International Journal of
Disabilities Sports and Health Sciences
e-ISSN: 2645-9094

RESEARCH ARTICLE

The Effect of Role Uncertainty of Students in University Team Sports on Team Combination

Mustafa Barış SOMOĞLU[1*], Efecan TEZCAN[2], Ahmet Yılmaz ALBAYRAK[3] and Muhammet Uhud TÜRKMEN[4]

[1]Gümüşhane University, Physical Education and Sports College, Physical Education and Sports Teaching Department, Gümüşhane / Türkiye
[2]Gümüşhane University, Physical Education and Sports College, Sports Management Department, Gümüşhane / Türkiye
[3]Gümüşhane University, Physical Education and Sports College, Sports Management Department, Gümüşhane / Türkiye
[4]Gümüşhane University, Physical Education and Sports College, Sports Management Department, Gümüşhane / Türkiye
*Correspondingauthor: barissomoglu@gmail.com

Abstract
The primary objective of this research is to assess the level of team cohesiveness and role ambiguity among students who participate in university team sports, and examine them based on pre-determined variables. The selection of participants was conducted through a convenient sampling approach. The study employed the cross-sectional scanning method and comprised a sample of 238 participants, consisting of 88 females (37%) and 150 males (63%), who are engaged in team sports at Gümüşhane University during the 2022-2023 academic year. A Personal Information Form, Team Cohesion Scale and Role Ambiguity Scale were utilised to gather data in this study. Data was then analysed using T-tests, ANAVO and correlation tests. Analysis results indicate that university students who participate in team sports demonstrate above average team unity, whilst exhibiting below average role ambiguity. Men were found to have better scores in the team unity and group attractiveness task dimensions, based on gender. In contrast, students studying in departments other than physical education and sports schools reported higher role ambiguity. It has been noted that university students who have played on the same sports team for 1-5 years encounter greater role ambiguity compared to those who have had longer experience. Playing different sports and the number of years spent playing sports did not impact participants' team unity or role ambiguity. An additional noteworthy finding is the negative significant connection between role ambiguity and team commitment.

Keywords
Sport, Team, Togetherness, Uncertainty, Role

INTRODUCTION

Humanity has arisen various needs in order to survive and tried various strategies to meet these needs. Nature and living conditions have kept people together and this process has led people to become a nation. As Maslow stated in his theory, belonging is one of the greatest needs of human beings. Therefore, individuals often desire to be a member or join a community. It is stated that the main reasons for individuals to participate are belonging, partnership and realization (Hightower, 2000). According to Shaw (1971), the group; It is a gathering of people who are mutually influenced and interacting with each other. The uniting of individuals in groups for a goal reveals the concept of togetherness. If this unity occurs in the sports environment, the concept of team unity emerges. According to Carron, Widmeyer and Brawley (1998), team unity; It means that a group comes together to achieve goals, an effort to maintain

Received: 05 September.2023 ; **Accepted:** 16 October 2023; **Online Published:** 25 October 2023
[1]**ORCID:** 0000-0001-5811-384X , [2]**ORCID:** 0000-0003-3284-6361, [3]**ORCID:** 0000-0002-3345-6579 , [4]**ORCID:** 0000-0003-2067-7935

How to cite this article: Somoğlu, M.B., Tezcan, E., Albayrak, A.Y. anad Türkmen, M.U. (2023). The Effect of Role Uncertainty of Students in University Team Sports on Team Combination. *Int J Disabil Sports Health Sci*;2023;Special Issue 1:241-.253https://doi.org/10.33438/ijdshs.1355453

unity and a dynamic process. The term "team cohesion", which is frequently encountered in the literature, is synonymous with concepts such as team cohesion, group unity, group solidarity, group cohesion.

Team unity provides the expression of being able to work in harmony, show solidarity and cooperate in order for a group of individuals to achieve common goals. This concept is considered the key to success in many areas from the business world to sports, from education to social projects. Positive harmony among team members and focusing on common goals increase the work of the team (Hackman and Wageman, 2005). Team cohesion is a fundamental phenomenon in which a group of people join forces and coordinate to achieve their common goals. The stability of this phenomenon is a critical factor for continued success.

Interaction within the team, shared goals and personal commitment to the team are expressed as determining factors in team unity (Eren, 2001). Team cohesion may occur due to factors such as individuals' dedication to the team and their desire to stay in the team. Team members with high team cohesion are generally willing to participate in the team's activities, attend meetings, and are happy with the team's success. On the contrary, members of teams with weak cohesion do not participate in the team's activities and are uninterested in the team. A strong unity within the group is considered a positive quality for teams (Eren, 2001).

One of the important group dynamics of the members of a team is considered to be the uncertainty perception of the roles of the athletes (Beauchamp and Bray, 2001; Beauchamp et al., 2002; Bosselut et al., 2010b; Eys et al., 2003a; Mellalieu and Juniper, 2006 Özkara 2019;). Role ambiguity is defined as a situation in which expectations are not clearly stated (Kahn et al., 1964). Role ambiguity is the lack of clear information about the details of individuals' powers and responsibilities (Baltaş and Baltaş, 2004). In situations where role ambiguity is experienced, people cannot fully perceive what is expected of them and exhibit behaviors that are not compatible with expected behaviors (Bernardin, 2010; Fisher, 2001). In addition, the person does not show the desired performance in the task when he lacks the necessary information about the task (Ceylan and Ulutürk, 2006).

The first studies related to this concept (role, role ambiguity, role conflict) were studied in the field of management and organization and are based on the role division model of Kahn et al. (1964). Based on this model, definitions of role ambiguity include two basic dimensions, namely task ambiguity and social-emotional states (Kahn et al., 1964; Ok, 2002; Özkalp and Özkalp, 2004). According to this approach, role ambiguity includes both details about the person's duties and how their performance is evaluated.

