

Examination of Empathic Skills and Stress-Coping Levels of Students Playing on School Teams

VAROL TUTAL¹

¹*School of Physical Education and Sports, Department of Physical Education and Sports Teaching, Siirt University, Siirt*

ABSTRACT

The purpose of this study is to examine the empathic skills and stress coping levels of students playing in school teams. A total of 204 individuals, 96 of whom were male (47.1%) and 108 of whom were female (52.9%), who were participating in school teams in secondary education and doing sports in Şırnak province, voluntarily participated in the study. In the study, the "Empathy Scale" developed by Baron-Cohen et al. (2004) and adapted into Turkish by Bora and Baysan (2009) and the "Coping with Stress Scale" developed by Türküm (2002) were used. The Cronbach Alpha internal consistency coefficient of the scales used in the study was examined and it was determined as .85 for the Empathy Scale and .82 for the Coping with Stress Scale. In this direction, the T-Test was used to determine the differences between demographic variables. However, Pearson Correlation analysis was used to determine the relationships between variables within the scope of the study. As a result, it has been observed that the average empathy score of licensed female individuals is higher than that of male individuals. When the t-test results were examined according to the licensed sports variable, a statistically significant difference was found in the sub-dimensions of cognitive empathy, empathic interest-sympathy, emotional response, and social competence. When the t-test results were examined according to the variable of coping with stress in the licensed sports variable, a statistically significant difference was found in the avoidance sub-dimension. Considering the Pearson-correlation analysis results regarding the relationship between the scales used in the study, it is seen that there are statistically significant results.

Key Words: Empathy Skill, Stress, School Teams

INTRODUCTION

Human beings experience their first impressions and experiences by trying to understand, discovering, learning and realizing everything that happens around them. The instinct of curiosity, which facilitates exploring the environment and understanding the world with its experiences, facilitates the development of the individual. One of the factors that provide this development is a sport. Sport is a set of activities that improve the physical and mental health of human beings, especially in terms of personality development, with a higher level of strength and self-confidence compared to other peers.¹ In addition to benefits such as physical and physiological change and development after participation in sports, it also has a positive effect on psychological and social conditions.² As a matter of fact, there are many studies in the literature that focus on psychological factors.³⁻⁹ Especially young individuals should have positive development and should be directed towards various activities that provide absolute satisfaction by supporting their emotional and social development in the field of education. Self-awareness is at the core of the empathy discussed in the research. A person must understand his or her feelings and thoughts before he or she can understand another person's feelings and thoughts. For an empathic behaviour, it is extremely important for an individual to recognize himself, to listen well, to perceive that he may have a different culture and belief value structure, and to understand and accept only the existing position without judgment.^{10,11} In line with this information, empathy is a person's perception of his feelings and thoughts clearly by putting himself in another person's shoes.¹² Researchers state that the cognitive and affective side of empathic skill is an extremely important educational process in terms of being positive and continuous in the person as a feature that can be improved

by training.¹³⁻¹⁷ The second dimension of the study is stress. Stress is a state of nervousness that damages the biological and psychological balance and plays an important role in regulating the damaged balance by adapting to new events and situations, and especially causing a decrease in efficiency.¹⁸ In today's world where rapid social, economic and social changes are seen, stress; Although is much more involved in our lives, it affects society in terms of mental and physiological health.¹⁹ Especially during adolescence, coaches apply intensive and challenging training programs to athletes. Athletes in this age period, going under challenging training, expecting a high level of performance and thinking that their only goal is to win, causes the athlete to develop a stress situation. In such cases, the fact that the age of quitting sports before reaching adolescence is seen at a very early age has led researchers to examine the effects on competition stress.²⁰

MATERIAL AND METHOD

This research has been designed with the relational screening model. This model is aimed to determine the presence and/or degree of co-change between two or more variables.²¹

Research Group: A total of 204 individuals, 96 of whom were male (47.1%) and 108 female (52.9%), voluntarily participated in the study.

