

The Relationship Between Problem-Solving Skills and Humor-Based Coping Strategies in Young Football Players

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Abstract

The primary aim of this study is to investigate the relationship between humor-based coping strategies and problem-solving skills among young football players aged 17-21 years. A correlational survey design was conducted with 309 male athletes who are actively professional football players in the Alanya district of Antalya province. The Social Problem-Solving Inventory-Short Form and the Coping Humor Scale were used as data collection instruments. Data analysis included descriptive statistics, one-way ANOVA, Pearson correlation analysis, and simple regression analysis. Regarding the factors of age and football experience, there were generally no significant differences in humor-based coping and problem-solving skills. However, in the careless/impulsive style subscale, the 17-year-old group scored significantly lower than the 20-year-old group. A strong positive correlation was detected between problem-solving skills and humor-based coping. Simple regression analysis demonstrated that problem-solving skills revealed 20.8% of the variance in humor-based coping behavior. The research indicated a strong positive relationship between problem-solving skills and humor-based coping strategies among young football players. It was observed that young athletes with high problem-solving skills use humor as an effective coping mechanism. These findings demonstrate the methodological necessity of employing integrated approaches that incorporate humor and problem-solving skills in enhancing the psychological resilience of young athletes.

Keywords: Coping, Humor, Problem-Solving, Young Football Player

Genç Futbolcularda Problem Çözme Becerileri ile Mizah Temelli Başa Çıkma Stratejilerinin İlişkisi

Öz

Bu araştırmanın temel amacı, 17-21 yaş aralığındaki genç futbol oyuncularının mizah yoluyla başa çıkma stratejileri ile problem çözme becerileri arasındaki ilişkiyi incelemektir. Araştırma, Antalya ili Alanya ilçesinde aktif futbol oynayan 17-21 yaş aralığındaki 309 erkek sporcuyla ilişkisel yöntem modelinde yürütülmüştür. Veri toplama araçları olarak Sosyal Problem Çözme Envanteri-Kısa Form ve Mizahi Yoluyla Başa Çıkma Ölçeği kullanılmıştır. Verilerin analizinde betimsel istatistikler, tek yönlü anova, pearson korelasyon analizi ve basit regresyon analizi uygulanmıştır. Yaş ve futbol deneyimi faktörleri açısından mizah yoluyla başa çıkma ve problem çözme becerilerinde genel olarak anlamlı farklılık bulunmamıştır. Ancak dikkatsiz/dürtüsel tarz alt

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boyutunda 17 yaş grubu 20 yaş grubundan anlamlı düzeyde düşük puan almıştır. Problem çözme becerileri ile mizah yoluyla başa çıkma arasında güçlü pozitif korelasyon tespit edilmiştir. Basit regresyon analizi sonuçları problem çözme becerisi ile mizah yoluyla başa çıkma arasında %20,8 oranında paylaşılan varyans olduğunu göstermiştir. Araştırma, genç futbolcularda problem çözme becerileri ile mizah yoluyla başa çıkma stratejileri arasında güçlü pozitif ilişki olduğunu ortaya koymuştur. Problem çözme becerisi yüksek olan genç sporcuların mizahı etkili bir başa çıkma mekanizması olarak kullandıkları tespit edilmiştir. Bu bulgular, genç sporcuların psikolojik dayanıklılığının geliştirilmesinde mizah ve problem çözme becerilerinin entegre yaklaşımlarla ele alınması gerektiğini göstermektedir.

Anahtar Kelimeler: Başa Çıkma, Mizah, Problem Çözme, Genç Futbolcu

INTRODUCTION

Adolescence is an extremely sensitive period when young people shape their identities and take steps toward independence. Young athletes in this age group have to deal with the natural challenges of adolescence on the one hand, while also facing the unique pressures of sports on the other (McNeill and Steele, 2016). The abstract thinking ability and hypothetical reasoning skills that emerge during adolescence significantly enhance young people's capacity to cope with complex problems (Blakemore and Mills, 2014). In this context, understanding the role of humor in controlling dual stressors can help professionals working with adolescent athletes develop more effective intervention approaches.

