

# The Determined of Relationship Between Team Cohesion and Effective Communication Skill Levels in Volleyball Players

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## Abstract

The aim of this research is to determine the relationship between team cohesion and effective communication skill levels in volleyball players. In the study, a descriptive relational survey model was used. The study group consists of 193 athletes, including 140 females and 53 males. For the "Group Environment Questionnaire (GEQ)", "Scale for Effective Communication in Team Sports" and personal information form were used as data collection tools. During the analysis phase, it was determined that the data had a normal distribution, and an Independent Sample T-Test, One-Way Analysis of Variance (ANOVA) test was used for group comparisons. The relationship between Group Environment and Effective Communication levels was determined by Pearson's Analysis. The analysis results showed that; there was no a significant difference according to gender, position and year of sport in the Group Environment Questionnaire. There was a significant difference according to marital status in the Group Environment-Task. In the Scale for Effective Communication in Team Sports; There was no a significant difference according to gender and position. There was a significant difference found according to age and marital status variables in the effective communication. There was a significant difference according to year of sport in distinctiveness-negative conflict scores. As a result of the correlation analysis, there was a positive and moderate relationship between team cohesion with effective communication. However, it was determined that there was no a significant correlation between team cohesion and sub-dimension scores and distinctiveness -negative conflict scores. In this regard, it is foreseen that the cooperation of club technical members-athlete and including in-club social activities will be a supportive factor.

**Keywords:** Team Sports, Team Cohesion, Team Communication, Volleyball

**Voleybol Oyuncularında Takım Uyumu ile Etkili İletişim Beceri Düzeyleri Arasındaki İlişkinin Belirlenmesi**

## Özet

Bu araştırmanın amacı, voleybolcularda takım uyumu ile etkili iletişim beceri düzeyleri arasındaki ilişkinin belirlenmesidir. Çalışmada, betimsel nitelikte ilişki tarama modeli kullanılmıştır. Çalışma grubu, 140 kadın 53 erkek olmak üzere 193 sporcudan oluşmaktadır. Veri toplama aşamasında "Takım Birlikteliği Envanteri", "Spor Takımları İçin Etkili İletişim Ölçeği" ve kişisel bilgi formu kullanılmıştır. Analiz aşamasında verilerin normal dağılım gösterdiği belirlenmiş olup, grup karşılaştırmaları için Bağımsız Örneklem T-Testi, Tek Yönlü Varyans Analizi (ANOVA) testi kullanılmıştır. Takım Birlikteliği ile Etkili İletişim düzeyleri arasındaki ilişki ise Pearson's Analizi ile belirlenmiştir. Analiz sonucunda takım birlikteliği envanterinde; cinsiyet, yaş, spor yılı, mevki değişkenine göre anlamlı farklılık görülmemiştir. Medeni durum değişkenine göre takım birlikteliği-görev puanları arasında anlamlı fark saptanmıştır. Etkili iletişim ölçeğinde; cinsiyet ve mevki değişkenine göre anlamlı fark görülmemiştir. Yaş ve medeni duruma göre etkili iletişim puanları arasında anlamlı fark saptanmıştır. Spor yılına göre ayırt etme-negatif çatışma puanları arasında anlamlı farklılık tespit edilmiştir. Korelasyon analizi sonucunda; takım birlikteliği ile etkili iletişim puanları arasında pozitif yönde ve orta düzeyde anlamlı ilişki tespit edilmiştir. Takım birlikteliği ve alt boyut puanları ile etkili iletişim ve kabul etme-pozitif çatışma puanları arasında pozitif yönde ve orta düzeyde ilişki saptanmıştır. Takım birlikteliği ve alt boyut puanları ile ayırt etme-negatif çatışma puanları arasında anlamlı ilişki saptanmamıştır. Bu hususta kulüp teknik üyeleri-sporcu iş birliği ile kulüp içi sosyal etkinliklere yer verilmesinin destekleyici bir unsur olacağı öngörülmektedir.

**Anahtar Kelimeler:** Takım Sporları, Takım Uyumu, Takım İletişim, Voleybol

## INTRODUCTION

Individuals are constantly in contact in daily life (1). Therefore, the importance and value of the concept of communication are felt more and more today. The communication skill levels of individuals are effective in the success of all institutions, organizations, professions and scientific fields. In this context, communication is also considered to be an important concept in the field of sports. As a matter of fact, the intensive training systems and camp periods in which athletes are involved can negatively affect many areas of their lives. Athletes can be subjected to cruel criticism by performing in front of many people they have never seen and know before. In such cases, the high communication skills of the athletes and the opportunity to express their thoughts in the most accurate way can minimize possible problems. Therefore, athletes who are frequently in contact with their teammates, coaches, spectators and the media should have effective communication skills to protect their status and increase their sports performance (2).

