

RESEARCH ARTICLE

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# **Examining of Tennis Referee's Task and Ego Orientations According to Some Demographic Characteristics**

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**Abstract:** The purpose of this study is to determine the task and ego orientations of tennis referees, and to determine whether they differ according to some demographic characteristics. The data obtained from the research were in the survey model within the scope of quantitative research and were examined in a descriptive research design. According to the information obtained from the corporate website of the Turkish Tennis Federation, there are 219 tennis referees registered in the Anatolian Side of Istanbul. Doğan et al. (2017) The Task and Ego Orientation Scale in Sports for Referees was used. In addition, a demographic information form consisting of 4 questions was created. In this form, tennis referees were asked about their gender, age, education status and the period they were refereeing. Before starting the research, necessary permission was obtained from the relevant scientist regarding the use of the mentioned scale. The scale from prepared by the researcher in Google documents was sent to the referees registered in the Turkish Tennis Federation in the Anatolian Side of Istanbul through social communication networks. All analyzes were carried out using the SPSS 26.0 package program at 95% confidence level. In the study, according to the total scores of the tennis referees on the Task and Ego Orientation Scale for Referees in Sports; there was a significant difference only in terms of gender variable. Accordingly, the sub-dimension point averages of female referees in sports are lower than male referees.

Keywords: Tennis, Umpires, Sports, Goals

# **About the Authors**



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#### 1. Introduction

In recent years, the subject of goal orientations has attracted the attention of many researchers and important academic studies have been put forward on this subject. Human beings tend towards certain goals in order to experience the pleasure of success [1]. Referees are indispensable in competitive sports activities. Persons authorized to resolve disputes between individuals/teams in sports environments are called referees. The tennis referee is the official institution that regulates the sports behavior of those who directly participate in the tennis game and implements the rules of the game. This authority imposes important responsibilities on them. Considering that referee behaviors affect success [2], a good referee is expected to have a strong sense of task as well as honesty.

Referee activities and positions may differ according to the sports branch. Tennis refereeing in Turkey is divided into four categories. These referee categories are graded as follows;



- Line umpire (1st, 2nd and 3rd level)
- Referee (1st, 2nd and 3rd level)
- Chair umpire (1st, 2nd, 3rd, 4th and 5th level)
- Chief of umpires (1st, 2nd, 3rd and 4th level)
- International Referees (White Badge, Bronze Badge, Silver Badge, Gold Badge)

## 1.1 Socio-Cognitive Success Theory

As well as athletes, referees who play an important role in competitions have goals to achieve success. Within the framework of achievement goals theory, Nicholls argues that in achievement contexts, personal goals or motivational achievement orientations reflect individual differences in personal success criteria [3]. The basic premise is that individuals engage in these contexts to demonstrate competence. However, competition can be interpreted in different ways depending on one's goal orientation. Specifically, he advocated the existence of at least two goal orientations, namely task orientation and ego orientation.

As the decision makers of sports environments, such as athletes, it is usual for referees to adopt one or both of these goal orientations. In the case of adopting both goal orientations, one may weigh more or less than the other. Those who adopt a task orientation prioritize task mastery, skill development, and collaboration. The priority of those who adopt ego orientation is always the desire to be more successful than others. We can say that task-oriented goals focus on individuality and ego-oriented goals focus on competition [4].

In task orientation, where the concept of talent does not differ, perceptions of talent and personal achievement are based on learning experiences, personal development and mastery of the task. Demonstrating skill is based on maximum effort and is self-referential. In ego orientation, where the concept of talent is normative, individuals think that they are successful when they show that they have superior abilities compared to others or when they achieve the same results with others, but with less effort. These goal orientations are independent, not opposite poles of a continuum. It is possible that one orientation of the individual is low, the other high, and vice versa. It is also possible that both orientations are low or both orientations are high. The orientation of one species is not gained at the expense of another [5].

These two types of goal orientation are orthogonal; this means that a person may have the same or different degrees of the aforementioned orientations [6]. However, the participation state is not orthogonal. Not every participation situation has corresponding goal orientations. Since goal orientations are orthogonal, it seems that the relative strength of each goal orientation can lead to more than one state of engagement. To explain with an example, a situation may arise where referees with high task and low ego goal orientations will show task participation, while referees with high ego and low task goals may show ego involvement [7].

