# A Comparative Study of Students' Happiness Levels and Thinking Styles in Physical Education and Sport Teaching, and Other Departments, in Turkey

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# Abstract

The objectives of this research were to compare the happiness and thinking styles of undergraduate students in the Physical Education and Sports Teaching Department and different departments, and to examine the relations between the students' happiness levels and their thinking styles. Using the correlational study design 661, undergraduate students were determined by a convenience sampling method. Participants were selected in terms of being easily accessible from Gazi University, which is located in the Ankara province, Turkey. The analysis indicated that the Department of Physical Education and Sports Teaching students' average level of happiness was significantly higher than in some other departments. However, the Department of Physical Education and Sports Teaching students' need for cognition was not significantly different from the students from other departments. Physical Education and Sports Teaching students'. Besides, the happiness levels and thinking styles did not differ significantly by gender. There was a positive correlation between their faith in intuition and happiness. However, there was no significant relation between their faith in intuition, nor need for cognition and their faith in intuition.

Keywords: the department of physical education and sports teaching, happiness, thinking styles, undergraduate students

# 1. Introduction

The concept of thinking style was introduced by Sternberg (1988) in his "Mental Self-Government Theory". "The basic idea of the theory of Mental Self-government is that the forms of government we have in the world are not coincidental. Rather, they are external reflections on what goes on in people's minds. They represent alternative ways of organizing our thinking. Thus, the forms of government we see are mirrors of our minds." (Sternberg, 1999, p. 19) "'Thinking styles' refer to the ways in which people choose to use or exploit their intelligence as well as their knowledge. Styles are not abilities, but rather how these abilities (and the knowledge acquired through them) are used in day-to-day interactions with the environment." (Grigorenko & Sternberg, 1995) "Thinking styles concern how one prefers to think about the material as learning about it or after already it." (Zhang, 2002) Mankind has been running some thinking processes while exhibiting certain intellectual and behavioral reactions, both in interpersonal relationships and in dealing with life events (Imamoğlu, 2008).

Some variables may influence the development of thinking styles, such as gender, age, culture, personality types, leadership experience, travel experience, the number of hobbies, parenting styles, school education types and quality levels, and profession. Besides, socializing is thought to be more effective than the naturally preferred thinking styles based on genetic factors (Sternberg, 2009; Zhang, 2000, 2001). Socialization has also increased the happiness (Csikszentmihalyi & Hunter, 2003). In addition, there is a significant relation between happiness and exercise (Farahani, Saiah, Heidary, Nabilu & Eskandaripour, 2011). In this context, it is useful to define the concept of happiness, which is another dependent variable of the research. Jacobsen (2007) emphasized that distinguishments between brief and durable states of happiness are made using two distinct definitions.

We understand <u>ordinary happiness or bliss</u> to be a brief state of mind during which an individual feels that all essential needs have been fulfilled and that all essential goals have been reached. The individual feels fulfilled, and in some cases even merged with the surroundings or nature. By real or genuine happiness, we understand a durable state of balance between the individual's wishes, goals, and needs on the one hand, and the surroundings or the world on the other. This state is associated with well-being, serenity and relaxation.

Happiness, which is the study area of positive psychology, is related to well-being (Ansari & Parveen, 2016; Carr, 2011, p. 2). "Happiness is a mental or emotional state of well-being characterized by positive or pleasant emotions ranging from contentment to intense joy." (Sundriyal & Kumar, 2014) It can be considered that socializing influences both happiness and thinking styles. Besides, it is known that exercise has an important role for the socialization process (Kaplan & Çetinkaya, 2014; Orphan, 2010). In this context, the aim of this study is to compare the happiness levels and thinking styles of the Physical education and Sport Teaching department students to students of other departments and examine the relation between happiness and thinking styles.

The research questions of this study are as follows:

1. Is Physical Education and Sport Teaching students' happiness level different from that of the students in other departments?

2. Are Physical Education and Sport Teaching students' thinking styles different from that of the students in other departments?

3. Are happiness and thinking styles differentiated by gender and age in university students?

4. Is there a relation between thinking styles and happiness?

## 2. Method

## 2.1 Research Model

In this study, we were try to compare the thinking styles and happiness level of undergraduate students of the Physical Education and Sport Teaching to different departments and investigate the relation between happiness and thinking styles. We used a correlational study design to this end. Because, correlational study involves measuring two or more variables and determining the correlation between them (Heppner, Wampold & Kivlighan, 2007; Rovai, Baker & Ponton, 2013; Schneider, Gruman & Coutts, 2011).

