

# Investigation of the Relationship between the Loneliness and Peer Relationships of Sports High School Students

Research Article

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## ABSTRACT

The aim of the study is to investigate the relationship between the peer relationships and loneliness levels of students who study in the sports high school. The study group of the study consisted of 9th, 10th and 11th-grade students who study in sports high schools in Elazığ between 2017-2018 years. Because there was a total of 145 students, no sampling method was adopted and it was attempted to reach all the students in the population. As a result, the study was conducted with the data collected from 132 students. In the study, the UCLA Loneliness Scale short form and Friendship Qualities Scale were used as the data collections tool. In the data analysis, SPSS package software was utilized. As a result of the study, it was observed that the mean loneliness scores of males were higher compared to females and the mean peer relationship scores of females were significantly higher compared to males. The mean loneliness levels and mean peer relationship scores of the students did not differ depending on their grade of education. Additionally, it was determined that there was a negative and significant correlation between peer relationship and loneliness and peer relationship significantly and negatively predicted loneliness.

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### Keywords:

Loneliness, Peer Relationship, Sports High School

## Introduction

Individuals require social interaction in order to maintain their existence since the first years of their lives. Individuals, thanks to the relationships they established with themselves, their families, friends and the society they are in, can exhibit a healthy development. Individuals' establishing of relationships with others have a place in many theories. Adler (1964), who defines establishing relationship with the concept of social interest, points out to the owned relationships as the most important determiner of an individual's health. Similarly, Sullivan (1953), who emphasizes on how relationships shape individuals, suggests that close friend relationships increase self-values of individuals. Along with the importance of close relationships in every

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period of life, peer relationships especially come to the forefront in the adolescence period, when quick and intense changes are experienced and significantly prepare the ground for adolescents' identity development (Atik, Çok, Çoban, Doğan & Karaman, 2014; Demir & Kutlu, 2017).

Social relationships are important for individuals of every age. In the lives of all the people, they require to establish relationships with others and be in interaction. Today, interpersonal relationships deteriorate due to many reasons and the number of people who are deprived of establishing closeness with others rapidly increases. For centuries, in all the cultures, poems, songs and literature in the world, loneliness, due to a commonly observed subject, is believed to be an experience that is experienced universally (Karnick, 2005). Many characteristics of modern societies, such as urbanization, migration, decrease in intergenerational ties, increase in single-parent families and support on individualism (Dill & Anderson, 1999), cause loneliness, which establishes the basis of emotional, physical and psychological problems (Demir & Kutlu, 2016a; Ernst & Cacioppo, 1999; Karahan et al., 2004).

Loneliness, as well as being a difficult to define, draggy and complex experience, emerges as a significant problem that negatively affects individuals' lives by increasing each day. In society, loneliness is generally expressed as the state of being alone physically. People may experience loneliness in certain periods of their lives no matter their ages, genders or social status. Individuals may also experience loneliness when they are together with others. Therefore, the basis of loneliness consists of the insufficiency of the social relationships experienced and the low level of satisfaction obtained from these relationships (Oruç, 2013). Loneliness, which should be examined deeply, should be approached as an experience that can be observed in various types and especially has significant negative effects on the psychological well-being of individuals. In every society, it can be observed that loneliness is experienced by individuals no matter the age, gender or position. According to the type and the level of loneliness, its effects on the individual diversify.

It is observed that loneliness is especially observed in adolescents and this produce results that might affect the whole of their lives. The importance of this subject is noted by many researchers and the necessity for social support is emphasized (Arslan, Hamarta, Özyeşil & Saygın, 2011; Demir & Kutlu, 2016b). In all likelihood, lonesome students are individuals who are socially restricted; therefore, they are the individuals whose interpersonal communication skills are not developed (Yüksek, 2002). The social networks of lonesome students are also narrow. These students receive less support from their families and friends. With the decreased social support perceived, the loneliness causes larger internet psychological symptoms and negative experiences (Öztürk, 2006).

When peer relationships are investigated, it is observed that peer relationships in every age have different qualities. In peer relationships in the childhood period in a general view, the social environment of children (peer relationships, classroom rules, etc.), individual characteristics of individuals (social skills, aggressiveness, social behaviors, etc.) and their interaction with each other shape the structure of peer relationships (Song, 2006). Peers in the adolescence period have a place as significant as the family in adolescents' lives. Peers serve for many positive functions for adolescents such as friendship, social and emotional support, providing clones while they can also cause negative effects. One of the strongest and the most consistent predictor of the risky behavior of adolescents is whether the individual has a friend who demonstrates such type of behaviors. Adolescents' being together with peers who demonstrate risky behaviors causes them to demonstrate deviant behaviors in future periods (Gençoğlu, Kumcağız, & Ersanlı, 2014; Uludağlı & Sayıl, 2009).

