

## **Investigation of Social Relationship Levels of Individuals Exercising in Open and Closed Environments**

**Erdem AYYILDIZ**

Trakya Üniversitesi Kırkpınar Spor Bilimleri Fakültesi, Edirne, Türkiye  
<https://orcid.org/0000-0001-5219-4837>

**Email:** [eayyildiz@nku.edu.tr](mailto:eayyildiz@nku.edu.tr)

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### **Abstract**

The aim of this research is to examine the social relationship levels of individuals who exercise in indoor and outdoor environments. The sample group of the research consists of 448 individuals who exercise in indoor and outdoor environments. As a data collection tool, a scale for determining the general information form and social relationship levels was applied to the athletes participating in the research. After the data collection process, normality test was performed. After the test result, which was homogeneous as a result of the normality test, the independent t-test was performed for paired groups and the anova (tukey) test was performed for groups of three or more. The Benjamini-Hochberg False Discovery Rate (FDR) was used to correct for Type I errors that occurred when more than one statistical analysis was performed. Looking at the results of the study, it was determined that individuals over 25 years of age, individuals with a high level of well-being, and those who exercise outdoors have higher levels of social relations.

**Keywords:** Sociology, Sport, Sports Sociology.

## Introduction

Today, the place and importance of sports in social life has started to increase gradually. The socialization power of sports is one of the most effective methods. It is important to analyze perceptions and attitudes well in order to socialize in sports environments. In addition, it is seen that the individual is affected by the environment he is in, and his perceptions and attitudes are shaped accordingly (Asada & Ko, 2019; Michelini, 2018; Özdiç, 2005; Wu, Li ve Wang, 2021). Social environments such as friends and family can be given as examples.

Factors affecting the socialization of individuals are not only related to their financial well-being, but also to their relational, mental and physical well-being (LeBaron & Kelley, 2021). In addition to being an individual's interaction process, socialization depends on the personality structure of psychological factors such as thoughts, feelings, attitudes, behaviors, actions, goals and expectations, psycho-social characteristics specific to the period in which they live, and the social, cultural and economic characteristics of the environment in which they live. Family, school, social groups and mass media are important factors affecting this concept (Hajizadeh et al., 2021; Şahan, 2008; Şahin and Özçelik, 2016).

The increasing visibility of the sport phenomenon in the society in the historical process has made it worth examining from a sociological perspective. The relationship between sports and health was strengthened with concepts such as physical activity and exercise; Sports have become a set of activities that everyone wants to be involved in. However, sports is a sociological phenomenon that is too broad to be considered only as activities for health (Akkaya, 2019).

Outdoor activities; It consists of activities carried out in naturally existing or formed waters, land, air, snow and ice. It is possible to classify them according to the structure used as a source. Activities such as mountaineering, rock climbing, trekking, camping, canyoning, caving, skiing, scuba diving, bird watching, botanical observation, educational activities in nature, free diving, delta wing, sailing are examples that can be evaluated in this context (Kaplan and Ardahan, 2013).

In addition to the socialization of people, sports also make an important contribution to their psychological and physical development. Also sports facilities, nature walks, outdoor activities, etc. Since people come together in environments, it both contributes to their socialization and is an important element in terms of society getting to know each other. This element, which brings people from different cultures together, will be more beneficial to the society by bringing sports-related institutions and organizations (Ministry of Youth and Sports, local governments, Sports Federation for Everyone, etc.) together to provide sports opportunities. When the literature is examined, there are very few studies on social relations in the field of sports sciences. The collection of data during the pandemic period and determining the attitudes of individuals towards social relations in this process make our study extremely important. This study aims to determine the social relationship levels of individuals who exercise in indoor and outdoor environments.

## Material ve Method

### Research Model

In this study, quantitative method was used and it was done with descriptive survey, which is one of the survey models.

### Universe-Sample (Research Group)

The sample group of the research consists of 448 individuals who exercise in indoor and outdoor environments.

