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## Examining The Thinking Styles of Executives and Their Attitudes Toward Sports: Research on Private Sector Employees in Türkiye

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### ARTICLE INFORMATION

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### ABSTRACT

Thinking style and attitude significantly influence individuals' actions and behaviors across various domains. Previous research has highlighted the challenges of integrating these thinking styles and attitudes with the complexities of real-world scenarios. This article investigates the thinking styles and attitudes of executives (n=216) towards sports, examining the relationships between these variables in the context of gender, active sports participation, frequency of sports activity, and purpose of sports engagement. The study employs causal-comparative and correlational research designs. The findings indicate that executives predominantly favor a liberal thinking style, with a conservative thinking style being the least preferred. Analysis of the sub-dimensions of the general attitude scale revealed that while executives generally place high importance on and interest in sports, their active participation in sports is moderate. A regression model assessing the specific impact of thinking styles on attitudes towards sports demonstrated that the legislative, executive, judicial, monarchic, hierarchical, oligarchic, anarchic, global, local, internal, external, liberal, and conservative thinking styles collectively have a significant relationship with general attitudes towards sports. However, only the legislative, hierarchical, and liberal thinking styles were significant predictors of overall sports attitudes. Specifically, an increase in the legislative thinking style correlated with a decrease in positive sports attitudes, whereas increases in hierarchical and liberal thinking styles were associated with enhanced positive sports attitudes. The final findings revealed low-level positive and negative correlations between all sub-dimensions of the executives' thinking styles inventory and their general attitude towards sports and its sub-dimensions.

**Keywords:** Attitudes, Executives, Private Sector, Sport, Thinking Styles



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## INTRODUCTION

Thinking is an infinite skill in human thinking. It refers to people's specific approach to processing and evaluating information, problem solving and decision-making. (Armstrong & Cools 2009; Yılmaz & Sünbül, 2004). Thinking is classified according to different types thanks to the aim to reach and the skills it contains. Thinking is the reflection of the thinking processes that occur in the human mind differently. Different personality and character structures have led to the formation of different thinking style. People's thinking styles differ from each other, and the accumulation, abilities and personal characteristics of the individual and cultural differences play an important role in the formation and shaping of the way of thinking. (Park et al., 2005). It is seen that the thinking styles of individuals are applied at a high level and sometimes at a low level in the solution of problems and decision-making stages according to the social environment, society, time and cultural structures of the community (Zabukovec & Kobal-Grum, 2004). Palut describes thinking styles "It is interpreted as a different reflection of the thoughts and processes that occur in the inner world of the person" (Palut, 2004). In another definition, the thinking style is the tendencies and orientations revealed by the individuals as a result of the evaluation in the mental process against the problems, events and various problems they encounter. (Sünbül, 2004). Sternberg (1997) tried to define and classify thinking styles by analogy with the governing organization and mechanism of an organization or country. In this context, he characterized his theory as organizational behaviour and management in thinking. In recent years, managerial thinking style studies have increased their importance in management and organizational behaviour studies. Firms and companies are in fierce competition to take part in this global market, which is becoming increasingly complex and uncertain and where competition is at the highest level. Thus, managers and executives working in the relevant sectors must possess or exhibit creative and multi-dimensional thinking skills with intuitive and emotional evaluations as well as analytical and linear thinking. (Vance 2007, Smith et al., 2004). This study analyzes the thinking styles of managers and their attitudes toward sports by comparing them according to age, active sports status, frequency of playing sports, and purpose of playing sports

### Thinking Style

The concept of thinking styles, as initially defined by Sternberg and Grigorenko (1993), refers to the manner in which individuals prefer to process information, finding certain methods more usable and suitable for themselves. Sternberg (1997) expanded on this by categorizing thirteen distinct thinking styles into five domains: forms, functions, levels, scope, and trends. This theory draws an analogy between these cognitive processes and the legislative, executive, and judicial functions found in governmental systems. Specifically, the legislative function in thinking involves the creation of rules and the production of original, creative outputs. The executive function pertains to the implementation, application, and practical conversion of ideas, while the judicial function encompasses evaluation, decision-making, judgment, criticism, and comparison (Buluş, 2005).

Recent research continues to explore and validate these dimensions of thinking styles. For example, Zhang and Sternberg (2019) have provided contemporary insights into how these styles impact educational outcomes and professional practices, emphasizing the importance of aligning educational strategies with individual cognitive preferences to enhance learning efficacy.

When we look at the literature studies on thinking, it is observed that there are many theories that open thinking styles to the discussion. All these scientific findings have been aimed at finding the way people think. One of these theories is the Theory of Mental Self-Government. The main theme in this theory, found and developed by Sternberg, is the creation of executive, authoritative, judicial, monarchical, hierarchical and oligarchic thinking styles

that have been adopted by many people and institutions around the world (Buluş, 2000). Sternberg and Grigorenko (1997), Balkıs & Işiker (2005) & Sternberg (2009); He divided his thinking styles into 13 categories considering the characteristics of the managers in particular and the profiles of all individuals in general (Table 1).

**Table 1**

*Summary of Styles of Thinking Style*

<b>Style</b>	<b>Characterization</b>
Legislative	Like to create their own management processes by creating their own rules.
Executive	They are successful in transforming framed and defined project applications.
Judicial	Actively use the elements of judgment, criticism in decision-making processes.
Monarchic	Focus on a single fact or variable want to make their own rules.
Hierarchical	Make a to-do list or activities according to its importance.
Oligarchic	Focus equally on every element that make up a task.
Anarchic	They may act out of rules while performing their tasks.
Global	Handle issues with a holistic / global approach.
Local	Concentrate on specific problems rather than general problems.
Internal	Rely on their own hunches in solving problems.
External	Exhibit more social trends than outgoing business processes.
Liberal	Innovation and entrepreneurship are at the forefront, form their own paradigm.
Traditional	Prefers to stick on tradition and the way things are always done.

The concepts of thinking and attitude are interrelated, and the fact that the thought is positive and negative directly affects the attitude to be had. Attitude are pre-learned tendencies that consist of reactions and actions that individuals develop against people and everything that is a part of the external world (Demirel, 1997). Attitude is a process that develops in the mind that differs in the individual point organized through experiences and enables to react to all distant and closely related situations (Shapiro, 1999).

Thought and attitude are closely related to it is a complex mental process that can be interpreted and includes assumptions and assumptions that are difficult to discover and solve. An individual's attitude towards an item and an object does not arise simply by analyzing one's beliefs about that subject because emotions work simultaneously with the cognitive process of the human and are difficult to detect (Agarwal & Malhotra, 2005). The concept of thinking style that guides human behavior is in direct or indirect contact with not only sports but also many social, cultural and economic issues, and still maintains its characteristic of being the main determining theme. Even though people have similar abilities and qualifications, there is individual difference in their thinking styles. In recent years, it has been observed that the studies on individual differences have shifted towards the cognitive research axis of studies on human thought (Evans, 2002). In these individual differences, while skills, abilities and character traits are effective, the social environment of the individual place lived, the cultural structure of the society and time are also important (Buluş, 2000).

