# Rumination and Positive Thinking States of Sports Center Members

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Abstract: Although rumination is a concept that expresses repetitive thoughts, it is considered as a parameter that can directly affect thinking styles. Accordingly in the study in which ruminative thinking styles and positive thinking states of sports center members were examined, it was examined how the variables differentiate the measurement tools. While 587 individuals who were members of the sports center participated in the study, the data were obtained by face-to-face survey method with the ruminative thinking style scale and positive thinking scale. Descriptive statistics, independent sample t test, one-way analysis of variance Anova, Tukey test, Pearson correlation test and regression analysis were used to determine the relationships between the groups. The findings indicate that the participants exhibited rumination and positive thinking styles above the average.

Significant differences were found between participants' gender, age, marital status, adequate and productive use of leisure time and ruminative thinking styles and positive thinking styles; on the other hand, perceived income and education levels did not significantly change both measurement tools. It is important for individuals to evaluate rumination, which is a form of repetitive thinking, in terms of reinforcing positive thinking rather than using it negatively, in terms of positive emotion regulation and thus developing positive thinking skills. By transferring various information in this direction in sports centers, various studies on positive thinking styles can be programmed in practices.

Keywords: Rumination, Positive Thinking, Sports, Members

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### INTRODUCTION

R umination has been defined as one of the reactions to stressful experiences that generally make it difficult to cope and its relationship with many psychological problems, especially depressive mood, has been revealed by response styles researchers [1] In adults, rumination is often referred to as a reflection of emotional conflicts [2]. Rumination occurs unconsciously when individuals experience negative life events or stressful events [3].

According to the general opinion, rumination stems from maladaptive thought habits and causes negative memories to be recalled repeatedly, leading to decreases in cognitive task performance in depressed patients [4]. rumination immediately increases self-focus and disrupts positive mood [5]. Ruminating about negative emotional events can make them feel more recent, reducing the sense of distance between them and the past [6].

Rumination refers to unconsciously repeated thoughts when an individual experiences negative life events or encounters stressful events [3]. The tendency to rumination is associated with increased activity in memory-related regions of the brain even during a cognitive task, indicating more internally directed thoughts [7]. Self-focused rumination leads to reduced problem-solving ability and self-esteem due to negative thoughts and self-blame [8]. Rumination induced in daily life immediately increases ruminative self-focus and disrupts positive mood [5].

This repetitive and disturbing way of thinking, called rumination, which can occur in stressful situations, can negatively affect individuals' mental health. On the other hand, when ruminative thoughts are processed appropriately, they can cause individuals to come out of the process stronger and can be replaced by positive thoughts [9].

Developing repetitive thought patterns in terms of positive thoughts can also contribute significantly to individuals' positive thinking styles. Positive thinking improves performance in difficult situations, increases effort capacity, and enhances coping in stressful situations [10]. Positive thinking is



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the tendency to always focus on the positive side of things. Positive people are those who believe they can overcome any obstacle. Some people believe that positive thinking is a scientifically proven way of thinking, but it may not always be positive and positive thinking may not be realistic [11]. Rather, positive thinking should be characterized as developing the ability to draw positive conclusions from various situations.

When all this information is evaluated, the current research was carried out to examine the level of ruminative thinking style and positive thinking skills of individuals who go to the sports center and to examine how these levels differ with various variables.

# **METHOD**

The study is a survey study prepared with quantitative method. The study group consists of 587 participants who are members of 5 different sports centers operating in Ankara. Considering the approximately 5000 sports center members in the population, 587 participants were included in the study to obtain a strong discourse, based on the information that at least 357 people would represent the sample group [28].

Data were collected by face-to-face survey method. In addition to the demographic data form, "Ruminative Thinking Style Scale" and "Positive Thinking Skills Scale" were collected.

## **Ruminative Thought Style**

The original name of the scale developed by Jay K. Brinker and David J.A. Dozois is "Ruminative Thought Style Questionnaire (RTSQ)" [12]. Consisting of 20 items, the scale is designed according to a Likert-type 7-point scoring system. In the scale, which tries to evaluate ruminative thinking styles, participants rate the extent to which the statements in the items describe themselves with a rating between seven (describes me very well) and one (does not describe me at all). The scale, which considers ruminative thinking as a repetitive, uncontrollable, intrusive and reversible way of thinking, investigates these characteristics in the items it contains [13].