Participation in sports during adolescence is of vital importance not only in terms of physical development but also in terms of increasing mental capacity and developing social skills (Bozdağ and Sarı, 2021). On the one hand, people who participate in sports activities can mitigate the feeling of loneliness and, on the other hand, they satisfy their needs to form meaningful bonds with those around them and develop effective communication skills (Bozdağ and Sarı, 2021). In this context, soccer is one of the most popular sports worldwide, enjoyed by millions of young people who also benefit from its contribution to their personal development (Holt et al., 2017). Football does not evaluate the performance of players solely as a physical effort; due to rapidly changing game dynamics, the need for quick decision-making, and complex tactical situations, this sport requires intense mental processing (Mimmert et al., 2017). Young footballers

struggle not only with the difficulties they encounter in training and match environments but also, with stress factors arising from their daily lives. This double burden can create stress and anxiety that can affect the quality of their performance on the field (Akarçesme, 2004). For this reason, it is extremely important for football players to strengthen themselves both physically and mentally (Apaydın, 2000). The ability to cope with difficulties and solve problems plays a decisive role not only in the success of athletes on the field but also in their mental resilience and standard of living (Tamminen and Gaudreau, 2017). At this point, it is necessary to understand how the use of humor, which has an important role among stress coping strategies, contributes to young footballers' struggle with difficulties both in training and in daily life.

Humor is a powerful tool in managing stress (Martin and Ford, 2018). Beyond lowering stress hormone levels, it has a broad impact that strengthens bonds between group members and encourages mutual support (Martin and Ford, 2018). According to Cann et al. (2010), humor increases people's emotional resilience in stressful conditions, reduces their perception of danger, and offers more constructive coping methods. Martin (2007) found that humor triggers mental reappraisal processes in people when they encounter stress, thereby mitigating the harmful consequences of stress. Kuiper and McHale (2009) also highlighted the effects of humor on strengthening social relationships and improving group dynamics, revealing that it plays a critical role in ensuring group cohesion.

The function of humor in the context of sports is becoming increasingly important. Studies showing that humor plays a critical role in managing the stress factors experienced by young athletes reveal that humor strengthens interpersonal bonds while also reducing negative emotional states (Morgan et al., 2019; Tamminen et al., 2016). Morgan et al. (2019). In their research on coping methods among elite young athletes, Morgan et al. (2019) stated that humor can serve as a crucial linking component in the interaction between mental resilience and performance. This role of humor in coping with stress also plays a critical role in enabling young soccer players to generate effective solutions when faced with unexpected situations during a match. Indeed, stress management and problem-solving skills are two fundamental areas of competence that are closely related in a dynamic sport such as football (Memmert et al., 2017).

Problem-solving abilities are vital for success both on and off the field in a sport like soccer, which is characterized by rapidly changing and unpredictable situations (Memmert et al., 2017). These abilities are of great importance for football players in terms of successfully coordinating training periods and match environments under intense competitive conditions (Memmert et al., 2017). Coping with stress, creative approaches, and mental agility play a supportive role in enhancing athletes' abilities (Kadaş et al., 2023; Şahin, 2024). It has been found that mental agility and problem-solving abilities enable football players to respond quickly and efficiently when faced with sudden developments and increase their ability to cope with stress (Şahin, 2024).

The theoretical findings of the relationship between humor and problem-solving skills are based on the common mechanisms of cognitive flexibility and creative thinking processes (Evans and Stanovich, 2013; McGraw and Warren, 2010). According to McGraw and Warren's (2010) Benign Violation Theory, humor involves the mental resolution of conflicting and safe situations, and this process requires similar cognitive operations to problem-solving. Furthermore, within the Dual Process Theory framework, it

is known that both humor and problem-solving processes involve both automatic (System 1) and controlled (System 2) cognitive processes (Evans and Stanovich, 2013). These theoretical approaches suggest that humor enhances cognitive flexibility, thereby strengthening the capacity to develop alternative perspectives.

Empirical evidence also supports these theoretical findings. Zhou and colleagues (2021) showed that humor facilitates insight problem-solving processes, while Korovkin and Nikiforova (2015) demonstrated that humor-oriented thinking enhances creative problem-solving performance. The general psychology literature also confirms that humor positively affects the brain's mental adaptation ability and develops problem-solving mechanisms (Wang et al., 2018). These findings indicate that there may be a strong relationship between humor and problem-solving at the cognitive level.

