

Examination of the Socialization and Communication Skills of High School Students Participating in Physical Education and Sports Classes

Beden Eğitimi ve Spor Dersine Katılan Lise Öğrencilerinin Sosyalleşme ve İletişim Becerilerinin İncelenmesi

¹İsa ÇİFTÇİ,

Bingöl University, Faculty of Sport Sciences, iciftci@bingol.edu.tr <https://orcid.org/0000-0002-7056-3146>

* Araştırma Makalesi / Research Article

Gönderi Tarihi / Received : 03.10.2025

Kabul Tarihi / Accepted : 24.12.2025

Online Yayın Tarihi / Published : 31.12.2025

<https://doi.org/10.71243/dksbd.1816222>

Abstract

The purpose of this study was to investigate the relationship between the socialization levels and communication skills of high school students who take part in physical education and sports classes. The research was carried out using a descriptive and correlational survey design. The study group included 374 students enrolled in a public high school located in the city center of Bingöl, selected through a simple random sampling method. Data were collected using the Socialization Scale developed by Şahan (2007) and the Communication Skills Assessment Scale developed by Korkut (1996). As the data did not meet the assumption of normality, non-parametric statistical methods were employed. Specifically, the Mann–Whitney U test was used for comparisons between two groups, the Kruskal–Wallis H test for comparisons among three or more groups, Spearman’s rank correlation for examining the relationships between variables, and simple linear regression analysis to determine the predictive impact of socialization on communication skills. The findings revealed a moderate, positive, and significant correlation between students’ socialization levels and communication skills ($r = 0.428$; $p < 0.01$). In terms of gender, female students exhibited higher socialization levels than male students. Regarding grade level, 9th-grade students had higher socialization levels, whereas 10th-grade students demonstrated stronger communication skills. No significant differences were observed concerning the number of siblings or sports club membership. Regression results indicated that socialization level was a significant predictor of communication skills, accounting for approximately 18% of the variance. Overall, the findings suggest that physical education and sports classes contribute notably to the enhancement of students’ social interaction and communication skills.

Key words: Physical education, socialization, communication skills

Öz

Bu çalışmanın amacı, beden eğitimi ve spor derslerine katılan lise öğrencilerinin sosyalleşme düzeyleri ile iletişim becerileri arasındaki ilişkiyi incelemektir. Araştırma, betimsel ve ilişkisel tarama modeli çerçevesinde yürütülmüştür. Çalışma grubu, basit rastgele örnekleme yöntemiyle seçilen ve Bingöl şehir merkezinde bulunan bir devlet lisesinde öğrenim gören 374 öğrenciden oluşmuştur. Veriler, Şahan (2007) tarafından geliştirilen Sosyalleşme Ölçeği ve Korkut (1996) tarafından geliştirilen İletişim Becerileri Değerlendirme Ölçeği kullanılarak toplanmıştır. Verilerin analizinde normallik varsayımı karşılanmadığından, parametrik olmayan testler uygulanmıştır. İki grup karşılaştırmalarında Mann–Whitney U testi, üç ve daha fazla grup karşılaştırmalarında Kruskal–Wallis H testi, değişkenler arasındaki ilişkilerin incelenmesinde Spearman sıra korelasyon analizi ve yordayıcı etkiyi belirlemek için basit doğrusal regresyon analizi kullanılmıştır. Bulgular, öğrencilerin sosyalleşme düzeyleri ile iletişim becerileri arasında orta düzeyde, pozitif ve anlamlı bir ilişki olduğunu göstermiştir ($r = 0.428$; $p < 0.01$). Cinsiyete göre, kız öğrencilerin sosyalleşme düzeyleri erkek öğrencilere göre daha yüksek bulunmuştur. Sınıf düzeyi açısından, 9. sınıf öğrencilerinin sosyalleşme düzeyleri daha yüksek iken, 10. sınıf öğrencilerinin iletişim becerileri daha yüksek çıkmıştır. Kardeş sayısı ve spor kulübü üyeliği değişkenleri açısından anlamlı bir fark tespit edilmemiştir. Regresyon analizi sonuçlarına göre, sosyalleşme düzeyinin iletişim becerilerinin anlamlı bir yordayıcısı olduğu ve iletişim becerilerindeki varyansın yaklaşık %18’ini açıkladığı belirlenmiştir. Elde edilen sonuçlar, beden eğitimi ve spor derslerinin öğrencilerin sosyal etkileşim ve iletişim becerilerinin gelişiminde önemli bir rol oynadığını ortaya koymaktadır.