While individuals progress toward the period of adolescence, their relationships with their peers progressively increase and the validation and acceptance of the peer group start to gain significant importance. Peer groups have many contributions to adolescents' individualism and becoming an independent individual of society. By providing feelings of connection and belonging, peer groups become effective in adolescents'

development of self-confidence and self-respect, decreasing the effect of stressful events, providing a social support (Dornbush, 1989), facilitating the gain of moral norms and values and contributing to the development of skills to establish interpersonal relationships by the feedbacks they provide for each other (Kaner, 2000).

Children, with the additional effect of the school, start to spend a majority of their time with their peers and in a positive or negative social interaction with them. With increasing age, the time spent with peers also increases and it especially reaches to a peak with the adolescence (Rubin, Chen, Coplan, Buskirk & Wojslawowics, 2005). The behavior of adolescents starts to be shaped by their peers rather than the family or school (Tolson & Urberg, 1993). Even though friendship relationships are important in every age, it especially gains increasing importance in today's individualistic societies due to the reduction of families in number, the decrease in large family relationships, the increase in years spent in school and the development of many groups that operate outside of the school (Hortaçsu, 2003). This interaction that starts in the school and is carried outside of the school can get ahead of the effect of the family in the further years of adolescence (Bee & Boyd, 2007).

Considering the fact that peer relationships have such an importance in the adolescence period, it is believed that it is important to investigate the relationship between peer relationships and loneliness. Especially, no study that investigated these relationships in students who study in sports high school was encountered. Therefore, it is believed that this study will have an authentic place in the literature and will guide further studies and researchers. Additionally, the facts that the studies were usually conducted with the adolescents who studied in other types of schools and there was no study conducted with the students in sports high school in this direction are viewed as serious deficiencies and it is believed that contributions will be provided about several dynamics in students who study in sports high schools by means of this study. Within this scope, the main aim of this study is to investigate the relationship between peer relationships and loneliness in students who study in sports high school and the main question to search an answer for is "Is there a relationship between peer relationship and loneliness in students?". Furthermore, the sub-aim of the study consists of investigating the mean scores of loneliness and peer relationships of students in terms of gender and grade of education.

## Method

This study is a correlation study that investigates the relationship between loneliness and peer relationship.

### Study Group

The study group of the study consisted of 132 students who studied in 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade in Kaya Karakaya Sports High School in the city center of Elazığ during the 2017-2018 education period. Within this framework, it was attempted to reach all 145 students, however, because the principle of volunteerism was adopted and the attendance status of the students during the study, 13 students did not participate in the study. Of the participating students in the study, there were 33 (25%) females and 99 (75%) males. 54 (41%) of the participants were 9<sup>th</sup>-grade students while 32 (24%) of them were 10<sup>th</sup>-grade students, followed by 46 (35%) of them from 11<sup>th</sup> grade.

### Data Collection Tools

In this study, the data was collected by means of using the UCLA Loneliness Scale Short Form, Friendship Qualities Scale and the personal information form created by the researcher.

**UCLA Loneliness Scale Short-Form (ULS-SF):** ULS-SF was developed by Hays and DiMatteo (1987) in order to measure the loneliness levels of adolescents. The Turkish adaptation of the scale was conducted by Yıldız and Duy (2014). One item was removed from the scale, which consisted of eight items in the original

form, in the Turkish adaptation study due to inability to meet the required factor load value and the measurement tool was adapted into Turkish with seven matters. The scale has a 7-point Likert type gradation and the scores that can be obtained from the scale ranges between 7 and 28. High scores obtained from the scale indicate high levels of loneliness. For the validity of the scale, exploratory factor analysis (EFA) was first conducted and it was determined that the measurement tool consisted of a single factor. Then, as a result of the confirmatory factor analysis (CFA), it was observed that the fit indices of this factor was good ( $\chi^2/sd=1.94$ , RMSEA=0.06, RMR=0.03, SRMR=0.04, GFI= 0.97, CFI=0.98, NFI=0.96, NNFI= 0.97). The reliability of the scale was investigated by Cronbach alpha internal consistency coefficient and test-retest method. The Cronbach alpha coefficient was determined as 0.74 and the test-retest coefficient was calculated as 0.84. These findings indicated that the scale was a valid and reliable measurement tool.