Unlike other scales related to the concept, the RDDQ tries to assess the general tendency of thinking without taking into account the current mood of the person. This shows that the scale is suitable for use in other psychopathological conditions. Since it is not specific to any psychopathological condition, the sum of the scores in the scale does not indicate a psychiatric disorder. The scale, which does not have a cut-off score that determines the ruminative thought pattern, evaluates the ruminative thought tendencies of the participants. In the current study, the internal consistency coefficient was determined as .94.

# **Positive Thinking Skills Scale**

The Positive Thinking Skills Scale is an 8-item one-dimensional measurement tool. The scale has a 4-point scale. The validity and reliability studies of the Turkish form of the scale were conducted by Akın, Uysal, and Akın [14]. In the current study, the internal consistency coefficient was determined as 87

# Data analysis

As a result of the analyzes, parametric tests were applied since it was determined that the data showed normal distribution. Descriptive statistics, independent sample t test, one-way variance analysis Anova, Tukey test were used to determine the relationships between groups. The distribution table of the study group in the research is given in Table 1.

**Table 1.** Percentage and frequency distributions for the participants

	N=(587)						
	Variable	f	%				
Gender	Male	394	67,1				
	Female	193	32,9				
Age	30 <	257	43,8				
	30-40 age	166	28,3				
	40 >	164	27,9				
Marital status	Married	238	40,5				
	Single	349	59,5				
Education	High School and	117	19,9				
	Below						
	Bachelor's Degree	386	65,8				
	Postgraduate	84	14,3				
Percieved income	Low	115	19,6				
	Middle	431	73,4				
	High	41	7,0				
Leisure adequacy	Adequate	290	49,4				
	Inadequate	297	50,6				
Leisure productivity	Sufficient	262	44,6				
	Insufficient	325	55,4				

# **FINDINGS**

The findings for the analysis of the ruminative thinking styles and positive thinking states of the sports center members, the analysis of the differences between them and certain variables, and the determination of the relationship and effect between the measurement tools are given below.

**Table 2.** Arithmetic mean, standard deviation and Kurtosis-Skewness values between measurement tools

		N=(587)				
	Min.	Max.	$\bar{x}$	SS	Skewness	Kurtosis
Ruminative thinking styles	22,00	138,00	81,87	25,92	,149	-,816
Positive thinking skills	,00	24,00	15,64	5,02	-,312	-,113

When Table 2 is examined, it can be said that the participants in the study realized a high level of rumination and likewise a high level of positive thinking skills.

**Table 3.** Independent sample t test results between measurement tools and gender variable

	N=(587)					
	Gender	n	$\bar{x}$	SS	t	p
Ruminative thinking styles	Male	394	80,27	25,00	-2,147	0,032*
	Female	193	85,14	27,47	_	
Positive thinking skills	Male	394	15,26	4,83	-2,584	0,010*
_	Female	193	16,40	5,32	_	
p<0,05*			·			

Participants' ruminative thinking styles and positive thinking skills differ significantly according to gender. The relevant difference is that female participants exhibit higher ruminative thinking style and positive thinking style than male participants.

**Table 4.** One-way analysis of variance anova test results between measurement tools and age

			N=(587	<u>'</u> )		
	Age	n	$\frac{\overline{}}{x}$	SS	F	p
Ruminative thinking styles	30<	257	81,20	26,48	0,223	0,801
	30-40	166	81,86	25,33		
	40>	164	82,93	25,74		
	Total	587	81,87	25,92		
Positive thinking skills	30<	257 <sup>a</sup>	15,07	5,17	5,085	0,006*
	30-40	166 <sup>c</sup>	16,64	4,73		
	40>	164 <sup>b</sup>	15,52	4,93		
	Total	587	15,64	5,02		

p<0,05\* a>b>c>d

While ruminative thinking style does not show a significant difference according to age variable, it shows a significant difference according to positive thinking style. In the post hoc analysis in which within-group differences were determined, it was determined that the group under the age of 30 had higher positive thinking skills. Although not in a significant way, it is seen that the ruminative thinking style of the group over the age of 40 is higher than the other age groups.

