

#### **Spor Bilimleri Araştırmaları Dergisi** Journal of Sport Sciences Research Vol: 9, Issue: 2, June 2024 E-ISSN: 2548-0723 URL: http://www.dergipark.org.tr/jssr

# Investigation of Decision Making Styles and Problem Solving Skill Levels of School Administrators Doing Sports and Non-Sports\*

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Research Article Received: 19.12.2023

Accepted: 27.06.2024

**DOI: 10.25307/jssr.1406752** Online Published: 30.06.2024

#### Abstract

The aim of this study is to examine the decision-making styles and levels of problem-solving skills among school administrators who do and do not do sports. For this purpose, the study was conducted using the quantitative research method, specifically the descriptive survey model. The research was conducted with a sample group of 358 among 2334 school administrators working in Bursa in the 2021-2022 academic year. Personal Information Form, Problem Solving Scale (PSS) and Melbourne Decision Making Scale (MDMS) were used to collect study data. In the analysis of the data, SPSS 21.0 package program was used, and the significance level was taken as  $\alpha = 0.05$ . Shapiro-Wilk Normality Test was used to distribute the total and subscale scores obtained from PSS and MDMS. In conclusion, it was determined that there were no significant differences between the groups of administrators who engage in sports and those who do not, based on variables such as the duration of their leadership, whether they received administrative training, and the type of school where they work. Administrators with a history of licensed sports participation had a higher rate of engagement in sports. In the sports group, administrators exhibited a preference for a cautious decision-making style and had higher levels of self-esteem. They also demonstrated lower levels of avoidant, procrastinative, and panicked decision-making styles. Furthermore, it was concluded that the impact of engaging in sports on the perception of problem-solving skills was not significant between administrators who engage in sports and those who do not.

Keywords: School managers, Style of making decisions, Problem solving, Doing sports

# Spor Yapan ve Yapmayan Okul Yöneticilerinin Karar Verme Stilleri ve Problem Çözme Beceri Düzeylerinin İncelenmesi

## Öz

Bu çalışmanın amacı, spor yapan ve yapmayan okul yöneticilerinin karar verme stillerinin ve problem çözme beceri düzeylerinin incelenmesidir. Bu amaç doğrultusunda, çalışma nicel araştırma yöntemlerinden betimsel tarama modeline göre yürütülmüştür. Araştırma, 2021-2022 eğitim-öğretim yılında Bursa'da görev yapan 2334 okul yöneticisi arasından 358 kişilik örneklem grubu ile gerçekleştirilmiştir. Araştırma verilerinin toplanmasında Kişisel Bilgi Formu, Problem Çözme Ölçeği (PÇO) ve Melbourne Karar Verme Ölçeği (MKVÖ) kullanılmıştır. Verilerin analizinde SPSS 21.0 paket programı kullanılmış olup anlamlılık düzeyi α=0,05 olarak alınmıştır. PÇO ve MKVÖ'den elde edilen toplam ve alt ölçek puanlarının dağılımında Shapiro-Wilk Normallik Testi kullanıldı. Sonuç olarak; spor yapan- yapmayan gruplar arasında, yöneticilik süresi, yöneticilik eğitimi alıp almama, görev yapılan okul türü değişkenine göre anlamlı farklılık olmadığı saptanmıştır. Sporcu geçmişinde lisanslı olarak spor yapan yöneticilerinin spor yapma oranının yüksek çıktığı, spor yapan grupta olan yöneticilerinin dikkatli karar verme stilini tercih ettiği ve öz saygı düzeylerinin yüksek olduğu; kaçıngan, erteleyici ve panik karar verme stillerinin düşük olduğu anlaşılımıştır. Ayrıca spor yapan yöneticilerin problem çözme becerisi bağlamında istendik-olumlu yaklaşım biçimlerini kullandıkları anlaşılırken spor yapan-yapmayan gruplar arasında problem çözme becerisi algısı bağlamında spor yapmanın etkisinin olmadığı sonucuna varılmıştır.

