

Violence in sports: A look at mental endurance, problem-solving, and violent tendencies in young active athletes

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ABSTRACT

This study aimed to examine the relationship between mental endurance, problem-solving skills, and attitudes toward violence in sports among young active athletes. The study population consisted of individuals aged 15–35 residing in Ankara Province, and the sample included 101 volunteer athletes training in various sports branches at the Youth and Sports Club in the Etimesgut district. Data were collected using a demographic information form, the Mental Endurance Inventory, the Independent–Reciprocal Problem-Solving Scale, and semi-structured interviews. The quantitative data were analyzed using SPSS (v. 22.0), while the qualitative data were evaluated through thematic analysis. The findings indicated that the athletes generally demonstrated above-average levels of mental endurance and problem-solving skills, while their tendencies toward violence were relatively low. Moreover, athletes who scored higher in the sub-dimensions of emotional control and stress management were better able to regulate negative emotions such as anger during competition and were less prone to aggressive behavior. Our findings highlight the crucial role of psychological resilience and social support in preventing violence in sports. Therefore, investing in the mental and social development of young athletes—by all stakeholders, including coaches, sports psychologists, families, and sports administrators—appears to be one of the most effective strategies to combat violence in the sporting arena.

KEYWORDS

Mental Toughness; Problem Solving; Violent Tendencies; Family Support; Competition Pressure

1. INTRODUCTION

The phenomenon of violence in sports has historically been seen as a natural byproduct of competition and physical struggle. Since ancient times, sports have been a more peaceful representation of wild life practices such as war and hunting, limited by rules (Alpman, 1972). However, despite this peaceful framework, it is known that athletes occasionally exhibit aggressive behavior.

The concept of violence or aggression covers a wide range, not only the use of physical force, but also verbal abuse or unlawful harshness. Theoretically, while Freud's psychoanalytic approach defines aggression as an instinctive drive of humans, Bandura's social learning theory suggests that individuals learn violence through modeling and reinforcement (Bandura, 1976). Current approaches emphasize that violence in sports cannot be reduced to a single cause, but that it occurs as a result of the interaction of individual characteristics (temperament, past experiences, level of impulsivity) and situational factors (the importance of competition, spectator pressure, referee decisions). According to the General Aggression Model, an athlete's violent act is guided by their cognitive evaluations, emotional state, and physiological arousal level at that moment, and these factors are affected by personal and environmental inputs (Anderson & Bushman, 2002).

There are various findings that these differences are reflected in tendencies to violence or aggression. Some studies have reported that individual athletes exhibit higher levels of aggression compared to team athletes. For example, Kafalı et al. (2017) found in the data they obtained from athletes in different branches in Izmir that participants in individual sports exhibited more aggressive attitudes than those in team sports. According to this result, the pressure of competing alone and the individual taking on all the responsibility may have an increasing effect on the level of aggression.

However, some other studies suggest that the branch of sport does not make a significant difference on the tendency to violence. İşler et al. (2025) reported in their study with a large group of athletes that there was no statistically significant difference between the violence tendency scores of individual and team athletes. In other words, whether the athlete takes part in a team game or competes individually is not a factor that determines his/her tendency to violence. These contradictory findings show that the tendency to violence in sports is too multidimensional to be reduced to just the type of branch and that other intervening variables may play a role. For example, in team sports, group belonging and social support within the team can restrain aggression, while in some cases, collective provocation or group hostility towards the opposing team can fuel violence

(Kerr et al., 2014). Therefore, when examining violent behavior in the context of individual and team sports, it is necessary to take into account the psychosocial dynamics in these environments.

In recent years, the concept of mental toughness has come to the fore in the sports psychology literature and has been examined for its effects on athlete performance and behavior. Mental toughness, in its most general definition, is the athlete's capacity not to give up under difficult conditions, to maintain focus, to maintain self-confidence, and to show maximum performance under pressure (Gucciardi et al., 2015). An athlete with high endurance can recover quickly and return to their previous level of functionality when faced with difficulties such as intense training load, injury, or failure, and even emerge stronger from these experiences (Fletcher & Sarkar, 2013). Research shows that athletes with high levels of psychological resilience are more successful in controlling their stress and anxiety levels during competition (Hosseini & Besharat, 2010). In studies conducted on elite athletes in particular, it has been determined that high levels of mental resilience strengthen the athlete's ability to delay reward, regulate emotions, and direct attention to the target, thus reducing feelings of panic and tension that reduce performance (Anthony et al., 2018; Lu et al., 2016). In addition, mental resilience has begun to be associated not only with the athlete's positive characteristics but also with negative behavioral tendencies.