### Findings

**Table 1.** Descriptive Statistics

| Variable         | Grup               | N   | %    | Total |
|------------------|--------------------|-----|------|-------|
| Gender           | Woman              | 206 | 45.8 | 448   |
|                  | Man                | 242 | 54.2 |       |
| Age              | 18-24 age          | 93  | 24   | 448   |
|                  | 25-31 age          | 78  | 20.1 |       |
|                  | 32-38 age          | 118 | 30.4 |       |
|                  | 39 years and older | 99  | 25.5 |       |
| Type of Exercise | Outdoor exercise   | 256 | 57.1 | 448   |
|                  | Indoor exercise    | 192 | 42.9 |       |
| Marital status   | The married        | 288 | 64   | 448   |
|                  | Single             | 160 | 36   |       |
| Welfare Level    | Low                | 96  | 21.4 | 448   |
|                  | Middle             | 192 | 42.9 |       |
|                  | High               | 160 | 35.7 |       |

### Data Collection Tools

The data collection tool consists of two parts. In the first part, there is a personal information form and there is a total of 5 demographic information. In the second part, the Social Relationship Scale developed by Turner, Frankel and Levin (1983) and adapted into Turkish by Duyan, Gelbal and Var (2013) was used. The scale is 2-dimensional and consists of 15 questions.

### Analysis of Data

When the reliability coefficients of the data were examined, it was found to be reliable at the level of 0.88. According to Kalaycı (2018), it is highly reliable in the range of 0.80 – 1.00.

When the kurtosis and skewness values are examined, it is determined that they are in the range of -2+2. According to Weaver and Wuensch, (2013), -2+2 values indicate that the data is homogeneously distributed.

Due to the homogeneous distribution of the data, parametric tests were applied. In other words, the t-test for paired groups and the anova test for groups of three or more were used. In

cases where there was a significant difference in the Anova test, the post-hoc (Tukey) test was performed to see between which groups the difference was.

Effect sizes were calculated with the GraphPad 9 program. Due to the large number of analyzes and exploratory nature of this study, Benjamini-Hochberg False Discovery Rate (FDR) was used to correct Type I errors and 20% was considered an acceptable error (Thissen, Steinberg, & Kuang, 2002). The FDR ratio differed only in the gender variable and the value was written as q value.

**Table 2.** Results of the t-test analysis according to the gender variable of the participants

| Variable              | Gender | N   | $\bar{x}$ | Sd. | Df. | t      | p    | Q Value |
|-----------------------|--------|-----|-----------|-----|-----|--------|------|---------|
| <b>Family Support</b> | Woman  | 206 | 3.37      | .44 | 446 | -1.265 | .314 | .314    |
|                       | Man    | 242 | 3.41      | .51 |     |        |      |         |
| <b>Friend Support</b> | Woman  | 206 | 3.39      | .38 | 446 | -1.008 | .206 | .235    |
|                       | Man    | 242 | 3.44      | .47 |     |        |      |         |

$p < 0,05$

When Table 2 is examined, it has been determined that there is no significant difference in the gender variable in the sub-dimensions of family support and friend support, which are the sub-dimensions of the social relationship scale.

| Variable              | Age                    | N   | $\bar{x}$ | Sd. | F      | P    | ANOVA<br>Tukey |
|-----------------------|------------------------|-----|-----------|-----|--------|------|----------------|
| <b>Family Support</b> | 18-24 age(1)           | 93  | 3.17      | .63 | 13.892 | ,000 | 2,3,4>1        |
|                       | 25-31 age(2)           | 78  | 3.50      | .67 |        |      |                |
|                       | 32-38 age(3)           | 118 | 3.44      | .54 |        |      |                |
|                       | 39 years and older (4) | 99  | 3.50      | .59 |        |      |                |
| <b>Friend Support</b> | 18-24 age(1)           | 93  | 3.14      | .30 | 57.799 | ,000 | 2,3,4>1        |
|                       | 25-31 age(2)           | 78  | 3.44      | .32 |        |      |                |
|                       | 32-38 age(3)           | 118 | 3.33      | .44 |        |      |                |
|                       | 39 years and older (4) | 99  | 3.74      | .40 |        |      |                |

**Table 3.** Anova test analysis according to the age variable of the athletes

$p < 0,05$

When Table 3 is examined, it has been determined that individuals over the age of 25 are significantly higher in the sub-dimensions of family and friend support than those over the age of 18-24 ( $p > 0.05$ ).