**Friendship Qualities Scale (FQC):** FQC was developed by Bukowski, Hoca and Boivini (1994) in order to measure the peer relationships in children and adolescents. The adaptation of the scale into Turkish culture was conducted by Erkan-Atik, Esen-Çoban, Çok, Doğan and Güney-Karaman (2014). Within the framework of the scale's validity, confirmatory factor analysis (CFA) was conducted. As a result of CFA, it was observed that the scale consisted of five factors just as in the original form. The Turkish version of the scale consists of 22 matters. It is a 5-point Likert type scale. The high scores obtained from the scale indicate that the level of peer relationship is high. As a result of CFA, it was observed that the fit indices of the scale were at an acceptable level ( $\chi^2/sd=3.36$ , RMSEA=0.06, GFI= 0.88, CFI=0.97, NNFI= 0.96). Additionally, in the analyses, it was observed that the Cronbach alpha internal consistency coefficient for the whole scale was 0.85. This results indicated that the scale was a valid and reliable measurement tool.

## Procedure

Prior to the initiation of the study, written permission from the Elazığ Directorate of National Education was obtained. Then, the only sports high school in the city was contacted and the measurement tool was conducted with the students who participated in the study voluntarily in an available period for both the school and the students. Before the analyses, Kolmogorov Smirnov Z test was conducted and it was observed that the value was higher than 0.05. Because the data demonstrated a normality distribution, it was decided to conduct parametric tests. In the data analysis, t-test, ANOVA, Pearson Correlation analysis and Simple Linear Regression analyses were employed.

## Findings

**Table 1.** T-test Results Regarding the Students' Scores of Loneliness and Peer Relationship according to Gender

Variables	Gender	n	$\bar{x}$	Sd.	t	p
Loneliness	Female	33	13.61	4.24	-2.040	.043*
	Male	99	15.35	4.28		
Peer Relationship	Female	33	86.58	18.60	3.104	.002**
	Male	99	76.47	15.32		

\*p<0.05, \*\*p<0.01

In the investigation of Table 1, it was observed that there were significant differences in the loneliness and peer relationship scores of the participants. Accordingly, the mean loneliness scores of female students were lower in a statistically significant way compared to male students [ $t=-2.040$ ,  $p=0.043$ ,  $p<0.05$ ]. Additionally, it was found out that the mean peer relationship scores of females were higher in a statistically significant way compared to males [ $t=3.104$ ,  $p=0.002$ ,  $p<0.01$ ].

**Table 2.** ANOVA Results Regarding the Students' Mean Scores of Loneliness and Peer Relationship according to Grade of Education

	Grade	n	X̄	Sd.	F	p
<b>Loneliness</b>	9 <sup>th</sup>	54	13.94	4.33	2.376	0.097
	10 <sup>th</sup>	32	15.53	4.56		
	11 <sup>th</sup>	46	15.63	3.97		
	Total	132	14.92	4.31		
<b>Peer Relationship</b>	9 <sup>th</sup>	54	80.57	16.49	.460	0.632
	10 <sup>th</sup>	32	78.69	17.50		
	11 <sup>th</sup>	46	77.37	16.23		
	Total	132	79.00	16.71		

In the investigation of Table 2, it was observed that there were no significant differences in the mean loneliness scores of students according to their grade of education ( $p=0.097$ ,  $p>0.05$ ). Additionally, it was observed that the mean peer relationship scores of the students did not significantly differ according to their grade of education ( $p=0.632$ ,  $p>0.05$ ).

**Table 3.** Pearson Correlation Coefficient Results in the Investigation of the Relationship between Loneliness Levels and Peer Relationships of students

Loneliness	1
Peer Relationship	-.24**

(\*\*)= $p<0.01$

In the investigation of Table 3, it was observed that there was a negative and low correlation between the loneliness scores and peer relationship scores of students ( $r=-.24$ ,  $p<.01$ ). According to this finding, it can be stated that the students with high scores of loneliness have low scores of peer relationship.

**Table 4.** Results of Simple Linear Regression Analysis regarding the Peer Relationship's Prediction of Loneliness

Variable	B	Std. Error	$\beta$	t	p
Simple	19.784	1.774	-	11.152	.000**
Peer Relationship	-.062	.022	-.239	-2.804	.006**
R=.239	R <sup>2</sup> =.057				
F (1-130)=7.863	p=.006				

(\*\*)= $p<0.01$

In the investigation of Table 4, it was observed that the peer relationship significantly predicted loneliness. Peer relationships explains the 6% of the variance in loneliness [ $R^2=0.057$ ;  $F(1-130)=7.863$ ,  $p<.01$ ].