Data Collection Tools:

Empathy Scale: The Empathy Scale was adapted to Turkish by Bora & Baysan (2009). The long form of the scale is a measuring tool that has 60 items and produces a score between 0-80 evaluated with 40 items (20 items are excluded from being considered as filler material). The scale ("strongly agree" and "strongly disagree") is evaluated with the least empathic two response options 0,

the moderate empathic response option 1, and the most empathic answer option with 2 points. Higher scores on the scale indicate a high ability to empathize. In the Turkish translation study of the scale, the internal consistency reliability coefficient was determined as 0.85 and the test-retest reliability coefficient as 0.76.22

Coping with Stress Scale. The scale was developed by Türküm (2002). The scale, which consists of 23 items and 3 sub-dimensions, is evaluated as a five-point Likert-type ("completely appropriate" = 5, "quite suitable" = 4, "undecided" = 3, "somewhat suitable" = 2, "not at all suitable" = 1).23

Data Analysis and Interpretation: Microsoft Excel and SPSS 22.0 computer program were used for statistical analysis of the data obtained from the scales. After the obtained data was transferred to the SPSS package program, firstly the lost and empty data were evaluated. As a result of this evaluation, the data of 2 people were

excluded from the analysis. After this stage, the extreme data evaluation was made considering the Mahalanobis distance. As a result of Mahalanobis values, the data of 1 person was excluded from the analysis and analyzes were made on the data of the remaining 203 people. After this stage, firstly, -2, + 7 skewness kurtosis values proposed by Hong, Malik, and Lee24 were taken into consideration for the assumptions of normality and it was determined that the distribution was normal. The Cronbach Alpha internal consistency coefficient of the scales used in the study was examined and it was determined as .85 for the Empathy Scale and .82 for the Stress Coping Scale. Accordingly, the T-Test was used to determine the differences between demographic variables. However, Pearson Product Moment Correlation analysis was used to determine the relationships between variables within the scope of the study.

Findings:

Table 1. The Average, Standard Deviation, Skewness and Kurtosis Values of the Scope of the Study Regarding the Scales Used

| Scales | Sub-Dimensions | N | \bar{x} | Ss | Skewness | Kurtosis |
|--------|----------------------------|-----|-----------|---------|----------|----------|
| ES | Cognitive Empathy | 204 | 13,7990 | 5,34650 | -,292 | -,697 |
| | Empathic Interest-Sympathy | 204 | 4,8824 | 4,10885 | ,660 | -,630 |
| | Emotional Response | 204 | 5,4461 | 1,86807 | -,169 | ,051 |
| | Social Competence | 204 | 2,5784 | 1,60318 | ,378 | -,394 |
| | Avoidance | 204 | 30,6422 | 5,73850 | -,463 | -,065 |
| CSS | Problem Oriented | 204 | 32,2892 | 5,53268 | -,662 | -,125 |
| | Social Support | 204 | 22,0343 | 5,67284 | -,453 | ,201 |

Table 2. T-Test Results Regarding the Scores Obtained from the Empathy Scale by Gender Variable

| Sub-Dimensions | Gender | N | \bar{x} | Ss | t | df | p |
|----------------------------|--------|-----|-----------|---------|--------|-----|-------|
| Cognitive Empathy | Male | 96 | 12,9479 | 5,57696 | -2,163 | 202 | ,032* |
| | Female | 108 | 14,5556 | 5,03879 | | | |
| Empathic Interest-Sympathy | Male | 96 | 5,3125 | 4,45164 | 1,413 | 202 | ,159 |
| | Female | 108 | 4,5000 | 3,75786 | | | |
| Emotional Response | Male | 96 | 5,4688 | 2,09236 | ,163 | 202 | ,871 |
| | Female | 108 | 5,4259 | 1,65311 | | | |
| Social Competence | Male | 96 | 2,7604 | 1,76364 | 1,534 | 202 | ,127 |
| | Female | 108 | 2,4167 | 1,43472 | | | |

When the results of the t-test according to the gender variable are examined in Table 2, it has been determined that there is no statistically significant difference in the sub-dimensions of empathic interest-sympathy, emotional response and social competence. A statistically significant difference was found in the cognitive empathy sub-dimension. When the average scores were examined, it was observed that the average empathy score of licensed female individuals was higher than that of male individuals ($p < 0.05$).

