72	$13.00\pm4.11$	10.38±3.10	10.27±2.78
71 kg and over	46.55±9.40	9.83±4.96	$14.66 \pm 4.74$	11.16±2.77	10.88±2.78
Statistic	F = 1.217	F= .991	F= .668	F=.976	F=1.260
	Sig=0.30	Sig=0.40	Sig=0.57	Sig=0.40	Sig=0.29
Income Status	6	U		<u> </u>	0
Low	42.52±7.55	8.70±3.70	13.47±3.06	10.17±3.20	10.17±3.06
Middle	42.31±9.23	8.11±4.03	14.08±4.15	10.26±2.83	9.85±3.04
Good	47.15±8.44	10.61±4.13	15.76±4.95	10.00±3.05	10.76±1.78
Statistic	F= 1.641	F= 2.112	F= 1.245	F= 0.44	F= 553
	Sig= 0.20	Sig= 0.12	Sig=0.29	Sig=0.95	Sig=0.57
Athlete Year		-			
1-3 years	41.52±9.90	9.17±4.04	14.47±4.33	8.56±3.15	9.30±2.49
4-6 years	42.83±8.75	8.26±3.93	14.16±4.02	10.44±2.59	9.95±3.14
6 years and over	45.42±7.96	8.68±4.44	14.00±4.28	11.57±2.54	11.15±2.43
Statistic	F= 1.026	F= .398	F= 0.75	F= 6.704	F= 2.233
	Sig= 0.36	Sig= 0.67	Sig=0.92	Sig=0.00	Sig=0.13
Weekly Physical					
1 day	42.18±7.52	9.54±3.61	14.18±4.21	9.09±2.30	9.39±1.74
2 days	42.29±7.94	8.64±3.83	14.11±3.12	10.35±3.48	9.17±2.32
3 days	44.00±10.29	9.06±4.31	14.06±4.33	10.33±3.49	10.53±3.46
4 days and over	43.20±9.28	8.18±4.18	14.29±4.43	10.37±2.63	10.35±3.07
Statistic	F= .134	F= .426	F= .015	F= .609	F= 1.037
	Sig= 0.94	Sig= 0.73	Sig=0.99	Sig=0.61	Sig=0.38
Daily Liquid					
1 liter and below	36.45±7.07	$7.09\pm2.50$	12.36±4.38	8.09±3.20	8.90±2.46
1.5 liters	42.00±7.26	8.14±3.35	13.97±3.29	9.87±2.72	10.00±2.92
2 liters	44.70±9.86	8.60±4.39	$14.25 \pm 4.50$	11.10±3.11	10.75±3.20
2.5 liters and over	47.36±9.85	10.36±5.26	15.73±4.86	11.21±2.22	10.05±2.71
Statistic	F= 4.355	F= 1.956	F= 1.694	F= 3.830	F= .960
	Sig= 0.00	$S_{1g}=0.12$	S1g=0.17	Sig=0.01	S1g=0.41
Daily Main Course	2(22)0.55	0.11+4.40	11 44:2 (0	0.22+2.02	0.44+2.00
1 course	36.33±8.55	8.11±4.40	$11.44\pm3.60$	8.33±2.82	8.44±3.08
2 courses	40.76±7.07	8.34±3.04	13.80±3.21	9.30±2.96	9.30±2.32
3 courses	45.09±8.59	8.93±4.27	$14.63 \pm 4.25$	10.90±2.76	10.61±2.99
4 courses and over	45.50±11.00	8.16±5.09	15.58±5.03	11.00±2.44	10.75±3.01
	F= 3.041	F=.217	F=2.118	F= 3.495	F= 2.383
	Sig= 0.01	$S_{1g} = 0.88$	Sig=0.10	Sig=0.01	Sig=0./5
I do not altin any source	41.41+6.04	0 17+2 52	12.06+2.40	10 10 2 60	10.06+2.86
Morning	41.41±0.94	0.1/±3.33	13.00±3.49	$10.10\pm2.00$	10.00±2.80
Lunch	43.49±9.99	0.00±4.33	$14.32\pm4.37$	10.20±3.21	9.00±2.88
Statistic	$43.00\pm/.40$ E_ 0.41	$0.22\pm 3.92$ E= 212	$E_{-2.192}$	$10.33\pm2.00$ E001	$10.00\pm 3.23$ E_ 152
Statistic	$\frac{\Gamma941}{\text{Sig} - 0.20}$	r = .312 Sig= 0.72	1 - 2.102 Sig=0.11	$\frac{\Gamma = .001}{\text{Sig} = 0.02}$	Γ430 Sig=0.62
	51g- 0.39	51g-0.75	515-0.11	515-0.92	51g-0.05