A review of the national and international literature reveals that studies examining the relationship between humor and problem-solving skills in the context of soccer are limited. Existing research has generally been conducted on general populations or different age groups (Canpolat et al., 2023; Traş et al., 2011), and no studies have been found that examine this relationship specifically in young football players aged 17-21.

The main rationale for including the variables of age and sports experience in the study is that, according to Erikson's psychosocial development theory, this period is a critical stage in terms of identity formation and, as stated in the neurodevelopmental findings of Casey et al. (2008), it is thought that brain development in this age range may affect humor and problem-solving processes in different ways. The sports experience factor was addressed within the framework of Deliberate Practice Theory to understand the relationship between experience and the development of cognitive skills.

This study aims to examine the relationship between coping strategies through humor and problem-solving skills in young football players aged 17-21. The main research questions are as follows:

RQ1: Do young soccer players differ in terms of age groups, subdimensions of problem-solving skills, and levels of coping through humor?

RQ2: Do young football players differ in terms of their football experience duration, sub-dimensions of problem-solving skills, and levels of coping through humor?

RQ3: Is there a significant relationship between young football players' problem-solving skills and their coping strategies through humor?

RQ4: Do young football players' problem-solving skills significantly predict their coping strategies through humor?

The results of this study are expected to contribute to the design of programs aimed at increasing young soccer players' psychological resilience, coping with performance anxiety, and developing their problem-solving skills. Furthermore, a better understanding of the relationship between humor and problem-solving skills will also make important contributions to the sports science literature. In the long term, this study aims to provide information that could be beneficial for young soccer players in terms of both their athletic career development and their overall well-being.

METHOD

Research Model: In this study, a correlational approach was adopted to determine the relationships between variables and the

direction of these relationships. The correlational method is a research model that aims to determine the existence and degree of co-variation between two or more variables (Karasar, 2019). The population of the study consists of young individuals actively involved in soccer, and convenience sampling was used in the sample selection.

Study Group

The population of this study consists of male athletes aged 17-21 who actively play soccer in the Alanya district of Antalya Province. A statistical power analysis was performed using G*Power 3.1 software to determine the sample size of the study. Based on an alpha level of 0.05, statistical power of 80%, and medium effect sizes (Cohen, 1988), it was determined that 85, 55, and 159 participants were needed for correlation, regression, and ANOVA analyses, respectively (Faul et al., 2007). A total of 309 male athletes selected using convenience sampling were included in the study, and this sample size has sufficient power for the planned analyses.

Ethics Approval

Approval for the study was obtained from the Non-Interventional Clinical Research Ethics Committee of the Faculty of Sports Sciences, Selcuk University, dated 28.05.2025 and numbered 217. Written consent was obtained from participants on a voluntary basis, and parental consent forms were obtained for those under the age of 18.

Table 1. Demographic Information of Young Football Players Participating in the Study

	Groups	N	%
Age	17	57	18.4
	18	64	20.7
	19	54	17.5
	20	71	23.0
	21	63	20.4
Time spent playing soccer	1-2 years	81	26.2
	3-4 years	77	24.9
	5-6 years	78	25.2
	7 years and above	73	23.6
	Total	309	100

As shown in Table 1, a total of 309 athletes aged 17-21 participated in the study. The age distribution of the participants was balanced, with the highest participation coming from the 20-year-old group (23.0%). A balanced distribution was also observed in terms of duration of soccer playing experience, with participants distributed similarly across all experience levels (1-2 years: 26.2%; 3-4 years: 24.9%; 5-6 years: 25.2%; 7 years and above: 23.6%).

Process

Research data was collected between June 30, 2025, and July 30, 2025, using face-to-face and online survey methods. The data collection tool consists of the following scales, along with a demographic information form.

Data Collection Tools

Personal Information Form

The researcher developed the personal Information Form to determine the demographic characteristics of the participants.

The form included questions regarding two demographic variables: the participants' age and the duration of their active participation in football.