Various studies in the sport context show that a task orientation involves basing beliefs about sport practice on effort and cooperation [8-12]. In ego orientation, the effort to win and to prove one's abilities to others comes to the fore [13].

More specifically, goal-orientation theory proposes that the goal-orientation a person adopts in a given situation will influence their motivation to enter that situation. That is, if a person adopts a theory of achievement associated with a desire for giftedness (ego orientation), we can expect that person to engage in activities in which he can demonstrate superior competence and gain recognition from others. Conversely, if the person is task-oriented (task orientation), we can predict that he will base his participation on the opportunity presented for skill development and enjoyment of other intrinsic aspects of the experience.

The hypotheses to be tested in line with purpose of the research are as follows;

Hypothesis 1. The task and ego orientation levels of tennis referees are high level (H1). Tennis referees; hypothesis 2. gender (H2), hypothesis 3. age (H3), hypothesis 4. education status (H4) and hypothesis 5. refereeing period (H5), there is a significant difference between task and ego orientation levels according to variables.

It is seen that most of the previous studies are athlete or trainer centered. The scarcity of studies on this subject on referees increases the importance of this research.

#### 2. Materials and Methods

#### 2.1 Participants

The universe of the research consists of tennis referees who have official refereeing certificate by



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meeting the criteria determined by the Turkish Tennis Federation in the Anatolian Side of Istanbul (N=151). According to Krejcie and Morgan's table, which is frequently used in calculating the sample size of such studies, it was determined that at least 140 tennis referees should be reached, and the sufficient number of tennis referees (N=151) reached within the scope of the research was determined [14]. The answers given to the scales were analysed.

#### 2.3 Measures

The form used to collect data in the research consists of two parts.

Demographic Information Form: It is a 4-item form created by the researcher to reveal demographic data.

The Task and Ego Orientation Scale in Sports for Referees: The "Task and Ego Orientation Scale in Sports (SGEYÖ)", which was first developed by Duda, was first evaluated by Toros for reliability and evaluation for Turkish athletes [5, 8, 15, 16]. It is a two-factor scale that has been validated and revised for referees with the validity and reliability studies conducted by Doğan and colleagues [17]. Participants answer the items using a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scale consists of 13 items in total. Accordingly, 2, 5, 7, 8, 10, 12 and 13 (7 items) of the items under the first factor indicate the task orientation of the referees, and 1, 3, 4, 6, 9 and 11 (6 items) of the items under the second factor indicate the ego orientation of the referees. When the Cronbach Alpha values of the sub-dimensions of the "Task and Ego Orientation Scale for Referees in Sports", which consists of task-oriented goals and egooriented goals, are examined; task-oriented goals .82, ego-oriented goals .83 and overall, .83 Cronbach Alpha reliability coefficient.

#### 2.4 Procedures

Ethics committee approval was given by Istanbul Technical University, Social and Human Sciences Human Research Ethics Committee on 03.02.2022 with the decision no 216. In addition, written permission to use the scale was obtained from the scientist who developed the scale via e-mail. The scale form prepared by the researcher in google documents was sent to the referees registered in the TTF in the Anatolian Side of Istanbul through social communication networks. It took approximately 20 days to collect the scales. The obtained data were analysed in the SPSS 26.0 package program and performed at 95% confidence level.

#### 2.5 Data Analysis

The descriptive statistics (number, percentage, mean, standard deviation) given in this study are given. As the first step of the statistical analysis, the assumption of normality was checked with the Shapiro Wilk test. Independent Sample T test was used to compare the means of two independent groups with normal distribution. Mann Whitney U test was used to compare the means of two independent groups that did not have a normal distribution. The Kruskal Wallis test was used to compare the means of three or more independent groups that did not have a normal distribution. Analyses were carried out in IBM SPSS 25 program. The independent variables of the research are gender, age, education and refereeing period. The dependent variable is task and ego orientation levels.

#### 3. Results and Discussion

In this section, descriptive statistics on the demographic characteristics of tennis referees and analyzes to find answers to research questions are presented.

