

Investigation of Individual Competitiveness: Perceptions of Students Taking Special Ability Exams

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Abstract: Competition refers to a phenomenon that can affect and direct observable human behaviour. Competitiveness can be a triggering factor in achieving success and focusing on the target. The individual competitiveness scale can provide an opportunity to observe and evaluate students participating in various competitions within the scope of exams. This study seeks to examine the individual competitiveness perceptions of the students who take special talent exams according to some demographic variables. This quantitative study was carried out in a descriptive survey model. The sample of the study consists of 218 students who participated in the special talent exams held in September 2021 at Kahramanmaraş Sutçu İmam University Faculty of Sports Sciences. Data were analysed using the statistical software program Jamovi 1.6.12. Arithmetic mean and standard deviation values were determined for data analysis while t-Test and One-Way Analysis of Variance (ANOVA) were used to determine the differentiation status of participant views in terms of demographic variables, and Post-Hoc tests were used to determine the groups with difference for the significant F value. As a result of the research, it was observed that there were significant relationships between the participants' Individual Competitiveness Scale and the CPT (Core Proficiency Test/Exam) score, age, sports branch and weekly work-out variables according to the "Enjoyment of Competition" sub-scale. According to the 'Competition Avoidance' sub-scale, there were significant relationships in terms of the CPT score, age, and weekly work-out number variables and that there was no significant relationship in terms of sports branch variable. As a result, students' individual competitiveness perceptions were determined in terms of different variables.

Keywords: Individual Competitiveness, Special Talent, Exam, Student

Introduction

The competition term remains as an important notion in today's world. Competition can be considered as a phenomenon that can affect the concrete behaviors of people and direct their behaviors. Though concepts such as (to) compete, competition, competitor, and competitiveness seem to be used generally more in industry, marketing, and trade, it is a common notion used in all areas. This notion is also used constantly in the field of sports. In sports, there is usually an opponent to compete with, and it is done with the aim of winning and

succeeding. In individual competitiveness, the competitive drive of the individual plays an essential role in attaining the goal.

In competitiveness, being ahead of competitors, along with the ability to survive, can be regarded a success. Some individuals do not enjoy competition and thus avoid it. Some individuals enjoy competition with rivals and try to be superior to others. According to Bilbey/Akbayırlı (1998), competitiveness is the effort to perform at a higher level than what one does in activities related to oneself and/or the desire and effort to perform at a higher level than others in comparison to others.

There are two main sources of motivation that affect and sustain the notion of competition, which is used in social, economic, educational and sports issues. The first one is the desire to be better and perform better than other people. The second is the desire to compete with oneself and to improve one's own performance and self-development (Hibbard & Buhrmester, 2010; Houston et al. 2002; Menesini, Tassive & Nocentini 2018). Rivalry in sport has been defined as, “a fluctuating adversarial relationship existing between two teams, players or groups of fans, gaining significance through on-field competition, on-field or off-field incidences, proximity, demographic makeup and/or historical occurrence(s)” (Havard et al., 2013).

Today, it is inevitable for individuals to think innovatively in society thanks to the rapid development of technology with knowledge in a rapidly changing and developing world. Sports is one of the areas that aims to systematically educate individuals in line with research activities designed for the development of innovative educational technology including safe and effective applications in the field of protection of the health of individuals, multifaceted development, and personal development (Atılgan & Tükel, 2021). In this context, it becomes important to follow and adapt to innovations to compete in sports.

Individual competitiveness may vary from person to person. Some people seem to turn almost every situation into a competition and others tend to be indifferent toward competition, or even some others avoid it whenever possible (Mudrack, Bloodgood & Turnley 2012). Atılgan & Tükel (2021) suggest that to ensure a good competition, there is a need more than ever for productive employees who are energetic, enthusiastic, and focused, devoted to the clubs, teams, institutions and organizations they work for as well as have a sense of responsibility and care their job in all sports activities, organizations, and events. Competition helps the individual do the best s/he can while also motivating to succeed (Ediger, 2000). Individual competitiveness can be a trigger factor in achieving success and focusing on the goal. The individual competitiveness scale can offer the opportunity to observe and evaluate students participating in various competitions within the scope of exams. In this context, this study aims to reveal the perceptions of individual competitiveness of students taking special talent exams according to some demographic variables. The research questions were as follows:

- Do individual competitiveness perceptions of the students differ according to CPT (Core Proficiency Test)?
- Do individual competitiveness perceptions of the students differ according to the age variable?
- Do individual competitiveness perceptions of the students differ according to the sports branch

variable?