Social Problem-Solving Inventory-Short Form (SPSI-SF)

The "Social Problem-Solving Inventory-Short Form" developed by D'Zurilla and colleagues (2002) and adapted into Turkish by Çekici (2009) was used. The scale is a 25-item measurement tool consisting of five subscales: "Positive Orientation to Problems," "Negative Orientation to Problems," "Rational Problem Solving," "Careless/Impulsive Style," and "Avoidant Style." The scale uses a five-point Likert-type rating scale, with responses ranging from "Not at all appropriate (0)" to "Completely appropriate (4)". The lowest possible score on the scale is 0, and the highest possible score is 100. A high score indicates a good level of social problem-solving skills, while low scores indicate a low level of social problem-solving skills. In the adaptation study conducted by Çekici (2009), confirmatory factor analytic approach was

performed, and it was determined that the fit indices met the criteria. In the original adaptation study, the reliability coefficients for the subscales were found to be Rational Problem-Solving .81, Negative Attitude Towards Problems .76, Avoidance Style .74, and Careless/Impulsive Style .61. In this study, the reliability coefficients for the subscales were found to be .72 for Rational Problem-Solving, .70 for Negative Problem Orientation, .71 for Avoidance Style, and .75 for Careless/Impulsive Style, and the Cronbach Alpha coefficient for the entire scale was found to be .79.

Humor Coping Scale

Developed by Martin (1996) and later adapted into Turkish by Yerlikaya (2009), the "Coping with Difficulties through Humor Scale" (MYBÇÖ) is a 7-item scale that measures the use of humor as a coping strategy in stressful situations. It is a self-report scale using a four-point Likert-type rating scale: (1) Strongly Disagree, (2) Disagree, (3) Agree, and (4) Strongly Agree. The internal consistency Cronbach's alpha coefficient calculated to test the reliability of the scale was found to be .80. In this study, the Cronbach's alpha coefficient of the scale was found to be .75.

Analysis of Data

In this study, normality tests, one-way analysis of variance (ANOVA), Pearson correlation analysis, and simple linear regression analysis were used to analyze the data. First, the normality of the data was determined by checking that the Skewness and Kurtosis values were between +2 and -2, indicating that the data were normally distributed (Tabachnick and Fidell, 2013). One-way analysis of variance (ANOVA) was applied to examine the differences between groups, and post-hoc analyses were performed. Pearson correlation analysis was performed to examine the relationships between variables. Simple regression analysis was performed to determine the predictive effect of problem-solving skills on coping through humor. Microsoft Excel 2021 was used for data organization and processing, and the SPSS 27.0 package program was used for

statistical analyses. The statistical significance level was set at $p < 0.05$.

RESULTS

Table 2. Participants' Problem-Solving and Coping Through Humor Results Based on Age Factor ANOVA Test Results

Scale	Age	N	X	Sd	F	P	Tukey
Coping Through Humor	17	57	3.05	0.69	1.572	0.182	-
	18	64	2.86	0.69			
	19	53	2.83	0.69			
	20	71	2.77	0.69			
	21	63	2.81	0.64			
Problem-Solving skills	17	57	3.66	0.48	0.557	0.694	-
	18	64	3.62	0.60			
	19	54	3.58	0.58			
	20	71	3.70	0.55			
	21	63	3.70	0.47			
Positive Attitude Towards Problems	17	57	3.90	0.50	0.887	0.472	-
	18	64	3.97	0.51			
	19	54	3.82	0.56			
	20	71	3.91	0.53			
	21	63	3.98	0.51			
Negative Attitude Towards Problems	17	57	4.15	0.53	1.354	0.25	-
	18	64	3.91	0.81			
	19	54	3.86	0.70			
	20	71	3.93	0.79			
	21	63	3.95	0.72			
Rational-Problem Solving	17	57	3.75	0.63	1.51	0.199	-
	18	64	3.58	0.84			
	19	54	3.44	0.85			
	20	71	3.46	0.80			
	21	63	3.50	0.69			
Careless/Impulsive Style	17	57	3.42	0.82	3.315	0.011*	17<20
	18	64	3.52	0.76			
	19	54	3.55	0.80			
	20	71	3.80	0.67			
	21	63	3.79	0.68			
Avoidance Style	17	57	3.59	0.48	0.1697	0.15	-
	18	64	3.74	0.50			
	19	54	3.74	0.51			
	20	71	3.84	0.61			
	21	63	3.73	0.52			

* $p < 0.05$

When examining the one-way ANOVA results presented in Table 2, no statistically significant differences were found in most of the general scores and subdimensions of the problem-solving scale and the overall humor coping scale according to the age factor ($p > 0.05$). However, a statistically significant

difference was found between age groups in the careless/impulsive style sub-dimension ($F=3.315$, $p=0.011$). According to the results of the Tukey HSD multiple comparison test, the mean of the 17-year-old group ($X=3.42$) is significantly lower than the mean of the 20-year-old group ($X=3.80$).