**Table 4.** Results of the t-test analysis according to the gender variable of the participants

| Variable | Type of Exercise | N | $\bar{x}$ | Sd. | Df. | t | p |
|----------|------------------|---|-----------|-----|-----|---|---|
|----------|------------------|---|-----------|-----|-----|---|---|

|                       |                  |     |      |     |     |        |      |
|-----------------------|------------------|-----|------|-----|-----|--------|------|
| <b>Family Support</b> | Outdoor exercise | 256 | 3.59 | .43 | 446 | 10.982 | .000 |
|                       | Indoor exercise. | 192 | 3.18 | .31 |     |        |      |
| <b>Friend Support</b> | Outdoor exercise | 256 | 3.60 | .36 | 446 | 12.224 | .000 |
|                       | Indoor exercise. | 192 | 3.11 | .48 |     |        |      |

$p < 0,05$

When Table 4 is examined, it has been determined that there is a significant difference in the exercise type variable in the sub-dimensions of family support and friend support, which are the sub-dimensions of the social relationship scale. According to the results of the study, it was determined that the participants who did outdoor exercises in the sub-dimensions of family support and friend support were significantly higher than the participants who exercised indoors ( $p > 0.05$ ).

**Table 5.** Anova test analysis according to the age variable of the athletes

| Variable              | Refah Düzeyi | N   | $\bar{x}$ | Sd. | F       | ANOVA |       |
|-----------------------|--------------|-----|-----------|-----|---------|-------|-------|
|                       |              |     |           |     |         | P     | LSD   |
| <b>Family Support</b> | Low(1)       | 96  | 2.85      | .15 | 343.906 | ,000  | 3>2>1 |
|                       | Middle (2)   | 192 | 3.36      | .51 |         |       |       |
|                       | High (3)     | 160 | 3.76      | .08 |         |       |       |
| <b>Friend Support</b> | Low(1)       | 96  | 2.90      | .9  | 210.301 | ,000  | 3>2>1 |
|                       | Middle (2)   | 192 | 3.34      | .32 |         |       |       |
|                       | High (3)     | 160 | 3.81      | .28 |         |       |       |

$p < 0,05$

When Table 5 is examined, it has been determined that there is a significant difference in the sub-dimensions of family and friend support. When the results were examined, it was determined that there was a significant difference in the sub-dimensions of family support and friend support as the welfare level increased ( $p < 0.05$ ). continue from the discussion result.

## Discussion and Results

Considering the participation rates in sports, it is seen that men participate higher. In order to detect this situation, it is necessary to analyze the social power of sports well. However, there are very few studies on the determination of sports socialization status. To encourage women's participation in sports, it is necessary to strengthen women's internal locus of control, make the best use of socialization agents, and improve their sports socialization status (González-Hernández and Martínez-Martínez, 2020; Huang et al., 2019; Oxford and Spaaij, 2019). The main reason why there was no significant difference in the gender variable in our study is thought to be due to the fact that the necessary opportunities of the people in the closed and open spaces used for establishing social relations are presented equally.

When the age variable was analyzed sociologically, increasing age was associated with less friendship and less support from family (Siedlecki et al., 2014). In addition, in a study conducted among participants aged 18 to 60 years, it is seen that participants who receive adequate social support from their friends have a higher sense of well-being (Brajša-Žganec,

Kaliterna-Lipovčan, & Hanzec, 2018). When the above studies are examined, family and friendship relations in different nations may vary. In the results of our study, it is seen that individuals between the ages of 18-24 adopt a more individual life and feel the support of family friendship more than the age of 25 and above. Also, contrary to Siedlecki et al., (2014), it is seen that family and friendship support increase more with increasing age. The reason for this is that the majority of the participants between the ages of 18-24 are university students. It is thought that he has to become more individualized in his intensive study environment and new initiatives in the business environment. It is thought that individuals over the age of 25 emphasize more socialization and family support in these difficult days, especially after the pandemic.

As participation in physical activity increases, the level of socialization and quality of life increase (Ayyildiz et al., 2019; González-Hernández and Martínez-Martínez, 2020; Kim et al., 2020). Participants who exercise in open areas consist of trekking, camping, jogging groups, people who meet and exercise on social media and do regular sportive activities individually. However, people who exercise indoors are more members of sports facilities and mostly do individual sports activities. For this reason, it is thought that the social relations of individuals who exercise in open spaces and move with the community are higher. It is necessary to have a certain level of well-being in order to exercise in open and closed areas. In addition, in order to socialize more and spend time with family and friends, the level of welfare should be high.

As a result, equal opportunities should be created for everyone, regardless of the level of welfare in the society. Establishing the sports fields of local governments and universities in a way that everyone can reach is important for increasing social relations. Especially when the results of the study are examined, it is seen that the social relations of the young people between the ages of 18-24 and those with medium and low welfare levels are lower. It is considered important to carry out studies specific to these groups in order to raise a sociological structure such as family and friendship relations to a better level.

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