- Do individual competitiveness perceptions of the students differ according to the number of work-out per week variable?

Method

Research Model

The research is a quantitative study carried out in the descriptive survey model. This study sought to determine the individual competitiveness perceptions of the students taking special talent exams according to some demographic variables along with examination into the differentiation status. Within the framework of ethical standards, approval was obtained from all participants with the "Informed Consent Form" in this study. The data were collected with the approval of and in the presence of the relevant institution authorities. As the researcher was assigned to take part in the exam, it was easier to collect data.

Population and Sample

The population of the study consists of students who participated in the special talent exam held in September 2021 at the Faculty of Sports Sciences, Kahramanmaraş Sütçü Imam University. 576 students applied to take the exam, but 390 students took the special talent exam. Among the 390 students who participated in the special talent exam, 218 forms that were available among those who filled out the scale forms were evaluated for analysis. The sample of the study consisted of 218 students who participated in special talent exams.

Results

Personal information of the students participating in the study is given in Table 1.

Table 1. Participant Information Included in the Research Sample

Demographic Variables		N	%
CPT (Core Proficiency Test) Score	220 and under	89	40.8
	221 and over	129	59.2
Age	18-19	119	54.6
	20 and over	99	45.4
Sports Branch	Yes-Available	153	70.2
	No-N/A	65	29.8
Number of Weekly Work-out	1-2 days	30	13.8
	3-4 days	76	34.9
	5-6 days	112	51.4

Data Collection Tools

Individual Competitiveness Scale: In this study, the Individual Competitiveness Scale was used to examine the students' perceptions of individual competitiveness. The scale developed by Houston & et al. (2002) was adapted into Turkish by Günay & Celik (2020). The scale is two-dimensional including enjoyment of competition and competition avoidance (Cronbach Alpha: .94 and .81). The scale is in form of 5-likert and graded as 1=strongly agree, 5=strongly disagree. The total Cronbach alpha coefficient of the Individual Competition Index is .81 and has a high level of reliability. In this study, the overall Cronbach Alpha coefficient was .82, while it was .74 for the Enjoyment of Competition sub-scale and .77 for the Competition Avoidance sub-scale.

Data Analysis

Scale forms were submitted to participants in a face-to-face environment and they were asked to fill out the forms. 218 participants gave usable feedback. The data of the study were analysed using the statistical software program Jamovi 1.6.12. Arithmetic mean and standard deviation values were determined for data analysis. As a result of the normality test, the skewness value of the data was determined as .372 for the Individual Competitiveness Scale, .694 for the Enjoyment of Competition sub-scale, and -.219 for the Competition Avoidance sub-scale. Since the distribution was normal, t-test and One-Way Variance Analysis (ANOVA) were used to determine the differentiation between the variables, and Post-Hoc tests were used to determine the groups that differed for the F value found to be significant.

Findings

In this part of the research, the data were evaluated statistically and the result of evaluation is shown in tables. Findings regarding the arithmetic average and standard deviation values of the scores of the students' obtained from the scale of individual competitiveness are shown in Table 2.

Table 2. Arithmetic Mean and Standard Deviation Values of Participants for the Individual Competitiveness Scale and its Sub-scales

Scale and Sub-scales	N	Min-Max	\bar{X}	SD
Individual Competitiveness	218	1-5	2.83	.53
Enjoyment of Competition	218	1-5	2.80	.92
Competition Avoidance	218	1-5	3.11	1.19

Table 2 highlights that the participants' overall score average for the individual competitiveness scale and their opinions on enjoyment of competition and competition avoidance were moderate.

The findings regarding the distribution of students' CPT (Core Proficiency Test) variable scores are shown in Table 3.