**Table 5.** One way analysis of variance anova test results between measurement tools and perceived income variable

perceived income variable										
				N = (587)	7)					
		Perceived income	n	$\bar{x}$	SS	F	p			
Ruminative styles	thinking	Low	115	79,85	26,63	1,030	0,358			
		Middle	431	82,76	25,98	<u> </u>				
		High	41	78,14	23,00	<u> </u>				
		Total	587	81,87	25,92					
Positive thinkin	g skills	Low	115	15,19	4,70	0,578	0,562			
		Middle	431	15,74	5,17	<u> </u>				
		High	41	15,80	4,28					
		Total	587	15,64	5,02					

p<0,05\* a>b>c>d

When Table 5, in which the difference between perceived income level and measurement tools was determined, it was determined that the income levels of the participants did not differentiate their ruminative thinking and positive thinking skills. However, although there is no significant difference, it can be said that as the income level increases, positive thinking states increase in parallel.

**Table 6.** One way analysis of variance anova test results between measurement tools and education level variable

N=(587)							
Education level	n	$\frac{-}{x}$	SS	F	p		
High School and Below	117	80,30	26,34	0,975	0,378		
Bachelor's Degree	386	82,92	25,75				
Postgraduate	84	79,21	26,10				
Total	587	81,87	25,92				
High School and Below	117	16,20	4,64	1,067	0,345		
Bachelor's Degree	386	15,44	5,10				
Postgraduate	84	15,77	5,13	_			
Total	587	15,64	5,02				
	High School and Below Bachelor's Degree Postgraduate Total High School and Below Bachelor's Degree Postgraduate Total	High School and 117 Below  Bachelor's Degree 386  Postgraduate 84  Total 587  High School and 117  Below  Bachelor's Degree 386  Postgraduate 84	High School and 117 80,30  Below  Bachelor's Degree 386 82,92  Postgraduate 84 79,21  Total 587 81,87  High School and 117 16,20  Below  Bachelor's Degree 386 15,44  Postgraduate 84 15,77  Total 587 15,64	High School and 117 80,30 26,34 Below  Bachelor's Degree 386 82,92 25,75 Postgraduate 84 79,21 26,10  Total 587 81,87 25,92 High School and 117 16,20 4,64 Below  Bachelor's Degree 386 15,44 5,10 Postgraduate 84 15,77 5,13  Total 587 15,64 5,02	High School and 117 80,30 26,34 0,975  Below  Bachelor's Degree 386 82,92 25,75  Postgraduate 84 79,21 26,10  Total 587 81,87 25,92  High School and 117 16,20 4,64 1,067  Below  Bachelor's Degree 386 15,44 5,10  Postgraduate 84 15,77 5,13  Total 587 15,64 5,02		

p<0,05\* a>b>c>d

Measurement tools do not differ according to education level. However, it can be said that

positive thinking increases as the educational level increases.

Table 7. Independent sample t test results between measurement tools and marital status variable

	N=(587)					
	Marital	n	_ .v	SS	t	p
	status		X			
Ruminative thinking styles	Married	238	87,071	25,55	4,065	0,000*
	Single	349	78,329	25,60	_	
Positive thinking skills	Married	238	15,739	5,49	-0,387	0,699
_	Single	349	15,575	4,68	_	

p<0,05\*

It was determined that the ruminative thinking style of married participants was higher than that of single participants. There is no significant difference in positive thinking.

Table 8. Independent sample t test results between measurement tools and adequate time

			varial	ole			
_			•	N=(587)	)		
		Adequate time	n	$\bar{x}$	SS	t	p
Ruminative th styles	inking	Adequate	238	87,071	25,55	3,010	0,003*
		Inadequate	349	78,329	25,60		
Positive thinking sk	ills	Adequate	238	15,739	5,49	-2,014	0,044*
		Inadequate	349	15,575	4,68		

p < 0.05\*

It was determined that participants who stated that they had enough leisure time exhibited higher ruminative thinking style and positive thinking style.