Anahtar kelimeler: Okul yöneticisi, Karar verme stili, Problem çözme becerisi, Spor yapan

<sup>\*</sup> This study was produced from the thesis study of Uludağ University Institute of Educational Sciences, whose graduation was approved on 10.01.2023.

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## INTRODUCTION

In all institutions and organizations, the people who take on the most serious duties and responsibilities are undoubtedly managers (Vural, 2013). A manager is defined as a superior who can take responsibility for the execution of services in an institution or organization, and who, from time to time, supervises and supervises decisions regarding issues other than certain transactions while performing tasks and transactions related to his/her duty (Bozkurt and Ergun, 1998). While performing these duties, the manager should also provide his employees with a sense of belonging (Atılgan and Ergun, 2022). Corporate managers may face decisionmaking and problem-solving situations while performing their management duties. Managers have to make a decision to solve these problems (Zembat et al., 2018). Administrators with problem solving, management drivers and problem classification skills play an important role in increasing the quality of the educational environment and achieving the goals of the educational institution (Leithwood and Steinbach, 1991). One of the most important duties of individuals at the head of education management is to fulfill the determined goals of the institution, to increase the quality of education by making educational environments functional, and to keep up with innovations by following educational developments. For this reason, it is very important for educational administrators, especially school administrators, to be administratively equipped (Özgenel, 2018). In order to create an effective and efficient institutional structure, it is of great importance that school administrators have a solid management approach (Çiçek, 2019).

Similar methods may not always yield results in solving the problems encountered. While sometimes there is difficulty and complexity in this regard, the solution to the problems can sometimes be very easy and short-term. Therefore, managers having certain characteristics can provide them with great convenience in decision-making and problem solving. The most important of these features is a healthy mood (Karaca, 2021). One of the important stakeholders in creating a healthy mood is sports.

Social-sports activities have an important place in raising biologically healthy individuals. Sports enable individuals, especially those who have been involved in sports activities from an early age, to live a quality life. In addition to its physical and biological benefits, sports also have an aspect that affects people's social development and contributes to the strengthening of their competence in this field (Emamvirdi, 2013). Additionally, due to the nature of sports, some elements occur in the form of indirect learning. Especially in individual and team sports, the athlete's attitude towards his opponent, his attitude, and his tendency to comply with the rules also affect his life outside of sports. In particular, the necessity of acting with a collective spirit in working life is very effective in the emergence of harmonious individuals who are prone to teamwork, successful in social relations (Demirtaş, 2018).

Today, sports have gone much further than just contributing to the psychological and physical development of individuals and have made significant contributions to the socialization of individuals by clarifying their ability to maintain responsibility, cooperation and order (Toprak, 2019). Starting sports at a young age has a great impact and importance in gaining responsibility awareness and raising individuals with strong communication skills (Yazarer et al., 2004). When we look at the literature, we see that the research findings generally support

this view. However, when we look at the literature, it is understood that the number of studies on the decision-making styles and problem-solving skills of managers who have sports as their social capital is insufficient and limited in number.

In this context, the aim of this study is; The aim is to determine whether school administrators, who are primarily responsible for coordinating education and training activities, have a sports background in their social capital and whether their sports background has an impact on making successful decisions and problem solving in their managerial life. Based on this, the aim is to examine the decision-making styles and problem-solving skill levels of school administrators who do and do not do sports in terms of some variables. At this point, the sub-goals of the research can be expressed as follows:

1- What are the tendencies of school administrators according to demographic characteristics and sports participation?

2- What are the trends of school administrators' Melbourne Decision Making Scale and subscale scores according to their sports activities?

3- What is the tendency of school administrators' problem-solving scale and subscale scores according to their sports activities?