Task ambiguity refers to situations that are unclear about the tasks that a person should perform and includes three basic sub-dimensions. These sub-dimensions are: Uncertainties about the area of responsibility, uncertainties in what is expected to fulfill the required behavioral responsibilities, uncertainties about the hierarchical priority of each task. It is possible for the person to experience task ambiguity due to reasons such as not knowing what his/her powers include and not, not specifying the institutional goals clearly, clearly and regularly, not knowing the required standards, having insufficient experience in the profession, insufficient education and knowledge level, and unclear job descriptions (Ok, 2002).

Kahn et al., (1964) introduced the second main dimension as the Social-Emotional Role Ambiguity dimension. This dimension includes the uncertainty one feels about how one's achievements are perceived by others. The inability of the individual to clearly perceive the criteria by which his performance is evaluated or to receive constructive feedback from his environment causes a psychological process called social-emotional role ambiguity or a feeling of discomfort. When the existing literature on role ambiguity is examined, it is seen that most of the studies in this field are predominantly carried out in the context of business and industry, where productivity and performance are particularly important (Eys et al., 2003a).

Research focusing on role ambiguity has been conducted in the field of sports sciences since the 2000s. Studies on role ambiguity in sports have revealed its relationship to various factors. Increased cognitive and bodily anxiety has been associated with role ambiguity (Beauchamp et al., 2003). Decreased perceived competence and role performance showed links with role ambiguity (Beauchamp et al., 2002; Bray and Brawley, 2002; Eys and Carron, 2001; Özkara and Özbay, 2019).

Moreover, decreased sense of competence (Bray and Brawley, 2002; Eys and Carron, 2001) as well as decreased athletic pleasure (Eys and Carron, 2005; Eys et al., 2003b) have been associated with role ambiguity. . It has also been found to be associated with role conflict (Beauchamp and Bray, 2001) and social loafing (Høigaard et al., 2010).

Another factor associated with role ambiguity in sports is the athletes' perceptions of group integrity and team cohesion in their teams (Davarcı, 2008; Çepikkurt and Pehlevan, 2018). In order for a team to create an efficient structure, it is considered important to consider the necessity of members to have a clear role, to determine the distance between role ambiguity and group integrity, and to determine the communication and interaction between these two factors. Academic studies covering the dynamics of sports emphasized the importance of role ambiguity and group integrity, and the critical role of communication between these two variables in achieving successful performance and enjoying sports activities (Carron et al., 2007; Eys et al., 2006; Bosselut et al., 2012). The importance of unity in achieving the desired goals and keeping a group together is indisputable. On the other hand, individuals experiencing role ambiguity are naturally emotional and it has been emphasized that role ambiguity can lead to tension, decreased self-confidence and dissatisfaction. From this point of view, the aim of this research is; The aim of this study is to determine the role ambiguity perceptions of the athletes in the team and the level of team cohesion, to examine them in terms of the determined variables and to reveal the relationship between them.

MATERIALS AND METHODS

Model of the Research

This study was carried out with a quantitative research approach and a general evaluation was made about the whole or a part of the universe by using the cross-sectional survey method (Karasar, 2009). The cross-sectional survey model, which is carried out using the quantitative research method, involves the collection and analysis of data at a particular time or period. In this method, researchers try to understand the current situation by examining one or more variables at a given moment. In the cross-sectional survey model, a cross-sectional (instant) data is collected from the participants, that is, information is collected at a certain time using tools such as a questionnaire or observation. This type of research model is often used to understand the general state of the population or a particular trait or set of traits. The results of the analysis of the data can reflect their characteristics at a particular time. However, cross-sectional scanning models do not determine changes over time because the data represent only a particular moment.

Universe and Sample / Study Group

The sample of the study consists of a total of 238 (86 26% female/150 74% male) licensed athletes who are active in the province of Gümüşhane in the 2022-2023 academic year. The sample was selected with the “Easy Sampling Method”. With this method, time, easy accessibility and financial savings were achieved (Yıldırım and Şimşek, 2014).

Of the university students who participated in the research, 86.6% were PESC students and 13.4% were athletes from other departments. 18.9% of these students are in the 1st grade, 31.1% in the 2nd grade, 37.4% in the 3rd grade, and 12.6% in the 4th grade. Considering their distribution according to the variable of how many years they have played in the same team, 204 of them do sports in the same team for 1-5 years, while 34 of them play in the same team for 6 years or more. Of these students, 140 are interested in handball, 62 in volleyball, 36 in football. 30 of these athletes are between 0-2 years, 44 are between 3-5 years, 84 are between 6-8 years and 81 are doing sports for 8 years or more.

Ethics of Research; In order to start the data collection process of the research, an ethical approval report was obtained from the "Gümüşhane University Scientific Research and Publication Ethics Committee" (14.06.2023, article no: E-95674917-108.99-182130). Throughout the study, the “Higher Education Institutions Scientific Research and Publication Ethics Directive” was continued to be complied with. Before the study, the participants were informed and informed consent was obtained from the researchers.

Data Collection Tools

Personal Information Form

It consists of "gender, department, year of playing sports, year of playing in the same team and sports branch" created by the researcher. Athletes' Role Ambiguity Inventory (ARAI): The scale developed by Beauchamp and Bray (2001) was adapted into Turkish by Davarcı (2008) to evaluate the uncertainties about the roles of athletes. The inventory consists of two sub-dimensions, "Knowing What the Role Requires" and "Role Responsibility and Performance Criteria", and includes 7 items in total. The scale has a 7-point Likert style self-assessment format.