Anahtar kelimeler: Beden eğitimi, sosyalleşme, iletişim becerileri

¹ Corresponding author (İsa ÇİFTÇİ; iciftci@bingol.edu.tr).

Introduction

Education is a holistic process that aims not only to develop individuals' cognitive skills but also to strengthen their social, emotional, and communicative aspects. Within this process, enabling individuals to adapt to society, establish effective communication, and maintain healthy social relationships are among the fundamental goals of education. The school is a key social institution where students' academic and social development takes shape. Among its most dynamic courses, physical education and sports play a crucial role not only in supporting students' physical development but also in enhancing their social skills (Eime et al., 2013; Karataş et al., 2021).

Physical education and sports activities help individuals acquire skills such as cooperation, empathy, team spirit, leadership, and effective communication (Li et al., 2022; Üzüm & Üzüm, 2019). In this respect, sports serve as an important means of socialization that strengthens interpersonal relationships, fosters social bonds, and reduces communication barriers. The high school period, in particular, represents a critical developmental stage during adolescence in which individuals form their identities, build self-perception, and regulate peer relationships. Supporting students' socialization and communication skills during this stage is therefore essential for both individual and social adjustment (Eather et al., 2023; Öztürk, 2020).

Socialization is defined as the process by which individuals learn social norms, values, and behaviors to adapt to their social environment, while communication skills are fundamental tools that enable this process to function effectively. Sports activities conducted in the school environment increase opportunities for interaction, thereby enhancing self-confidence, a sense of social belonging, and empathy (Teke, 2022; Atalay, 2023). In this context, physical education courses are regarded as significant learning domains that contribute not only to students' physical development but also to their psychosocial growth.

A review of national and international literature reveals that participation in physical education and sports courses improves students' social interaction, communication, empathy, and socialization skills (Eime et al., 2013; Üzüm & Üzüm, 2019; Karataş et al., 2021). However, studies examining the relationship between participation in physical education courses and both communication and socialization skills at the high school level remain limited.

This study seeks to examine the socialization and communication skill levels of high school students participating in physical education and sports classes and to analyze the relationship between these two variables. The research is expected to enhance understanding of how participation in sports activities influences students' social interactions and communication abilities, and to offer insights for improving the educational, social, and psychological aspects of physical education programs.

When socialization is considered as the process through which individuals interact with their social environment, learn group norms, and internalize social roles, communication skills emerge as both a means and an outcome of this process. Vygotsky's (1978) sociocultural theory emphasizes that

individuals' cognitive and social skills develop through social interaction; in this context, socialization provides a fundamental learning environment that directly supports the development of communicative competence. Similarly, Bandura's (1986) social cognitive theory suggests that individuals acquire behaviors through observation, modeling, and social interaction, indicating that experiences gained in social environments play a decisive role in the development of communication skills. According to Erikson's (1968) psychosocial development theory, social acceptance, a sense of belonging, and identity formation become prominent during adolescence, and the successful resolution of these developmental tasks is closely associated with the acquisition of effective communication skills. From these theoretical perspectives, it can be argued that socialization processes supported through physical education and sports classes constitute an important causal mechanism in enhancing students' communication skills.