Table 3. ANOVA Test Results for Coping Through Problem-Solving and Humor According to Participants' Football History

Scales	Football History	N	X	Ss	F	P	Tukey
Coping Through Humor	1-2 years	81	2.89	0.64	0.693	0.557	-
	3-4 years	77	2.90	0.71			
	5-6 years	77	2.88	0.63			
	7 years +	73	2.76	0.75			
Problem-Solving skills	1-2 years	81	3.57	0.53	1.010	0.388	-
	3-4 years	77	3.70	0.47			
	5-6 years	77	3.68	0.57			
	7 years +	74	3.68	0.59			
Positive Attitude Towards Problems	1-2 years	81	3.82	0.54	3.144	0.026*	1-2 years < 7 years +
	3-4 years	77	3.89	0.52			
	5-6 years	77	3.91	0.49			
	7 years +	74	4.07	0.52			
Negative Attitude Towards Problems	1-2 years	81	3.84	0.72	0.918	0.432	-
	3-4 years	77	3.98	0.70			
	5-6 years	77	3.99	0.76			
	7 years +	74	4.02	0.70			
Rational Problem-Solving	1-2 years	81	3.89	0.61	1.716	0.164	-
	3-4 years	77	3.86	0.58			
	5-6 years	77	3.72	0.75			
	7 years +	74	3.70	0.70			
Careless/Impulsive Style	1-2 years	81	3.40	0.77	3.795	0.011*	1-2 years < 5-6 years 1-2 years < 7 years +
	3-4 years	77	3.63	0.73			
	5-6 years	77	3.77	0.76			
	7 years +	74	3.73	0.71			
Avoidance Style	1-2 years	81	3.64	0.59	1.197	0.311	-
	3-4 years	77	3.75	0.50			
	5-6 years	77	3.79	0.53			
	7 years +	74	3.75	0.49			

* $p < 0.05$

When examining the one-way ANOVA results presented in Table 3, no statistically significant difference was found in the humor coping scale and the problem-solving scale sub-dimension according to the football background factor ($p > 0.05$). However, a statistically significant difference was found between the groups in the positive orientation toward the problem subscale ($F = 3.144$, $p = 0.026$). According to the results of the Tukey HSD multiple comparison test, participants with 7 years or more of active football experience ($X = 4.07$) had significantly higher scores than participants with 1-2 years of active football experience ($X = 3.82$).

Similarly, a significant difference was found between groups in the careless/impulsive style subscale ($F = 3.795$, $p = 0.011$). According to Tukey HSD results, the average of participants with 1-2 years of active football experience ($X = 3.40$) is significantly lower than both participants with 5-6 years ($X = 3.77$) and 7 years or more ($X = 3.73$) of soccer experience.

Table 4 shows that the results of the Pearson correlation analysis indicate a moderate positive and statistically significant relationship between coping through humor and problem-solving skills ($r = .456$, $p < .001$).

Table 4 . Correlation Results Between Coping Through Humor and Problem-Solving Scale

	Problem-Solving Skills
Coping Through Humor	.456**

** $p < 0.01$

Table 5. Simple Regression Analysis Results of the Study

Variable	B	Std. Error	β	T	P	95% CI
Fixed	0.740	0.238		3.108	0.000	0.272-1.209
Problem-Solving Ability	0.579	0.064	0.456	8.981	0.002	0.452-0.706

R: 0.456, R²: 0.208, $p < .001$

Dependent Variable: Coping Through Humor

Table 5 shows that the results of the simple regression analysis indicate a moderate positive relationship between problem-solving skills and coping through humor. In the regression model, problem-solving skills were statistically significantly associated with 20.8% of the total variance related to coping through humor. These findings indicate a strong covariation between the two variables. When the model assumptions were checked, it was determined that the standardized residuals were normally distributed, and the assumption of equal variance was met. These findings reveal a strong correlational link between problem-solving skills and the use of humor.

DISCUSSION and CONCLUSION

The findings of this study reveal a strong positive relationship between coping strategies through humor and problem-solving skills, as well as important results that support the theoretical foundations of this relationship. The research results are consistent with the literature and provide valuable information regarding the psychological development of young athletes.