One of the main ways to create a successful team is to ensure that individuals are integrated within the team. When team athletes provide team integration beyond being individuals, the ground is prepared for the emergence of high-level performances. In the field of sociology, team collaboration, which is identical with the concept of group collaboration, is defined as "the commitment state that holds the team or group together". Festinger et al. (3) refer to team collaboration as "all the forces that are effective in the coexistence of the group members" (4). Team success, which is parallel to team integration, needs to be carried out in a systematic and stable manner in terms of emotional and mental aspects. It is very difficult for teams that constantly experience negative fluctuations to ensure success and continuity (5,6). According to Deutsc (7), teams with high engagement tend to advance to the goal as a whole. So much so that while group engagement increases efficiency and success when it is revealed from the common goals of the group, it does not have the desired effect for success when it is revealed for individual reasons. Similarly, Seashore (8) states that while the success graph of teams with high group commitment increases, it becomes very difficult to talk about success for teams with low

commitment (9). One of the basic elements of achieving success is the determination of the duties and responsibilities of individuals within the group. Task distributions within the team enable individuals to understand that they have different qualities and increase loyalty to the team. When evaluated in the sports world, this situation shows its effects with concepts such as team spirit, team integration, synergy and team play (10).

Team success is ensured by effective and continuous interaction between athletes. In other words, the communication that the athletes will establish with each other also shapes the success of the team. As a matter of fact, providing feedback to the athlete about his performance is provided by good communication and interaction within the club. For example; while all team players may be harmed by the decrease in the performance of a player in the volleyball branch where mutual interaction is high, it is not possible to talk about the same effect for the baseball branch within individual sports (11). In this regard, it is seen as an important element that volleyball players have good communication skills and ensure a group environment. The aim of this study is to examine the relationship between the group environment and effective communication skills levels in volleyball players.

## MATERIAL AND METHOD

### Research Model

In this study, a descriptive relational scanning model was used as one of the quantitative research methods. In the quantitative research method, events and situations are measured by making individuals concrete in such a way that they meet at a common point (12). The scanning method aims to collect data to determine certain characteristics in a group (13).

### The Universe of the Research

The universe of the research consists of volleyball players in Turkey. The sample group of the study consists of 140 female and 53 male at professional and amateur levels, a total of 193 volleyball players. According to the categorization of Turkish Volleyball Federation player competing in the 1st league and 2nd league were professional and players competing in regional leagues were amateur.

## Data Collection

### Personal Information Form:

In order to reach the demographic information of the participants, a five-item personal information form (gender, age, marital status, sports year, position) prepared by the researcher was used.

### Group Environment Questionnaire (GEQ):

The inventory developed by Carron et al. (14) was adapted into Turkish by Unutmaz et al. (15). The scale was consisted of 18 items and 4 sub-dimensions (individual attraction to group social, individual attraction to group task, group integration- social, group integration-task). These sub-dimensions were individual attraction to group social (1,3,5,7,9 items), individual attraction to group task (2,4,6,8 items), group integration-social (11,13,15,17 items) group integration-task (10, 12, 14, 16, 18 items). The inventory is of the Likert type of 9 and the items are "1=I disagree at all..... 9=I completely agree." The inventory contains reverse substances (1,2,3,4,6,7,8,11,13,14,17,18). The internal consistency coefficients of the inventory were calculated as  $\alpha=.61$  for the individual attraction to group social sub-dimension,  $\alpha=.67$  for the individual attraction to group task sub-dimension,  $\alpha=.63$  for the group integration- social sub-dimension and  $\alpha=.65$  for the group integration-task sub-dimension. The total internal consistency coefficient of the inventory was determined as  $\alpha=.82$  (15). In the study; the overall Cronbach's Alpha value of the scale was determined as  $\alpha=.83$ , the task sub-dimension as  $\alpha=.74$ , and the social sub-dimension as  $\alpha=.65$ . When the literature is in the inventory; it is possible to come across studies in which task (2, 4, 6, 8, 10, 12, 14, 16, 18) and social (1, 3, 5, 7, 9, 11, 13, 15, 17) are used in two sub-dimensions (16, 17).

### Scale for Effective Communication in Team Sports:

The scale developed by Sullivan and Feltz (18) was adapted by Alkan (19) to Turkish team athletes. The scale consists of 2 sub-dimensions and 15 items: acceptance and positive conflict (3,4,5,6,8,11,13,14,15), distinctiveness and negative conflict (1,2,7,9,10,12) sub-dimension. The scale is of the Likert type of 7 and the items are "1= Never.... 7= Always". The internal

consistency coefficients of the scale were determined as  $\alpha=.85$  for the acceptance and positive conflict sub-dimension,  $\alpha=.78$  for the distinctiveness and negative conflict sub-dimension, and the total internal consistency coefficient of the scale as .85 (19). In the study; the overall Cronbach's Alpha value of the scale was determined as  $\alpha=.84$ , the acceptance and positive conflict sub-dimension as  $\alpha=.89$ , and the distinctiveness and negative conflict sub-dimension as  $\alpha=.72$ .

## Methodology

The Group Environment Questionnaire (GEQ), Scale for Effective Communication in Team Sports and personal information form were used as data collection tools. The participants filled the scales as online on Google Forms application.