### METHOD

#### **Research Model**

The planning and execution of this research study was designed according to the quantitative research method. In this context, the study was conducted according to the descriptive survey design, one of the non-experimental designs. Survey design is the study carried out on a sample determined within the universe that is thought to represent the entire planned study. Within the scope of these studies, it is expressed as the quantitative description of opinions, attitudes and tendencies about the general universe (Creswell, 2013; Karasar, 2005). Descriptive survey design, these are processes that enable the collection, description and statistical interpretation of numerical data regarding variables (Büyüköztürk, 2010).

#### **Participants**

The population of this study consists of 2334 school administrators working in central and district schools within the Bursa Provincial Directorate of National Education. The sample of the study consists of 358 school administrators who participated in the study from this universe. Stratified random sampling method was used when creating the sample. Stratified random sampling method; each unit belongs to only one layer. It is divided into small sub-main masses, provided that no unit is left out. If simple random sampling is applied to each stratum, such sampling is called stratified sampling (Serper vd., 2016). In the stratified sampling model, the universe must be divided into homogeneous layers, and samples are selected from each separated layer and combined. Stratified sampling is generally preferred when there are sub-layers or sub-groups within the universe with clear boundaries. The advantage of this sampling selection is that the results will be more precise if the variables we investigate are related to the

stratification sample. In other words, some variables that we think may affect the result with simple random sampling, especially age and gender distribution; The possibility of such elements not being distributed equally across groups due to chance can be reduced by stratified sampling (Kılıç, 2013). In this thesis study, the central districts in Bursa were considered as a layer and a sample group was created from each district using a simple random method.

### **Ethical Approval**

The information, scale and survey form regarding the research process were approved by the decision of Bursa Uludag University Social and Human Sciences Research and Publication Ethics Board, session number 2021-01, dated 29.01.2021.

### **Data Collection Tools**

In order to collect research data, first of all, the "Personal Information Form" created by the researcher by taking expert opinions was given to school administrators in order to determine demographic information, the "Melbourne Decision Making Scale" to determine Decision Making Styles and the "Problem Solving Scale" to determine perception of problem solving skills has been implemented. The tools used to collect research data are generally introduced as follows.

*Melbourne Decision Making Scale I-II (MDMS I-II):* The scale was adapted from Mann et al., (1998) and consists of two parts. The scale is a 3-point Likert type scale and consists of two dimensions. Each dimension is scored on its own. The first dimension consists of six items and measures self-esteem in decision making. The highest score that can be obtained for the first dimension is 12 and the lowest score is 0. Getting a high score from the first dimension of the scale consists of 22 items measuring decision-making styles. There are four subscales in the second dimension. These; avoidant, panic, procrastinator and careful decision-making styles. Depending on the type of score obtained from the styles, it indicates that the relevant decision-making style is used more (Uygur, 2018). Internal consistency coefficients of the Melbourne decision-making scale range between .65 and .80 (Kelecek et al., 2013).

**Problem Solving Inventory:** Problem Solving inventory developed by Heppner and Peterson (1982) adapted to Turkish by Sahin et al. (1993). This inventory, which measures an individual's problem-solving skills, is a 6-point Likert-type scale consisting of a total of 35 items and evaluated according to a scoring system between 1-6. An increase in the score obtained from the scale means that the individual's problem-solving skill level decreases. In the evaluation of the problem-solving inventory, 3 items (9, 22, 29) are excluded from evaluation and items 1, 2, 3, 4, 11, 13, 14, 15, 17, 21, 25, 26, 30 and 34 are scored in reverse order. A minimum of 32 and a maximum of 192 points can be obtained from the scale. The scale has six subscales: Hasty approach, thinking approach, avoidant approach, evaluative approach, self-confident approach and planned approach (Saracaloğlu, 2001). Sahin et al. (1993), as a result of the factor analysis conducted by the inventory; In PSI factor analysis, Kaiser-Meyer-Olkin (KMO) was found to be significant at 0.79 and Bartlett's Test of Sphericity was found to be significant at 0.01. Cronbach Alpha coefficient for the overall scale was found to be 0.85 (Yazıcı, 2017).