Table 3. T-Test Results Regarding the Scores Obtained from the Coping with Stress Scale According to the Gender Variable

| Sub-Dimensions | Gender | N | \bar{x} | Ss | t | df | p |
|------------------|--------|-----|-----------|---------|-------|-----|------|
| Avoidance | Male | 96 | 31,2604 | 5,46615 | 1,455 | 457 | ,147 |
| | Female | 108 | 30,0926 | 5,94136 | | | |
| Problem Oriented | Male | 96 | 32,3333 | 5,51871 | ,107 | 457 | ,915 |
| | Female | 108 | 32,2500 | 5,57049 | | | |
| Social Support | Male | 96 | 21,9583 | 4,81208 | -,180 | 457 | ,857 |
| | Female | 108 | 5,4259 | 1,65311 | | | |

When the t-test results are examined according to the gender variable in Table 3, it was found that there is no statistically significant difference in the sub-dimensions of avoidance, problem-oriented and social support ($p < 0.05$).

Table 4. T-Test Results Regarding the Scores Obtained from the Empathy Scale According to the Licensed Sports Variable

| Sub-Dimensions | Gender | N | \bar{x} | Ss | t | df | P |
|----------------------------|--------|-----|-----------|---------|-------|-----|-------|
| Cognitive Empathy | Yes | 63 | 14,9365 | 4,32872 | 2,047 | 202 | ,025* |
| | No | 141 | 13,2908 | 5,68399 | | | |
| Empathic Interest-Sympathy | Yes | 63 | 6,8254 | 3,92486 | 4,748 | 202 | ,000* |
| | No | 141 | 4,0142 | 3,89869 | | | |
| Emotional Response | Yes | 63 | 6,0794 | 1,58929 | 3,315 | 202 | ,001* |
| | No | 141 | 5,1631 | 1,91842 | | | |
| Social Competence | Yes | 63 | 3,0952 | 1,44484 | 3,144 | 202 | ,002* |
| | No | 141 | 2,3475 | 1,62122 | | | |

When the t-test results are examined according to the licensed sports variable in Table 4, a statistically significant difference was found in the sub-dimensions of cognitive empathy, empathic interest-sympathy, emotional response and social competence. When the average scores were examined, it was observed that the empathy score averages of the individuals who do sports with a license are higher than the individuals who do not do sports with the license ($p < 0.05$).

Table 5. T-Test Results Regarding the Scores Obtained from the Coping with Stress Scale According to the Licensed Sports Variable

| Sub-Dimensions | Gender | N | \bar{X} | Ss | t | df | P |
|------------------|--------|-----|-----------|---------|-------|-----|-------|
| Avoidance | Yes | 63 | 32,5238 | 5,48563 | 3,201 | 457 | ,002* |
| | No | 141 | 29,8014 | 5,66722 | | | |
| Problem Oriented | Yes | 63 | 32,3333 | 5,58223 | ,076 | 457 | ,940 |
| | No | 141 | 32,2695 | 5,53028 | | | |
| Social Support | Yes | 63 | 22,3175 | 4,54662 | ,476 | 457 | ,635 |
| | No | 141 | 21,9078 | 6,12011 | | | |

When the t-test results are examined according to the licensed sports variable in Table 5, it has been found that there is no statistically significant difference in the problem-oriented and social support sub-dimensions. A statistically significant difference was found in the avoidance sub-dimension ($p < 0.05$). When the average scores were examined, it was seen that the average scores of the individuals who do sports with licenses are higher than the individuals who do not do sports with a license ($p < 0.05$).