Research Hypotheses

H1: There is a positive and significant relationship between the socialization levels and communication skills of high school students participating in physical education and sports classes.

H2: The socialization levels and communication skills of high school students participating in physical education and sports classes differ significantly by gender.

H3: The socialization levels and communication skills of high school students participating in physical education and sports classes differ significantly by grade level.

H4: The socialization levels and communication skills of high school students participating in physical education and sports classes differ significantly by the number of siblings.

H5: The socialization levels and communication skills of high school students participating in physical education and sports classes differ significantly by sports club membership.

H6: The socialization levels of high school students significantly predict their communication skills.

METHOD

Research Design

The research was structured based on the general survey and correlational survey models, both of which fall under descriptive research designs. This approach follows a quantitative research framework aimed at describing the existing situation and identifying the relationships among variables (Karasar, 2022; Büyüköztürk ve ark., 2023).

Research Group

The population of the research consists of students studying at public high schools located in the city center of Bingöl during the 2024–2025 academic year.

The study sample comprises 374 students chosen through the simple random sampling method from a public high school located in a city in Turkey. In determining the sample size, the population size, the purpose of the research, the scope of the data collection instruments, and feasibility conditions

were taken into consideration. Furthermore, based on a 95% confidence level and a 5% margin of error, it is accepted that approximately 350–380 participants are sufficient to represent the population. Accordingly, the 374 students included in the study were evaluated as adequate in terms of sample size. This approach enhances the representativeness of the sample and supports the generalization of the research findings (Büyüköztürk ve ark., 2023).

Data Collection Process

The data collection process of the research was conducted during the fall semester of the 2024-2025 academic year. The data collection instruments were administered to students attending a public high school located in the city center of Bingöl, following the acquisition of the necessary formal permissions from the school administration and classroom teachers. The administration was carried out during physical education and sports classes as well as guidance sessions, taking the students' academic schedules into consideration.

The scales were administered face-to-face in a classroom setting by the researcher. Prior to the administration, the purpose of the study was explained to the students, participation was ensured on a voluntary basis, and the principle of confidentiality was guaranteed. The data collection process lasted approximately 20-25 minutes on average, and students were requested to respond to the scale items carefully and sincerely.

The students participating in the research consist of high school students who attend mandatory physical education and sports classes as part of the Ministry of National Education curriculum. Participants were not differentiated based on their participation in elective sports courses or regular extracurricular sports activities; rather, all students were evaluated within the scope of the compulsory physical education curriculum. This approach allows the socialization and communication skill levels obtained in the research to be interpreted within the context of the students' shared educational environment.

Data Collection Instruments

Personal Information Form

This form, prepared by the researcher, includes information related to the students' demographic characteristics (gender, grade level, number of siblings, and membership in a sports club).

Socialization Scale

To measure students' socialization levels, the Socialization Scale (SS) developed by Şahan (2007) was employed. The scale includes two subdimensions: Socialization and Socialization through Sports. In accordance with the aim of this study, only the Socialization subdimension was used. This subdimension consists of 34 items designed to assess the concept of socialization and is rated on a 5-point Likert scale. The reliability of the Socialization subdimension was confirmed with a Cronbach's Alpha coefficient of $\alpha = 0.79$. The items within the scope of the Socialization Scale are designed to

evaluate individuals' levels of establishing social relationships, intra-group interaction, and social adaptation. Some of the sample items included in the scale are as follows:

I prefer to stay away from crowds as much as possible.

I am selective when communicating with people in society.

Communication Skills Assessment Scale

To assess students' communication skills, the Communication Skills Assessment Scale developed by Korkut (1996) was utilized. This instrument measures individuals' self-perceptions of their communication competence and consists of 25 items rated on a 5-point Likert scale. Higher scores indicate a more favorable self-evaluation of communication skills, and the scale contains no reverse-scored items. Validity and reliability analyses confirmed that the scale has a single-factor structure, with a Cronbach's Alpha reliability coefficient of $\alpha = 0.80$. The Communication Skills Assessment Scale is designed to measure individuals' skills in self-expression, listening, and empathy. Some of the sample items included in the scale are as follows:

People whose problems I listen to leave my presence feeling relieved.