#### 2.2 Participants

Through a convenience sampling method, 661 undergraduate students were determined. "Convenience sampling entails using the most conveniently available people as participants." (Pilot & Back, 2010, p. 309) The students were selected both in terms of being easily accessible from the Gazi University, which is located in the Ankara province, Turkey. The participants involved 403 women and 258 men total who had a mean age of 21.01; they were from the Department of Physical Education and Sports Teaching (81 participants), the Department of Art Education (53 participants), the Department of Early Childhood Education (72 participants), the Department of School Teaching (74 participants), the Department of Guidance and Psychological Counseling (60 participants), the Department of History (60 participants), the Department of Turkish Language and Literature (52 participants), the Polatlı Social Sciences Vocational School (the Department of Child Care and Youth Services, the Department of Hair and Beauty Services, and the Department of Textile Clothing Footwear and Leather) (71 participants), the Department of Electrical and Electronic Engineering (71 participants), and the Faculty of Tourism (Tourism Management-Recreation Management) (67 participants).

#### 2.3 Research Instruments

In the context of the present study, the data was collected with the "Oxford Happiness Scale" and the "Rational-Experienced Thinking Styles Scale" from the participants.

The Oxford Happiness Scale was originally developed by Hills and Argyle (2002), and the validity and reliability of the Turkish form was adapted by Dogan and Sapmaz (2012). The scale consists of 28 items and is a one-dimensional structure.

The Rational-Experiential Thinking Style scale was first developed by Epstein, Pacini, Denes-Raj, and Heier (1996). The validity and reliability of the Turkish version was adapted by Buluş (2003). It consists of 19 items and two sub-dimensions. The "Need for Cognition" of the scale is defined as the sub-scale analytical-rational thinking style, while the "Faith in Intuition" subscale is defined as the intuitive-experiential thinking style.

# 2.4 Data Analysis

The data was analyzed through the SPSS 23.00 statistical software. Then the normality analysis of the data was done using the Kolmogorov-Smirnov Test. An analysis of the data obtained from the research showed that it did not meet the normal distribution. Because of this reason, non-parametric tests were used. The Kruskal Wallis test was used for comparing the departments and age groups according to the Happiness and Rational-Experiential Thinking Styles subscales. The Mann Whitney U test was used for comparing gender according to the Happiness and Rational-Experiential Thinking Styles subscales. In addition, the Spearman Correlation Analysis was used to investigate the relation between the Happiness and Rational-Experiential Thinking Styles.

# 3. Results

## Table 1. Comparison of Happiness Levels According to Departments

		Happiness					
		Mean	Std. Dev.	Median	Min	Max	p
	Department of Art Education	3.48	0.49	3.45	2.55	4.48	0.415
	Department of Early Childhood Education	3.61	0.59	3.48	2.45	4.55	1.000
Department of	Department of School Teaching	3.67	0.48	3.69	2.41	4.55	1.000
Physical EducationandSports	Department of Guidance and Psychological Counseling	3.35	0.44	3.34	2i59	4.28	0.001*
Teaching Mean=3.69	Department of History	3.50	0.44	3.50	2.21	4.31	1.000
Std. Deviation= 0.48 Median=3.69	Department of Turkish Language and Literature	3.35	0.52	3.38	2.21	4.34	0.020*
Minimum= 2.41 Maximum=4.55	Department of Electrical and Electronic Engineering	3.58	0.60	3.55	2.34	4.55	1.000
	Faculty of Tourism	3.67	0.54	3.59	2.41	4.55	1.000
	Polatlı Social Sciences Vocational School	3.43	0.53	3.41	1.69	4.48	0.035*

# \*p<0.05

According to the Kruskal Wallis test results, the Department of Physical Education and Sports Teaching students' happiness level average was significantly different from the Department of Guidance and Psychological Counseling, Turkish Language and Literature Department, and the Polatlı Social Sciences Vocational School (p < 0.05).