Table 6. Pearson-Correlation Analysis Results Regarding the Relationship Between Scales Used in the Study

| n=202 | | Avoidance | Problem Oriented | Social Support |
|----------------------------|---|-----------|------------------|----------------|
| Cognitive Empathy | r | ,283** | ,397** | ,141* |
| | p | ,000 | ,000 | ,045 |
| Empathic Interest-Sympathy | r | ,339** | ,142* | -,091 |
| | p | ,000 | ,043 | ,195 |
| Emotional Response | r | ,385** | ,321** | ,169* |
| | p | ,000 | ,000 | ,016 |
| Social Competence | r | ,281** | ,186** | -,029 |
| | p | ,000 | ,008 | ,683 |

Table 6 shows that between cognitive empathy and avoidance ($r = ,283$; $p < 0.05$) positively low, problem oriented ($r = ,397$; $p < 0.05$) positively moderate, social support ($r = ,141$; $p < 0.05$) there was a low level statistically significant positive correlation. These results can be interpreted that as individuals' cognitive empathy levels increase, their coping levels for these sub-dimensions will also increase. It was found that there was no statistically significant negative correlation between empathic interest-sympathy and social support ($r = -,091$; $p > 0.05$). On the other hand, it was found that there was a moderate positive correlation between empathic interest-sympathy and avoidance ($r = ,339$; $p < 0.05$), and a low level statistically significant relationship in the positive direction between problem oriented ($r = ,142$; $p < 0.05$). These results can be interpreted that as individuals' cognitive empathy levels increase, their coping levels for these sub-dimensions will also increase. Between emotional response and avoidance ($r = ,385$; $p < 0.05$) positively moderate, problem oriented ($r = ,321$; $p < 0.05$) positively moderate, social support ($r = ,169$; $p < 0.05$)) It was found that there is a low level statistically significant positive correlation. These results can be interpreted that as individuals' cognitive empathy levels increase, their coping levels for these sub-dimensions will also increase. It was determined that there was no statistically significant negative correlation between social competence and social support ($r = -,029$; $p > 0.05$). On the other hand, it was determined that there is a moderate positive correlation between social ability and avoidance ($r = ,281$; $p < 0.05$) and a low level statistically significant relationship between problem oriented ($r = ,186$; $p < 0.05$). These results can be interpreted that as

individuals' cognitive empathy levels increase, their coping levels for these sub-dimensions will also increase.

DISCUSSION AND CONCLUSION

In this study, definitions are made about empathy and methods of coping with stress. Its biological aspects and effects on personal development in adolescent individuals were reviewed. In terms of both biological and environmental factors in the development of our characteristics, the effects of empathy and stress-coping methods on human development were examined. In the adolescent period, where many personal, emotional and social skills are shaped, the studies have gained the quality of a study that is very important for a better understanding of these two concepts. In the comparisons made in our study, when the t-test results regarding the scores obtained from the empathy scale according to the gender variable were examined, it was found that there was a significant difference in the statistical analysis results in the cognitive empathy sub-dimension. When the average scores were examined, it was seen that the average empathy score of female individuals was higher than that of male individuals. When the t-test results of the stress scale were examined according to the gender variable, it was found that there was no statistically significant difference in avoidance, problem-oriented and social support sub-dimensions. When the t-test results were examined according to the licensed sports variable, it was seen that there were statistically significant differences in the sub-dimensions of cognitive empathy, empathic interest-sympathy, emotional response, and social competence. When the average scores were examined, it was found that the empathy score averages of the individuals who do sports with licenses are