Attitude includes an evaluation of an object, person and event on a continuum from negative to positive makes us prone to behave in a certain way in the face of that object, person and event (Plotnik, 2009). Our thoughts about events and objects affect our feelings and our

emotions, on the other hand, directly affect our behaviour. It is no different from the attitude developed towards a sport, activity or object by individuals developing positive or negative thoughts towards an object or person. Therefore, the thinking style of individuals in developing positive or negative attitudes is directly related to it and transforms into behaviour through emotions and feelings, resulting in a positive or negative attitude and behaviour.

There is an intense and significant relationship between individuals' thinking processes and styles and attitudes towards sports, inheritance, life and orientation. In this context, it should primarily be aimed to determine the attitudes of societies about sports or to change the existing attitudes positively. It is thanks to sports that changes that form the basis of societies and determine the inter-personal relationship, reach everyone and have a universal language (Parkhouse & Bonnie, 2001). The change can be effective and ineffective as it can be on a small or large scale, but its positive effects and repercussions on the society are important for increasing healthier individuals in the society (Kotler et al., 2002).

According to the information summarized above, there is no existing study in the literature that examines the effect of thinking styles on general attitudes towards sports. This research aims to address this gap by being the first to explore the relationship between the thinking styles of individuals working at the management level and their attitudes towards sports. This study holds significant importance as it seeks to encourage and guide individuals not only in sports-related sectors but also across various business fields.

Based on the assumption that individuals have different thinking styles, managers' attitudes and tendencies towards sports; their thinking style may be shaped by factors such as gender difference, lifestyle, professional competencies and interest in sports. Therefore, even if there are different thinking styles, the correct perception of the physical, cognitive, mental and social-cultural benefits of sports will contribute to the development of positive attitudes of individuals in the society. In this regard, the following questions have been addressed to determine the aims and objectives of the research.

- Do the thinking styles of managers differ according to their gender?
- Which thinking styles do managers have?
- What is the attitude relationship toward sports?
- Do managers' thinking styles affect their attitudes towards sports significantly?

## METHOD

### Research Methodology

This research was conducted by causal comparison and correlational research designs. Causal comparison design is a research method that aims to examine the subject under study by comparing at least two different scales with each other. In this research, non-probability sampling methods used, is a sampling technique where the samples are gathered in a process that does not give all the individuals in the population equal chances of being selected. Non-probability sampling involves selecting participants based on convenience or specific criteria rather than random selection. This method allows for easier and quicker data collection, making it useful in exploratory research or when access to the entire population is impractical (Etikan et al., 2008). In this research design, the subject and event studied emerged independently from the directions and manipulations of the researcher and researcher does not have any influence or intervention in the formation of the groups to be compared (Büyüköztürk et al., 2008). In this research with the help of causal comparison design, the relationship between the thinking styles and attitudes towards sports of the individuals working as managers was compared according to different demographic variables.

Based on the relationships obtained with this research method, the opportunity to predict some results can be created. While the cause-effect relationship is emphasized in the causal comparison design, the change of variables together in the correlational research method is considered. The results obtained in the correlational research method only give an idea that there may be a cause-effect relationship (Büyüköztürk et al., 2008). In this research with the help of correlational research design; Relationships between the thinking styles of managers and their attitudes towards sports were examined and the effects of working individuals' thinking styles on attitudes towards sports were investigated

### **Universe and Sample**

The target population for this research comprises managers at Konya Şeker company. Given the substantial time, labor, and economic resources required to reach all 380 managers, a convenience sampling method was employed. This approach ensured the participation of 216 managers from both the central and provincial enterprises of Konya Şeker.

Prior to the commencement of the study, all necessary permissions were obtained, and a questionnaire was administered to 216 selected managers. The participants were thoroughly briefed on the purpose and procedures of the study, with an emphasis on the voluntary nature of their participation. Detailed descriptive information about the participating managers from Konya Şeker is presented in the subsequent charts.

The thesis project titled "An Examination of the Relationship Between the Thinking Styles and Attitudes Towards Sports of Employees in Managerial Positions" was approved for preparation as a thesis by the Directorate of the Institute of Health Sciences at Selçuk University, based on the decision dated 02/11/2017, numbered 44, and decision number 40/10. Furthermore, the project received unanimous approval for compliance with the Ethics Committee Directive by the Ethics Committee of the Faculty of Sports Sciences at Selçuk University, as per the decision dated 13/11/2017.