A question that has recently been addressed in the literature is whether this characteristic of an athlete with high levels of ambitiousness and mental toughness paves the way for unsportsmanlike behaviors (e.g., rule violations, excessive aggression, or cheating) (Gucciardi et al., 2015). Studies conducted with the Prosocial and Antisocial Behavior Scale developed by Kavussanu & Boardley (2009) have shown that mental characteristics can have a bidirectional effect on the moral behaviors of athletes. On the one hand, athletes with high self-confidence and durability can lead in sportsmanship and gentlemanly behaviors; on the other hand, antisocial behaviors (e.g., intentional foul, verbally teasing the opponent) can be seen in situations where goal-orientation and ambition to win are very high (Hodge & Gucciardi, 2015). These findings suggest that the relationship between mental durability and violence tendency is not linear and may depend on intervening motivational and situational factors. The athlete's problem-solving skills can be considered an important component of mental durability. Problem-solving is a skill that the athlete uses both to develop game strategies and to cope with stress. Athletes with high problem-solving skills can quickly adapt to unexpected situations that arise during the match, make calm decisions, and keep their emotional reactions under control.

Indeed, it has been found that athletes with high levels of resilience use problem-focused coping strategies more frequently in the face of stressful events and thus can prevent the violent expression of negative emotions (Nicholls et al., 2016; Wang et al., 2015). In one study, it has been shown that training programs designed to increase psychological resilience contribute to athletes gaining perceptual flexibility and developing problem-solving skills (Khatri et al., 2022). This indicates that effective problem-solving ability can be a protective factor against violence in sports. Because an athlete who can handle problems with constructive methods can manage this without turning it into physical or verbal violence even if he or she experiences frustration or anger. As a result, it is necessary to consider the relationship between mental skills (resilience, coping, problem solving) and aggressive behaviors in sports within a holistic framework. Environmental and cultural factors play an important role in the formation of behaviors in the sports environment, as well as individual psychological characteristics. Young athletes in particular are under the influence of not only physical performance but also social support and expectations from their environment. Support from family, coach and teammates is one of the most critical elements that reinforce an athlete's psychological resilience (Wang et al., 2015; Mira et al., 2023).

Studies show that athletes who receive strong support from their families have higher motivation to participate in sports and have higher stress coping skills (Knight et al., 2016). Especially in adolescent athletes, parental support significantly affects the athlete's willingness to continue doing sports and their self-confidence (Şirin et al., 2018). Self-confidence is one of the cornerstones of mental resilience and determines the athlete's capacity to both take risks and cope with failure (Laborde et al., 2014). Support from family or close circle increases the athlete's self-confidence by reinforcing the feeling of being valued and understood; this helps the athlete to remain calm even under pressure (Lu et al., 2016). In contrast, inadequate social support or an overly pressured environment may create psychological stress in the athlete and increase the risk of burnout and angry outbursts (Gustafsson et al., 2017).

Ogel et al. (2006) pointed out that communication problems and indiscipline within the family may trigger violent behavior in young people. This situation shows that if an athlete lacks a healthy communication and support environment at home or in their social environment, the possibility of expressing their frustrations and tensions on the sports field through violence may increase. Cultural values can also affect the perception and frequency of violence in sports; in some societies, a tough and aggressive style of play is glorified as a competitive spirit, while other societies prioritize moderation and respect in sports conflicts (Kerr & Stirling, 2008; Gervis et al., 2016).

Therefore, in order to understand the psychological pressures that a young athlete is exposed to, it is necessary to evaluate both the immediate environmental factors (family, school, coach) and the cultural context in which they are located. In this context, the relationships between violence in sports, mental toughness, and problem-solving skills need to be examined from a holistic perspective. Findings in the literature indicate that violence in sports does not only arise from individual ambition or competition; reveals that the athlete's psychological equipment is shaped by the interaction with the social environment in which he/she lives (Anderson & Bushman, 2002; Kavussanu & Boardley, 2009).