I can express my thoughts clearly whenever I want.

Ethical approval and institutional permission

This research received approval from the Ethics Committee of Bingöl University, Institute of Health Sciences, under the decision dated 28.10.2025 and meeting number 10/01.

Data Analysis

The data collected for the study were analyzed using the IBM SPSS Statistics 27.0 software package. Prior to analysis, the dataset was prepared by organizing the data, coding variables, and correcting any erroneous entries.

To examine the distribution characteristics of the data obtained from the Socialization and Communication Skills Scales administered to 374 participants, normality analyses were performed. Both the Kolmogorov–Smirnov and Shapiro–Wilk tests were applied, and the results indicated $p = 0.000 < 0.05$ for both scales. This result statistically demonstrates that the data did not exhibit a normal distribution (Razali & Wah, 2011; Ghasemi & Zahediasl, 2012; Büyüköztürk, 2018). Therefore, non-parametric tests were employed in subsequent analyses.

Accordingly, the Mann–Whitney U test was applied for comparisons involving two groups, while the Kruskal–Wallis H test was employed for analyses with three or more groups. Spearman's correlation analysis was conducted to evaluate the relationships between variables. In addition, simple linear regression analysis was performed to determine the extent to which socialization levels predict communication skills.

FINDINGS

In this section, the findings derived from the analysis of the data collected for the study are presented in tabular form.

Table 1. Mann–Whitney U Test Results for Socialization and Communication Skills Scores by Gender

| Dimension | Gender | n | Mean Rank | U | p | Effect Size (r) |
|----------------------|--------|-----|-----------|---------|--------|-----------------|
| Socialization Level | Female | 233 | 197.75 | 14037.5 | 0.018* | 0.12 |
| | Male | 141 | 170.56 | | | |
| Communication Skills | Female | 233 | 193.52 | 15024.5 | 0.166 | 0.07 |
| | Male | 141 | 177.52 | | | |

$p < 0.05$

Table 1 presents the results of the Mann–Whitney U test regarding students' socialization levels and communication skills scores according to gender. The analysis results indicate that students' socialization level scores show a statistically significant difference by gender ($U = 14037.5$, $p = 0.018$, $p < 0.05$). Examination of the mean rank values reveals that female students have higher socialization levels than male students. The effect size of this difference is small ($r = 0.12$; Cohen, 1988).

In terms of communication skills scores, no statistically significant difference was found according to gender ($U = 15024.5$, $p = 0.166$, $p > 0.05$). The effect size calculated for communication skills was also found to be small ($r = 0.07$).

Table 2. Kruskal–Wallis H Test Results for Socialization and Communication Skills Scores by Grade Level

| Dimension | Grade Level | n | Mean Rank | df | p | η^2 |
|----------------------|-------------|-----|-----------|----|--------|----------|
| Socialization Level | 9th Grade | 128 | 207.3 | 2 | 0.003* | 0.04 |
| | 10th Grade | 145 | 189.1 | | | |
| | 11th Grade | 101 | 159.0 | | | |
| Communication Skills | 9th Grade | 128 | 194.1 | 2 | 0.004* | 0.05 |
| | 10th Grade | 145 | 202.2 | | | |
| | 11th Grade | 101 | 157.8 | | | |

$p < 0.05$

As seen in Table 2, the Socialization Level scores of the students differed significantly by grade level ($p = 0.003 < 0.05$). The Dunn–Bonferroni post-hoc test indicated that the difference was between 9th and 11th-grade students, with 9th-grade students showing higher socialization levels. Similarly,

Communication Skills scores differed significantly by grade level ($p = 0.004 < 0.05$), with the post-hoc analysis revealing a significant difference between 10th and 11th grades. 10th-grade students had higher communication skill levels than 11th-grade students. The eta-squared (η^2) values computed for both variables ($\eta^2 = 0.04$ and $\eta^2 = 0.05$) showed that the effect size was small (Cohen, 1988).