### **Measurement Instruments**

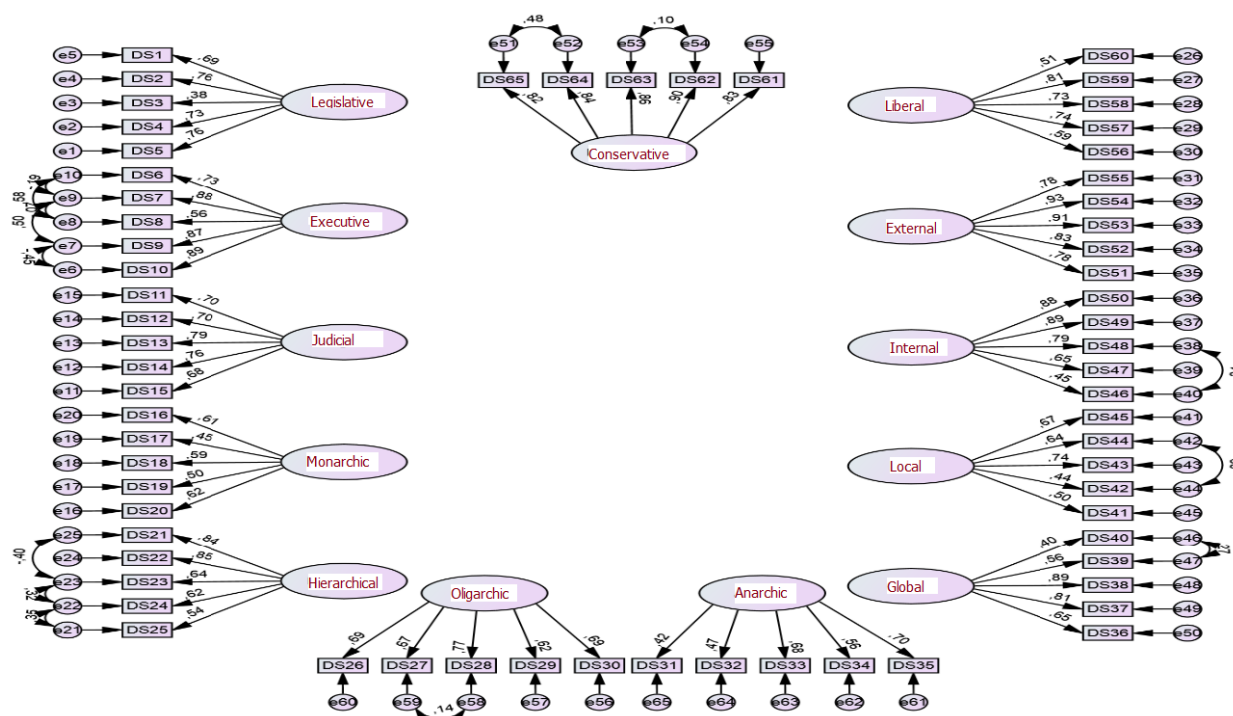
#### ***Thinking Style Scale***

The Thinking Styles Scale developed by Sternberg and Wagner (1992) and adopted into Turkish by Buluş (2006). The scale consists of 13 dimensions; Legislative, Executive, Judicial, Monarchic, Hierarchical, Oligarchic, Anarchic, Global, Local, Internal, External, Liberal and Conservative. There are five items in each dimension of the scale consisting of 65 items. Thinking Styles Scale, High scores from the dimensions of Legislative, Executive, Judicial, Monarchic, Hierarchical, Oligarchic, Anarchic, Global, Local, Internal, External, Liberal and Conservative indicate that each thinking style expressed by the dimensions of the scale is adopted. For example, if an individual gets high scores in the judicial thinking style, it means that the individual adopts the judicial thinking style and that the judicial thinking style may be dominant in the individuals.

The validity of the Thinking Styles Scale was examined by confirmatory factor analysis (CFA), and the Cronbach Alpha internal consistency coefficient was calculated. CFA is commonly used in scale development and validity analyzes or to determine whether a predetermined structure has been verified (Kline, 2011). In this study, confirmatory factor analysis was found to be compatible with the three-factor model in the analysis conducted to test whether the 13-factor structure of the thinking styles scale, which is accepted in the literature, is preserved. (TLI = 0.90; CFI =0.92; RMSEA = 0.06).

Figure 1

Thinking styles scale confirmatory factor analysis diagram

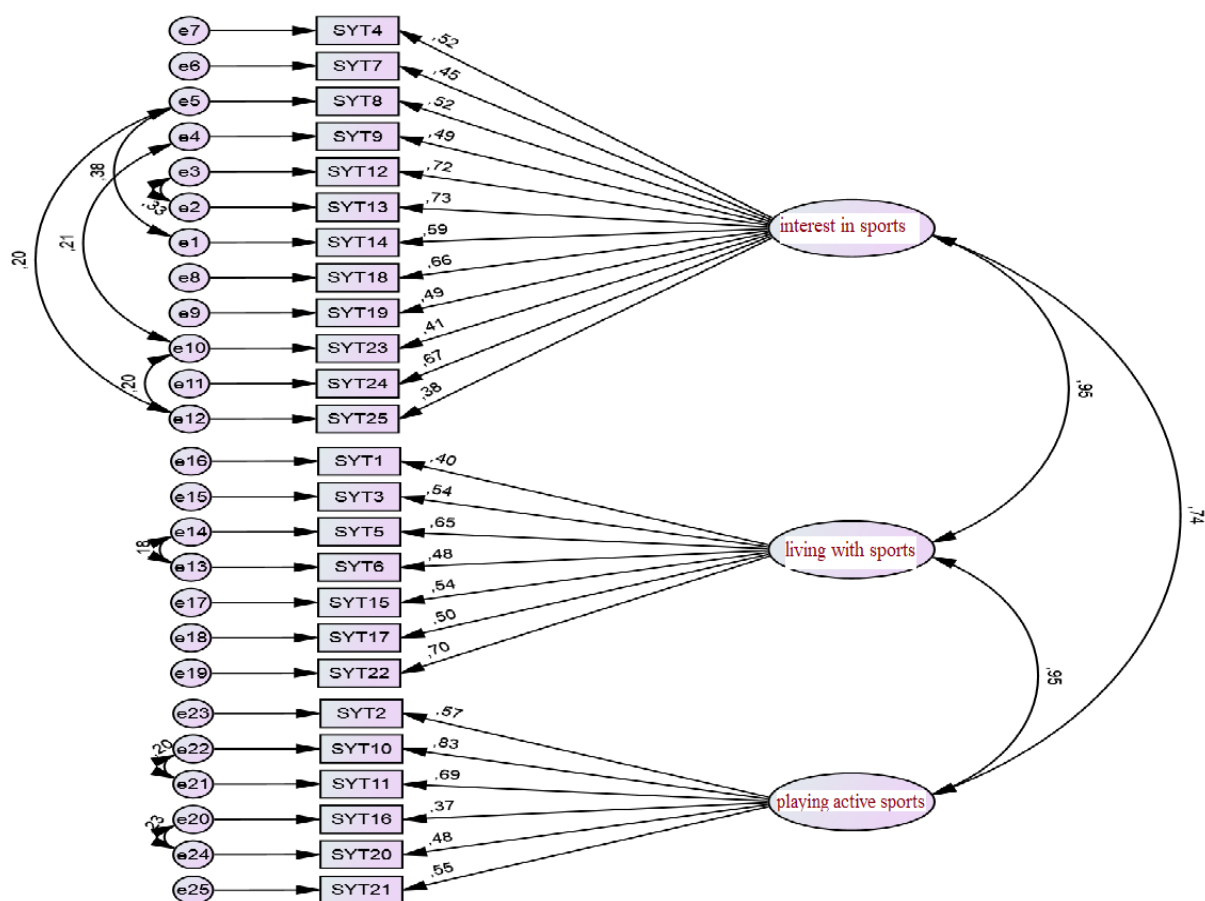


**Sport Attitude Scale**

In line with the general purpose of the study, the Attitude Towards Sports Scale developed by Şentürk (2012) was used to determine the managers' attitudes towards sports. The scale consists of three sub-dimensions; interest in sports, living with sports and playing active sports. In the scale with a total of 25 statements; 12 expressions in the interest in sports dimension (4-7-8-9-12-13-14-18-19-23-24-25), 7 statements in the dimension of living with sports (1-3-5-6-15-17- 22) and 6 statements (2-10-11-16-20-21) in the playing active sports life dimension. (Sentürk, 2012). As the scores obtained from the General Attitude Scale towards Sports increase, the level of positive attitudes towards sports also increases. Similarly, the scale; as the scores obtained from the dimensions of interest in sports, living in sports and active sports increase, interest towards sports, positive attitudes towards living and active sports increase. The validity of the Attitude towards Sports Scale was examined by confirmatory factor analysis (CFA) and its reliability was calculated by calculating the Cronbach Alpha internal consistency coefficient. CFA is an analysis method that is frequently used in the development of measurement models and provides important facilities. CFA is used in scale development and validity analysis or is used to determine whether a predetermined structure has been verified (Kline, 2011). In this study, confirmatory factor analysis was used to test whether the three-factor structure of the scale of attitude towards sports, which is accepted in the literature, is preserved. Fit values obtained by testing the model of the three-factor structure. (TLI = 0.95; CFI = 0.95; RMSEA = 0.08). Accordingly, it is understood that the three-factor model generally complies with the data at an acceptable level (Browne and Cudeck 1993, Byrne 1989, Jöreskog and Sörbom 1993, MacCallum et al. 1996, McDonald and Marsh 1990, Tanaka and Huba 1985).