## Statistical Analysis

The sample size was determined as five times of the scale item count (49). According to Kolmogorov-Smirnov / Shapiro-Wilk test results, it was determined that the data showed suitability to the normal distribution. In the research, according to gender and marital status variables, differences between effective communication and group environment levels for sports teams were determined by student t-test; differences according to age, sports year and position variables were determined by one-way variance analysis (ANOVA) and Tukey multiple comparison test. Pearson's correlation analysis was used to determine the relationship between effective communication and group environment in volleyball players. In the study, SPSS 21.0 statistical package program was used for the analysis of the data. The research findings were given as number of people (n), standard deviation (sd) and mean ( $\bar{x}$ ), and differences in importance level of 0.05 were considered significant.

## Ethical Aspect of Research

The ethical report of the study was approved by Gümüşhane University Scientific Research and Publication Ethics Board with the document dated 23.02.2022 and numbered 2022/1. Permission to use was obtained from the authors of the scales via e-mail. The scales were applied to the participants on a voluntary basis.

## FINDINGS

**Table 1.** Demographic Characteristics of Athletes

Variables	Category	n	%
Gender	Female	140	72.5
	Male	53	27.5
Age	18-21	93	48.2
	22-25	62	32.1
	26 and older	38	19.7
Marital Status	Married	181	93.8
	Single	12	6.2
Sports Year	1-5 years	47	24.4
	6-10 years	77	39.9
	11 years and over	69	35.8
Position	Setter	30	15.5
	Setter's Diagonal	28	14.5
	Middle Blocker	39	20.2
	Hitter	66	34.2
	Libero	30	15.5

193 volleyball players, including 140 women (72.5%) and 53 men (27.5%) participated in the study. In terms of age, 93 people (48.2%) in the 18-21 age range, 62 people in the 22-25 age range (32.1%), and 38 people in the 26 and older age range (19.7%) participated. In the marital status variable, it is seen that 181 people are married (93.8%) and 12 people are single (6.2%). In the sports year, 47 people (24.4%) participated in the 1-5 range, 77 people in the 6–10- year range (39.9%), and 69 people (35.8%) in the 11 years and above range. In the position variable, it is seen that the setter player is 30 people (15.5%), the setter cross player is 28 people (14.5%), the middle player is 39 people (20.2%), the slammer player is 66 people (34.2%), and the libero player is 15.5 people (15.5%) (Table 1).

**Table 2.** T-Test Results on the Differences in Group Environment Questionnaire and Effective Communication Scale Scores by Gender and Marital Status Variable

Scales and Sub-Dimensions	Gender	n	$\bar{x}$	sd	t	p
Social	Female	140	6.24	1.45	-1.900	.059
	Male	53	6.67	1.30		
Task	Female	140	6.97	1.55	.127	.899
	Male	53	6.94	1.34		
Group Environment Questionnaire	Female	140	6.60	1.39	-.925	.356
	Male	53	6.81	1.22		
Acceptance and Positive Conflict	Female	140	46.98	12.33	-1.209	.228
	Male	53	49.26	9.75		
Distinctiveness and Negative Conflict	Female	140	26.82	7.58	-.213	.831
	Male	53	27.09	8.81		
Effective Communication Scale	Female	140	73.80	15.96	-.998	.319
	Male	53	76.35	15.51		
<b>Marital Status</b>						
Social	Married	181	7.04	1.30	1.724	.086
	Single	12	6.31	1.42		
Task	Married	181	8.18	.569	6.536	.001*
	Single	12	6.88	1.50		
Group Environment Questionnaire	Married	181	7.61	.893	2.551	.120
	Single	12	7.43	1.35		
Acceptance and Positive Conflict	Married	181	58.25	5.22	6.519	.001*
	Single	12	46.90	11.67		
Distinctiveness and Negative Conflict	Married	181	32.80	3.71	2.727	.070
	Single	12	30.50	7.96		
Effective Communication Scale	Married	181	91.08	7.45	3.876	.001*
	Single	12	73.40	15.64		

\*  $p < 0.05$

There was no a significant difference between group environment and sub-dimension scores according to gender ( $p>0.05$ ). There was no a significant difference between effective communication and sub-dimension scores by gender ( $p>0.05$ ). There was no a significant difference between group environment and social scores according to marital status ( $p>0.05$ ). A significant difference was found between the task scores according to marital status ( $p<0.05$ ). A significant difference was found between effective communication and acceptance-positive conflict scores according to marital status ( $p<0.05$ ). There was no a significant difference between distinctiveness according to marital status and negative conflict scores ( $p>0.05$ ) (Table 2).