#### **Data Analysis**

The suitability of the total and subscale scores obtained from the Melbourne decision-making scale and problem-solving scales to normal distribution was examined with the Shapiro Wilk test. If scale scores comply with normal distribution, mean and standard deviation; if it does not comply with normal distribution, it is given with median, minimum, and maximum values. The reliability of the scales was evaluated using Cronbach's alpha coefficient. In comparisons of scale scores between groups, Mann Whitney U test was used if there were two groups and no normal distribution was observed, and Kruskal Wallis test was used if the number of groups was more than two groups, and no normal distribution was observed. If overall significance was found after the Kruskal Wallis test, subgroup analyzes were conducted using the Dunn-Boenferroni test. Categorical variables were compared between groups using the chi-square test, Fisher's exact test and Fisher Exact test. The analyzes were carried out using the SPSS. Program, and the significance level in the analyzes was taken as  $\alpha = 0.05$ .

#### FINDINGS

In this section, the data obtained as a result of the research and the analysis results of school administrators, one of the most important stakeholders in education and training, are included.

Age (years) (n=358)	
25-30 age	17(4.70%)
31-35 age	42(11.70%)
36-40 age	95(26.50%)
41-46 age	106(29.60%)
_>47 age	98(27.40%)
Gender (n=358)	
Woman	94(26.30%)
Male	264(73.70%)
Graduation Department (n=358)	
Physical Education and Sports	41(11.50%)
Other	317(88.50%)
Management Time (n=358)	
1-5 years	138(38.50%)
6-10 years	103(28.80%)
11-15 years	67(18.70%)
16-20 years	18(5%)
>21 years	32(8.90%)
Receiving Management Training (n=358)	261(72.90%)
Type of School Worked (n=358)	
Pre-school	13(3.60%)
Primary school	75(20.90%)
Middle school	134(37.40%)
High school	136(38%)

Table 1. Distribution of participants by demographic characteristics

Data are expressed as n%.

Perspective on Sports (n=358)	
Positive	349(97.50%)
Negative	9(2.50%)
Doing Sports (n=358)	226(63.10%)
Frequency of Exercising (n=358)	
Every day	31(8.70%)
3 days in a week	67(18.70%)
2 days in a week	65(18.20%)
1 day a week	77(21.50%)
I don't do it at all	118(33%)
Doing Sports in Primary and Secondary Education Years (n=358)	261(72.90%)
Status of Doing Sports with a License (n=358)	121(33.80%)
District of Duty (n=358)	
Yıldırım	146(40.80%)
Osmangazi	137(38.30%)
Nilüfer	46(12.80%)
Kestel	17(4.70%)
Gürsu	12(3.40%)

Table 1	(Continue).	Distribution of	particip	ants by d	lemographic	characteristics
	( ) -					