	Need for cognitions									
		Mean	Std. Dev.	Median	Min	Max	р			
	Department of Art Education	3.49	0.51	3.47	2.18	4.53	0.094			
	Department of Early Childhood Education	3.14	0.39	3.12	2.06	3.82	1.000			
Department of De	Department of School Teaching	3.26	0.46	3.24	2.41	4.24	1.000			
Physical EducationandSports	Department of Guidance and Psychological Counseling	3.31	0.48	3.29	1.82	4.35	1.000			
Teaching Mean= 3.23	Department of History	3.41	0.45	3.41	2.47	4.29	0.625			
Std. Dev.=0.48 Median=3.24	Department of Turkish Language and Literature	3.45	0.49	3.53	1.53	4.12	0.082			
Minimum= 2.41 Maximum=4.24	Department of Electrical and Electronic Engineering	3.20	0.51	3.24	1.53	4.12	1.000			
	Faculty of Tourism	3.22	0.46	3.24	2.41	4.12	1.000			
	Polatlı Social Sciences Vocational School	3.32	0.54	3.35	1.71	4.29	1.000			

## Table 2. A Comparison of Need for cognitions According to the Departments

According to the Kruskal Wallis test results, the Department of Physical Education and Sports Teaching students' Need for cognition average was not significantly different from the the other department students' Cognitive Need average (p > 0.05).

Table 3. A C	omparison o	of Faith in	intuition	According	to the De	partments

		Faith in in	tuition				
		Mean	Std. Deviation	Medyan	Min	Max	р
	Department of Art Education	3.89	0.61	3.92	2.33	5.00	1.000
	Department of Early Childhood Education	4.00	0.38	4.00	3.25	4.75	1.000
Department of Physical	Department of School Teaching	3.87	0.52	3.83	2.83	5.00	1.000
Education and Sports Teaching	Department of Guidance and Psychological Counseling	3.43	0.50	3.50	2.25	4.75	0.001*
Mean= 3.88 Std	Department of History	3.65	0.60	3.67	2.92	5.00	1.000
Deviation=0.58 Median=3.83	Department of Turkish Language and Literature	3.79	0.58	3.75	2.00	5.00	1.000
Minimum= 2.83 Maximum=5	Department of Electric and Electronics Engineering	3.91	0.65	4.00	2.00	5.00	1.000
	Faculty of Tourism	3.98	0.54	4.00	2.83	5.00	1.000
	Polatlı Social Sciences Vocational School	3.92	0.67	4.00	1.75	5.00	1.000

# \*p<0.05

According to the Kruskal Wallis test results, the Department of Physical Education and Sports Teaching students' Faith in intuition was significantly higher than the Department of Guidance and Psychological Counseling students.

			Mean	Std. Deviation	Minimum	Maximum	Median	р
Hanninaaa		Male	3.50	0.54	1.69	4.55	3.50	0.224
Happiness	Female	3.57	0.52	2.24	4.55	3.52	0.234	
Sty enti Rat	Need for	Male	3.25	0.50	1.53	4.29	3.24	0 165
li le cognition	Female	3.31	0.48	1.71	4.53	3.27	0.165	
Thin 1-E	Faith in	Male	3.80	0.56	2.00	5.00	3.83	0.207
ıkin	intuition	Female	3.86	0.60	1.75	5.00	3.92	0.207

Table 4. The Comparison of Happiness Levels and Rational-Experiential Thinking Styles According to Gender

According to Mann Whitney U test results; happiness and thinking styles did not differ significantly by gender (p> 0.05). In other words, the levels of happiness and rational-experiential thinking styles of men and women can be said to be about equal.

Table 5. The Comparison of Happiness Levels and Rational-Experiential Thinking Styles According to Age Groups

					Mean	Std. Deviation	Minimum	Maximum	Median	р
			18-19		3.42	0.41	2.52	4.17	3.48	
			20-21		3.54	0.55	1.69	4.55	3.48	
Happiness			22-23		3.57	0.58	2.34	4.55	3.59	0.006*
			24 above	and	3.64	0.43	2.21	4.31	3.59	
Rat			18-19		3.27	0.50	2.06	4.35	3.24	
iona	Need fo		20-21		3.29	0.48	1.71	4.47	3.29	
ıl-E,	cognition	r	22-23		3.32	0.50	1.53	4.29	3.24	0.555
xperien			24 above	and	3.25	0.46	2.53	4.53	3.24	
tial			18-19		3.69	0.63	1.75	5.00	3.75	
Thinking Styles	Eoith i		20-21		3.81	0.55	2.08	5.00	3.75	
	intuition	[]	22-23		3.89	0.59	2.00	5.00	3.92	0.002*
			24 above	and	4.02	0.62	2.50	5.00	4.00	