**Table 3.** One-Way Analysis of Variance Results on the Differences in Group Environment Questionnaire Scores and Effective Communication Scale Scores by Age Variable

Scales and Sub-Dimensions	Age	n	$\bar{x}$	sd	f	p
Social	18-21	93	6.40	1.32	.121	.886
	22-25	62	6.35	1.59		
	26 and older	38	6.27	1.41		
Task	18-21	93	7.07	1.38	.740	.479
	22-25	62	6.78	1.49		
	26 and older	38	7.00	1.73		
Group Environment Questionnaire	18-21	93	6.74	1.22	.318	.728
	22-25	62	6.56	1.47		
	26 and older	38	6.63	1.47		
Acceptance and Positive Conflict	18-21	93	47.08	11.37	.262	.770
	22-25	62	47.72	10.79		
	26 and older	38	48.71	13.96		
Distinctiveness and Negative Conflict	18-21	93	25.03b	8.49	7.831	.001*
	22-25	62	27.29b	6.94		
	26 and older	38	30.81a	6.45		
Effective Communication Scale	18-21	93	72.11b	15.14	3.060	.049*
	22-25	62	75.01ab	15.08		
	26 and older	38	79.52a	17.79		

\*  $p<0.05$

There was no a significant difference between group environment and sub-dimension scores according to age ( $p>0.05$ ). There was no a significant difference in effective communication and distinctiveness -negative conflict scores according to age ( $p<0.05$ ). There was no a significant difference in acceptance-positive conflict scores according to age ( $p>0.05$ ) (Table 3).

**Table 4.** Results of One-Way Analysis of Variance on the Differences Group Environment Questionnaire and Effective Communication Scale Scores by Sport Year Variable

Scales and Sub-Dimensions	Sports Year	n	$\bar{x}$	sd	f	p
Social	1-5 years	47	6.71	1.26	2.557	.080
	6-10 years	77	6.12	1.39		
	11 years and over	69	6.38	1.52		
Task	1-5 years	47	7.27	1.28	2.728	.068
	6-10 years	77	6.67	1.47		
	11 years and over	69	7.08	1.59		
Group Environment Questionnaire	1-5 years	47	6.99	1.13	3.031	.051
	6-10 years	77	6.40	1.33		
	11 years and over	69	6.73	1.46		
Acceptance and Positive Conflict	1-5 years	47	48.36	10.20	.164	.849
	6-10 years	77	47.11	10.71		
	11 years and over	69	47.65	13.68		
Distinctiveness and Negative Conflict	1-5 years	47	22.76b	8.61	11.253	.001*
	6-10 years	77	27.07a	7.36		
	11 years and over	69	29.50a	6.88		
Effective Communication Scale	1-5 years	47	71.12	14.05	2.074	.129
	6-10 years	77	74.19	14.77		
	11 years and over	69	77.15	17.77		

\*  $p<0.05$

There was no a significant difference between group environment and sub-dimension scores according to the sports year ( $p>0.05$ ). There was no a significant difference between effective communication and acceptance-positive conflict scores according to the year of sport ( $p>0.05$ ). Significant differences were found in distinctiveness and negative conflict scores according to the sports year ( $p<0.05$ ) (Table 4).

**Table 5.** One-Way Analysis of Variance Analysis on the Difference of Group Environment Questionnaire and Effective Communication Scale Scores According to Position Variable

Scales and Sub-Dimensions	Position	n	$\bar{x}$	sd	f	p
Social	Setter	30	6.53	1.40	1.003	.407
	Setter's Diagonal	28	6.00	1.40		
	Middle Blocker	39	6.25	1.60		
	Hitter	66	6.35	1.40		
	Libero	30	6.68	1.27		
Task	Setter	30	7.19	1.36	1.396	.237
	Setter's Diagonal	28	6.38	1.75		
	Middle Blocker	39	6.95	1.45		
	Hitter	66	7.05	1.35		
	Libero	30	7.10	1.64		
Group Environment Questionnaire	Setter	30	6.86	1.25	1.291	.275
	Setter's Diagonal	28	6.19	1.47		
	Middle Blocker	39	6.60	1.41		
	Hitter	66	6.70	1.26		
	Libero	30	6.89	1.38		
Acceptance and Positive Conflict	Setter	30	48.93	11.87	1.253	.290
	Setter's Diagonal	28	44.10	12.75		
	Middle Blocker	39	46.15	12.90		
	Hitter	66	48.25	10.93		
	Libero	30	50.03	10.23		
Distinctiveness and Negative Conflict	Setter	30	27.00	8.32	1.026	.395
	Setter's Diagonal	28	28.00	7.00		
	Middle Blocker	39	26.00	6.47		
	Hitter	66	25.95	8.72		
	Libero	30	29.00	8.10		
Effective Communication Scale	Setter	30	75.93	16.85	1.055	.380
	Setter's Diagonal	28	72.10	17.20		
	Middle Blocker	39	72.15	15.91		
	Hitter	66	74.21	15.01		
	Libero	30	79.03	15.11		

\*  $p<0.05$

There was no a significant difference between group environment and sub-dimension scores according to the position variable ( $p>0.05$ ). There was no a significant difference between effective communication and sub-dimension scores according to the position variable ( $p>0.05$ ) (Table 5).