**Figure 2**

*Attitude towards sports scale confirmatory factor analysis diagram.*



The tested three-factor model is shown in Figure 2.4. All path coefficients shown in the model are statistically significant ( $P < 0.001$ ). It was understood that the 3-factor structure of the Attitude towards Sports Scale was compatible with the available data. As a result, it was determined that the 3-factor structure of the scale was preserved in this study. The reliability of the Attitude towards Sports Scale was examined by calculating the Cronbach Alpha internal consistency coefficient. According to the results, the internal consistency coefficient of the dimension of being interested in sports was 0.85; the internal consistency coefficient of living with sports dimension was 0.75, and the internal consistency coefficient of active sports dimension was calculated as 0.74. The Cronbach Alpha internal consistency coefficient should be greater than 0.70. Coefficients lower than this value indicate that the reliability of the scale is weak (Tavşancıl, 2005). The values calculated for the Attitude Scale towards Sports in this study showed that the reliability of the scale based on internal consistency was sufficient.

### Statistical Analysis of Data

For the general purpose of the study, descriptive analysis techniques (mean, standard deviation, highest and lowest values) were used to determine the level of thinking styles and attitudes towards sports of the managers working in the Konya Şeker company. The scores of the managers who participated in the study from the Thinking Styles and Attitude Scale towards Sports; Parametric analysis techniques were used to compare and examine the variables of age, gender, education level, personal income level, actively doing sports, frequency of doing sports, purpose of doing sports and the type of sport / activity performed.



Parametric tests are based on some assumptions. These assumptions were checked before the analyzes were carried out. When the research data were examined, it was understood that there were no extreme values in the data set that would make normal distribution difficult. After this stage, it was investigated whether the scores obtained from the Thinking Styles and Attitudes towards Sports Scales have a normal distribution. In studies with large samples, it is considered sufficient to have the coefficients of skewness and kurtosis in the range of  $\pm 2$  to meet the assumption of the normal distribution (George & Mallery, 2010). It was determined that the skewness and kurtosis values of the distributions are in the specified range ( $-0.94 \leq \text{Skewness} \leq 1.15$ ;  $-0.58 \leq \text{Kurtosis} \leq 1.17$ ), and the data show a distribution quite close to normal. According to this result, it is understood that it is appropriate to use parametric tests in data analysis. The dependent and independent variables and analysis techniques used in the study are shown in Table 2.

**Table 2**

*Dependent, Independent Variables and Analysis Techniques*

<b>Dependent Variables</b>	<b>Independent Variables</b>	<b>Analysis Techniques</b>
<b>Scores Obtained from Thinking Styles and Attitudes Towards Sports Scales</b>	Gender	Independent t test sample
	Sport Status	Independent t test sample
	Frequency of playing sports	One-way analysis of variance
	Purpose of playing sports	One-way analysis of variance

By using the Pearson Correlation analysis technique, the relationships between the managers' scores from the Thinking Styles Scale and the scores they received from the Attitude towards Sports Scale were examined. Pearson Correlation Analysis requires meeting the normal distribution assumption. When this assumption is met, the direction and strength of linear relationships between variables can be reported with the help of Pearson Correlation and Multiple Linear Regression Analysis. The correlation coefficients obtained can be interpreted as follows; A low level of correlation with  $0 \pm 0.29$ , a moderate correlation of  $0.30$  with  $\pm 0.69$ , and a high level of correlation with  $0.70$  with  $\pm 1.0$  (Çokluk et al., 2012).

## FINDINGS

In the study, to determine the thinking styles of the managers, the mean, standard deviation, minimum, and maximum values of the data obtained from the thinking styles scale were calculated and analyzed.

**Table 3**

*Descriptive Values of Scores Obtained from the Thinking Style Scale*

<b>Sub-scales</b>	<b>n</b>	<b>Minimum</b>	<b>Maksimum</b>	<b><math>\bar{X}</math></b>	<b>Sd</b>	<b>Level</b>
<b>Legislative</b>	216	2,8	7,0	5,46	0,92	High
<b>Executive</b>	216	3,2	7,0	5,23	0,85	Medium-High
<b>Judicial</b>	216	3,0	7,0	5,54	0,78	High
<b>Monarchic</b>	216	2,0	6,8	4,51	0,94	Medium-High
<b>Hierarchical</b>	216	2,4	7,0	5,58	0,81	High
<b>Oligarchic</b>	216	2,0	6,8	4,61	1,06	Medium-High
<b>Anarchic</b>	216	2,2	7,0	5,23	1,00	Medium-High
<b>Global</b>	216	1,0	6,4	3,60	1,12	Medium-
<b>Local</b>	216	2,2	6,6	4,68	0,92	Medium-High
<b>Internal</b>	216	1,8	7,0	4,07	1,20	Medium-
<b>External</b>	216	1,6	7,0	5,26	1,04	Medium-High
<b>Liberal</b>	216	2,2	7,0	5,73	0,82	High
<b>Conservative</b>	216	1,0	6,8	2,79	1,23	Medium-High

When Table 3 is examined, the Legislative, Executive, Judicial, Monarchic, Hierarchical,

Oligarchic, Anarchic, Global, Local, Internal, External, Liberal and Conservative thinking style scores are respectively 2.8-7.0; 3.2-7.0; 3.0-7.0; 2.0-6.8; 2.4-7.0; 2.0-6.8; 2.2-7.0; 1.0-6.4; 2.2-6.6; 1.8-7.0; 1.6-7.0; It is understood that it takes values between 2.2-7.0 and 1.0-6.8. Legislative, Executive, Judicial, Monarchic, Hierarchical, Oligarchic, Anarchic, Global, Local, Internal, External, Liberal and Conservative thinking style mean scores are 5.46, respectively; 5.23; 5.54; 4.51; 5.58; 4.61; 5.23; 3.60; 4.68; 4.07; 5.26; It is calculated as 5.73 and 2.79. According to these values, rulers' perceptions of legislative, judicial, hierarchical and liberal thinking styles are high; middle-high perceptions of executive, monarchic, oligarchic, anarchic, local and external thinking style; global and intrinsic learning style perceptions are moderate and conservative learning style perceptions are medium-low.

The comparison of the scores obtained by the managers from the Thinking Styles Scale according to the independent variables are presented in tables below.