**Table 1.** Descriptive statistics of participants on demographic variables (N) and (%)

	N	%	
Gender			
Female	57	37,7	
Male	94	62,3	
Age			
18-27	64	42,4	
28-37	54	35,8	
38 and above	33	21,9	
Educational Status			
High School/Associate Degree	90	59,6	
Undergraduate/Graduate	61	40,4	



Referee Period			
5 years and less	91	60,3	
6 years and more	60	39,7	

62.3% of the participants are women and 42.4% are in the 18-27 age group. The rate of high school / associate degree graduates is 59.6%. While 60.3% of them have 5 years or less refereeing experience, 39.7% of them have 6 years or more refereeing experience.

**Table 2.** Distribution of the scores of the participants on the task and ego orientation scale for referees in sports

	<b>Task Orientation</b>	Ego Orientation
N	151	151
M	20,7	21,5
SD	3,08	1,83

N: Number of people, M: Mean

As can be seen in Table 2, the average score of tennis referees' task orientation in sports  $(M=20.7\pm3.08)$  is lower than the average score of ego orientation in sports  $(M=21.5\pm1.83)$ . In addition, when the ego and task orientations of tennis referees are examined together, it can be said that both are at the "middle" level.

**Table 3.** Distribution of the scores of the participants' task and ego orientation levels according to the gender variable

	Female	Male		
	n=57	n=94	t	р
Task orientation	19,1 ± 3,04	21,8 ± 2,65	-5,73	0,001*
Ego orientation	21,3± 1,88	$21,6 \pm 1,80$	-1,12	0,266

t: Independent Samples T-Test

For referees, there was a statistically significant difference between the group averages according to gender in the sub-dimension of task orientation in sports (p<0.05). The task orientation sub-dimension mean scores for referees in sports are lower in women than in men.

**Table 4.** Distribution of the scores of the participants' task and ego orientation levels according to the age variable

	18-27 n=64	28-37 n=54	38 and above n=33	x²	p
Task orientation	20,3±3,17	21,2±3,21	21,0±2,60	2,507	0,286
Ego orientation	21,5±1,63	21,4±2,08	21,5±1,82	0,182	0,913

x<sup>2</sup>: Kruskal Wallis test

There was no significant difference in the sub-dimension scores of the Participants' Task and Ego Orientation Scale in Sports for Referees according to the age group (p>0.05). Age group does not affect the scores on the Task and Ego Orientation Scale for Referees in Sports.

**Table 5.** Distribution of the scores of the participants' task and ego orientation levels according to the educational status variable

n=90		U	р
Degree	n=61		
School/Associate	Undergraduate/Graduate		
High			



Task orientation	20,5±2,99	21,1±3,21	2463	0,282
Ego orientation	21,4±1,87	21,5±1,78	2656	0,731

U: Mann Whitney U test

There was no significant difference in the sub-dimension scores of the Participants' Task and Ego Orientation Scale in Sports for Referees according to their educational status (p>0.05). Educational status does not affect the scores on the Task and Ego Orientation Scale for Referees in Sports.

**Table 6.** Distribution of the scores of the participants' task and ego orientation levels according to the refereeing period variable

	5 years and less n=91	6 years and more n=60 yıl	t	р
Task orientation	$20,5 \pm 3,30$	$21,1 \pm 2,70$	-1,14	0,257
Ego orientation	$21,4 \pm 1,85$	$21,7 \pm 1,80$	-1,03	0,303

t: Independent Samples T-Test

There was no significant difference in the subdimension scores of the Participants' Task and Ego Orientation Scale for Referees in Sports according to the duration of refereeing (p>0.05). The refereeing process does not affect the scores on the Task and Ego Orientation Scale for Referees in Sport.

In this research, it was found that the ego orientation of tennis referees was higher than their task orientation. When the average of task and ego orientations is considered, it is at a middle level. Accordingly, it can be thought that tennis referees are in an effort to be superior with the desire to increase their prestige in the society. "Being the best" is unquestionably important for ego-oriented individuals. In this way, they feel successful. There are other studies in the literature that support this result [15,18, 19]. The fact that ego and task orientations are directly proportional or inversely proportional to each other in goal orientation affects referee behavior. There is information in the literature that task-oriented referees can meet the expectation for the success of refereeing performance [20]. Considering that ego and task orientation are actually a life critique, it is clear that goal orientation is a very important issue.