higher than the individuals who do not do sports with a license. These results can be interpreted as when it is observed that there is an increase in the empathic interest-sympathy levels of individuals, their coping levels related to these sub-dimensions will also increase. In the light of the data obtained as a result of the analyses, it can be interpreted that as the emotional response levels of the individuals' increase, their coping levels related to these sub-dimensions will also increase. As a result of the statistical analysis of the study, it can be said that as individuals' social competence levels increase, their coping levels regarding these sub-dimensions will also increase. When the related literature is examined, it is seen that there are many studies examining the styles of coping with stress according to the gender variable. In a study conducted by Tozoğlu et al.25 on university students, it was reported that the level of coping with stress differs according to the gender variable. The results of this research do not match our study findings. With this research, it is seen that there are many studies in the literature that examine the styles of coping with stress according to the gender variable.26-28 It can be said that these differences arise from the relevant sample group. When different genders interested in team sports were examined, it was found that the empathic skill levels of women were higher than that of men. It has been declared that female team athletes are more understanding, can solve an existing problem faster and more easily, and they are also a sharing structure compared to male athletes.29 The empathic skill level of an adolescent individual showed statistical significance according to their sports status, and accordingly, it was concluded that the empathic tendency levels of the adolescent age group students were much higher than the students who did not have sports habits. Participation in sports activities positively affects psychological, personality development and emotional development characteristics.30 Psychological dimensions of empathic skills and coping with stress levels of individuals who are interested in team sports in adolescent groups have been researched and analysis findings have been obtained in terms of their defence mechanism against uncontrollable stress situations and how their empathic skills vary in competitions and competitions that are predicted to experience stress and anxiety. In interpersonal relationships, it is seen that these cognitive behaviours, which are revealed by the individual to learn to look at the world through the eyes of another person, support the positive relationships in which trust-based people develop their self-understanding and relaxed communication skills with the concept of empathy. It is possible that individuals who cannot empathize will often have difficulties in understanding life. In addition, it is known that individuals who can develop empathic understanding in relationships between people have a more tolerant attitude and approach towards other people. In this way, differences between people can turn into a source of wealth, not a cause of conflict. In our study, it is known that stress is one of the most negative factors affecting human productivity in individual and social life. Not being able to directly see the negative effects of this condition, which is one of the important cognitive diseases of our age, on human relations, reveals its importance in understanding the

importance of the stress source. In our age, individuals and communities who can cope with stress have a concrete decrease in productivity. The study suggests a set of preventive mechanisms under excessive stress that can help cope with stress, evaluate its current and potential effects, and cope with stress.

REFERENCES

1. İşler, H. (2012). Physical Education and Sports Information. Istanbul: Ol Book.
2. Efe, M., Öztürk, F., Koparan, Ş. ve Şenışık Y. (2008). The effect of volleyball training on social efficacy expectation and assertiveness at 14-16 age group individuals. *Journal of Uludağ University Faculty of Education*, 21 (1), 69-77.
3. Berengüi, R., García-Pallarés, J., López-Gullón, J. M., Garcés de Los Fayos, E. J., Caravaca, E. C., & Martínez-Abellán, A. (2013). Fundamental psychological skills in Olympic Wrestling. *Cuadernos de Psicología del Deporte*, 12(2), 19-22.
4. Olmedilla, A., Ortega, E., Andreu, M. D., & Ortín, F. J. (2010). Psychological intervention program in soccer players: evaluation of psychological skills through CPRD. *Journal of Sports Psychology*, 19 (2), 249-262.
5. Yarayan, Y. E., Yıldız, A. B., & Gülşen, D. B. A. (2018). Examination of mental toughness levels of individual and team sports players at elite level according to various variables. *The Journal of International Social Research*, 11(57), 992-999.
6. Yarayan, Y. E., & Ayan, S. (2018). Examination of imagination format of athletes in different team sport. *Journal of International Social Research*, 11(60), 1416-1422.
7. Yarayan, Y. E., Yıldız, A. B., Gülşen, D. B. A., & İlhan, L. (2020). Is the level of football a determinant of prosocial and antisocial behavior?. *Spormetre-The Journal of Physical Education and Sport Sciences*, 18(4), 125-133.
8. Arı, Ç., Ulun, C., Yarayan, Y. E., Dursun, M., Mutlu, T., & Üstün, Ü. D. (2020). Mindfulness, healthy life skills and life satisfaction in varsity athletes and university students. *Progress in Nutrition*, 22, 1-8.
9. Çelik, O. B., & Güngör, N. B. (2020). The effects of the mental training skills on the prediction of the sports science faculty students' anxiety levels. *International Journal of Eurasian Education and Culture*, 9,888-929.
10. Kabapınar, Y. (2015). *Developing with Empathy Developing Empathy: Child and Empathy*, Peçem Academy Publishing Training Consultancy 1st Edition, Ankara.
11. İlkim, M., & Akyol, B. (2018). The comparison of some motoric characteristics of hearing impaired individuals sports athletic and gymnastic. *Universal Journal of Educational Research* 6(10): 2148-2152
12. Dökmen, Ü. (2013). *Communication Studies and Empathy in Art and Daily Life*, Remzi Publishing, 49th Edition. Istanbul, 157-169.
13. Guttman, H.A. (2001). *Empathy In Families of Women with Borderline Personality Disorder, Anorexia Nervosa, And A Control Group Family Process*, Fall, 2000 Family Process, Inc. In Association.
14. Halıçoğlu, İ. U. (2004). A study on relationship between level of mother's skill of empathy upbringing attitude. Unpublished Master's Thesis, Gazi University Institute of Educational Sciences, Ankara.
15. Tanrıdağ, Ş. R. (1992). Investigation of Empathic Tendency and Empathic Skill Levels of Personnel Working in Mental Health Services in Ankara in Terms of Various Variables. Unpublished Doctoral Thesis, Hacettepe University Institute of Social Sciences, Ankara.
16. Ural, S. N. (2010). The effect of social studies course on the democratic attitude and empathic tendency levels of primary