Group Environment Questionnaire (GEQ)

In the study, the team collaboration inventory, which was developed by Carron et al. (1985) to measure team cohesion and adapted into Turkish by Unutmaz, Kiremitçi, and Gençer (2014), was used. The inventory consists of 18 items divided into 4 sub-dimensions: "group integration-task, group integration-social, individual attractions to group-task, and individual attractions to group-social". The item distribution for each sub-dimension is as follows: 5 items (1, 3, 5, 7, 9) for Group Attractiveness-Social, 4 items for Group Attractiveness-Task (2, 4, 6, 8), Group Cohesion-Social (11, 13, 15, 17) and 5 items (10, 12, 14, 16, 18) for Group Integrity-Task. Each item in the inventory is measured on a 9-point Likert scale. Some items in the inventory are reverse scored (1, 2, 3, 4, 6, 7, 8, 11, 13, 14, 17,18).

Analysis of Data

First of all, the suitability of the data for the analysis of the data analyzed with SPSS 25.0 was tested. In this direction, Kolmogorov-Smirnov tests were applied, but the suitability of the data could not be tested. The values of kurtosis and skewness, which are another suitability parameter, were examined and it was decided that they were suitable for the analysis (between -1.5 and +1.5) (Büyüköztürk, 2010; Tabachnick and Fidell, 2013). As a result of the assumption of normality, other parametric tests (descriptive statistics, t-test, one-way analysis of variance) were applied.

RESULTS

In Table 1, Group Environment Questionnaire (GEQ) and its sub-factors group integration-task (GİT), group integration-social (GİS), individual attractions to group-task (IAGT), individual attractions to group-social (IAGS), and Athletes' Role Ambiguity Inventory Descriptive statistics results are given for (ARAI) and sub-factors Knowing What the Role Requires (KWRR), Role Responsibility and Performance Criteria (RRPC) scale scores. When Table 1 is examined, it has been determined that the scores obtained from the total and sub-dimensions of GEQ are above the average, and the scores from the ARAI and sub-dimensions are below the average. When the kurtosis and skewness scores were examined, it was assumed that they showed normal distribution by taking values between +1 and -1 in all scales and sub-dimensions.

Table 1. Descriptive Statistics on GEQ and ARAI Scores

GEQ	**n**	$\bar{X}$	**Ss**	**Skewness**	**Kurtosis**	**Min.**	**Mak.**
GİT	238	6,19	1,33	-0.700	-0,158	2,60	9
GİS	238	5,89	1.90	-0.012	-0.757	1,25	9
IAGT	238	5,78	1.27	-0.052	-0.341	3,00	9
IAGS	238	6,20	1.56	-0.034	-0.865	2,20	9
GEQ Total	238	6,04	1.09	0.384	-0.227	3,28	8,83
ARAI	**n**	$\bar{X}$	**Ss**	**Skewness**	**Kortosis**	**Min.**	**Mak.**
KWRR	238	2,20	1,14	0,939	0,017	1	5
RRPC	238	2,40	1,05	0,352	-0,158	1	5
ARAI Total	238	2,29	0,98	0,519	-0,347	1	5

Group Environment Questionnaire (GEQ), Group İntegration-Task (ARAI), Group İntegration-Social (GİS), İndividual Attractions to Group-Task (IAGT), İndividual Attractions to Group-Social (IAGS), Athletes' Role Ambiguity Inventory (ARAI) Knowing What the Role Requires (KWRR), Role Responsibility and Performance Criteria (RRPC).

The t-test findings according to the total and sub-dimension scores of GEQ and ARAI according to the "gender" variable of the participants are shown below (Table 2). As can be seen in the table below, the athletes' GEQ total [$t_{(236)}$=-0.878, p>0.05], GİT [$t_{(236)}$=-0.535, p>0.05], IAGT [$t_{(236)}$=-0.139, p>0.05], IAGS [$t_{(236)}$=-0.875, p>0.05] did not show a significant gender-related difference; A significant difference was found in favor of men in the dimension of GİS [$t_{(236)}$=-2.406, p<0.05]. ARAI levels were determined by gender in total [$t_{(236)}$=-0.666, p>0.05] and KWRR [$t_{(236)}$=0.026, p>0.05], RRPC [$t_{(236)}$=-1.493, p>0.05] dimensions. did not differ significantly.

Table 2. GEQ and ARAI Scores by Gender Variable t-test Results

GEQ	Gender	n	$\bar{x}$	Ss	sd	t	p
GİT	Female	88	6,12	1,30	236	-,535	,59
	Male	150	6,22	1,34			
GİS	Female	88	5,50	2,10	236	-2,406	,02*
	Male	150	6,11	1,73			
IAGT	Female	88	5,76	1,21	236	-,139	,89
	Male	150	5,78	1,29			
IAGS	Female	88	6,31	1,57	236	,875	,38
	Male	150	6,13	1,55			
GEQ Total	Female	88	5,96	1,12	236	-,878	,38
	Male	149	6,08	1,05			
ARAI	**Gender**	**n**	$\bar{x}$	**Ss**	**sd**	**t**	**p**
KWRR	Female	88	2,21	1,07	236	,026	,97
	Male	150	2,20	1,17			
RRPC	Female	88	2,27	0,96	236	-1,493	,13
	Male	150	2,48	1,08			
ARAI Total	Female	88	2,23	0,89	236	-,666	,50
	Male	150	2,32	1,02			

*p<0.05 , Group Environment Questionnaire (GEQ), Group İntegration-Task (ARAI), Group İntegration-Social (GİS), İndividual Attractions to Group-Task (IAGT), İndividual Attractions to Group-Social (IAGS), Athletes' Role Ambiguity Inventory (ARAI) Knowing What the Role Requires (KWRR), Role Responsibility and Performance Criteria (RRPC).