Table 3. Kruskal–Wallis H Test Results for Socialization and Communication Skills Scores by Number of Siblings

| Dimension | Number of Siblings | n | Mean Rank | df | p | η^2 |
|----------------------|--------------------|-----|-----------|----|-------|----------|
| Socialization Level | Only child | 8 | 192.75 | 2 | 0.410 | 0.01 |
| | 2–3 children | 56 | 183.42 | | | |
| | 4 or more | 309 | 189.68 | | | |
| Communication Skills | Only child | 8 | 192.00 | 2 | 0.315 | 0.01 |
| | 2–3 children | 56 | 185.00 | | | |
| | 4 or more | 309 | 188.00 | | | |

$p < 0.05$

As shown in Table 3, the students' Socialization and Communication Skills scores did not differ significantly according to the number of siblings ($p > 0.05$). This result indicates that students' socialization and communication skills are independent of the number of siblings. The eta-squared (η^2) values calculated for both dimensions were 0.01, indicating a small effect size (Cohen, 1988).

Table 4. Mann–Whitney U Test Results for Socialization and Communication Skills Scores by Sports Club Membership

| Dimension | Sports Club Membership | n | Mean Rank | U | p | Effect Size (r) |
|----------------------|------------------------|-----|-----------|--------|-------|-----------------|
| Socialization Level | Yes | 57 | 195.11 | 8251.0 | 0.260 | 0.07 |
| | No | 312 | 187.39 | | | |
| Communication Skills | Yes | 57 | 192.00 | 8325.5 | 0.445 | 0.05 |
| | No | 312 | 188.00 | | | |

$p < 0.05$

As shown in Table 4, there were no significant differences in students' Socialization and Communication Skills scores according to the variable of sports club membership ($p > 0.05$). Although

the mean ranks of students who were members of sports clubs were slightly higher than those who were not, this difference was not statistically significant. The calculated effect size (r) values ($r = 0.07$ and $r = 0.05$) revealed that both dimensions had a small effect size (Cohen, 1988).

Table 5. Correlation Between Socialization and Communication Skills Scores

| Variable | Communication Skills | |
|---------------------|----------------------|-------|
| Socialization Level | r | 0.428 |
| | p | 0.000 |
| | n | 374 |

As shown in Table 5, there was a moderate, positive, and significant relationship between the Socialization Level and Communication Skills scores of students participating in physical education and sports classes ($r = 0.428$; $p < 0.01$). The results indicate that as students' socialization levels increase, they use their communication skills more effectively.

Table 6. Regression Analysis Results on the Predictive Effect of Socialization Level on Communication Skills

| Variable | B | Std. Error | β | t | p |
|---|--------|------------|---------|------|-------|
| Constant | 32.841 | 3.952 | – | 8.31 | 0.000 |
| Socialization Level | 0.415 | 0.059 | 0.428 | 7.05 | 0.000 |
| $R = 0.428$ $R^2 = 0.183$ $F(1, 372) = 49.74$ $p < 0.001$ | | | | | |

As shown in Table 6, the Socialization Level scores of students significantly predicted their Communication Skills scores ($F(1,372) = 49.74$; $p < 0.001$). The coefficient of determination ($R^2 = 0.183$) indicates that approximately 18% of the total variance in communication skills is explained by the socialization level. Based on the standardized regression coefficient ($\beta = 0.428$), communication skills increase significantly as socialization levels increase. According to Cohen's (1988) classification, this value, ranging between $\beta = 0.30$ – 0.50 , indicates a medium effect size.