There is a statistically significant difference according to gender in the sub-dimension of tennis referees' task orientation in sports (p<0.05). It is seen that this difference is against women. The sub-dimension point averages of female referees in sports task orientation are lower than that of male referees. This result shows that male referees focus on both skill learning, learning new skills, demonstrating mastery at the task, hard work and the belief that success will be

achieved by proving one's superior ability among colleagues. However, the imbalance between male and female sample numbers may require skepticism towards the result. Because the number of female samples (n=57) is almost half of the male sample (n=94). A similar difference is not seen in the sub-dimension of ego orientation in sports. The result of a study investigating the goal orientations of athletes engaged in individual and team sports supports the result of our research [15]. In another study, it was suggested that goal orientations did not differ in terms of gender in the ego orientation sub-dimension [21]. There are other studies in the literature that support this result [22].

When the task and ego orientations of the tennis referees participating in our study were examined, it was found that there was no significant difference compared to the other variables considered within the scope of the research (p<0.05). In summary, it can be said that the age, education status and refereeing period of tennis referees do not cause a difference in their task and ego orientations in sports.

Considering the age variable, there are other studies that are similar to the results of our study [15, 12]. Proios and Doganis conducted a study on 148 referees aged between 17 and 50, and found that the age variable alone did not significantly affect the referees' goal orientation [23]. According to the results of Barut's (2018) research, it was revealed that the task and ego orientation scores of basketball players did not show a significant difference according to age [24]. In another study, the task and ego orientations of amateur and professional football players were



examined and no significant difference was found according to the age variable [25]. It is thought that the research results that do not overlap with the current research results may be affected by conditions such as the branch, environmental factors, upbringing, and competition level [13, 26, 27]. Other studies on ego and task orientation in the literature and the different study groups were also effective in not obtaining similar results.

Considering the variable of educational status, studies with similar results were found in the literature [25, 27]. Balkis (2019), on the other hand, stated that there is a statistically significant difference in the task and ego orientations of the athletes according to the educational status variable [26]. It is thought that the reason for the research results contradicting with the current research results is due to the fact that different sample groups were studied.

Since there are no other studies dealing with the variable of refereeing period, it is thought that the current research results will form the basis for future research in this field. A study conducted to determine error rates on line umpires revealed interesting results. Accordingly, Corboch et al. (2016) noted that line umpires have an error rate of 27% while performing their tasks. They argued that it is not very accurate to evaluate the performance of the line umpires by %, and that experienced referees (active refereeing period) should be placed on the lines in order to reduce the error rate [28].

#### 4. Conclusion

As a result, it is seen that the initial hypotheses are partially supported. According to the findings, the task and ego orientations of tennis referees are middle. It was concluded that the gender variable was an important determinant in the sub-dimension of task orientation. Age, educational status, and period of refereeing were not found to be a determinant of the level of task and ego orientation in this research sample. With these results, H2, one of the research hypotheses, was accepted only for the task orientation sub-dimension; H1, H3, H4 and H5 hypotheses were rejected.

Despite the important role the referee plays in a tennis match, research in the field of refereeing is limited. Indeed, although research on athletes' goal orientations is frequent, research on referees' goal orientations is scarce. It is thought that, in addition to the researches to be conducted with larger sample numbers, comparative studies to be conducted on referees from different branches will make significant contributions to the field. In the future, it may be recommended to include studies to support the task-oriented attitudes of referees. Considering that the fact that the referees watch the game from different angles according to the refereeing categories may have an effect on their goal orientation, it can be suggested to examine the relationship between these two variables.

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# **Ethics Approval**

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#### **Author Contribution Statement**

The entire work was designed and completed by Pero Duygu DUMANGÖZ

#### **Additional Materials**

No additional data are available

#### **Conflict of interest**

The author have no conflicts of interest to declare that are relevant to the content of this article.

#### Does this article screened for similarity?

Yes

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