**Table 4**

*Comparison of Administrators' Scores Received from the Thinking Styles Scale by Gender*

Sub-scales	Gender	n	$\bar{X}$	Sd	t	P
<b>Legislative</b>	Female	63	5,55	0,83	0,88	0,380
	Male	153	5,43	0,95		
<b>Executive</b>	Female	63	5,41	0,85	2,00	0,046*
	Male	153	5,16	0,84		
<b>Judicial</b>	Female	63	5,42	0,77	-1,46	0,15
	Male	153	5,59	0,79		
<b>Monarchic</b>	Female	63	4,59	0,95	0,84	0,40
	Male	153	4,47	0,94		
<b>Hierarchical</b>	Female	63	5,52	0,88	-0,63	0,53
	Male	153	5,60	0,78		
<b>Oligarchic</b>	Female	63	4,74	1,01	1,14	0,26
	Male	153	4,56	1,08		
<b>Anarchic</b>	Female	63	5,03	1,04	-1,81	0,07
	Male	153	5,30	0,97		
<b>Global</b>	Female	63	3,69	1,12	0,81	0,42
	Male	153	3,56	1,12		
<b>Local</b>	Female	63	4,50	0,88	-1,83	0,07
	Male	153	4,75	0,93		
<b>Internal</b>	Female	63	4,30	1,18	1,84	0,07
	Male	153	3,98	1,20		
<b>External</b>	Female	63	5,02	1,02	-2,13	0,03*
	Male	153	5,35	1,04		
<b>Liberal</b>	Female	63	5,58	0,75	-1,68	0,09
	Male	153	5,79	0,85		
<b>Conservative</b>	Female	63	2,76	1,14	-0,25	0,80
	Male	153	2,80	1,27		

When Table 4 is examined, it is understood that the averages of the rulers' legislative, judicial, monarchic, hierarchical, oligarchic, anarchic, global, local, internal, liberal and conservative thinking style scores do not show a statistically significant difference by gender ( $P > 0.05$ ). On the other hand, it was understood that the managers' executive and external thinking style mean scores showed a statistically significant difference according to gender ( $P < 0.05$ ). The executive thinking style mean score of women and the external thinking style score average of men were found to be significantly higher.

**Table 5***Comparison of the Scores of the Managers' Thinking Styles Scale by Active Sports Activity*

Sub-scales	Do you do Sport active Sport?	n	$\bar{X}$	Sd	t	P
Legislative	Yes	107	5,37	0,93	-1,45	0,15
	No	109	5,55	0,90		
Executive	Yes	107	5,16	0,92	-1,18	0,24
	No	109	5,30	0,77		
Judicial	Yes	107	5,67	0,73	2,47	0,01*
	No	109	5,41	0,82		
Monarchic	Yes	107	4,56	0,93	0,78	0,44
	No	109	4,46	0,96		
Hierarchical	Yes	107	5,65	0,73	1,34	0,18
	No	109	5,50	0,88		
Oligarchic	Yes	107	4,67	1,03	0,72	0,47
	No	109	4,56	1,09		
Anarchic	Yes	107	5,40	0,88	2,65	0,01*
	No	109	5,05	1,07		
Global	Yes	107	3,68	1,19	1,15	0,25
	No	109	3,51	1,05		
Local	Yes	107	4,89	0,82	3,43	0,00
	No	109	4,47	0,97		
Internal	Yes	107	4,05	1,12	-0,31	0,76
	No	109	4,10	1,28		
External	Yes	107	5,20	1,09	-0,79	0,43
	No	109	5,31	1,00		
Liberal	Yes	107	5,79	0,89	1,06	0,29
	No	109	5,67	0,75		
Conservative	Yes	107	2,56	1,12	-2,73	0,01*
	No	109	3,01	1,29		

\*P&lt;0,05

When Table 5 is examined, managers only; It is understood that the mean scores of judicial, anarchic, local and conservative thinking styles show a statistically significant difference according to the status of active sports ( $P < 0.05$ ). There is a significant relationship between active sports and judicial, anarchic, local and conservative thinking styles. Managers who stated that they actively do sports; It was determined that their perceptions of judicial, anarchic and local thinking styles were significantly higher, and their perceptions towards conservative thinking styles were significantly lower.

**Table 6***Comparison of the Scores of the Managers' Thinking Styles Scale by Frequency of Exercising*

Sub-scales	Frequency of Exercising	n	$\bar{X}$	Sd	F	P	Significant Difference
Legislative	1. Once a week	31	5,14	1,02	3,57	0,03*	3>1
	2. Twice a week	46	5,30	0,80			
	3. There are times a week and more	30	5,73	0,95			
Executive	1. Once a week	31	4,87	0,69	4,27	0,02*	3>1
	2. Twice a week	46	5,12	0,82			
	3. There are times a week and more	30	5,53	1,16			
Judicial	1. Once a week	31	5,75	0,67	2,30	0,11	-
	2. Twice a week	46	5,77	0,61			
	3. There are times a week and more	30	5,43	0,90			
Monarchic	1. Once a week	31	4,59	1,03	0,53	0,59	-
	2. Twice a week	46	4,46	0,93			
	3. There are times a week and more	30	4,67	0,82			
Hierarchical	1. Once a week	31	5,57	0,86	0,50	0,61	-
	2. Twice a week	46	5,64	0,57			

	3.	There are times a week and more	30	5,75	0,80			
<b>Oligarchic</b>	1.	Once a week	31	4,45	1,07			
	2.	Twice a week	46	4,86	0,84	1,57	0,21	-
	3.	There are times a week and more	30	4,59	1,23			

\*P<0,05

**Table 6**

*Comparison of the Scores of the Managers' Thinking Styles Scale by Frequency of Exercising (Continued)*

Sub-scales	Frequency of Exercising	n	$\bar{X}$	Sd	F	P	Significant Difference
<b>Anarchic</b>	1. Once a week	3 1	5,53	0,95			
	2. Twice a week	4 6	5,62	0,63	6,23	0,00*	1>3 2>3
	3. There are times a week and more	3 0	4,95	1,00			
<b>Global</b>	1. Once a week	3 1	3,99	1,17			
	2. Twice a week	4 6	3,50	1,07	1,61	0,21	-
	3. There are times a week and more	3 0	3,66	1,35			
<b>Local</b>	1. Once a week	3 1	4,85	0,79			
	2. Twice a week	4 6	5,05	0,75	1,76	0,18	-
	3. There are times a week and more	3 0	4,69	0,94			
<b>Internal</b>	1. Once a week	3 1	3,87	1,00			
	2. Twice a week	4 6	4,00	1,11	1,25	0,29	-
	3. There are times a week and more	3 0	4,31	1,24			
<b>External</b>	1. Once a week	3 1	5,37	0,95			
	2. Twice a week	4 6	5,46	0,78	6,59	0,00*	1>3 2>3
	3. There are times a week and more	3 0	4,62	1,41			
<b>Liberal</b>	1. Once a week	3 1	5,75	0,73			
	2. Twice a week	4 6	5,96	0,70	1,87	0,16	-
	3. There are times a week and more	3 0	5,56	1,22			
<b>Conservative</b>	1. Once a week	3 1	2,54	1,08			
	2. Twice a week	4 6	2,38	1,03	1,70	0,19	-
	3. There are times a week and more	3 0	2,86	1,27			

\*P<0,05

When Table 6 is examined, managers only; It is understood that the mean scores of legislative, executive, anarchic and external thinking styles show a statistically significant difference according to the frequency of doing sports (P <0.05). There is a significant relationship between the frequency of doing sports and the styles of legislative, executive, anarchic and external thinking. The perceptions of the managers who stated that they did sports

“three times a week or more” towards the legislative and executive thinking styles were found to be significantly higher than those of the managers who stated that they did sports “once a week”. The perceptions of the managers who stated that they do sports “once a week” and “twice a week” towards anarchic and external thinking styles are significantly higher than those of their managers who stated that they do sports “three times a week or more”.