When Table 1 is examined, among the participants in the study, the rate of those in the 25-30 age group is 4.70%, the rate of those in the 31-35 age group is 11.70%, the rate of those in the 36-40 age group is 26.50%, the rate of those in the 41-46 age group is The rate of people over the age of 47 was determined as 29.60% and the rate of those over the age of 47 was determined as 27.40%. When the distribution by gender status is examined, the rate of female participants is 26.30% and the rate of male participants is 73.70%. When the distribution of the participants according to their graduation department was examined, the rate of those who graduated from Physical Education and Sport School (PESS) was determined as 11.50% and the rate of those who graduated from other departments was determined as 88.50%. When the distribution of participants according to management tenure is examined, the rate of those in the 1-5 year group is 38.50%, the rate of those in the 6-10 year group is 28.80%, the rate of those in the 11-15 year group is 18.70%, and the rate of those in the 16-20 year group is The rate of those aged over 21 years is 5% and 8.90%. The rate of those receiving management training was determined as 72.90%. When the distribution of the participants according to the type of school where they worked was examined, the rate of those in the preschool group was determined as 3.60%, the rate of those in the primary school group was 20.90%, the rate of those in the secondary school group was 37.40% and the rate of those in the high school group was 38%. When the distribution of the participants according to their perspective on sports was examined, the rate of those who had a positive perspective on sports was determined as 97.50% and the rate of those who had a negative perspective was determined as 2.50%. The rate of people doing sports was determined as 63.10%. When the distribution of the participants according to the frequency of doing sports is examined, the rate of those who do sports every day is 8.70%, the rate of those who do sports 3 days a week is 18.70%, the rate of those who do sports 2 days a week is 18.20%, the rate of those who do sports 1 day a week is 21.50%. and the rate of those who do not do any sports is determined as 33%. The rate of those who do sports in primary and secondary education years is determined as 72.90%. When the distribution of participants according to the districts where they worked is examined, the rate of those working in Yıldırım district is 40.80%, the rate of those working in Osmangazi district is 38.30%, the rate of people working in Nilüfer district is 12.80%, the rate of people working in Kestel district is 4.70%, the rate of people working in Gürsu district is 4.70%. The rate of those working was determined as 3.40%.

	Sports status			
	Yes	No	p-value	
	( <b>n=226</b> )	(n=132)		
Age (years)				
25-30 age	14(6.20%)	3(2.30%)		
31-35 age	30(13.30%)	12(9.10%)		
36-40 age	57(25.20%)	38(28.80%)	<b>0,001</b> <sup>a</sup>	
41-46 age	78(34.50%)	28(21.20%)		
>47 age	47(20.80%)	51(38.60%)		
Gender				
Woman	55(24.30%)	39(29.50%)	0.2208	
Male	171(75.70%)	93(70.50%)	0,520*	
Graduation Department				
Physical Education and Sports	37(16.40%)	4(3%)	-0 001a	
Other	189(83.60%)	128(97%)	<0,001"	
Management Time				
1-5 years	89(39.40%)	49(37.10%)		
6-10 years	71(31.40%)	32(24.20%)		
11-15 years	39(17.30%)	28(21.20%)	0,198 <sup>a</sup>	
16-20 years	12(5.30%)	6(4.50%)		
>21 years	15(6.60%)	17(12.90%)		
Receiving Management Training	161(71.20%)	100(75.80%)	0,389ª	
Type of School Worked				
Pre-school	6(2.10%)	7(5.30%)		
Primary school	42(18.60%)	33(25%)	0 2278	
Middle school	90(39.80%)	44(33.30%)	0,227	
High school	88(38.90%)	48(36.40%)		
Perspective on Sports				
Positive	226(100%)	123(93.20%)	-0.001h	
Negative	0	9(6.80%)	<0,001°	
Doing Sports in Primary and Secondary	172(76 10%)	80(67 40%)	0 085ª	
Education Years	1/2(/0.10%)	09(07.40%)	0,065	
Status of Doing Sports with a License	95(42%)	26(19.70%)	<0,001ª	

<b>Table 2.</b> Comparison of demographic characteristics according to sports acti-	Fable 2	2. Comparison	of demographic	characteristics	according to si	ports activit
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Data are expressed as n(%).; a:Chi-square Test, b:Fisher's Exact Chi-square Test, c:Fisher Exact Test

When Table-2 is examined, there is a difference between the groups that do and do not do sports according to age distribution (p = 0.001). There was no statistically significant difference between the sports and non-sports groups according to gender distribution (p = 0.320). There is a difference between the graduation department groups according to their participation in sports (p<0.001). In subgroup analyses, it was determined that the rate of those who graduated from the PESS department in the group doing sports was higher than the rate of those who graduated from the PESS department in the group that did not do sports (16, 40% and 3%). On the other hand, it was determined that the rate of graduates from other departments in the nonsports group was higher than the rate of graduates from other departments in the sports group (97% and 83.60%). There is no difference between the groups that do sports and do not do sports according to the distribution of management time (p = 0.198). It was determined that the rates of receiving management training did not differ between groups that do sports and those that do not do sports (p = 0.389). There is no difference between the groups that do sports and those that do not do sports according to the distribution of the school type (p = 0.227). There is a difference between the groups according to their perspective on sports (p<0.001). All participants who do sports have a positive perspective on sports. According to the distribution of those who did sports in primary and secondary school years, there was no statistically significant difference between the groups that did sports and did not do sports (p = 0.085).