Table 3. Differentiation Status of Participants' Perceptions of Individual Competitiveness According to CPT (Core Proficiency Test) Score and *t*-test Findings for Independent Samples

Scale and Sub-scales	CPT-Core Proficiency Test	\bar{X}	SD	<i>t</i>	<i>p</i>
Individual Competitiveness (Score)	220 and under	2.77	.54	-2.68	.008*
	221 and over	2.97	.52		
Enjoyment of Competition	220 and under	2.55	.81	-3.51	.001*
	221 and over	2.98	.94		
Competition Avoidance	220 and under	3.37	1.19	2.70	.007*
	221 and over	2.93	1.17		

*($p < 0,05$)

Table 3 highlights that statistically significant differences were found in the enjoyment of competition and competition avoidance in terms of the CPT (Core Proficiency Test/Exam) variable ($p < 0.05$). Participants with a score of CPT (221 and over) were found to have a higher score than participants with a low score of CPT (220 and under) in the overall competitiveness scale. And finally, it is the opposite for competition avoidance.

The *t*-test results of the distribution of students' according to the age variable are shown in Table 4.

Table 4. Differentiation Status of Participants' Perceptions of Individual Competitiveness According to Age and *t*-test Findings for Independent Samples

Scale and Sub-scales	Age	\bar{X}	SD	<i>t</i>	<i>p</i>
Individual Competitiveness	18-19	2.81	.50	-2.51	.013*
	20 and over	2.99	.56		
Enjoyment of Competition	18-19	2.63	.76	-3.17	.002*
	20 and over	3.02	1.04		
Competition Avoidance	18-19	3.28	1.12	2.30	.022*
	20 and over	2.91	1.25		

*($p < 0,05$)

Table 4 highlights that statistically significant differences were found in the overall individual competitiveness scale, and enjoyment of competition and competition avoidance sub-scales ($p < 0.05$). Participants aged 20 and over were found to have higher scores than participants aged 18-19 in terms of enjoyment of competition in the overall individual competitiveness scale. Participants aged 20 and over had lower scores than participants aged 18-19 in terms of competition avoidance.

The *t*-test results of the individual competitiveness scale scores according to the sports branch variable of the students' are shown in Table 5.

Table 5. Differentiation Status of Participants' Perceptions of Individual Competitiveness According to Sports Branch and t-test Findings for Independent Samples

Scale and Subscales	Sports Branch	\bar{X}	SD	<i>t</i>	<i>p</i>
Individual Competitiveness	Yes - Available	2.94	.56	1.98	.048*
	No-N/A	2.78	.46		
Enjoyment of Competition	Yes-Available	2.90	.99	2.44	.015*
	No-N/A	2.58	.67		
Competition Avoidance	Yes - Available	3.02	1.22	-1.71	.088
	No-N/A	3.32	1.10		

*($p < 0.05$)

Table 5 highlights that statistically significant differences were found in the overall individual competitiveness scale and enjoyment of competition ($p < 0.05$). Participants with any sports branches were found to have higher scores than participants with no sports branch in terms of the overall individual competitiveness scale and enjoyment of competition. There was no statistically significant difference in terms of competition avoidance ($p < 0.05$).

The one-way analysis of variance (ANOVA) results of the individual competitiveness scale scores according to the number of weekly work-out variable of the students' are shown in Table 6.

Table 6. Differentiation Status of Participants' Individual Competitiveness Perceptions According to the Number of Weekly Work-out and One-Way Variance Analysis (ANOVA) Results

Scale and Sub-scales	Weekly Work-out	N	\bar{X}	SD	<i>F</i>	<i>p</i>	Groups with differences (Post-Hoc Test)
Individual Competitiveness	1-2 days (a)	29	2.66	.96	6.10	.003*	b – a, c
	3-4 days (b)	75	3.11	1.14			
	5-6 days (c)	113	2.68	.63			
Enjoyment of Competition	1-2 days (a)	29	2.65	.95	5.30	.006*	b – a, c
	3-4 days (b)	75	3.08	1.15			
	5-6 days (c)	113	2.66	.65			
Competition Avoidance	1-2 days (a)	29	3.33	1.26	4.65	.010*	a, c – b
	3-4 days (b)	75	2.78	1.26			
	5-6 days (c)	113	3.28	1.09			

*($p < 0.05$)

Table 6 highlights that statistically significant differences were found in the overall individual competitiveness scale, and enjoyment of competition and competition avoidance ($p<0.05$). Participants with a weekly work-out of 3-4 days were found to have higher scores than participants with a weekly work-out of 1-2 days to 5-6 days in the overall individual competitiveness scale and enjoyment of competition. On the other hand, it was determined that the participants competition avoidance who had a weekly work-out of 3-4 days had a lower score than participants who had a weekly work-out of 1-2 days and 5-6 days.