Current studies on active athletes also show that family support and a positive education-training climate play a critical role in the emergence of the long-term positive effects of sports (e.g., development of discipline, self-control, problem-solving skills), while high stress, insufficient support or negative experiences can push the athlete to undesirable behaviors (Gustafsson et al., 2017; Anthony et al., 2018). In this direction, this study aims to examine how the tendency to violence interacts with mental resilience and problem-solving skills within the scope of the views of young people who do active sports. For this purpose, the limitation of the study conducted on 101 active athletes in Ankara province is the uncertainty of the universe and being limited to a single region. Despite this, it is thought that the findings will shed light on the effects of factors such as family support, trust and mental resilience, and tendency to violence on sports success and long-term participation.

2. METHODS

2.1. Design

This study was a cross-sectional field study designed to examine the relationships between young athletes' mental toughness, problem-solving skills, and attitudes towards violence in sports. In this study, where a quantitative method approach was adopted, the demographic information, mental toughness levels, stress coping strategies (problem-solving dimension) and subjective perceptions of the phenomenon of violence in sports were evaluated with statistical methods.

2.2. Participants

The study included 101 participants aged 16 and over, who received training in various branches at the Youth and Sports Club in the Etimesgut district of Ankara province and actively engaged in sports. This group represents the current participants to whom the study was applied. However, the universe of the study is accepted as the entire young population between the ages of

15-35 in the province of Ankara. According to the 2022 Address Based Population Registration System (ABPRS) data of the Turkish Statistical Institute (TUIK), the total population included in this age group in Ankara is 1,748,324.

The Cochran sampling formula is generally used to determine the sample size in studies. This formula is widely preferred when the target universe (N) is large enough (e.g. $\geq 10,000$) and a certain confidence level and margin of error (d) are selected. The formula first performs calculations with the assumption of an infinite universe; then, a finite population correction is applied. The following steps are shown as an example for a sampling error of 0.10 (i.e. 10%) and a confidence level of 90%. The Sample Size (n_0) for an Infinite Universe is given in *Equation 1*:

$$n_0 = \frac{Z^2 * p * (1-p)}{d^2} \quad (1)$$

In equation 1;

- **Z:** Z value for confidence level $Z \approx 1.645$ at 90% confidence level
- **p:** Default probability for proportional uncertainty, usually $p=0.5$ is taken as the most conservative approach.
- **d:** Desired sampling error (margin of error), in this study is $\pm 10\%$ (i.e. 0.10).

The sample calculation is given below.

$$n_0 = \frac{Z(1.645)^2 * 0.5 * (0.5)}{(0.10)^2} = n_0 = \frac{2.706025 * 0.25}{0.01} = n_0 = \frac{0.67650625}{0.01} = 67.65$$

When a $\pm 10\%$ margin of error was used at a 90% confidence level, the minimum sample size representing the universe of 1,748,324 people was calculated as approximately 68 people. Considering this calculation, it was thought that a sample of 101 people would represent the universe within the scope of the study.

The study was conducted in accordance with the approval received from the Social Sciences Ethics Committee of the relevant university. Participants were informed that participation in the study was voluntary and that their data would be kept confidential; those who did not complete the survey forms or did not want to continue were excluded from the study without any obligation.

2.3. Instruments and Procedures

In this study, the Mental Toughness in Sports Inventory, consisting of 14 questions, and the Independent-Reciprocal Problem Solving Scale, consisting of 10 questions, were used. These scales

were deemed appropriate to answer questions about how active sports life contributes to mental activity and problem-solving skills in accordance with the research question and hypotheses.

A scale developed by Sheard, Golby, and Van Wersch to assess the mental toughness levels of athletes was designed as a four-point Likert scale in 2009. This scale includes fourteen items consisting of three main dimensions: trust, continuity and control. This scale was translated into Turkish and its cultural adaptation was carried out within the scope of Altınbaş's doctoral thesis prepared in 2015. Linguistic validity was provided based on the data obtained after expert translations and the application of both Turkish and English versions to various groups. In the analyses conducted with the data obtained after translation, the correlation coefficients for each sub-dimension were determined as 0.87, 0.88 and 0.88, respectively, indicating that linguistic equivalence was maintained. In addition, the validity of the structure of the inventory applied to 242 athletes for the Turkish sample was examined with confirmatory factor analysis and it was determined that it showed a good fit. As a result of the reliability analyses, it was determined that the scale was acceptably reliable in general and in each sub-factor; the total internal reliability coefficient of the scale was calculated as 0.83. Another scale, the Stress Coping Methods Scale, was developed by Moos in 1993 and adapted to Turkish by Ballı and Kılıç in 2016. This scale consists of two main sub-dimensions, namely avoidance and approach reactions, and a total of eight dimensions under these sub-dimensions. During the Turkish adaptation, only approach reactions and four sub-dimensions of these reactions were examined. The scale, organized on a five-point Likert scale, was designed to measure how often users use certain coping strategies. The scale has shown high internal consistency in reliability studies and was found to be 0.91 for the problem solving dimension, 0.91 for positive evaluation, 0.91 for logical analysis, 0.80 for the professional support seeking dimension, and 0.73 for the environmental support seeking dimension. In the context of this study, the overall internal reliability of the Mental Toughness Inventory was determined as 0.90.