According to the distribution of licensed sportspeople, there is a statistically significant difference between the groups that do sports and those that do not (p<0.001).

	Sports Status			
	Yes (n=226)	No (n=132)	p-value	
Melbourne Decision Making Scale				
Self-Respect in Decision Making	11(4:12)	11(5:12)	0,055 <sup>d</sup>	
Careful Decision Making Style	11(5:12) (10,80±1,65)	11(5:12) ( <i>10,05±2,09</i> )	<b>0,001</b> <sup>d</sup>	
Avoidant Decision Making Style	2(0:12)	3(0:8)	0,124 <sup>d</sup>	
Procrastinator Decision Making Style	2,50(0:9)	2(0:9)	0,660 <sup>d</sup>	
Panic Decision Making Style	2(0:9)	2(0:7)	0,491 <sup>d</sup>	

**Table 3.** Comparison of Participants' Melbourne decision making scale and subscale scores according to sports engagement status

Data are expressed as median (minimum-maximum) and mean  $\pm$  std. deviation, d: Mann Whitney U Testi

When Table-3 is examined, there is no difference between the groups according to the median scale score obtained from the self-esteem in decision-making scale, which is the sub-dimension of the Melbourne decision-making scale (p=0.055). The median scale score obtained from the self-esteem subscale of those who do sports and those who do not do sports was determined as 11. It is seen that the average scale score obtained from the careful decision-making style subscale is higher in the sports group (p=0,001). The average scale score of the participant group doing sports is 10.80. The average scale score of the non-sports group was determined as 10.05. There is no difference between the groups according to the median scale score obtained from the avoidant decision-making style scale (p=0.124). The median scale score obtained from the avoidant decision-making style subscale of athletes is 2. The median scale score obtained from the avoidant decision-making style subscale of the non-sports group was determined as 3. There is no difference between the groups according to the median scale score obtained from the procrastinatory decision-making style scale (p=0.660). The median scale score obtained from the procrastinatory decision-making style subscale of athletes is 2.50. The median scale score obtained from the procrastinatory decision-making style subscale of the non-sports group was determined as 2. There is no difference between the groups according to the median scale score obtained from the panic decision-making style scale, which is the subdimension of the Melbourne decision-making scale (p=0.491). The median scale score obtained from the panic decision-making style subscale of those who do sports and those who do not do sports was determined as 2.

	Sports Status		
	Yes (n=226)	No (n=132)	p-value
Problem Solving Scale			
Total Score	106(58:161)	107(56:180)	0,256 <sup>d</sup>
Hasty Approach	42(16:54)	40(19:54)	<b>0,042<sup>d</sup></b>
Thinking Approach	10(5:25) 10,04±3,66	10(5:27) 11,14±4,25	0,013 <sup>d</sup>
Avoidant Approach	22(8:24)	21(7:24)	0,057 <sup>d</sup>
Evaluative Approach	6(3:16)	6,5(3:18)	<b>0,006</b> <sup>d</sup>
Self-Confident Approach	19(11:37)	20(10:40)	<b>0,001</b> <sup>d</sup>
Planned Approach	7,50(4:20)	8(4:21)	<b>0,007</b> <sup>d</sup>

**Table 4.** Comparison of participants' problem solving scale and subscale scores according to sports activity

Data are expressed as median(minimum: maximum) and mean ± st.deviation, d:Mann Whitney U Testi