Discussion And Conclusion

In this study, the relationship between the socialization levels and communication skills of high school students participating in physical education and sports classes was examined. The findings revealed a moderate, positive, and statistically significant relationship between socialization levels and communication skills. This result indicates that socialization plays a fundamental role in the development of students' communication skills. From an educational perspective, physical education and sports classes provide a structured social environment in which students actively practice

cooperation, self-expression, and interpersonal interaction. Socialization is a key psychosocial process that regulates an individual's interaction with society, enables adaptation to group norms, and facilitates effective interpersonal communication (Vygotsky, 1978; Bandura, 1986; Giddens, 1991).

The findings are consistent with previous research. Studies conducted using the scale developed by Korkut (1996) have shown that students' communication skills are positively associated with their level of social interaction. Şahan (2007) stated that sports contribute to individuals' socialization processes, particularly emphasizing that team sports enhance social communication, team spirit, and empathy skills. Similarly, Tsigilis et al. (2020) demonstrated that physical activities improve social behavior and communication competence among youth. These results highlight the pedagogical value of physical education lessons not only for physical development but also for supporting students' social and communicative competencies within the school context.

Analyses by gender revealed that female students had significantly higher levels of socialization compared to male students ($p < 0.05$). This finding reflects the influence of gender roles on social interaction. Previous studies have also reported that females tend to display higher levels of empathy, sensitivity, and communication skills in social interaction processes (Tannen, 1990; Kaya & Deniz, 2021; Eisenberg & Lennon, 2023). According to Gilligan (1982) women tend to prioritize relationality and empathy in moral reasoning, which translates into greater competence in social communication. From an educational standpoint, this finding suggests that learning environments encouraging emotional expression and cooperative interaction may further strengthen socialization outcomes for all students, particularly male students.

Results regarding grade level showed that 9th-grade students had higher socialization levels than 11th-grade students, while 10th-grade students scored higher in communication skills than those in 11th grade. This suggests that students are more socially active and participatory during the early years of high school, but social interaction tends to decrease as academic pressure and exam anxiety increase. Çelik and Koç (2021) and Papadopoulos et al. (2022) similarly reported that exam stress and academic workload negatively affect social interaction and communication skills among upper-grade students. According to Erikson's (1968) psychosocial development theory, adolescence is a stage focused on identity formation and social belonging; however, when this process is hindered by academic pressures, social relationships may weaken. In line with Erikson's framework, increased academic stress may restrict students' opportunities for social exploration and peer interaction, thereby limiting the development of social identity and communication skills. This interpretation strengthens the theoretical explanation by linking school-based academic pressure directly to psychosocial development processes.

No significant differences were found in relation to the number of siblings or sports club membership variables. This suggests that students' socialization and communication skills are influenced not only by family structure or sports participation but also by in-school social interactions, teacher relationships, and individual characteristics (Akbulut & Gülmez, 2020; Karasar, 2022). Coakley

(2001) and Weiss (2008) emphasized that the socializing effect of sports depends not only on the frequency of participation but also on its quality-specifically, an individual's role within the team and the nature of their experiences. Accordingly, physical education classes that emphasize collaboration, shared responsibility, and inclusive participation may play a critical role in enhancing students' social outcomes regardless of extracurricular involvement.

The regression analysis results showed that socialization level was a significant predictor of communication skills. This finding indicates that socialization is a variable that directly influences individuals' communication competence. Field (2013) and Kalaycı (2016) highlighted that subdimensions of social skills-such as emotional awareness, self-confidence, and active listening-are key determinants of communication proficiency. This result underscores the importance of incorporating interaction-based teaching strategies into physical education curricula to foster both social and communicative development.

In addition, Altınbaş and Günay (2022) found that sports activities enhance students' empathy tendencies, thereby improving communication skills; similarly, Rahmani and Hedayati (2021) reported that participation in sports strengthens social communication competence. These findings further support the results of the present study.