The study was conducted at the Etimesgut District Youth Sports Club in Ankara province between 20.02.2025-07.03.2025 after receiving approval from the Ethics Committee. As part of the study, a volunteer-based study was conducted with young people who came to the Sports Club in the street concept. Within the scope of the study, the street concept was used for young people who came to the gym to answer the study questions, and each interview lasted approximately 35 minutes. The survey forms that were taken as printouts were used during the answering of the questions, and then the survey forms were processed into MS Excel by the researcher.

2.4. Statistical Analysis

In this study, the analysis of data obtained from the 101 athlete participants was performed using the SPSS 22.0 statistics package. Since the number of participants was 101, the normality test of the data was examined with the Kolmogorov-Smirnov test. Since the p values obtained were less than 0.05, parametric test methods were preferred. The gender distribution of the participants was determined through frequency analysis and the means of the mental toughness and stress coping scales by gender were examined with descriptive statistics.

Gender differences were compared with the Independent Sample T-test. In addition, the relationship between the Mental Toughness Inventory and the Stress Coping Scales was evaluated using Pearson Correlation Analysis and the variability according to age was analyzed with the One-Way ANOVA test. The Mental Toughness Inventory score distributions, Problem Solving dimension scores and the means of additional statements regarding violence in sports were evaluated. Then, Independent Sample T-test and One-Way ANOVA analyses were conducted to see whether the levels of mental toughness and problem solving differed according to gender or different age groups, and significant differences were examined.

The relationship between the tendency to violence in sports and mental toughness and problem solving skills was investigated through Pearson correlation analysis and regression model; in the regression analysis, the dependent variable was the tendency to violence in sports (additional statement score averages), and the independent variables were the Mental Toughness Inventory and Problem Solving dimension scores. After the differences were determined, a 5-question interview was conducted to investigate the athletes' tendency to violence, and the information about the interview was descriptively divided into themes and presented with thematic analysis.

3. RESULTS

The results are presented in this section in several tables. First, the demographic characteristics of the participants (gender, age, education level, sport branch, duration of participation in the sport, and presence of other athletes in the family) are presented in Table 1. As seen in Table 1, most of the athletes are male (77.23%) and between the ages of 20-24 (27.72%). The most popular sports are basketball (15.84%) and yoga (14.85%), and the majority of the participants have been actively involved in sports for more than 10 years (37.62%). In addition, 58.42% of the athletes have another athlete in their family, indicating that family support for sports is important.

Table 1. Demographic characteristics of participants

Category	Subcategory	n	Percentage (%)
Gender	Male	78	77.23%
	Female	23	22.77%
	Total	101	100.00%
Age	18-19	25	24.75%
	20-24	28	27.72%
	25-29	19	18.81%
	30-34	25	24.75%
	35+	4	3.96%
	Total	101	100.00%
Education Level	Primary School	24	23.76%
	High School	18	17.82%
	Associate Degree	23	22.77%
	Bachelor's Degree	15	14.85%
	Postgraduate	21	20.79%
	Total	101	100.00%
Sport Branch	Athletics	12	11.88%
	Basketball	16	15.84%
	Fitness	12	11.88%
	Judo	14	13.86%
	Pilates	6	5.94%
	Taekwondo	7	6.93%
	Volleyball	10	9.90%
	Yoga	15	14.85%
	Swimming	9	8.91%
	Total	101	100.00%
How long have you been practicing this sport?	1 year or less	8	7.92%
	2-5 years	30	29.70%
	6-10 years	25	24.75%
	10+ years	38	37.62%
Is there another athlete in your family?	Total	101	100.00%
	Yes	59	58.42%
	No	42	41.58%

Table 2 includes the evaluation of the differences in mental toughness and independent-mutual problem solving scales according to gender.