When Table-4 is examined, it is seen that the total score obtained from the problem solving scale does not differ between the study groups (p = 0.256). The median score of the total scale score of the sports group is 106. The median score of the group that does not do sports was determined as 107. It is seen that the median scale score obtained from the hasty approach scale is higher in the group doing sports (p = 0.042). The median scale score of the participant group doing sports was determined as 42, and the median scale score of the participant group not doing sports was determined as 40. It is seen that the average scale score obtained from the reflective approach scale is higher in the group that does not do sports (p = 0.013). The average scale score of the participant group who does sports was determined as 10.04, and the average scale score of the participant group who did not do sports was 11.14. There is no difference between the groups according to the median scale score obtained from the avoidant approach scale (p=0.057). The median scale score obtained from the avoidant approach subscale of those who do sports was determined as 22, and the median scale score obtained from the avoidant approach subscale of those who do not do sports was determined as 21. It is seen that the median scale score obtained from the evaluative approach scale, which is the sub-dimension of the problem-solving scale, is higher in the group that does not do sports (p = 0.006). The median scale score of the participant group that does sports was determined as 6, and the median scale score of the participant group that does not do sports was determined as 6.50. It is seen that the median scale score obtained from the self-confident approach scale is higher in the group that does not do sports (p = 0.001). The median scale score of the participant group doing sports was determined as 19, and the median scale score of the participant group not doing sports was determined as 20. It is seen that the median scale score obtained from the planned approach scale is higher in the group that does not do sports (p = 0.007). The median scale score of the participant group who does sports was determined as 7.50, and the median scale score of the participant group who did not do sports was determined as 8.

### **DISCUSSION and CONCLUSION**

In this part of the research, discussions, interpretations and suggestions were made according to the data obtained as a result of examining the decision-making styles and problem-solving skill levels of school administrators who do and do not do sports. The data obtained was tried to be supported with results related to problem solving and decision-making skills by using the literature. As a result of the research, there are many studies under different headings on decision-making styles and problem-solving skill levels, but no studies have been found that evaluate together the decision-making styles and problem-solving skill levels of school administrators who do not do por. The research results and study findings were evaluated together and tried to be supported in terms of differences and similarities.

When the demographic characteristics of school administrators were compared according to the age variable of whether they do sports or not, it was determined that there was a significant difference, but this difference was only in one group. In the subgroup analyses, it was determined that this difference was higher among those in the 41-46 age group who do sports compared to those in the 41-46 age group who do not do sports. It can be said that the main reason for this difference in the 41-46 age group is the tendency towards sports for health reasons. According to the study conducted by Var (2018), which supports our study, when the reasons for doing sports of the participants were examined, it was determined that the primary reason was health. Physical factors such as being fit, having a fit body, relieving stress, getting rid of excess weight and delaying aging are other reasons.

When looking at whether school administrators do sports or not in the context of the gender variable, it was determined that there was no significant difference. However, in the study conducted by Damar and Uçan (2021), there is a significant difference according to gender between individuals who do and do not do sports; It has been concluded that men have a higher rate of doing sports and accordingly, men's self-confidence is higher than women. As a result of our research, we think that the reason for this difference is due to the low number of female managers.

When the managers participating in the research were evaluated according to whether they were sports science graduates or not, a statistically significant difference was found. When looked at, it is understood that the rate of sports science graduates doing sports is higher than managers who do not have a department degree. This result can be interpreted that sports science graduate managers have high sports awareness and physical respect stimuli. When the literature is examined, there are studies supporting the study findings (Karacam et al 2016; Kara et al. 2021).

When the school administrators participating in the research were compared as groups that do sports and those that do not; When looked at statistically, it was observed that there was no significant difference according to the variables of management tenure, whether or not they received management training, and the type of school where they worked. When looking at the literature, no studies finding similar or different findings were found.