#### DISCUSSION

This study was conducted to investigate the health perception levels of elite judokas. As a result of the research, the health perception scale total score average of judokas was at a medium level of  $43.04\pm8,90$ , in the sub-dimensions of the scale, the Accuracy sub-dimension had the highest score average of  $14.20\pm4.11$ , and among the sub-dimensions of the scale, the Control Base sub-dimension. It was pointed that the dimension

had the lowest mean score with  $8.58\pm4.04$ . It was pointed out that there was no difference in the health perception levels of judokas in terms of the gender variable and that the health perception scale total score average of male judokas was higher than female judokas. In terms of judokas' health perception levels and nutrition education, there is a difference in the total score average of the Control Base sub-dimension and personal awareness sub-dimension, and the total score average of the health perception scale of the athletes who took nutrition training was higher than the athletes who did not take nutrition training. There was no difference in health perception levels between the research groups and persistent disease, while athletes without persistent illness had a higher average health perception scale score than athletes with persistent illness. The athletes' health perception scale total score average differed from the importance of health subscale score average and the age variable, and the health perception score averages rose with age. In the research group, judokas with a high income had a higher average health perception scale total score than judokas with a medium or low income. Athletes who had been attending in sports for at least 6 years had a higher average health perception scale score than other athletes. When the studies are analyzed; Cilingir and Aydın (2017) revealed a statistically important difference between the Control Base sub-dimension and precision sub-dimension mean score of the age variable, but no relationship between the chronic disease, gender, and income level variables and the health perception scale total score mean and sub-dimensions. Perrin et al. (2002) found that in terms of gender-related health perception, males perceived themselves to be healthier, while women perceived themselves to be more stressed. In the research completed by Kuloğlu and Uslu (2022), they suggested that there was no significant relationship between the variables of gender, age, height and weight and the health perception scale total score average and its sub-dimensions. In their study, Olgun and Kutlu (2022) determined that there is a significant relationship between the Assurance sub-dimension of age and chronic disease variables and the total score average of the health perception scale, and that there is a significant difference between the personal awareness and importance of health sub-dimension average score of the gender variable. Condello et al., (2016) found that playing sports on a regular basis, as well as actively participating in sports, is crucial in influencing participants' perceptions of physical and mental health in later life. Öztürk and Kolcu (2022) discovered a statistically important difference between the health perception scale total score average of individuals without chronic diseases and the health perception scale total score average of individuals with chronic diseases in their study of individuals aged 20-64 along the Covid-19 epidemic. In their study of nurse students' health perception levels, Demir et al. (2021) explored a statistically important difference between the income status variable and the total score average of the Assurance sub-dimension, but no significant difference between the gender and persistent disease variables and the scale of health perception total score average and sub-dimensions. Tunç et al. (2023) discovered a statistically important difference between age, education level, income level, exercise status, chronic disease, and the total and sub-dimensions of the health perception scale in their study. Shirom and Toker (2008) revealed a statistically important difference between the health

perception scale total score and sub-dimensions of age, gender, and physical activity frequency factors in their investigation. In the study conducted by İzgüden and Gökkaya (2022), it was determined that there was a statistically important difference between the variables of age and weekly exercise and the health perception scale total score average and the importance of health sub-dimension mean score average, but no relationship was discovered between the gender variable and the health perception scale total score average and subdimensions. In their study, Lee et al (2020) found that health perception influences sports involvement favorably. Zhou (2022) specified that athletes with high physical levels had a greater perception of health, and persons with good eating habits had a better perception of health in his study studying the perception of health and sports motivation of university students. In their research, Lasandro et al., (2021) discovered that there was no significant difference in terms of gender and mental and physical health of athletes, and that athletes had a higher health quality of life than inactive people. In the study done by Çayırlı and Bedirhan (2020), they noticed a statistically important difference between the perceived financial position variable and the total score average of the assurance sub-dimension, nevertheless there was no statistically important difference between the age variable and the total score average and subdimensions of the scale of health perception.

### CONCLUSION

In the final analysis, the research found that athletes' health perception was medium, male athletes had greater health perception levels than female athletes, and nutrition instruction was crucial in terms of health perception. Furthermore, as years of sports, age, and body weight grow, so do health perception levels, and appropriate and balanced diet and fluid consumption are vital for health perception. In line with these results, it can be suggested that conducting studies on the health perception levels of athletes will positively affect both their quality of life and sports performance, and that studies on the health perception levels of athletes in different sports branches and age groups can be recommended.

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#### **Conflict of Interest**

The author declare no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

#### **Author Contributions**

**Plan, design:** RE, KK, AY; **Material, methods and data** collection: RE, KK, AY; **Data analysis and comments:** RE, KK, AY; **Writing and corrections:** RE, KK, AY

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#### **Ethical considerations**

In addition, Bitlis Eren University Ethical Principles and Ethics Committee approval was obtained before starting the study (2023/09-19).

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