Table 2. Distribution of mental toughness in sports and independent-interdependent problem solving scales by gender

Scales	Male (n=78)	Female (n=23)	Total (n=101)
Mental Toughness in Sports	47.01±3.53	20.92±3.42	49.23±3.48
Confidence Subscale	17.35±4.32	17.98±2.53	21.43±2.81
Control Subscale	11.59±3.23	10.32±3.06	11.85±3.02
Persistence Subscale	8.22±1.21	8.72±1.38	8.52±1.31
Independent- Interdependent Problem Solving Scale	94.28±9.37	89.68±13.28	93.35±11.73
Logical Analysis Subscale	27.36±0.95	23.00±1.15	25.21±1.02
Positive Evaluation Subscale	23.18±4.23	20.56±5.02	21.68±4.58
Seeking Support Subscale	21.08±4.73	19.28±5.03	20.53±4.89
Problem-Solving Subscale	26.48±4.01	25.73±3.72	25.23±3.91

Note. * Pearson Correlation Analysis

Mental toughness and independent-mutual problem solving scales in sports differ according to gender. According to the Mental Toughness Inventory in Sports, while the average mental toughness score of male participants was measured as 47.01±3.53, it was measured as 20.92±3.42 for female participants. When the general average is examined, a value of 49.23±3.48 is striking. In the trust sub-dimension, female participants showed a slight superiority with an average score of 17.98±2.53 compared to the male score of 17.35±4.32. However, male scores were higher in the control (11.59±3.23) and continuity (8.22±1.21) sub-dimensions. In the Independent-Mutual Problem Solving Scale, the average score of males was determined as 94.28±9.37, while it was determined as 89.68±13.28 for females. The general average was 93.35±11.73. In the sub-dimensions of logical analysis, positive evaluation, seeking support and problem solving, men's scores were higher than women's scores. In light of this data, it is observed that the gender variable has an effect on mental toughness and problem solving skills in sports. While male participants generally received higher scores than women in mental toughness and problem solving skills, it was observed that women received higher scores in the trust sub-dimension.

The comparison of the general and sub-dimensions of the mental toughness and independent mutual problem solving scales in sports according to the gender variable is given in Table 3.

Table 3. Comparison of general and subscale scores of mental toughness in sports and independent-interdependent problem solving scales by gender

Scale	Gender	N	$\bar{x} \pm sd$	t	p
Mental Toughness in Sports Inventory	Male	78	37.26 ± 3.07	0.882	0.54
	Female	23	36.98 ± 5.05		
Confidence Subscale	Male	78	18.31 ± 3.04	4.394	0.000
	Female	23	16.82 ± 3.02		
Control Subscale	Male	78	9.55 ± 1.16	-2.447	0.027
	Female	23	10.52 ± 2.24		
Persistence Subscale	Male	78	10.22 ± 0.98	-2.02	0.063
	Female	23	9.58 ± 1.43		
Independent-Interdependent Problem Solving Scale	Male	78	93.28 ± 15.3	3.334	0.023
	Female	23	90.89 ± 14.46		
Logical Analysis Subscale	Male	78	26.03 ± 3.01	4.302	0.005
	Female	23	23.32 ± 4.67		
Positive Evaluation Subscale	Male	78	26.52 ± 3.25	2.649	0.008
	Female	23	24.21 ± 2.41		
Seeking Support Subscale	Male	78	22.86 ± 4.07	0.98	0.511
	Female	23	21.81 ± 4.82		
Problem-Solving Subscale	Male	78	23.32 ± 3.80	2	0.104
	Female	23	21.4 ± 4.0		

Note. * $p<0,05$; ** t test

In Table 3, mental toughness scores in sports were found to be similar in men (37.26 ± 3.07) and women (36.98 ± 5.05), and this difference was not statistically significant ($p=0.54$). In the trust sub-dimension, men (18.31 ± 3.04) scored significantly higher than women (16.82 ± 3.02) ($p=0.000$). In the control sub-dimension, women (10.52 ± 2.24) scored higher than men (9.55 ± 1.16) and this difference was statistically significant ($p=0.027$). In the Independent-Mutual Problem Solving scale, men (93.28 ± 15.3) scored higher than women (90.89 ± 14.46) and the difference was significant ($p=0.023$). Men also scored higher in the sub-dimensions of logical analysis ($p=0.005$) and positive evaluation ($p=0.008$). However, no significant difference was found between genders in the sub-dimensions of seeking support ($p=0.511$) and problem solving ($p=0.104$). In general, it was observed that the gender variable had an effect on mental toughness and problem solving skills in sports, with men scoring higher in some sub-dimensions, but women also had an advantage in some areas.