The finding that age and sports experience factors do not generally create significant differences in coping through humor and problem-solving skills is consistent with various studies in the literature (Table 2, Table 3). This finding is consistent with the studies by Akandere (2015), Fidanoğlu (2006), Saltuk (2006), and Tümkaya (2003),

which reported no changes in humor styles based on the age factor. Similarly, it is consistent with the studies by Altın and Demir (2019, Temel and Ayan (2015), and Yıldırım et al. (2009) which indicate that problem-solving skills do not change based on age.

However, it is noteworthy that the 17-year-old group scored significantly lower than the 20-year-old group on the careless/impulsive style subscale. This indicates that younger football players exhibit less impulsive behavior and approach problem-solving processes more carefully. This finding suggests that impulsivity levels may increase with age and is consistent with the neurodevelopmental studies by Casey et al. (2008), which reported that risk-taking behaviors may increase in late adolescence.

Steinberg's (2013) study, which states that young adults' emotional regulation skills are not yet fully developed and that this situation may increase their tendency to make impulsive decisions, supports our research findings. Furthermore, football as a sports activity that requires quick decision-making, young players' tendency to adopt a more cautious and analytical approach can be explained by their lack of experience.

This finding can also be linked to Dahl's (2004) study on brain development during adolescence. The researcher reported that the development of the prefrontal cortex is slower than that of the limbic system and that this situation may cause temporary increases in impulsive behavior with advancing age.

When examining the effects of soccer playing duration on humor and problem-solving skills (Table 3), our research findings show a consistent relationship with studies in the literature. In particular, soccer players with 7+ years of sports experience scoring higher on positive problem orientation demonstrates the long-term positive effects of sports. This finding is consistent with the findings of Kazarian and Martin (2004), Martin et al. (2003), and Traş et al. (2011) that individuals who play sports and have a specific sports background have a positive and optimistic sense of humor.

The fact that experienced football players also show significant differences in the careless/impulsive style dimension (Table 3) reveals the effect of sports experience on problem-solving approaches. This finding suggests that as sports experience increases, football players may exhibit more impulsive approaches, and this may be related to the development of experienced players' quick decision-making abilities (Evans and Stanovich, 2013; Raab and Johnson, 2007; Yarrow et al., 2009).

In terms of problem-solving skills, Yılmaz and Abakay (2020) reported that middle school students who participate in sports have statistically higher problem-solving skills, and that these skills develop more positively as the number of years of participation in sports increases. Which states that sports have positive effects on individuals' creativity and problem-solving skills, supports our current findings.

The most striking finding of the study, the strong positive correlation between coping through humor and problem-solving skills, is highly consistent with similar studies in the literature (Table 4). Canpolat et al. (2023)'s finding of a positive relationship between humor and problem-solving skills directly supports our current findings. Tuğut and Kaya (2017)'s finding of a positive relationship between the use of therapeutic humor and problem-solving skills also reinforces these results.

Studies by Korovkin and Nikiforova (2015), and Zhou et al. (2021) showing that a positive sense of humor can increase individuals'

insight and problem-solving skills strengthen the theoretical foundations of our research findings. Kellner and Benedek (2016)'s report that creative potential and intelligence level are important for humor production provides valuable insights into the cognitive foundations of the humor-problem solving relationship.

The underlying mechanism of this relationship, as stated by Martin and Ford (2018), is based on humor's capacity to increase cognitive flexibility, creative thinking, and the development of alternative perspectives. Yerlikaya (2009)'s finding of a negative relationship between consistent humor styles and stress, anxiety, and depression, and Cann and Etzel (2008)'s demonstration that positive personality traits mediate the relationship between humor understanding and problem-solving, reveal the multidimensional nature of this relationship.

The fact that the shared variance between the two variables is 20.8% demonstrates the practical importance of the relationship between problem-solving skills and coping through humor (Table 5). This finding is consistent with Koç (2016)'s study, which states that there is a meaningful connection between problem-solving approaches and solution-focused thinking and that there is a statistically significant relationship between problem-solving approaches and humor styles.

The study by Traş et al. (2011), which reports that as problem-solving skills increase, self-esteem, participatory humor, and the use of self-enhancing humor increase, while aggressive and destructive humor levels decrease, reveals the multidimensional nature of the predictive characteristics of the humor-problem-solving relationship. Research, which reports a positive correlation between life satisfaction and relational humor and self-enhancing humor in middle school students, also supports our regression findings.