Table 3. GEQ and ARAI t-test Results by Reading Department Variable

GEQ	The Section You Read	n	$\bar{x}$	Ss	sd	t	p
GİT	PESC	206	6,14	1,34	236	-1,449	,14
	Other	32	6,50	1,22			
GİS	PESC	206	5,88	1,92	236	-,091	,92
	Other	32	5,91	1,72			
IAGT	PESC	206	5,80	1,26	236	,990	,32
	Other	32	5,57	1,27			
IAGS	PESC	206	6,22	1,56	236	,728	,46
	Other	32	6,01	1,59			
GEQ Total	PESC	205	6,04	1,08	236	,063	,95
	Other	32	6,02	1,09			
ARAI	**The Section You Read**	**n**	$\bar{x}$	**Ss**	**sd**	**t**	**p**
KWRR	PESC	206	2,14	1,10	236	-2,008	,04*
	Other	32	2,57	1,27			
RRPC	PESC	206	2,34	1,03	236	-2,140	,03*
	Other	32	2,77	1,09			
ARAI Total	PESC	206	2,23	0,95	236	-2,325	,02*
	Other	32	2,66	1,03			

*p<0.05, Group Environment Questionnaire (GEQ), Group İntegration-Task (ARAI), Group İntegration-Social (GİS), İndividual Attractions to Group-Task (IAGT), İndividual Attractions to Group-Social (IAGS), Athletes' Role Ambiguity Inventory (ARAI) Knowing What the Role Requires (KWRR), Role Responsibility and Performance Criteria (RRPC).

The t-test findings according to the GEQ total and sub-dimension scores of the participants according to the variable of "reading department" are shown below (Table 3). As can be seen in the table below, the athletes' total GEQ [$t_{(236)}$=0.063, p>0.05], GİT [$t_{(236)}$=-1.449, p>0.05], GİS [$t_{(236)}$=-0.091, p>0.05], IAGT [$t_{(236)}$=0.990, p>0.05] and IAGS [$t_{(236)}$=0.728, p>0.05] dimensions did not show a significant difference depending on the department they read; ARAI levels were in the total [$t_{(236)}$=-2.325, p<0.05] and KWRR [$t_{(236)}$=-2.008, p<0.05], RRPC [$t_{(236)}$=-2.140, p<0.05] dimensions. differed significantly depending on the variable. According to these findings, it was concluded that the students who do sports at the university have less role ambiguity than those who study in physical education and sports colleges (PESC) than those who study in other departments.

After the analysis, one-way ANOVA results show that the main effect of the variable of years of doing sports on the GEQ and ARAI total and sub-factor scores of the athletes did not differ (Table 4).

Table 4. ANOVA Results of GEQ and ARAI Scores by Years of Sport Variable

GEQ	Sports Year	n	$\bar{x}$	Ss	Sd	F	p	Difference
GİT	0-2	31	6,16	1,42	3-234	,755	,52	-
	3-5	44	6,23	1,27				-
	6-8	82	6,03	1,37				-
	8 +	81	6,33	1,28				-
GİS	0-2	31	5,94	1,73	3-234	,659	,57	-
	3-5	44	6,15	1,76				-
	6-8	82	5,67	1,86				-
	8 +	81	5,92	2,06				-
IAGT	0-2	31	5,85	1,08	3-234	,339	,79	-
	3-5	44	5,60	1,30				-
	6-8	82	5,78	1,27				-
	8 +	81	5,82	1,30				-
IAGS	0-2	31	6,24	1,71	3-234	,453	,71	-
	3-5	44	5,96	1,54				-
	6-8	82	6,21	1,56				-
	8 +	81	6,30	1,52				-
GEQ Total	0-2	31	6,06	1,13	3-234	,477	,69	-
	3-5	44	6,00	1,14				-
	6-8	82	5,94	1,05				-
	8 +	80	6,14	1,07				-
ARAI	**Sports Year**	**N**	$\bar{x}$	**Ss**	**Sd**	**F**	**p**	**Difference**
KWRR	0-2	31	2,05	0,97	3-234	,340	,79	-
	3-5	44	2,29	1,05				-
	6-8	82	2,16	1,01				-
	8 +	81	2,25	1,34				-
RRPC	0-2	31	2,58	0,99	3-234	1,490	,21	-
	3-5	44	2,63	1,00				-
	6-8	82	2,33	1,03				-
	8 +	81	2,28	1,08				-
ARAI Total	0-2	31	2,28	0,85	3-234	,443	,72	-
	3-5	44	2,44	0,90				-
	6-8	82	2,23	0,92				-
	8 +	81	2,26	1,11				-

Group Environment Questionnaire (GEQ), Group İntegration-Task (ARAI), Group İntegration-Social (GİS), İndividual Attractions to Group-Task (IAGT), İndividual Attractions to Group-Social (IAGS), Athletes' Role Ambiguity Inventory (ARAI) Knowing What the Role Requires (KWRR), Role Responsibility and Performance Criteria (RRPC).