Table 9. Independent sample t test results between measurement tools and efficient time variable

			N=(587)						
		Efficient time	n	$\frac{-}{x}$	SS	t	p		
Ruminative styles	thinking	Efficient	238	87,071	25,55	3,727	0,000*		
		Inefficient	349	78,329	25,60	_			
Positive thinki	ng skills	Efficient	238	15,739	5,49	3,652	0,000*		
		Inefficient	349	15,575	4,68	_			

p<0,05\*

It is observed that ruminative thinking and positive thinking are more common in those who use leisure time productively.

#### DISCUSSION AND CONCLUSION

The research findings provide various evidences for determining the rumination levels and positive thinking skills of sports center members. Accordingly, the findings indicate that the participants exhibit above-average levels of rumination and positive thinking. Significant differences were found between the participants' gender, age, marital status, adequate and productive leisure time utilization and ruminative thinking styles and positive thinking styles; on the other hand, perceived income and education levels did not significantly change both measurement tools.

It is possible to consider rumination as a significant cognitive disorder in the sense that it keeps repetitive thought patterns hanging in the mind and makes positive thinking relatively difficult. On the other hand, putting positive thoughts into repetitive thought patterns can create a structure that supports positive thinking styles. However, when the literature is examined, it is possible to see that the negative aspect of rumination is more prominent.

Rumination is predicted to have a significant effect on the underpinnings of depression [15]. This prediction points to a number of cognitive impairments and subsequent symptoms

resulting from the establishment of negative thought patterns as opposed to positive thinking

patterns. Therefore, daily stress and stress-induced rumination may affect health and well-being by affecting sleep duration and daily cortisol activity [16]. According to another study, rumination intensifies and prolongs negative emotions, while reappraisal reduces anger and increases sympathetic nervous system activation (Ray, Wilhelm, & Gross, 2008) [17].. A similar study suggests that rumination may worsen mental health problems and limit the effectiveness of therapy; accordingly, psychological interventions targeting negative processing mechanisms may be potentially effective in reducing rumination [18].

When analyzed in terms of gender, it is observed that female participants exhibit higher levels of rumination than male participants in terms of the current research findings. Similarly, in another study, it was examined whether there was a significant difference in terms of gender variables. As expected, female students' rumination scores were found to be significantly higher than male students' scores [1, 19]. In another study, it was stated that women ruminate more frequently than men due to their beliefs of controlling emotions, being responsible for the emotional tone of relationships and overcoming negative events [20]. Apart from the finding that women experience more rumination, which is supported by the literature, it was determined that there was no differentiation according to gender in another study [21]. Various practices were found to be effective in reducing perceived stress through rumination and negative mood regulation [22].

In terms of positive thinking skills, contrary to the current finding, it is observed that males develop higher positive thinking skills than females [23]. Similarly, studies stating that men develop more positive thinking skills are included in the literature [24,25]. Tazegül [26]. revealed that the positive thinking skills of men and women do not differ. Based on the findings, it is a more supported assertion in the literature that men develop higher positive thinking skills than women, but the current finding is that women have higher positive thinking skills. It can be stated that positive thinking skills are not attributed to gender and should be seen as an individual skill.

While ruminative thinking style does not show a significant difference according to age variable, it shows a significant difference according to positive thinking style. In the post hoc analysis in which within-group differences were determined, it was found that the group under the age of 30 had higher positive thinking skills. Contrary to the related finding, Chang [27] found that positive thinking skills, i.e. optimism, increased significantly with increasing age. While it is possible to develop more positive thinking skills based on the experience gained with age, the negative background of life experience can also affect this way of thinking negatively.

Therefore, it is important for individuals to evaluate rumination, which is a form of repetitive thinking, in terms of reinforcing positive thinking rather than using it negatively, in terms of positive emotion regulation and thus developing positive thinking skills. By transferring various information in this direction in sports centers, various studies on positive thinking styles can be programmed in practices. It is also recommended to expand academic research on rumination and positive thinking skills with different sample groups.

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