**Table 6.** Pearson Correlation Analysis Results of the Relationship Between Group Environment Questionnaire Inventory and Effective Communication Scale Scores

		Scale for Effective Communication in Sports Teams			
		Acceptance and Positive Conflict	Distinctiveness and Negative Conflict	Total Point	
Group Environment Questionnaire	Total Point	r	.603	.662	.430
		p	.001*	.193	.001*
	Social	r	.524	.005	.389
		p	.001*	.943	.001*
	Task	r	.592	-.062	.406
		p	.001*	.389	.001*

\*  $p<0.01$

In the study, a positive and moderately statistically a significant relationship was found between group environment and effective communication total scores ( $p < 0.01$ ). A positive and moderate relationship was found between group environment and sub-dimension scores and effective communication and acceptance-positive conflict scores ( $p < 0.01$ ) (Table 6).

## DICCUSSION

In the research; it is aimed to determine the relationship between group environment and effective communication skill levels in volleyball players.

As a result of the research, there was no a significant difference between effective communication and sub-dimension scores by gender. When the literature studies are examined, it is found that the study findings are similar to the results of this research (11, 20, 21). On the other hand, the findings of the studies conducted by Kılıçgil et al. (22), Tepeköylü et al. (23) are not similar to the results of the current research. In addition to these results; there was no a significant difference between group environment and sub-dimension scores according to gender. As a result of the literature review, in the study conducted by Molla et al. (24), no a significant difference was found between the duty scores according to the gender variable. In the study conducted by Polat (25), there was no a significant difference in the team collaboration scores according to gender and it was seen that the findings supported the findings of this study. On the other hand, in the study conducted by Molla et al. (24), a significant difference was found between group collaboration-social scores according to gender. In the study conducted by Sezer (26), a significant difference was determined between the group collaboration scores according to gender and the findings were not similar to the findings of this study. It is predicted that the difference between the findings is due to the psychosocial characteristics of the branches and individuals.

Significant differences were found in effective communication and distinctiveness and negative conflict scores according to age. There was no a significant difference in age-based acceptance and positive conflict scores. When the difference for the total score of the scale was examined among the groups, it was seen that those in the age range of 26 and over had higher values than the 18-21 age range. When it is examined for the sub-dimension of

distinctiveness and negative conflict; it was found that those who were 26 and over had higher scores than those aged 18-21 and 22-25. When the literature studies are examined, it is possible to come across studies that are similar to the findings of this study (20, 27, 28, 29). On the other hand, the study findings made by Ulukan (11) Tepeköylü et al. (23) do not support the findings of the current study. In addition to these results; there was no a significant difference between group environment and sub-dimension scores according to age. As a result of the literature review, in the study conducted by Polat (25), there was no a significant difference between individual attractiveness duty-social scores according to age variable. In the study conducted by Yolcu (30) and Solmaz (31), there was no a significant difference between team collaboration scores according to age. In the study conducted by Şimşek (32), there was no a significant difference between the group collaboration scores according to age and it was seen that the findings supported the findings of this study. On the other hand, in the study conducted by Polat (25), there was a significant difference between group collaboration duty-social scores according to age variable. In the study conducted by Tatar (33), a significant difference was found between group collaboration and duty scores and the findings were not similar to the findings of the current study. The difference between the findings can be related to the dominance of the hierarchical system in the volleyball branch and the "awareness of being a team" of the athletes.

There was no a significant difference between the total score of the effective communication scale according to the sports year. There was no a significant difference between effective communication and acceptance-positive conflict scores according to the sports year. There was a significant difference in distinctiveness and negative conflict scores according to the sports year. When it was examined which groups the difference was between was examined, it was found that those who had 1-5 years of sports years had higher values than those who had 6-10 years and 11 years and over. As a result of the literature review, it is possible to come across studies that support the result of the current research (28, 34, 35, 36, 37). On the other hand, the study findings made by Savcı (20), Abakay and Kuru (38) are not similar to the findings of the current study. In addition to these results; according to the sports year variable, no a significant difference was found between group environment and sub-

dimension values. As a result of the literature review, in the study conducted by Polat (25), there was no a significant difference between group collaboration duty-social and individual attractiveness-duty scores according to the sports year variable. In the study conducted by Yolcu (30), no a significant difference was found between team collaboration scores according to sports year. In the study conducted by Şimşek (32), there was no a significant difference between the group collaboration scores according to the sports year and it was seen that the findings supported the findings of this study. On the other hand, in the study conducted by Polat (25), a significant difference was determined between individual attractiveness-social scores according to the variable of sports year. In the study conducted by Tatar (33), a significant difference was found between individual attractiveness-duty scores according to the sports year and the findings were not similar to the findings of the current study. It is thought that the difference between the findings is related to the level of activity and social activity of the athletes within the club they belong to.