The t-test findings according to the total and sub-dimension scores of the participants according to the "year of playing in the same team" variable is shown below (Table 5). As can be seen in the table below, the athletes' GEQ total [t(236)=0.108, p>0.05], GİT [t(236)=0.983, p>0.05], GİS [t(236)=-0.306, p>0.05], IAGT [t(236)=0.789, p>0.05] and IAGS [t(236)=-0.118, p>0.05] No significant difference was found in the dimensions of depending on the variable of playing for the same team. While ARAI levels differed significantly in total [t(236)=-1.986, p<0.05] and RRPC [t(236)=-1.999, p<0.05] dimensions depending on the variable of playing in the same team; No differentiation was found in KWRR [t(236)=-1.599, p>0.05] dimension. According to these findings, it was seen that students who do sports at the university have more role ambiguity than those who have fewer sports years (1-5 years) with the team than those who have longer sports years (6 years and above).

Table 5. GEQ and ARAI t-test Results by Years of Playing in the Same Team Variable

GEQ	Year of playing in the team	n	$\bar{x}$	Ss	sd	t	p
GİT	1-5	204	6,22	1,34	236	,983	,32
	6 and above	34	5,98	1,23			
GİS	1-5	204	5,87	1,89	236	-,306	,76
	6 and above	34	5,97	1,95			
IAGT	1-5	204	5,80	1,19	236	,789	,43
	6 and above	34	5,61	1,61			
IAGS	1-5	204	6,19	1,55	236	-,118	,90
	6 and above	34	6,22	1,66			
ARAI Total	1-5	204	6,04	1,05	236	,108	,91
	6 and above	33	6,02	1,28			
ARAI	**Year of playing in the team**	**n**	$\bar{x}$	**Ss**	**sd**	**t**	**p**
KWRR	1-5	204	2,49	1,10	236	-1,599	,11
	6 and above	34	2,15	1,31			
RRPC	1-5	204	2,73	1,02	236	-1,999	,04*
	6 and above	34	2,34	1,12			
ARAI Total	1-5	204	2,59	0,95	236	-1,986	,04*
	6 and above	34	2,23	1,08			

*p<0.05, Group Environment Questionnaire (GEQ), Group İntegration-Task (ARAI), Group İntegration-Social (GİS), İndividual Attractions to Group-Task (IAGT), İndividual Attractions to Group-Social (IAGS), Athletes' Role Ambiguity Inventory (ARAI) Knowing What the Role Requires (KWRR), Role Responsibility and Performance Criteria (RRPC).

After the analysis, one-way ANOVA results show that the main effect of the sport branch variable on the GEQ and ARAI total and sub-factor scores of the athletes did not differ (Table 6).

Table 6. GEQ and ARAI Scores ANOVA Results by Sports Branch Variable

GEQ	Branch	n	$\bar{x}$	Ss	Sd	F	p	Difference
GİT	Handball	140	6,08	1,39	3-235	1,922	,149	-
	Volleyball	63	6,46	1,15				-
	Football	36	6,09	1,28				-
GİS	Handball	140	5,73	1,99	3-235	1,318	,270	-
	Volleyball	63	6,18	1,55				-
	Football	36	5,98	2,07				-
IAGT	Handball	140	5,90	1,26	3-235	2,312	,101	-
	Volleyball	63	5,50	1,15				-
	Football	36	5,75	1,47				-
IAGS	Handball	140	6,27	1,53	3-235	,605	,547	-

	Volleyball	63	6,14	1,64				-
	Football	36	5,92	1,53				-
	Handball	140	6,01	1,10				-
GEQ Total	Volleyball	63	6,09	1,01	3-235	,129	,879	-
	Football	36	6,01	1,19				-
ARAI	**Branch**	**n**	**$\bar{X}$**	**Ss**	**Sd**	**F**	**p**	**Difference**
	Handball	140	2,13	1,11				-
KWRR	Volleyball	63	2,24	1,11	3-235	1,454	,236	-
	Football	36	2,54	1,29				-
	Handball	140	2,36	1,00				-
RRPC	Volleyball	63	2,52	1,11	3-235	,578	,562	-
	Football	36	2,33	1,13				-
	Handball	140	2,23	0,96				-
ARAI Total	Volleyball	63	2,36	0,95	3-235	,803	,449	-
	Football	36	2,45	1,13				-

Group Environment Questionnaire (GEQ), Group İntegration-Task (ARAI), Group İntegration-Social (GİS), İndividual Attractions to Group-Task (IAGT), İndividual Attractions to Group-Social (IAGS), Athletes' Role Ambiguity Inventory (ARAI) Knowing What the Role Requires (KWRR), Role Responsibility and Performance Criteria (RRPC).

Table 7 presents the results of the Pearson Correlation test performed to examine the relationship between GEQ and ARAI. As can be seen from Table 9, the correlation analysis between GEQ and ARAI reveals a significant, negative, moderate relationship between team cohesion and role ambiguity [r=-0.32, p=0.00].

Table 7. Correlation Results Between GEQ and ARAI

	GEQ		
	N	**r**	**p**
ARAI	238	-,319	0.00**

**p<0.01 [Group Environment Questionnaire (GEQ), Athletes' Role Ambiguity Inventory (ARAI)]

DISCUSSION

It was determined that university students' GEQ scores were above the average, and their ARAI scores were below the average. In other words, it can be said that the level of the team unity of the athletes is good, and the role ambiguities are low. In the study conducted by Çepikkurt and Pehlevan (2018) with female basketball players, it was stated that the basketball player participants perceived the social and task-oriented integrity of the team in a significantly positive way. In addition, it was stated that female basketball players have an opinion about the responsibilities of their own roles and the performance on which their performance is evaluated, but they have more limited information about the requirements of the role (Çepikkurt and Pehlevan, 2018). In the current study, it is considered as a natural result that the team unity scores above the average and the perceptions of role ambiguity are below the average. The participants showed that knowing the roles correctly in the teams had a positive effect on the team unity of the participants. These results can be interpreted as the participants who understand the responsibilities of the roles and performance evaluation have high perceptions of team cohesion, namely task integrity and social integrity.