**Table 7**

*Comparison of the Scores of the Managers' Thinking Styles Scale with the Purpose of Exercising*

Sub-scales	Purpose of Doing Sports	n	$\bar{X}$	Sd	F	P
<b>Legislative</b>	Health	130	5,45	0,97	0,08	0,92
	Social activity	63	5,48	0,90		
	Leisure activity	21	5,53	0,69		
<b>Executive</b>	Health	130	5,15	0,84	2,57	0,08
	Social activity	63	5,25	0,89		
	Leisure activity	21	5,60	0,68		
<b>Judicial</b>	Health	130	5,62	0,76	1,81	0,17
	Social activity	63	5,40	0,80		
	Leisure activity	21	5,47	0,86		
<b>Monarchic</b>	Health	130	4,50	0,92	0,04	0,96
	Social activity	63	4,53	1,05		
	Leisure activity	21	4,47	0,68		
<b>Hierarchical</b>	Health	130	5,55	0,84	0,48	0,62
	Social activity	63	5,65	0,77		
	Leisure activity	21	5,49	0,75		
<b>Oligarchic</b>	Health	130	4,65	1,09	1,01	0,37
	Social activity	63	4,49	1,07		
	Leisure activity	21	4,85	0,88		
<b>Anarchic</b>	Health	130	5,31	0,95	1,42	0,24
	Social activity	63	5,05	1,03		
	Leisure activity	21	5,26	1,17		
<b>Global</b>	Health	130	3,62	1,09	0,55	0,58
	Social activity	63	3,63	1,11		
	Leisure activity	21	3,35	1,28		
<b>Local</b>	Health	130	4,66	0,85	0,64	0,53
	Social activity	63	4,77	1,07		
	Leisure activity	21	4,53	0,94		
<b>Internal</b>	Health	130	4,13	1,17	0,89	0,41
	Social activity	63	3,92	1,19		
	Leisure activity	21	4,26	1,39		
<b>External</b>	Health	130	5,17	1,03	1,78	0,17
	Social activity	63	5,46	0,93		
	Leisure activity	21	5,17	1,41		
<b>Liberal</b>	Health	130	5,71	0,82	0,43	0,65
	Social activity	63	5,79	0,83		
	Leisure activity	21	5,61	0,85		
<b>Conservative</b>	Health	130	2,63	1,03	2,67	0,07
	Social activity	63	3,10	1,58		
	Leisure activity	21	2,90	1,10		

When Table 7 is examined, the managers; It is understood that the mean scores of legislative, executive, judicial, monarchic, hierarchical, oligarchic, anarchic, global, local, internal, external, liberal and conservative thinking style do not show a statistically significant difference according to the purpose of doing sports ( $P > 0.05$ ). There is no meaningful relationship between the aim of doing sports and legislative, executive, judicial, monarchic, hierarchical, oligarchic, anarchic, global, local, internal, external, liberal and conservative thinking styles.

Findings Regarding the Relationship Between the Thinking Styles Scale and the Attitude towards Sports Scale

**Table 8**

*Correlation Coefficients of the Relationships Between the Scores Obtained from the Managers' Thinking Styles Scale and the Scores Obtained from the Sports Attitude Scale*

Sub-scales	Interest in Sport	Live in Sport	Active Sport	Total Point
<b>Legislative</b>	-0,180**	-0,152*	-0,119	-0,174*
<b>Executive</b>	-0,102	-0,001	0,012	-0,053
<b>Judicial</b>	0,137*	0,007	0,006	0,076
<b>Monarchic</b>	0,004	0,037	-0,002	0,011
<b>Hierarchical</b>	0,146*	0,141*	0,097	0,149*
<b>Oligarchic</b>	-0,020	-0,012	0,019	-0,017
<b>Anarchic</b>	0,222**	0,054	-0,005	0,127
<b>Global</b>	0,080	0,090	0,113	0,098
<b>Local</b>	0,181**	-0,008	-0,066	0,073
<b>Internal</b>	-0,132	-0,112	-0,026	-0,111
<b>External</b>	0,185**	0,007	-0,009	0,094
<b>Liberal</b>	0,238**	0,091	0,038	0,164*
<b>Conservative</b>	-0,055	0,088	0,102	0,031

\*\* $P < 0,01$ ; \* $P < 0,05$

The relationship between the Thinking Styles Scale sub-dimension scores in Table 8 and the sub-dimension and total scores of the attitude towards sports scale was examined. As a result of this examination. Interest in sports with legislative thinking style ( $r = -0.180$ ;  $P < 0.01$ ), living with sports ( $r = -0.152$ ;  $P < 0.05$ ) and general attitude towards sports ( $r = -0.174$ ;  $P < 0.05$ ) of low negative direction; Judicial ( $r = 0.137$ ;  $P < 0.05$ ), anarchic ( $r = 0.222$ ;  $P < 0.05$ ), local ( $r = 0.181$ ;  $P < 0.01$ ) and extrinsic ( $r = 0.185$ ;  $P < 0.05$ ) low level positive direction between thinking styles and interest in sports; Hierarchical thinking style and interest in sports ( $r = 0.146$ ;  $P < 0.05$ ), living with sports ( $r = 0.141$ ;  $P < 0.05$ ) and general attitude towards sports ( $r = 0.149$ ;  $P < 0.05$ ) positive way; It was found that there is a low level positive relationship between liberal thinking style and interest in sports ( $r = 0.238$ ;  $P < 0.05$ ) and general attitude towards sports ( $r = 0.164$ ;  $P < 0.05$ ).