According to the position variable, there was no a significant difference between effective communication and sub-dimension scores. When the literature studies are examined, it is possible to come across studies of a similar kind with the results of this current research (28, 39). On the other hand, in a qualitative study conducted by Bottino (40), it was stated that the positions of athletes are a determining factor in coach-athlete communication. Similarly, in the study conducted by Hacicaferoğlu and Bakırcı (41), a significant difference was found between communication scores according to the position variable and the findings were not similar to the findings of the current study. In addition to these results; according to the position variable, there was no a significant difference between group environment and sub-dimension scores. As a result of the literature review, in the study conducted by Polat (25), no a significant difference was found between the team collaboration sub-dimension scores according to the position variable. In the study conducted by Tümbaşer (42), there was no a significant difference between the group collaboration scores according to the position variable and it was seen that their findings supported the findings of the current study. On the other hand, in the study conducted by Moralı and Doğan (43), it was stated that team collaboration was ensured after the training process of athletes working in different

positions. In the study conducted by Carron (44), it was stated that team positions are one of the basic elements of group collaboration and the findings are not similar to the findings of this study. It is possible to say that the difference between the findings is due to the fact that the athletes put the team's success ahead of their individual achievements.

A significant difference was found between the total score of effective communication according to marital status. When the sub-dimensions are examined; there was no a significant difference between distinctiveness by marital status and negative conflict scores. According to marital status, there was a significant difference between acceptance-positive conflict scores. In this regard, it was found that those who were married have higher communication scores than single athletes. As a result of the literature review, it was determined that the results of the research conducted by Aksoy (45), Boz et al. (36), Akbaş (46) were similar to the results of the current research. On the other hand, the study findings made by Akgül and Mutlu (34) Kumcağız et al. (47) are not similar to the findings of the current study. In addition to these results; there was no a significant difference between group environment and social scores according to marital status. According to marital status, there was a significant difference between the task scores. In this regard, it was determined that those who are married have higher values compared to those who are single. When the literature studies were examined, no a significant difference was found between the team collaboration scores according to the marital status variable in the study conducted by Tatar (33). In the research conducted by Şimşek (32), there was no a significant difference in group collaboration scores according to marital status and the findings are similar to the results of the current research. It is thought that the difference between the findings may be due to the fact that married athletes undertake a mission to create a family environment within the team.

Finally, a positive and moderately a significant relationship was found between group environment scores and effective communication scores in volleyball players. A positive and moderate relationship was found between group environment and sub-dimension scores and effective communication and acceptance-positive conflict scores. There was no a significant relationship between group environment and sub-dimension scores and distinctiveness -negative conflict scores.



There have been no studies on the relationship between the two scales in the literature, but similar studies have been identified. Boz et al. (36) found that as the communication levels of sports managers increase, the motivation of employees to work also increases. Abakay and Kuru (38) stated in their study that as the level of communication of female athletes with their coaches increased, their motivation for success also increased. In another study, Güzel et al. (48) found that team communication and collaboration affect team success. The studies mentioned in the literature coincide with the findings of this study. In this regard, it is possible to say that while team collaboration increases, intra-team communication also increases in volleyball players, and as team collaboration decreases, effective communication within the team also decreases. The fact that the concepts of communication and collaboration are related in the volleyball branch within the team sports supports the hypothesis of the study. As a matter of fact, volleyball is thought to be a sport that is open to harmony and interaction within the team. It is thought that the fact that athletes have communication skills will bring success. So much so that athletes spend time together on and off the field and become a whole in both their social and sports lives. At this point, it should be noted that the technical members of the club (coach, manager, conditioner, etc.) play an important role. In particular, it is thought that it may be useful to evaluate a lost competition as a team failure compared to individual reasons. Social activities within the club are seen as another supporting element.