It was determined that the group attractiveness-task scores of the gender-related men were higher than the women and differed significantly. It was concluded that GEQ and ARAI total and other factor scores were similar depending on gender. In other words, it can be said that being a woman or a man does not have an effect on GEQ and ARAI total and other factor scores. In the study of Aydın and Burmaoğlu (2018) with volleyball players between the ages of 15-18, it was stated that male participants experienced more role confusion in the same direction as the research findings. Çepikkurt and Pehlevan (2018), on the other hand, stated that female basketball players have problems in

knowing the requirements of the role in their study only with female basketball participants. In a different study, it is stated that gender does not have an effect on role ambiguity (Çankaya et al., 2021). When the studies on team collaboration are examined; Görgüt (2017) found a significant relationship in favor of female participants in all dimensions in his study with handball players. Soyer et al., (2010) similarly found significant differences in favor of women in their study. In the study of Molla, Öncen, Aydın (2019), a significant difference was found in favor of female participants in the Social Integrity of the Group sub-dimension, which defines the development and maintenance of social relations within the group, and no significant difference was found in other dimensions. It is predicted that the difference between the research findings and the literature may be due to different study groups and studies in different branches.

The department he studied did not have a main effect on the participants' GEQ and sub-factor scores; However, it was determined that those who read other departments on role ambiguity fell more into role ambiguity than those who read PESC. The reason for this situation may be that the athletes trained in the physical education and sports education program are more experienced and carry out their education in the field of sports. Similar to the research findings, Molla, Öncen, Aydın (2019) investigated the team unity of the athletes who go to sports schools and play in school teams, and concluded that the players who go to sports schools show higher team unity. No study evaluating this variable on this subject has been found in the literature. It is thought that by considering this variable, studies on these subjects will contribute to the literature.

When the findings were evaluated in terms of years of doing sports and sports branch, it was determined that the total and sub-factor scores of GEQ and ARAI were similar, in other words, the sports branch and the time spent with sports did not have an effect on team unity or role ambiguity in the team. Çankaya et al. (2021), in their study with athletes who play team sports, concluded that volleyball players experience more role ambiguity than soccer and handball players. In the literature on team cohesion, Dorak and Vurgun (2006) stated that in their study on team cohesion in team sports, participants with fewer years of playing sports showed higher team cohesion. In the study of Görgüt (2017) with handball players, it was stated that in the "Group Integrity Social" sub-factor, those who do sports for 4-7 years show higher team unity than those who do 11 or more. He attributed the result of this situation to age and stated that it may be due to the increase in the sense of independence as age progresses (Görgüt, 2017). The research conducted by Dorak and Vurgun (2006) showed that team unity varies according to different sports branches. It has been determined that volleyball players have higher team unity scores compared to handball players, football players compared to handball and basketball players. Similarly, in the study of Moralı (1994), it was stated that the ratio of football players to handball players had a higher level of team unity. It can be thought that the time spent with the same team rather than the year of doing sports may have an effect on the team unity, as the result of the current research is meaningless.

When considered in terms of the variable of years of playing in the same team, it was determined that those who played in the same team for 1-5 years in the ARAI total and RRPC sub-dimension experienced higher role ambiguity than those who played 6 or more in the same team. The year of playing in the same team did not affect the team unity. In the literature, Eys et al., (2003) investigated how group cohesion and role ambiguities changed throughout the season and whether they were related to experience; investigated their perceptions of role uncertainty during the season between experienced and inexperienced athletes. In their research, it was stated that experienced athletes exhibit a low level of role ambiguity perception compared to new players, as they have more experience in fulfilling their responsibilities regarding their duties during competitions and matches at the beginning of the season. However, it was emphasized that this difference decreased towards the end of the season and eventually disappeared. This finding, which emerged in the study of Eys et al., (2003), is important in terms of giving an idea that the perception of role ambiguity may change depending on the experience, the time worked with the team and the leader. This finding obtained in the study by Eys et al., (2003) provides important clues that the perception of role ambiguity may differ depending on experience and time spent with the team. If the effect of playing in the same team on team unity is interpreted, it can be said that

team unity may differ between seasons and years. In this sense, longitudinal studies may yield more effective results.

When the relationship between GEQ and ARAI was examined, a negative significant relationship was revealed between role ambiguity and team cohesion. In other words, as team cohesion increases, role ambiguity decreases, and as role ambiguity increases, team cohesion decreases. These results show that other studies revealing the balance between role ambiguity and group cohesion are largely in a similar line (Bosselut et al., 2010b; Bosselut et al., 2010a; Eys and Carron, 2001; Mellalieu and Juiper, 2006).

Eys and Carron (2001) in their study with university-educated basketball players stated that all sub-components of role ambiguity are basketball players' perceptions of task proficiency and negativity in task integrity. Bosselut et al., (2010b) and Bosselut et al., (2010a) examined the relationship between role ambiguity and group cohesion in their study on rugby players and football players, respectively, and emphasized that there was a negative relationship between role ambiguity and task integrity. These studies concluded that athletes who perceive low role ambiguity in teams perceive task integrity at a high level. Mellalieu and Juiper (2006) conducted a study using the method of interviewing football players. In their research, they emphasized that positive perceptions of role openness and role acceptance increase their perceptions of task competence and task integrity. Additionally, they stressed that such perceptions also contribute to reducing competitive anxiety, ultimately positively impacting both individual and group psychological well-being. These findings in the literature, besides supporting the current research results, are also considered important in terms of understanding role ambiguity and team cohesion. This finding emphasizes that reducing role ambiguity and strengthening team cohesion are increased for sports teams to be successful. Researchers such as Beauchamp and Bray (2001), Eys et al., (2003a), also emphasized the duration of the uncertainty of the role of athletes on team dynamics. This finding supported that especially the negative relationships between teams' unity and role ambiguities, it is important for the athletes to clarify their roles in the team and to understand the expectations from the perspective of team harmony and cooperation.