**Table 9**

*Results of the Regression Analysis Performed to Determine the Effect of Thinking Styles on General Attitude towards Sports*

Variable	B	Standard Error	$\beta$	t	P
Stable	2,82	0,49		5,76	0,00
Legislative	-0,11	0,06	-0,17	-2,06	0,04
Executive	0,01	0,06	0,01	0,15	0,88
Judicial	0,00	0,07	0,00	-0,04	0,97
Monarchic	-0,02	0,06	-0,04	-0,44	0,66
Hierarchical	0,13	0,06	0,17	2,13	0,03
Oligarchic	-0,09	0,05	-0,14	-1,73	0,09
Anarchic	0,04	0,06	0,07	0,75	0,45
Global	0,07	0,04	0,12	1,66	0,10
Local	0,01	0,06	0,02	0,22	0,83
Internal	-0,06	0,04	-0,11	-1,25	0,21
External	-0,02	0,05	-0,04	-0,46	0,65
Liberal	0,13	0,06	0,17	2,03	0,04
Conservative	0,05	0,04	0,10	1,23	0,22

$R=0,342$   $R^2=0,117$ ,  $F_{(13-215)}=2,053$   $P=0,018$

When Table 9 is examined, legislative, executive, judicial, monarchic, hierarchical, oligarchic, anarchic, global, local, internal, external, liberal and conservative thinking styles together give a significant relationship with the general attitude towards sports ( $R = 0.342$ ;  $R^2 = 0.117$ ;  $F = 2.053$ ;  $P < 0.05$ ) These variables together explain approximately 12% of the total variance in general attitude towards sports. On the other hand, when the significance test results of the calculated coefficients are examined, it is understood that only legislative, hierarchical and liberal thinking styles are significant predictors of general attitudes towards sports. As the legislative thinking style increases, positive attitudes towards sports decrease, and as the hierarchical and liberal thinking style increases, positive attitudes towards sports increase.

## DISCUSSION & CONCLUSION

In this study, the thinking styles and attitudes towards sports of 214 managers working in Konya Seker company were determined, and their thinking styles and attitudes towards sports were compared according to gender, age, active sports status, frequency of doing sports and the purpose of doing sports. In addition, the relationship between managers' thinking styles and their attitudes towards sports and the effect of thinking styles on their attitudes towards sports were also investigated. In this context, important and significant results were obtained at causal and relational levels in the study.

The managers who participated in the research had high perceptions of legislative, judicial, hierarchical and liberal thinking styles in general; middle-high perceptions of executive, monarchic, oligarchic, anarchic, local and external thinking style; It was determined that global and internal thinking style perceptions were moderate and conservative thinking style perceptions were at medium-low level.

According to the thinking style scale score averages of the administrators, it is seen that the thinking style preferred the most is liberal ( $x = 5.73$ ). According to this result, it is possible to say that managers prefer to try new approaches, techniques and actions at a high level and they can adapt to the changes and developments that occur in their environment (Sternberg 1994). It is seen that the liberal thinking style is followed by hierarchical ( $x = 5.58$ ), judicial ( $x = 5.54$ ) and legislative ( $x = 5.46$ ) thinking styles, respectively, in terms of average score (Table

3). that they can apply the order of priority and afterward in their work in a healthy way, they can establish the balance in their social and business life in a systematic way, they prefer to be systematic and organized while performing a job and making a decision, they set priorities both in daily life and in their work because they think that they cannot be efficient at the same time (hierarchical ) (Balgamis, 2007); They actively use the criticism and criticism dimension in solving problems, constantly evaluate their subordinates and aim to make the best decision with different critical perspectives, but they do not like being criticized by others (judgmental) (Monthly 2006, Obeidat 2007); It is possible to say that they use their own decisions and ideas extensively in their management processes and that their own initiatives and decisions as a manager (legislature) determine their relations with their employees and stakeholders (Zang, 2003).

Zang (2003) states that legislative, judgmental, hierarchical and liberal thinking styles have a high-level cognitive structure and are named Type 1 styles in this respect, that there is a mentally complex relationship between these styles, and this thinking in individuals with cognitive and mental maturity. He stated that their styles can be seen in a versatile way. Considering that 75.5% of those participating in the study are managers, 20.4% are managers, 3.2% are directors and 0.9% are coordinators, it is seen that the result is supported by the literature. The fact that managers consist of individuals who are educated and take part in managerial processes explains the predominant determination of these four styles. Zhang and Sternberg (2000) reported that individuals with high Type I thinking styles have high self-esteem, a deep approach to learning, a high level of cognitive development and leadership characteristics. In this context, their management and professional experiences as well as their educational foundations can be explained as the reason for the high level of Type 1 thinking styles of the managers within the scope of the research.

According to the thinking style scale score averages of the managers, it is seen that the thinking style that they prefer least is conservative ( $x = 2.79$ ). According to this result, it is possible to say that managers often do not use conventional methods in solving problems, and it is not important for them to employ traditional and cliché methods (Sternberg 2009). Zang (2003) reported that individuals with this thinking style express a tendency in line with the second group of norms and that this thinking style is a way of thinking that requires lower levels of cognitive complexity. He stated that these individuals prefer to stick to the general theme without going beyond the given duties. In studies with similar results, Vural (2013) stated that the top three thinking styles preferred by sports managers are hierarchical, executive and liberal, while the least preferred thinking styles are conservative, internal and local, Çağlayan (2012) stated that physical education teachers are the most preferred Balgalmış (2007) found that the thinking styles most used by school administrators were hierarchical, executive and external thinking styles, and the least preferred thinking styles were conservative, oligarchic and local thinking styles.

The gender variable of "legislative", "judicial", "monarchic", "hierarchical", "oligarchic", "anarchic", "global", "local", "internal", "liberal" and "conservative" thinking styles of the administrators participating in the study. it did not differ significantly according to; It was determined that "executive" and "external" thinking styles differ significantly according to the gender variable (Table 4). The executive thinking style score averages of women were found to be significantly higher than the male, and the external thinking style mean score of the male was found to be significantly higher than the female. According to Sternberg, individuals who frequently prefer the executive thinking style like to put things into practice and actively implement the plans or programs offered to them. In addition, these types of individuals are successful in transforming projects with a defined and defined content into practice (Invention 2005). We can say that female managers participating in the study have these characteristics at a higher level than men.



Individuals with an external thinking style are extroverted, human-centered, approachable and more social. They like working with others and dealing with problems with them. Group or collaborative learning experiences are activities they enjoy participating in (Invention 2005). Individuals using external thinking style tend to be more sensitive to social issues and be aware of social problems. They are more prone to collaboration (Duru 2004, Zhang and Sternberg 2005, Invention 2006). We can say that male managers participating in the study have these characteristics at a higher level than women.