- school students. Unpublished Master's Thesis, Sakarya University Institute of Social Sciences, Sakarya.
17. Ilkim and Mergan (2021), Examination Of Exercise In Individuals With Disabilities And Inquiry Skills Of Students In Sports Education Department, Int J Life Sci Pharma Res. ISSN 2250-0480; SP-14; "Health and Sports Sciences.
 18. Kuru, E. (2000). Program Development in Physical Education and Sports. Ankara: 1st Evening Art School Press.
 19. Türkçapar, Ü. (2007). Comparison of stress problem solving skills of physical education and sports school students and education faculty classroom teacher students. Unpublished Master Thesis. Gazi University, Institute of Educational Sciences, Department of Physical Education and Sports Teaching, Ankara.
 20. David, P. (1999). Children's Rights and Sport, The International Journal of Children's Rights, 7: pp. 53-81, 1999.
 21. Creswell, J. W. & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
 22. Bora E, Baysan-Arabacı L. (2009). Psychometric features of Turkish version of empathy quotient in university students. Bulletin of Clinical Psychopharmacology. 19(1): 39-47.
 23. Türküm, A. S. (2002). The Development of Coping with Stress Scale: Validity and Reliability Studies. Turkish Psychological Counseling and Guidance Journal, 2(8),19-31.
 24. Hong, S., Malik, M. L., ve Lee, M. K. (2003). Testing configural, metric, scalar, and latent mean invariance across genders in sociotropy and autonomy using a non-Western sample. Educational and Psychological Measurement, 63(4), 636-654.
 25. Tozoğlu, E., Bayraktar, G., Dursun, M., Gülbahçe, Ö., & Doğar, A. V. (2017) Research for university students' levels of dealing with stress from different types of variables. Journal of Education and Practice, 8, 25.
 26. Ptacek J. T., Smith R.E. and Zanas, J. (1992) Gender, appraisal and coping: a longitudinal analysis, Journal of Personality, 60(4), 747-770.
 27. Güler, Ö. ve Çınar, S. (2010). Determining to the perceived stressors and the used coping strategies of the nursing department students, Maltepe University Journal of Nursing Science and Art, Symposium Special Issue, 252-255.
 28. Savcı, M. ve Aysan, F. (2014). The relationship between the perceived stress level and the stress coping strategies in university students. International Journal of Turkish Education Sciences 44-56.
 29. Dorak, F. & Vurgun, N. (2006). The relation of empathy and team cohesion in terms of team sports?. Spormetre-The Journal of Physical Education and Sport Sciences, 4(2), 73-77.
 30. Bayar, P. (2003). The comparison of personality characteristics of female athletes and nonathletes. Hacettepe Journal of Sport Sciences. 14(3), 133-143.