## REFERENCES

1. Worth R. Communication Skills. 2nd Edition. New York: J.G. Ferguson Publishing Company, 2004.
2. Şahin N. Elit düzeyde takım sporu ve kişisel spor yapan iki kişiyle ilgili bilgilendirme. *Sportmetre Beden Eğitimi ve Spor Bilimleri Dergisi*, 2012; 10(1): 13-16.
3. Festinger L. Schacter S. Back K. Social Pressures In Informed Groups: A Study of a Housing Project. New York: Harare, 1950.
4. Morali S. Takım sporlarında, takım birlikteliğinin ve dayanışmasının ölçülmesi. Doktora Tezi, Dokuz Eylül Üniversitesi Sağlık Bilimleri Enstitüsü, İzmir, 1994.
5. Konter E. Antrenörlük ve Takım Psikolojisi. Ankara: Palme Yayıncılık, 2004.
6. Soyer F. Can Y. Güven H. Hergüner G. Bayansalduz M. Tetik B. Sporculardaki başarı motivasyonu ile takım birlikteliği arasındaki ilişkinin incelenmesi. *Uluslararası İnsan Bilimleri Dergisi*, 2010; 7(1): 225-239.
7. Deutsch M. An experimental study of the effects of cooperation and competition upon group process, *Human Relations*, 1949; 2(3): 199-231.
8. Seashore SE. Group Cohesiveness in the Industrial Work Group. Ann Arbor: University of Michigan, 1954.
9. Sığı Ü. Gruplarda bağlılık ve performans ilişkisi üzerine nitel bir çalışma. *Uluslararası İktisadi ve İdari İncelemeler Dergisi*, (2017), (16. ÜİK Özel Sayısı): 481-490.
10. Bıçakçı İ. İletişim ve Halkla İlişkiler. İstanbul: Kapital Medya Yayıncılık, 2002.
11. Ulukan H. İletişim becerilerinin takım ve bireysel sporculara olan etkisi. Yüksek Lisans Tezi, Karamanoglu Mehmet Bey Üniversitesi Sosyal Bilimler Enstitüsü, Karaman, 2012.
12. Karasar N. Bilimsel Araştırma Yöntemi: Kavramlar, İlkeler, Teknikler. Ankara: Nobel Yayınevi, 1999.
13. Büyüköztürk Ş, Kılıç ÇE, Akgün Ö, Karadeniz Ş, Demirel F. Bilimsel Araştırma Yöntemleri. Ankara: Pegem Akademi, 2008.
14. Carron A. Widmeyer W. Brawley L. The development of an instrument to assess cohesion in sport teams- the group environment questionnaire. *Journal of Sport Psychology*, 1985; 7(3): 244-266.
15. Unutmaz V. Kiremitçi O. Genç Rt. (2011). Takım birlikteliği envanteri'nin psikometrik özelliklerinin incelenmesi. *CBÜ Beden Eğitimi ve Spor Bilimleri Dergisi*, 2011; 6 (2): 23-30.
16. Özdemir İ, Sevilmiş A. The relationship between group cohesion and team achievement: the case of university handball 2. league teams. *Akdeniz Spor Bilimleri Dergisi*, 2021; 4(2): 193-209.
17. Light Shields DL, Gardner DE. Light Bredemeier BJ, Bostro A. The relationship between leadership behaviors and group cohesion in team sports. *The Journal of Psychology*, 1997; 131(2):196-210.
18. Sullivan P, Feltz D. Development of the scale for effective communication in team sport. *Journal of Applied Social Psychology*, 2003; 33(8): 1693-1715.
19. Alkan G. Takım sporlarında etkili iletişim ölçeğinin Türk takım sporcularına uyarlanması. Yüksek Lisans Tezi, Mersin Üniversitesi Sağlık Bilimleri Enstitüsü, Mersin, 2009.
20. Savaş DÜ. Sporcular tarafından algılanan antrenör iletişim becerilerinin branşlara göre incelenmesi. Yüksek Lisans Tezi, Gaziantep Üniversitesi Sağlık Bilimleri Enstitüsü, Gaziantep, 2017.
21. Hacıoğlu M. Üniversite öğrencilerinin beden imgesi hoşnutluğu ve iletişim becerilerinin incelenmesi. *Gaziantep Üniversitesi Spor Bilimleri Dergisi*, 2017; 2(2): 1-16.
22. Kılıçgil E, Bilir P, Özdiç Ö, Eroğlu K, Eroğlu, B. İki farklı üniversitenin beden eğitimi ve spor yüksekokulu öğrencilerinin iletişim becerilerinin değerlendirilmesi. *Sportmetre Beden Eğitimi ve Spor Bilimleri Dergisi*, 2009; 7(1): 19-28.
23. Tepeköylü Ö, Soytürk M, Çamlıyer H. Beden eğitimi ve spor yüksekokulu (BESYO) öğrencilerinin iletişim becerisi algılarının bazı değişkenler açısından incelenmesi. *Sportmetre Beden Eğitimi ve Spor Bilimleri Dergisi*, 2009; 7(3): 115-124.
24. Molla E, Öncen S, Aydın S. Spor okuluna giden ve spor okuluna gitmeyip yalnızca okul takımlarında oynayan adölesanların takım birlikteliğinin incelenmesi (Tekirdağ ili örneği). *Spor Eğitim Dergisi*, 2019; 3(3): 48-54.
25. Polat Ö. Curling sporcularında takım birlikteliğinin farklı değişkenler açısından incelenmesi. Yüksek Lisans Tezi, Atatürk Üniversitesi Kış Sporları ve Spor Bilimleri Enstitüsü, Erzurum, 2019
26. Sezer U. Genç sporcularda takım sarginlığı ve kolektif yeterlik inançlarının incelenmesi. Doktora Tezi, Anadolu Üniversitesi Sağlık Bilimleri Enstitüsü, Eskişehir, 2019.
27. Hacıoğlu M. Üniversite öğrencilerinin beden imgesi hoşnutluğu ve iletişim becerilerinin incelenmesi. *Gaziantep Üniversitesi Spor Bilimleri Dergisi*, 2017; 2(2): 1-16.
28. Sümer K. Spor hizmet çalışanlarının iletişim becerileri ile iç girişimcilik arasındaki ilişki (İstanbul örneği). Yüksek Lisans Tezi, İstanbul Gelişim Üniversitesi Lisansüstü Eğitim Enstitüsü, İstanbul, 2021.