Conclusion

The main findings obtained from this research can be summarized as follows:

1. A moderate and positive association exists between students' socialization levels and their communication skills.
2. A significant gender-based difference was identified in socialization levels, with female students demonstrating higher socialization levels than their male counterparts.
3. Significant differences were observed in both socialization and communication skills by grade level, with 9th-grade students showing higher socialization levels and 10th-grade students demonstrating higher communication skills.
4. No significant differences were found with respect to the number of siblings or sports club membership.
5. Socialization level is a significant predictor of communication skills and explains approximately 18% of the variance in communication skills.

In conclusion, physical education and sports classes represent multidimensional learning environments that enhance not only students' physical capacities but also their socio-emotional and communicative skills. This research demonstrated that socialization level is an important predictor of communication skills and highlighted the crucial role of school-based social interaction processes in students' personal development. Therefore, the scope of physical education courses should be expanded within the education system, and social development-oriented pedagogical approaches should be more widely implemented.

Recommendations

The content of physical education and sports classes should be structured to support students' social interaction and communication skills.

More emphasis should be placed on group work, team games, and collaborative activities.

Guidance and social skills training programs should be developed to enhance the socialization levels of male students.

School-based activities should be planned for upper-grade students to reduce exam anxiety and promote social participation.

School counseling services should organize workshops on communication skills, empathy, and group interaction.

In-service training should be provided to physical education teachers on pedagogical approaches that support social and emotional learning.

Future research should examine the relationship between socialization and communication skills across different age and socioeconomic groups, using experimental or longitudinal research designs.

Limitations of the Study

The study is limited to students attending a single public high school located in the city center of Bingöl.

The selection of the sample from a single school restricts the generalizability of the findings.

The research was conducted using a cross-sectional design, which does not allow for the establishment of a definitive cause-and-effect relationship between the variables.

The students' participation in extracurricular sports activities was not controlled or analyzed in detail.