As a result, it was concluded that the class, the year of doing sports, and the sports branch did not affect the team unity of the athletes playing in the sports teams and the role uncertainties experienced in the team. It was concluded that male participants had higher group attractiveness-task perceptions. It has been observed that those who study PESC experience less role ambiguity than students who study in other departments. Another important result is that role ambiguities affect team cohesion, as team cohesion increases, role ambiguity decreases, and as role ambiguity increases, team cohesion decreases. In short, it shows that for sports teams to perform effectively and achieve success, it is necessary not only to work physically, but also to have a clear understanding of the roles and responsibilities of team members. In addition, considering the decrease in team unity when athletes experience the uncertainty of their roles, team managers need to communicate their role definitions clearly and clearly, ensure that the athletes understand their performance, and thus increase team collaboration.

Considering the research findings and theoretical explanations regarding role ambiguity, it can be suggested that clear and clear distribution of team roles, ensuring that performance criteria are well known and accepted by all players, and making role requirements transparent to players can contribute to development. This may allow positive perception of the task and social harmony within the team. The current research was carried out only with the students who took part in team sports at Gümüşhane University. Studies to be carried out by increasing the sample group can make important contributions to the literature. Considering the direction of the relationship between role ambiguity and team cohesion, future studies that will include different variables mediating this relationship can add a different dimension to research. Considering that team unity may change over time (during the season) and the roles of the undertaker may differ over time, it is anticipated that lonARAIudinal studies in this area are important.

Acknowledment

This study was presented as a summary paper at the "4th International Recreation and Sports Management Congress".

Conflict of Interest

No conflict of interest is declared by the authors. In addition, no financial support was received.

Ethics Committee

Ethics of Research; In order to start the data collection process of the research, an ethical approval report was obtained from the "Gümüşhane University Scientific Research and Publication Ethics Committee" (14.06.2023, article no: E-95674917-108.99-182130).

Author Contributions

Study Design, MBS; Data Collection, MBS, ET; Statistical Analysis, AYA, MUT; Data Interpretation, MBS, ET, AYA; Manuscript Preparation, AYA, MUT; Literature Search, MBS, AYA. The published version of the manuscript has been read and approved by all authors.

REFERENCES

Baltaş, A. and Baltaş, Z., (2004). *Stress and Ways to Cope*. Istanbul: Remzi Bookstore.

Beauchamp, M.R. and Bray, S.R., (2001). Role Ambiguity and Role Conflict within Interdependent Teams, *Small Group Research*, 32, 133-157.

Beauchamp, M.R., Bray, S.R., Eys, M.A. and Carron, A.V., (2003). The Effect of Role Ambiguity on Competitive State Anxiety. *Journal of Sport and Exercise Psychology*, 25, 77-92.

Beauchamp, M.R., Bray, S.R., Eys, M.A., and Carron, A.V., (2002). Role Ambiguity, Role Efficacy, and Role Performance: Multidimensional and Mediational Relationships within Interdependent Sport Teams. Group Dynamics: Theory, *Research, and Practice*, 6, 229-242.

Bernardin, H.J., (2010). *Human Resource Management: An Experiental Approach*, (5 th. Ed.). The Mc. Graw Hill Companies Inc, New York.

Bosselut, G., Heuzé, J.P., and Sarrazin, P., (2010a). Structure of the Role Ambiguity Framework and Validity in the French Culture. *Psychology of Sport and Exercise*, 11, 471-478.

Bosselut, G., Heuzé, J.P., Eys, M.A., and Bouthier, D., (2010b). Influence of Task Cohesion and role Ambiguity on Cognitive Anxiety during a European Rugby Union Championship. *Athletic Insight*, 2, 17-34.

Bosselut, G., McLaren, C.D., Eys, M.A., and Heuzé, J.P., (2012). Reciprocity of the Relationship between Role Ambiguity and Group Cohesion in Youth Interdependent Sport. *Psychology of Sport and Exercise*, 13, 341-348.

Bray, S.R. and Brawley, L.R., (2002). Role Clarity, Role Efficacy, and Role Performance Effectiveness. *Small Group Research*, 33, 245–265.

Burmaoğlu, G., and Aydın, Ü. (2018). Role Confusion Perceptions of 15-18 Year Old Volleyball Players. *Bayburt Faculty of Education Journal*, 13 (26),99-512 .

Büyüköztürk, Ş. (2010). *Manual of data analysis for social sciences.* Ankara: Pegem Yayıncılık.

Carron, A., Widmeyer, W., and Brawley, L. (1985). The development of an instrument to assess cohesion in sport teams - The Group Environment Questionnaire. *Journal of Sport Psychology*, 7(3), 244-266.

Carron, A.V., Brawley, L.R., and Widmeyer, W.N., (1998). *The Measurement of Cohesiveness in Sport Groups.* In J.L. Duda (Ed.), Advances in sport and exercise psychology measurement (pp:213- 226). Morgantown, WV: Fitness Information Technology.

Carron, A.V., Eys, M.A., and Burke, S.M., (2007). *Team Cohesion: Nature, Correlates, and Development.* In S. Jowett, and D. Lavallee (Eds.), Social psychology in sport (pp:91-102). Champaign, IL: Human Kinetics.