When looked at according to the variable of managers' perspectives on sports, it is understood that there is no significant difference between the groups. While all participants who do sports

have positive perspectives on sports, it was determined that 6.80% of the group who did not do sports did not have a positive perspective on sports. It is thought that especially the fact that school administrators have a positive perspective towards sports is a very good result in the context of the management dimension, which is among the important stakeholders of the education system. In support of the research findings, the study conducted by Gökdağ (2019) examined the attitudes of school administrators towards sports and concluded that the administrators had positive attitudes. It is understood that this result is parallel to our study findings.

It was observed statistically that there was no significant difference in the title of those who do sports or those who do not, in the context of the status of doing sports during primary and secondary education and the district variables. In the literature review, no similar or different results supporting this information were found.

It was determined that there was a significant difference in the analyzes made according to the variable of whether the participants were licensed to do sports or not. It was concluded that the rate of doing sports was high among the managers who were in the group that did sports with a license in the past years. Such a result can be shown in the study conducted by Çon et al. (1997). According to the study; tendency to do sports in the future; It is shown that the circle of friends comes first, followed by sports clubs. From this perspective, it is understood that there is parallelism between the two studies in terms of results.

When examined under the heading of decision-making styles of school administrators who do and do not do sports, no statistically significant difference was found in the subscale evaluations of self-esteem, avoidant decision-making style, procrastinator decision-making style and panic decision-making style. Despite this, it is understood that the average scale score of the careful decision-making style subscale of managers in the sports group is high. This result strengthens our interpretation that administrators in the sports group are more careful. There are examples in the literature to support our study findings. Especially in the study conducted by Kelecek (2013), our results reached similar results. According to the research, when the decision-making styles of athletes from various sports branches are examined, it has been concluded that they least use the procrastinating decision-making style and prefer the careful decision-making style the most. Supporting these findings, Akpinar's (2015) study also reached similar results. In this study, it was concluded that participants who do sports have high levels of self-esteem in careful decision-making and decision-making, and low levels of avoidant, procrastinating and panic decision-making styles. In their study, Senduran and Amman (2015) concluded that individuals who do sports regularly are more self-confident than those who do not do sports. It was also concluded that people who do sports are more careful in solving the problems they encounter. Apart from this, Karabağ's (2019) study reached different results than the findings of our study.

The problem solving scale and subscale scores of school administrators were compared according to their sports activities. As a result of the comparison, no statistically significant difference was found according to the total score of the problem solving scale. This result concluded that it had no effect on the perception of problem solving skills between groups that do or do not do sports. However, a similar study concluded that team sports had an impact on

the development of the problem-solving paradigm (Myszka et al. 2023; Taşçı et al 2022; Pekel et al. 2021). It was concluded that the total score points of managers in the non-sports group with positive-desired approaches (thinking, evaluative, self-confident, planned approaches) were high. On the other hand; The interpretation of the scale is different depending on whether the score is low or high. When we look at the table, it is understood that the total score of the school administrators in the sports group is low. According to this result, it was concluded that school administrators in the sports group used subscales measuring desired-positive approach styles. When the literature is examined, there are studies supporting the study findings (Çağlayan et al. 2008; Çakır et al. 2020; Mirzeoğlu et al. 2010). It was observed that the problem solving skill perception levels of the students in the sports group were relatively higher than those who did not do sports. However, contrary to the study findings, Akın and Çakto (2020) concluded in their study that doing sports is not an effective factor in problem solving.

**Conflict of Interest:** Regarding this study, the authors and/or their family members do not have any relationships with scientific and medical committee members or members, consultancy, expert witness, employment in any company, shareholding or similar situations that may have the potential for conflict of interest.

**Declaration of Contribution of Researchers:** Research Design FA, HAG, AK; Data Collection FA; Statistical Analysis HAG, FA; Preparation of the article FA, HAG, AK.

**Ethical Approval:** Approved by the decision of Bursa Uludag University Social and Human Sciences Research and Publication Ethics Committee dated 29.01.2021, session number 2021-01.

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