Discussion and Conclusion

This study has been designed to examine the differentiation status of the participants in terms of some demographic variables in order to determine the individual competitiveness perceptions of the students who participated in the special talent exams. It was concluded that the participants' opinions on the overall individual competitiveness scale and enjoyment of competition and competition avoidance were at a moderate level.

Participants with a high score of CPT (221 and over) were found to have higher scores than participants with a low score of CPT (220 and under) in terms of the overall individual competitiveness scale and enjoyment of competition. It can be implied that the participants with a high score of CPT have good individual competitiveness levels, enjoy competition and do not avoid competition compared to participants with a low score of CPT. Jones (2015) defined competitiveness as a dynamic mental state that guides a player towards him/her as a psychological vision, and excellence sustained by social comparisons to be better than others. According to Jones et al. (2002), it is directly related to their mental toughness which means athletes can perform and concentrate better than opponents and be in control under pressure. Bilbey and Akbayırlı (1998) suggest that In Turkey, students start competing with each other at a younger age. Exams such as LGS (entrance exams to high schools) are an indication of this. As exam systems are applied to eliminate opponents and have a new test to start business life, the competitive environment continues constantly.

It was determined that participants aged 20 and over had higher scores than participants aged 18-19 in terms of the overall individual competitiveness scale and enjoyment of competition while participants aged 20 and over had lower scores than participants aged 18-19. It can be implied that participants aged 20 and over have good individual competitiveness and enjoyment of competition levels compared to participants aged 18-19 and they do not avoid competition. The literature review reveals that some studies support these findings. It is understood from Jones et al. (2002) and Jones (2015) that the concept of mental toughness is a concept that is closely related to the concept of individual competitiveness. Crust et al., (2014), Demir &Çelebi (2019) and Yılmaz & Yılmaz, (2017) suggest that as the age of athletes increases, their confidence, continuity, and mental toughness increases. Marchant et al. (2009) and Nicholls et al. (2009) also state that mental toughness has a positive relationship with age.

It was determined that the participants with any sports branch had a higher score than the participants with no

any sports branch in terms of the overall individual competitiveness scale and enjoyment of competition. It can be implied that the participants with a sports branch have better levels of individual competitiveness and enjoy competition compared to participants with no sports branch. This indicates that the individual competitiveness aspect of the participants who have a sports branch is strong. Toprak (2019) found that the competitiveness level score average of licensed athletes was higher than that of unlicensed athletes.

It was determined that the participants who had a weekly work-out of 3-4 days had a higher score than participants who had a weekly work-out of 1-2 days and 5-6 days in terms of the overall individual competitiveness scale and enjoyment of competition. On the other hand, it was determined that the participants who had a weekly work-out of 3-4 days had a lower score than participants who had a weekly work-out of 1-2 days and 5-6 days. It can be implied that the participants with a weekly work-out of 3-4 days have good individual competitiveness levels, enjoy competition and do not avoid competition compared to participants with a weekly work-out of 1-2 days and 5-6 days. This finding is an interesting and important conclusion. It emphasizes that when planning work-out programs, it is beneficial for coaches and physical education and sports teachers to consider this result in individual competitiveness and performance improvement.

Instead of training less or training a lot in a week, training for 3-4 days a week increases the individual competitiveness the students and their enjoyment of competition levels. Training less can lead to low motivation and carefreeness, and too much training can cause extreme anxiety. And this may result in poor performance. According to Robson Bonnie (2004), some believe that competitiveness is innate behaviour and that competition is a motivation for high success. Others believe that competition is de-performing, especially for ego-oriented individuals (focusing on comparing others), as increased stress and anxiety lead to a decrease in focus and perhaps a decrease in self-esteem. In addition, Yazici (2021) concluded in his study that as the training year increases, the level of justice decreases, while the level of competitive aggression increases.

This study focused on the question whether there was a significant differentiation in some demographic variables that the students who participated in special talent exams had in terms of their perceptions of individual competitiveness, and enjoyment of competition and competition avoidance. It may be possible to achieve new results by applying the individual competitiveness scale used in this study to different samples or using it together with different scales.

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