Table 4 shows the effect of having a family history of sportsmanship on the sub-dimensions of mental toughness and independent mutual problem solving scales.

Table 4. Comparison of the general and subscale scores of mental toughness in sports and independent-interdependent problem solving scales based on the presence of an athlete in the family

		Presence of an Athlete in the Family		N	$\bar{x} \pm sd$	t	p
Scale		Yes	No				
Mental Toughness in Sports Inventory	Yes	58,00	41.81±5.40		0.894	0.531	
	No	42,00	40.38±4.23				
Confidence Subscale	Yes	58,00	21.06±3.60		0.000	0.487	
	No	42,00	20.39±3.25				
Control Subscale	Yes	58,00	9.79±3.60		-0.063	1,08	
	No	42,00	10.95±3.27				
Persistence Subscale	Yes	58,00	9.38±1.22		0.998	0.617	
	No	42,00	9.25±1.98				
Independent-Interdependent Problem Solving Scale	Yes	58,00	97.82±8.25		1921	0.722	
	No	42,00	92.23±15.21				
Logical Analysis Subscale	Yes	58,00	23.12±1.57		-0.632	0.864	
	No	42,00	23.18±2.21				
Positive Evaluation Subscale	Yes	58,00	23.43±3.02		0.429	0.823	
	No	42,00	22.93±3.68				
Seeking Support Subscale	Yes	58,00	19.98±4.57		2,03	0.037	
	No	42,00	18.06±5.27				
Problem-Solving Subscale	Yes	58,00	27.82±1.92		1,98	0,31	
	No	42,00	27.32±1.87				

Note. * $p<0,05$; ** t test

According to the table, having a family history of sports does not have a significant effect on mental toughness and problem solving skills in sports in general ($p>0.05$). However, in the support seeking sub-dimension, individuals with a sports background (19.98 ± 4.57) scored significantly higher than those without (18.06 ± 5.27) ($p=0.037$). This result shows that having a family history of sports may increase the tendency of individuals to seek support.

Table 5. Examination of differences in scales based on age variable

Variable	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F		p
Mental Toughness	Between Groups	454.505	3	12.908	1	0.422
	Within Groups	30021.39	97	12.810		
	Total	30475.89	100			
Independent- Interdependent Problem Solving Scale	Between Groups	1652.88	3	517.925	4.804	0.001
	Within Groups	30351.16	97	132.706		
	Total	32004.04	100			

Note. * $p<0.05$; **One-Way ANOVA Test

In Table 5, mental toughness scores do not show a significant difference between age groups ($p=0.422$). However, the Independent-Reciprocal Problem Solving Scale reveals a significant difference between age groups ($p=0.001$). While it shows that age can have an effect on problem solving skills, it does not have a significant effect on mental toughness

5 semi-structured open-ended interview questions prepared regarding the mental toughness of athletes and the management of stress and anxiety that develop with competition were directed to athletes. A total of 4 main themes were determined regarding the answers given in the interview. The analysis results are given in Table 6.

Table 6. Analysis of themes and sub-themes of violence inclination based on five questions