REFERENCES

- Akbulut, E., & Gülmez, M. (2020). Lise öğrencilerinin sosyal beceri düzeyleri ile demografik özelliklerinin incelenmesi. *Milli Eğitim Dergisi*, 49(227), 134–151.
- Altınbaş, S., & Günay, S. (2022). Spor etkinliklerinin öğrencilerin iletişim becerileri ve empatik eğilimleri üzerindeki etkisi. *Uluslararası Sosyal Bilimler Dergisi*, 10(3), 257–271. <https://doi.org/10.29228/usb.2022.37>
- Atalay, R. (2023). *Ortaöğretim öğrencilerinin beden eğitimi ve spora yönelik tutumları ile empatik eğilim düzeyleri arasındaki ilişkinin incelenmesi* [Yüksek lisans tezi, Selçuk Üniversitesi]. Selçuk Üniversitesi Kütüphanesi.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.
- Büyüköztürk, Ş. (2018). *Sosyal bilimler için veri analizi el kitabı: İstatistik, araştırma deseni, SPSS uygulamaları ve yorum* (24. baskı). Pegem Akademi.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2023). *Bilimsel araştırma yöntemleri* (32. baskı). Pegem Akademi.
- Coakley, J. (2001). *Sport in society: Issues and controversies* (7th ed.). McGraw-Hill.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Çelik, E., & Koç, M. (2021). Ergenlerde sınav kaygısı, sosyal destek ve iletişim becerileri ilişkisi. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 11(64), 122–138.
- Eather, N., Morgan, P. J., Lubans, D. R., Jones, R. A., & Telford, R. M. (2023). The impact of sports participation on mental health and social outcomes: A systematic review. *Systematic Reviews*, 12(1), 162. <https://doi.org/10.1186/s13643-023-02263-9>
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents. *International Journal of Behavioral Nutrition and Physical Activity*, 10(98), 1–21. <https://doi.org/10.1186/1479-5868-10-98>
- Eisenberg, N., & Lennon, R. (2023). Gender differences in empathy and social communication: A meta-analytic review. *Journal of Applied Developmental Psychology*, 85, 101563. <https://doi.org/10.1016/j.appdev.2022.101563>
- Erikson, E. H. (1968). *Identity: Youth and crisis*. Norton.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Sage Publications.
- Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486–489. <https://doi.org/10.5812/ijem.3505>
- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Stanford University Press.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Harvard University Press.
- Kalaycı, Ş. (2016). *SPSS uygulamalı çok değişkenli istatistik teknikleri* (7. baskı). Asil Yayın Dağıtım.
- Karasar, N. (2022). *Bilimsel araştırma yöntemi* (37. baskı). Nobel Akademik Yayıncılık.
- Karataş, E. Ö., Savaş, B. C., & Karataş, Ö. (2021). Beden eğitimi, spor ve oyunun öğrencilerin sosyalleşmesi üzerine etkisi. *Kafkas Üniversitesi Sosyal Bilimler Dergisi*, 1(1), 1–16.
- Kaya, A., & Deniz, M. E. (2021). Üniversite öğrencilerinde empati, iletişim becerileri ve sosyal uyum ilişkisi. *Eğitimde Nitel Araştırmalar Dergisi*, 9(3), 877–892. <https://doi.org/10.14689/enad.9.3.5>
- Korkut, F. (1996). İletişim becerilerini değerlendirme ölçeğinin geliştirilmesi, güvenilirlik ve geçerlik çalışmaları. *Psikolojik Danışma ve Rehberlik Dergisi*, 2(7), 18–23.
- Li, J., Weston, S. J., & Anderson, M. (2022). Influence of sports activities on prosocial behavior in children and adolescents: A meta-analysis. *Frontiers in Psychology*, 13, 898573. <https://doi.org/10.3389/fpsyg.2022.898573>
- Öztürk, Ö. (2020). Lise öğrencilerinin ders dışı etkinliklere katılım durumlarına göre iletişimci biçimlerinin incelenmesi. *Journal of Social and Humanities Research*, 7(3), 45–56.
- Papadopoulos, A., Vlachopoulos, S., & Karagiorgos, T. (2022). Academic stress and social communication among high school students: The mediating role of self-efficacy. *Journal of Educational Psychology*, 114(7), 1302–1315. <https://doi.org/10.1037/edu0000702>
- Rahmani, M., & Hedayati, M. (2021). Social participation and communication competence among adolescents: The moderating role of sports participation. *Child Indicators Research*, 14(3), 1157–1174. <https://doi.org/10.1007/s12187-020-09778-3>

- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of Shapiro–Wilk, Kolmogorov–Smirnov, Lilliefors and Anderson–Darling tests. *Journal of Statistical Modeling and Analytics*, 2(1), 21–33.
- Şahan, H. (2007). Sporun sosyalleşme sürecine etkisi. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 12(1), 37–48.
- Tannen, D. (1990). *You just don't understand: Women and men in conversation*. Ballantine Books.
- Teke, M. S. (2022). Sporun sosyal gelişim sürecine etkisi. *Journal of Social and Humanities Sciences Research*, 9(82), 3550–3562.
- Tsigilis, N., Douda, H., & Tokmakidis, S. (2020). Physical education participation and its effects on social behavior and communication skills in adolescents. *International Journal of Behavioral Development*, 44(5), 432–441. <https://doi.org/10.1177/0165025419897524>
- Üzüm, H., & Üzüm, R. Y. (2019). Ortaokul ve lise öğrencilerinin beden eğitimi ve spor dersine ilişkin görüşlerinin değerlendirilmesi. *Journal of Social and Humanities Sciences Research*, 6(44), 3728–3734.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Weiss, M. R. (2008). “Field of dreams”: Sport as a context for youth development. *Research Quarterly for Exercise and Sport*, 79(4), 434–449. <https://doi.org/10.5641/193250308X13086832906085>