It was found that the thinking styles of the administrators participating in the research did not differ significantly according to the variable of active sports; It was determined that "judgmental", "anarchic", "local" and "conservative" thinking styles differ significantly according to the active sports variable (Table 5). The average scores of judicial, anarchic and local thinking style of managers who do active sports were found to be higher than managers who do not do active sports, and the average of conservative thinking styles of managers who do not do active sports was found to be higher than managers who do active sports. In judgmental thinking style, the individual takes into account the consequences of other individuals' actions and focuses on evaluating them. It focuses on evaluation, judgment and comparison. He prefers to work on problems that he can analyze and evaluate (Çubukçu 2004). In anarchic thinking style, individuals like to concentrate on jobs that do not create anxiety and give comfort and flexibility. They avoid being attached to anything. They are not systematic (Çubukçu 2004). The local way of thinking is associated with an interest in details, a tendency to deal with details rather than a general and comprehensive perspective. An individual with a local thinking style prefers dealing with concrete problems over abstract issues (Duru 2004, Zhang and Sternberg 2005, Invention 2006). When we evaluate the results of the research according to the related literature, managers who do active sports have a higher level of evaluation, judgment, comparison; It is possible to say that they carry out managerial processes with a detailed approach and avoiding being tied to anything. Another result of the study is that managers who do not do active sports use conservative thinking styles at a higher level compared to managers who do active sports. Individuals with a predominantly conservative thinking style like to act in accordance with existing rules and guidelines, to resist change, and to stay away from uncertain situations as long as possible. They prefer familiarity and what is known in their lives (Invention, 2005). In short, they are the people who prefer the traditional, the tried (Fer, 2005). Again, when we evaluate the results of the research according to the relevant literature, it is possible to say that managers who do not do active sports prefer those who are known at a higher level, prefer familiarity, and who prefer the tried when performing managerial processes compared to managers who do active sports.

It was found that the thinking styles of the administrators participating in the research did not differ significantly according to the frequency of doing sports; "judicial", "monarchic", "hierarchical", "oligarchic", "global", "local", "internal", "liberal" and "conservative"; It was determined that "legislative", "executive", "anarchic" and "external" thinking styles differ significantly according to the frequency of doing sports (Table 6). Scheffe multiple comparison test was applied to determine which groups caused the significant difference observed between groups. As a result of this practice, the average scores of executive and legislative thinking styles of managers who do sports three times a week or more than managers who do sports once a week; The anarchic and external thinking style score averages of managers who do sports once or twice a week were found to be higher than managers who do sports three times a week or more. This thinking style focuses on creativity, planning, designing and shaping (Çubukçu 2004, Fer 2005). In the executive thinking style, practice and doing actions are predominant. Individuals using this style enjoy working in accordance with the procedure (Çubukçu 2004). They like to follow the instructions and do what they are told (Park et al 2005). They prefer to apply existing rules and structured problems (Duru, 2004).

In the examination of the relationship between the thinking styles scale sub-dimension scores of the managers participating in the study and the sub-dimension and total scores of the attitude towards sports scale (Table 8), the following results were obtained: There was a low level of negative direction between legislative thinking style and interest in sports, and general attitude towards sports and sports. It has been determined that there is a relationship. According to this result; managers' high level of features such as doing everything according to their own style, liking to invent and design, not sticking to a certain structure, preferring to deal with works that require creativity, liking to produce projects, innovative, creative and idea generation (legislative thinking style) We can say that it will decrease their general attitudes towards being interested, living with sports and sports. The legislative function is also called prescriptive. In other words, this thinking style includes features that are very bound to the rules, who apply the rules meticulously, and who want the rules to be followed. The fact that managers with these qualities primarily consider their responsibilities in their jobs, strictly adhere to the rules on this issue, and perhaps focus on new business-related projects even in their spare time may have caused the result to come out like this.

It was found that there is a low-level positive relationship between judicial thinking style and interest in sports. According to this result; that managers have a high level of features such as evaluating the implementation processes of rules and instructions, liking to judge objects, events and facts, preferring to evaluate and analyze existing situations and thoughts, prefer studies where they can compare two perspectives or evaluate one perspective (judicial thinking style) We can say that it will increase their interest in sports.

It was determined that there is a low-level positive relationship between hierarchical thinking style and interest in sports, living with sports and general attitude towards sports. According to this result; Considering many goals with different priorities, focusing on several tasks at once, liking to do multiple tasks at once, not dealing with more than one purpose, but being aware that not all goals can be achieved at the same rate, using time effectively, doing multiple tasks simultaneously by prioritizing and problem We can say that having a high level of characteristics such as being systematic (hierarchical thinking style) in solving approaches will increase their interest in sports, living with sports and their general attitude towards sports.

It was found that there is a low-level positive relationship between anarchic thinking style and interest in sports. According to this result; managers like to concentrate on jobs that do not create anxiety, comfort, flexibility, avoid being attached to anything, like jobs that provide flexibility about where, when and how to work, like to handle problems with a random approach, dislike systems, directions and limitations, rules, We can say that having a high level of features such as avoiding procedures and official systems (anarchic thinking style) will increase their interest in sports.

It was found that there is a low-level positive relationship between local thinking style and interest in sports. According to this result, managers' high level of attention to details, dealing with concrete problems, preferring abstract issues, generally turning towards utilitarian goals, enjoying participating in work requiring work by focusing on details (local thinking style) rather than a general and comprehensive perspective, we can say that it will increase.

It was found that there is a low-level positive relationship between extrinsic thinking style and interest in sports. According to this result; managers like working with others and dealing with problems related to them, being more sensitive to social issues and being aware of social problems, being more prone to cooperation, enjoying doing jobs that provide opportunities to improve interpersonal relationships, preferring to do group work instead of individual work (external thinking style) We can say that having such features at a high level will increase their interest in sports.

A study revealed a modest positive correlation between a liberal thinking style and both an interest in sports as well as a general positive attitude towards sports. According to this result, managers like to do things in new ways that others have not used before, and to look for alternatives to traditional ways, to engage in work that requires innovation and uncertainty, to act without considering rules and procedures, to increase change, to encounter uncertain and uncertain situations, to make changes in their lives and to challenge traditions. We can say that having a high level of characteristics such as liking to read (liberal thinking style) will increase their interest in sports and their general attitude towards sports. There is no study examining the relationship between thinking styles and attitudes towards sports in the relevant literature.

The Thinking Styles Scale sub-dimensions (legislative, executive, judicial, monarchic, hierarchical, oligarchic, anarchic, global, local, intrinsic, external, liberal and conservative) showed a significant relationship with the general attitude towards sports (Table 9). Only legislative, hierarchical and liberal thinking styles among the variables were found to be significant predictors of general attitude towards sports. In other words, as the legislative thinking style increases, positive attitudes towards sports decrease, and as the hierarchical and liberal thinking style increases, positive attitudes towards sports increase.

### Recommendations

By organizing in-service training programs aimed at making managers aware of their own thinking styles, it can be ensured that they act in accordance with their thinking styles and develop their skills that will enable them to solve problems better. Managers can be informed about the positive effects of sports, both mentally, physically and emotionally, and they can be encouraged to participate in sports activities. Thinking styles have an important place in individuals' life skills and habits. It is thought that detailed studies investigating the thinking styles of managers and other factors affecting their attitudes towards sports (problem solving skills, ways of coping with stress, leadership styles, organizational commitments, management styles, etc.) will contribute to this field.

### Limitations of Research

The study has some limitations. The fact that the applied sample group is limited to only managers within a company is a fundamental deficiency in the generalizability of the results. Accordingly, it may be recommended to conduct similar studies on a larger scale

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**Ethics statement:** I hereby declare that research/publication ethics and citing principles have been considered in all the stages of the study. I take full responsibility for the content of the paper in case of dispute.

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