29. Arıcan H. Üniversite öğrencilerinin iletişim becerileri: sporcular ve sedanterler. *CBÜ Beden Eğitimi ve Spor Bilimleri Dergisi*, 2021; 16(2): 70-78.
30. Yolcu C.E. Yaratıcı drama programının iletişim, kendine güven ve takım birlikteliği üzerine etkisi: elit kadın voleybolcular örneği. Yüksek Lisans Tezi, İstanbul Gelişim Üniversitesi Lisansüstü Eğitim Enstitüsü, İstanbul, 2021.
31. Solmaz A.U. Voleybol ve futbol oynayan gençlerin takım birlikteliklerinin karşılaştırılması. Yüksek Lisans Tezi, Selçuk Üniversitesi Sağlık Bilimleri Enstitüsü, Konya, 2019.
32. Şimşek V. 2.Lig kadın voleybol oyuncularının grup sargınlığı ile yaşam memnuniyeti arasındaki ilişkinin incelenmesi. Yüksek Lisans Tezi, Marmara Üniversitesi Sağlık Bilimleri Enstitüsü, İstanbul, 2020.
33. Tatar G. Futbolda Takım birlikteliği ve liderin takım birlikteliği üzerindeki etkisinin incelenmesi. Doktora Tezi, Marmara Üniversitesi Sağlık Bilimleri Enstitüsü, İstanbul, 2009.
34. Akgül A, Mutlu TO. Basketbol klasman hakemlerinin iletişim becerilerinin problem çözme süreçleri üzerine etkisinin incelenmesi. *Sportre Beden Eğitimi ve Spor Bilimleri Dergisi*, 2021; 19(3): 81-95.
35. Özbay N. Amatör spor kulüplerinde görev yapan antrenörlerin iletişim becerilerinin değerlendirilmesi (Manisa ili örneği). Yüksek Lisans Tezi, Celal Bayar Üniversitesi Sağlık Bilimleri Enstitüsü, Manisa, 2012.
36. Boz C, Biçer T, Serter K, Kara KE, Şentuna M. Spor yöneticilerinin iletişim beceri düzeylerinin işgörenlerin motivasyonu üzerine etkisi. *Manas Sosyal Araştırmalar Dergisi*, 2021; 10(1): 492-502.
37. Koç A. Boks antrenörlerinin iletişim becerileri ve liderlik tarzlarının incelenmesi. Yüksek Lisans Tezi, Atatürk Üniversitesi Kış Sporları ve Spor Bilimleri Enstitüsü, Erzurum, 2020.
38. Abakay U, Kuru E. Kadın futbolcularda antrenörle iletişim düzeyi ve başarı motivasyonu ilişkisi. *Gaziantep University Journal of Social Sciences*, 2013, 12(1): 20-33.
39. Yıldırım, A. Hokeycilerin iletişim becerileri ve saldırganlık düzeylerinin incelenmesi. Yüksek Lisans Tezi, Gaziantep Üniversitesi Sağlık Bilimleri Enstitüsü, Gaziantep, 2015.
40. Bottino A. Athlete perspectives of playing-time selection communication in collegiate team sport. Ithaca College Theses, 442, 2021.
41. Hacıcaferoğlu S, Bakırcı O. Sporcu öğrencilerin etkili iletişim düzeylerinin incelenmesi; Futbol spor dalı örneği. *Journal of Socialand Humanities Sciences Research*, 2019; 6(44): 3353-3360.
42. Tümbaşer Y. Futbol ve basketbolcularda grup sargınlığı ve narsistik kişilik özelliklerinin incelenmesi. Yüksek Lisans Tezi, Çukurova Üniversitesi Sağlık Bilimleri Enstitüsü, Adana, 2020.
43. Morali S, Doğan B. Bireysel ve takım sporlarında takım birlikteliği düzeylerinin karşılaştırılması. *CBÜ Beden Eğitimi ve Spor Bilimleri Dergisi*, 1997; 2(1): 7-17.
44. Carron AV. Cohesiveness in sport groups. Interpretations and considerations. *Journal of Sport Psychology*, 1982; 4(2): 123-138
45. Aksoy U. Farklı klasmanlarda görev yapan futbol hakemlerinin iletişim becerileri ve özgüven düzeylerinin çeşitli değişkenlere göre incelenmesi (Aydın ili örneği). Yüksek Lisans Tezi, Adnan Menderes Üniversitesi Sağlık Bilimleri Enstitüsü, Aydın, 2019.
46. Akbaş E. Voleybol bölgesel liginde oynayan sporcuların antrenörle iletişim becerilerinin incelenmesi. Yüksek Lisans Tezi, Erciyes Üniversitesi Sağlık Bilimleri Enstitüsü, Kayseri, 2014.
47. Kumcağız H, Yılmaz M, Çelik SB, Avcı İA. Hemşirelerin iletişim becerileri: Samsun ili örneği. *Dicle Tıp Dergisi*, 2011; 38(1), 49-56.
48. Güzel P, Onağ, ZG, Özbey S. Futbol antrenörlerinin görüşlerine göre takım başarısını etkileyen faktörler: Nitel bir araştırma. *Pamukkale Journal of Sport Sciences*, 2013; 4(2), 125-145.
49. Tavşancıl E. Tutumların Ölçülmesi ve Spss ile Veri Analizi. Ankara: Nobel Yayıncılık, 2014.