### Discussion, Results and Suggestions

In this section, the loneliness level and peer relationship of the students will be evaluated in terms of gender and grade of education, and the results obtained from correlation and regression analysis conducted between their loneliness level and peer relationship dimension will be discussed, followed by proposed suggestions.

According to the findings obtained in this study, it was observed that the loneliness and peer relationship scores of the participants differed significantly according to their genders. Accordingly, it was concluded that the mean loneliness scores of females were lower in a statistically significant way compared to

mean scores of male students while mean peer relationship scores of female students were higher in a statistically significant way compared to male students. Accordingly, it was concluded that the peer relationship levels of female students were higher compared to male students and male students felt significantly lonelier from their peers compared to female students. Duyan, Duyan, Çifti, Sevin, Erbay and İközoglu (2010), in their study that investigated the variables affecting the loneliness status of high school students, concluded that male students felt lonelier compared to female students. Similarly, in some studies conducted abroad, it was concluded that male students felt lonelier (Lufting, 1987; Parker & Asher; 1993; Schultz & Moore, 1986). Demir (1990) explains this situation by the differentiation of the expectancies of the society from the youth according to gender. On the other hand, in a study conducted by Kutlu (2003), it was concluded that the loneliness levels of females were higher compared to males. This situation might be resulting from the study group of that study. In fact, it was observed that Kutlu conducted a part of this study with students who lived in orphanages. In several studies, it was determined that there were no significant differences in loneliness levels according to gender. In this regard, in a study conducted by Çeçen (2008), it was determined that the mean loneliness scores of female and male students did not differ in terms of gender. Even though it was determined in this study that the loneliness levels of males were significantly higher compared to females, when the studies are examined in a general sense, it is possible to state that it is not clear to determine for the benefit of which group the differentiation between gender and loneliness is.

According to the other result of this study, it was observed that the mean loneliness and peer relationship scores did not create significant differences according to the grade of education. Yılmaz, Yılmaz and Karaca (2008), in a study titled investigation of social support and loneliness levels of university students, reported that there was no statistically significant difference between the grade of education and level of loneliness, which is similar to the findings of this study. However, there have been studies that did not have similar results with this study. For example, Buluş (2007), in a study investigating loneliness in university students, reported that the level of loneliness was higher in 1<sup>st</sup>-grade students compared to others and as it progressed to 4<sup>th</sup> grade, the last grade, this level decreased.

According to another result obtained from the study, it was concluded that there was a negative and low correlation between loneliness levels and peer relationships. Accordingly, it can be stated that students with high loneliness scores had low peer relationship scores. In this relationship, it was also investigated whether peer relationship is a predictor for loneliness. In this study, it was determined that the peer relationship in adolescents predicted loneliness negatively and in a significant way. Duyan et al. (2010) reported that low peer relationship could cause loneliness. According to Duyan et al., when students do not have social support mechanisms, this can contribute them to experience the feeling of loneliness less. When considered in this scope, it can be thought that individuals with satisfactory levels of peer relationship are expected to experience the feeling of loneliness less compared to others. Adolescence years are especially periods when individuals attach more importance to peer relationships (Ersanlı, 2005). In the adolescence period, individuals have a privileged position in the lives of their friends (Austin & Sciarra, 2013). In this period, friends have a more special position than family, teachers and other acquaintances (Cüceloğlu, 2017). Therefore, the increase in the quality of the peer relationship in this period can be regarded as a contributing factor to the decrease in students' loneliness.

Adolescence period is an important period in terms of peer relationships. In the adolescence period, even the parents of the adolescent cannot achieve the same success of a peer group in teaching values and gaining self-confidence (Demir, Baran & Ulusoy, 2005). In fact, adolescents spend the majority of their day with their peers. This situation provides significant contributions to adolescents in achieving autonomy, gaining social skills and developing close relationships (Hartup, 2012). According to Berndt (2002), a high level of friendship quality contributes to positive social behaviors, sincere relationships, positive attitudes and

associations toward others. Indeed, the quality of friendship contribute to children in joining peer groups and gain a place for themselves in the social world. In brief, the positive attitudes the individuals perceive in friendship relationships helps them gain a feeling of belonging in the real social world (as cited in Savcı, 2017).

Considering the results of this study, it is necessary to pay attention to peer relationships in studies regarding loneliness in adolescents. Additionally, in studies regarding peer relationships and loneliness, gender was determined to be a significant variable while it was observed that grade of education is a not factor that can cause differentiation. In future studies, it will be beneficial to consider these results.

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