Zhao et al. (2014)'s demonstration of the mediating effect of social support and self-esteem in the relationship between humor style and life satisfaction, and Ford et al. (2016)'s finding that happy people have positive humor styles, explain the social and

individual dimensions of the predictive relationships in the regression analysis.

Our research findings are also consistent with the literature showing that humor is an effective coping mechanism. Nezelek and Derks (2001) reported that individuals who use humor as a coping tool have more positive psychological adjustment and social communication, and Erickson and Feldstein (2007) found that social and self-enhancing humor styles are positively correlated with healthy coping styles, strengthening the psychological foundations of our current findings.

Cann et al. (2010) and Martin (2007) noted that humor increases people's emotional resilience in stressful conditions, reduces their perception of danger, and offers more constructive coping methods, emphasizing the importance of our research results in the context of stress management.

Morgan et al. (2019)'s research on coping methods among elite young athletes suggests that humor may serve as an important connecting element in the interaction between mental resilience and performance, highlighting the practical value of our research findings.

Tamminen et al. (2016) reported that humor strengthens interpersonal bonds while reducing negative emotional states, and Steinhardt and Dolbier (2008) reported that individuals develop different ways of thinking in the face of problems, making them less affected by negative emotions and behaviors, highlighting the importance of humor for young soccer players in terms of team dynamics and individual performance.

Memmert et al. (2017) report that problem-solving abilities are vital for success both on and off the field in a rapidly changing sport like soccer, which is full of unpredictable situations. Kadaş et al. (2023) report that coping with stress, creative approaches, and mental agility play a supportive role in advancing athletes' problem-solving abilities, highlighting the importance of our research findings in terms of sports performance.

Wang et al. (2018)'s study, which confirms that humor positively affects the brain's mental adaptation ability and develops problem-solving mechanisms in the general psychology literature, supports the neurological foundations of our research findings. Blakemore and Mills (2014) reported that abstract thinking ability and hypothetical reasoning skills emerging during adolescence significantly strengthen young people's capacity to cope with complex problems, explaining the advantages of 17-21-year-old soccer players during their developmental period.

McNeill and Steele (2016) emphasize that adolescent athletes face the unique pressures of sport during this sensitive period when they are shaping their identities and taking steps toward independence, and highlight the importance of humor's role in managing this dual source of stress. This underscores the value of our research findings within the context of developmental psychology.

The results show that coaches and sports psychologists can use humor-based interventions to increase athletes' psychological resilience. These findings emphasize the importance of developing both humor and problem-solving skills for young soccer players in terms of both their athletic career development and their general well-being, and contribute valuable insights to the sports science literature.

This study has several limitations. First, the study is limited to male football players aged 17-21 in the Alanya district of Antalya province, and the findings cannot be generalized to different geographical regions, sports disciplines, and female athletes. Second, causal relationships could not be determined due to the convenience sampling method and cross-sectional research design. Third, the use of self-report scales carries the risk of social desirability bias. Finally, the study only examined coping and problem-solving skills through humor, leaving other potential variables such as personality traits, team climate, and coach support out of scope.

This study revealed a moderate, positive, and statistically significant relationship between

young soccer players aged 17-21's coping strategies through humor and their problem-solving skills. Regression analysis results showed that the shared variance between problem-solving skills and coping through humor was 20.8%, and this relationship was statistically significant.

In terms of age and active football experience factors, no general differences between groups were found in coping through humor and problem-solving skills. However, the 17-year-old group scored significantly lower than the 20-year-old group on the careless/impulsive style subscale, indicating that impulsive problem-solving approaches may increase with age. Furthermore, the fact that footballers with 7+ years of experience performed better than beginners in terms of positive orientation towards problems highlights the long-term psychological gains of sport.

These findings show that young athletes who developed problem-solving skills use humor as an effective strategy for coping.

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Author's Statement of Contribution to the Article

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Ethics Committee Approval

The study was conducted in accordance with the principles of the Declaration of Helsinki. Ethical approval was granted by the Ethics Committee of the Faculty of Sports Sciences, Selçuk University (Decision No: 2025/217, date: 05/28/2025).

Conflict of Interest Statement

There are no conflicts of interest among the authors.

Peer Review

After the blind review process, it was found suitable for publication and accepted.

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