\*p<0.05

According to the Kruskal Wallis test results, while there was a significant difference between the happiness scale and faith in intuition according to the age groups (p <0.05), the need for cognition did not show any significant differences according to the age groups (p> 0.05). For the Happiness scale, which varies significantly, the level of happiness of students in the 18-19 age group were significantly lower than the level of happiness in the age groups of 22-23 and 24 and above. The faith in intuition level of students in the 18-19 age group were significantly lower than the age group of 22-23 and 24 and above.

				Happiness	Need for cognition	Faith in intuition
Spearman's rho	Happiness		r	1	026	.221**
			р	1	.506	.000
	Need	for	r	026	1	.065
	cognition		р	.506	1	.091
	Faith	in	r	.221**	.065	1
	intuition		р	.000	.091	1

#### Table 6. The Relation between Happiness Scale and Rational-Experiential Thinking Styles

According to the results of correlation analysis, there was a positive correlation between faith in intuition and happiness scale by 22.1%. There was no significant relation between the happiness scale and need for cognition, nor the need for cognition and faith in intuition (p> 0.05).

#### 4. Discussion, Conclusions, and Recommendations

The Department of Physical Education and Sports Teaching students' average level of happiness was significantly higher than the Department of Guidance and Psychological Counseling, the Department of Turkish Language and Literature and the Polatlı Social Sciences Vocational School students. It is the level of physical activity that comes to mind when the reason for this difference is considered. It is known that physical education and sports teaching students have more physical activity in courses when we see the curriculum of the departments. Yet, this may not be indicated as the main reason, considering the possibility of exercising by students in other departments. This possibility will be equalized in terms of students in physical education and sports teaching as well as students in other departments when taking into account the possibility of extracurricular exercise of the physical education and sports teaching students. In light of this information when we investigate the relevant literature, an investigation (Huang & Humphreys, 2012) about the relationship between participation in physical activity and the self-reported happiness in the United States shows that "both men and women gain happiness from participation..." Similarly, Stubbe, De Moor, Boomsma, and De Geus (2007) indicated that "exercise participation is associated with higher levels of life satisfaction and happiness..."

The Department of Physical Education and Sports Teaching students' need for cognition average was not significantly different from the other departments' students. However, the Physical Education and Sports Teaching students' Faith in intuition was significantly higher than the Department of Guidance and Psychological Counseling students. Happiness levels and thinking styles did not differ significantly by gender. In other words, the levels of happiness and the thinking styles of men and women can be said to be equal. Gender is a subject in the happiness studies. Although some studies about the happiness and gender state that there is no relation between them (Demir, 2017; Küsgülü, 2014; Zohour & Fekri 2004), some findings claim that females are happier than males (Gülcan and Bal, 2014; Wood, Rhodes, & Whelan, 1989) or males are happier than females (Akin & Sent ürk, 2012). While there was a significant difference between the Happiness and Faith in intuition scales according to the age groups, the need for cognitions did not show any significant difference according to the age groups. The level of happiness of the students in the 18-19 age group was significantly lower than the level of happiness in the age groups of 22-23 and 24 and above. According to G ülcan and Bal (2014), there is a significant difference between age and happiness, whereas according to the result of Çakıroğlu (2007), age is not a significant variable for happiness in Turkey. The faith in intuition level of students in the 18-19 age group was significantly lower than the age group of 22-23 and 24 and above. Coskuner, Gacar and Yanlıç (2012) evaluated the thinking styles of the Department of Physical Education and Sports Teaching undergraduate students in a study they did. In this direction, they found that the rational and intuitive thinking styles are moderate, and may vary depending on some variables. There was positive correlation between the Faith in intuition and Happiness scales (22.1%). There was no significant relation between the happiness and need for cognition scales, nor the need for cognition and faith in intuition scales.

The following recommendations have been made based on the findings of this study: because of this study sample which one of the limitations of the study was not large, a study can be carried out on a larger sample. Moreover, future research can be done to compare the Physical Education and Teaching students with other departments' students through some different variables. In addition, different research methods can be employed to compare the students' happiness and thinking styles.

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