Ceylan, A., and Ulutürk, Y.H. (2006). Relationships Between Role Ambiguity, Role Conflict, Job Satisfaction and Performance, *Dogus University Journal*, 7(1),48-49.

Çankaya, S., İnce, A., Çakıcı, H. A. and Özyurt, B. (2021). Investigation of the Relationship Between Role Ambiguity and Burnout

Levels in Team Athletes. *OPUS International Journal of Society Researches* , 18 (39),47-59 . DOI: 10.26466/opus.835438.

Çepikkurt, F., and Pehlevan, Z. (2018). The relationship between role ambiguity and group cohesion in women's basketball teams. *Sport Sciences,* 13 (2),1-9. DOI: 10.12739/NWSA.2018.13.2.2B0112.

Davarcı, S. (2008). *The Effect of Role Ambiguity in Athletes on Group Integrity,* Unpublished Master's Thesis, Mersin University Institute of Health Sciences, Mersin.

Dorak, F., and Vurgun, N. (2006). The Relationship Between Empathy and Team Togetherness in Terms of Team Sports, *Spormetre Journal of Physical Education and Sports Sciences*, 4(2): 73-77.

Eren, E. (2001). *Organizational Behavior and Management Psychology.* Istanbul: Beta Press.

Eys, M.A. and Carron, A.V., (2001). Role Ambiguity, Task Cohesion, and Task Self Efficacy. *Small Group Research,* 32, 236-373.

Eys, M.A., Beauchamp, M.R., and Bray, S.R., (2006). *A Review of Team Roles in Sport.* In S. Hanton, and S. Mellalieu (Eds.), Literature Reviews in Sport Psychology (pp:227-256). Hauppauge, NY: Nova Science Publishers.

Eys, M.A., Carron A.V., Beauchamp, M.R., and Bray, S.R., (2003a). Role Ambiguity in Sport Teams. *Journal of Sport and Exercise Psychology,* 25, 534-550.

Eys, M.A., Carron, A.V., Bray, S.R., and Beauchamp, M.R., (2003b). Role Ambiguity and Athlete Satisfaction. *Journal of Sports Sciences,* 21, 391-401.

Fisher, R.T., (2001). Role Stres, The Type a Behaviour Pattern and External Auditer Job Satisfaction and Performance. *Behavioral Research in Accounting,* 13(1), 143-170.

Görgüt, İ. (2017). Examination of Team Unity of Handball Players. *Sportive Outlook: Journal of Sports and Educational Sciences,* 4(1),33-43.

Hackman, J. R., and Wageman, R. (2005). A theory of team coaching. *Academy of management review*, *30*(2), 269-287.

Hightower, J.V. (2000). *Coaching Leadership Behaviors and Team Cohesion in Women's Intercollegiate Athletic Teams,* Doctoral dissertation, University of Houston.

Høigaard, R., Fuglestad, S., Peters, D.M., Cuyper, B.D., Backer, M.D., and Boen, F., (2010). Role Satisfaction Mediates The Relation Between Role Ambiguity And Social Loafing Among Elite Women Handball Players. *Journal of Applied Sport Psychology,* 22, 408–419.

Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D., and Rosenthal, R.A., (1964). *Occupational Stress: Studies in Role Conflict and Ambiguity.* New York: Wiley.

Karasar, N. (2009). *Scientific Research Methods. Ankara: Nobel Publishing Distribution.*

Mellalieu, S.D. and Juniper, S.W. (2006). A Qualitative Investigation into Experiences of the Role Episode in Soccer. *The Sport Psychologist,* 20, 399-418.

Molla, E., Öncen, S., and Aydın, S. (2019). Examination of Team Unity of Adolescents Who Go to Sports School and Adolescents Who Do Not Go to Sports School and Only Play in School Teams (Tekirdağ Province Sample). *Journal of Sports Education,* 3(3),48-54.

Moralı, S. (1994). *Measuring Team Unity and Solidarity in Team Sports, Doctoral Thesis, Ege University Institute of Health Sciences, Izmir.*

Ok, S. (2002). *Examination of Bank Employees' Burnout Levels According to Job Satisfaction, Role Conflict, Role Ambiguity and Some Individual Characteristics.* Doctoral Thesis, Hacettepe University, Institute of Social Sciences, Department of Business Administration, Ankara.

Özkalp, E., and Özkalp, Ç., (2004). *Organizational Behavior (2nd Ed.).* Eskişehir: Open Education Faculty Publications.

Özkara, A. B. (2019). Investıgatıon Of Entrepreneurshİp Qualifications Of Sports HİGh School Students *Manas Sosyal Araştırmalar Dergisi, Supplement 1, 1304-1312.*

Özkara, A. B. and Özbay, S. (2019). Examination of The Psychological Resilience of Students Athletes At High School Level. *National Education Journal, 48* (221), 207-214.

Shaw, M. (1971). *Group Dynamics: The Psychology of Small Group Behavior.* McGraw-Hill, New York.

Soyer, F., Can, Y., Güven, H., Hergüner, G., Bayansalduz, M., and Tetik, B. (2010).

Examining the Relationship Between Athletes' Achievement Motivation and Team Cohesion, *International Journal of Human Sciences*, 7(1): 226-239.

Tabachnick, B. G., and Fidell, L. S. (2013). *Using multivariate statistics (6th ed.).* Boston: Allyn and Bacon.

Unutmaz, V., Kiremitçi, O., and Gençer, R. (2014). Examining the psychometric properties of the Team Cohesiveness Inventory. *CBÜ Journal of Physical Education and Sports Sciences, 6*(2), 23-30.

Yıldırım, A., and Şimşek H. (2013). *Qualitative Research Methods in the Social Sciences (9th Edition).* Ankara: Seçkin Publishing.