Main Themes Identified From The Questions & Answers	Sub-Themes	Participants' Views	Selected Participant Emphases
The Importance of Mental Resilience	Focus Under Pressure	K1, K5, K9, K12, K17, K22, K23, K28, K30, K34, K39, K44, K50, K57, K60, K63, K67, K74, K82, K85, K93, K95, K101	Final matches often bring high expectations for me to score, my heart starts racing, and I feel close to anger (K1)
	Self-Confidence and Self-Assertion	K3, K8, K15, K26, K31, K40, K42, K47, K49, K55, K62, K65, K71, K72, K76, K80, K81, K84, K87, K91, K92, K94, K100	As the captain, my teammates say you will figure it out, which puts me under intense pressure (K26)
	Stress Management Strategies	K4, K6, K10, K13, K16, K18, K21, K25, K33, K35, K38, K41, K43, K46, K51, K54, K56, K59, K61, K68, K70, K75, K77, K79, K86, K88, K90, K96, K97, K99	When I get angry under pressure, I bounce the ball on the ground a few times, take a deep breath, and manage to control my anger (K21)
	Emotional Control and Violence Management	K2, K7, K11, K14, K19, K20, K24, K27, K29, K32, K36, K37, K45, K48, K52, K53, K58, K64, K66, K69, K73, K78, K83, K89, K98	In the championship match, when the score was tied in the final minute, I ran into the opponent with my shoulder and committed a foul (K10)
Problem-Solving and Violence Inclination	In-Game Stress Management	K4, K13, K15, K20, K23, K26, K30, K37, K41, K45, K48, K52, K58, K60, K62, K65, K68, K70, K74, K80, K88, K90, K95, K96, K101	The crowd chanting goal pulls me away from calmness and raises my anger level (K4)
	Reaction to Referee Decisions	K1, K6, K8, K10, K16, K18, K19, K27, K33, K35, K40, K42, K44, K46, K55, K57, K61, K67, K73, K76, K79, K81, K84, K92, K97, K99	When the referee makes a wrong call, I lose control and start shouting, then I regret it when I get a card (K19)

Social Support	Approach to the Opponent and Violence Inclination	K3, K7, K9, K11, K17, K24, K25, K29, K36, K38, K49, K51, K54, K56, K59, K64, K66, K69, K72, K75, K78, K83, K86, K93, K98	In the semifinal, the crowd's pressure combined with missing a goal made me tackle the opponent too hard, and I received a card (K24)	
	Becoming Aggressive under Pressure	K2, K5, K12, K14, K21, K22, K28, K31, K32, K34, K39, K43, K47, K50, K53, K61, K63, K71, K77, K82, K85, K87, K89, K91, K94, K100	When I couldn't score, I deliberately stopped the opponent with a hard foul. If I could go back, I wouldn't do it now (K5)	
	Family Support	K3, K6, K16, K19, K22, K26, K29, K30, K33, K36, K38, K42, K45, K49, K52, K55, K58, K60, K63, K67, K71, K74, K77, K80, K82, K86, K90, K92, K94, K96, K100, K101	Before a match, when my mother sends me a text message of motivation, my self-confidence increases (K6)	
	Coach's Influence	K1, K4, K7, K9, K11, K13, K14, K17, K21, K24, K28, K32, K34, K37, K40, K44, K47, K48, K51, K56, K59, K62, K68, K70, K73, K76, K79, K81, K83, K85, K89, K93, K97, K99	Our coach encourages us to remain calm, which makes me commit fewer mistakes on the field (K21)	
	Relationship with Teammates	K2, K5, K8, K10, K12, K15, K18, K20, K23, K25, K31, K35, K39, K41, K46, K50, K53, K54, K57, K61, K64, K65, K66, K69, K72, K75, K78, K84, K87, K88, K91, K95, K98	When my teammates support me after I make a mistake, I can focus better on the game (K27)	
	Competitive Pressures	K1, K3, K9, K11, K13, K16, K20, K23, K25, K28, K31, K32, K37, K39, K41, K42, K45, K50, K51, K60, K61, K63, K67, K75, K79, K82, K85, K87, K88, K93, K94, K100, K101	In the final minutes, trying to protect the score makes me more aggressive (K25)	
	Perception of Violence and Sports Culture	Desire to Win	K2, K4, K8, K10, K15, K18, K19, K22, K29, K33, K36, K38, K44, K48, K52, K53, K56, K59, K62, K69, K70, K72, K74, K76, K80, K83, K84, K86, K90, K91, K95, K97, K98	I am calmer when we are in the lead, but I become more aggressive if we fall behind (K33)
		Sportsmanship	K5, K6, K7, K12, K14, K17, K21, K24, K26, K27, K30, K34, K35, K40, K43, K46, K47, K49, K54, K55, K57, K58, K64, K65, K66, K68, K71, K73, K77, K78, K81, K89, K92, K96, K99	Even when the referee makes a wrong call, I try to keep calm by training myself not to overreact (K30)

As can be seen from Table 6, the first thing that draws attention under the title of the Importance of Mental Toughness is focusing under Pressure. Many participants state that the accelerated heartbeats and thoughts of "I will be embarrassed if I make a mistake" trigger feelings of anger at critical moments such as final matches or the last meters (P1, P4, P55). However, efforts to control this emotional rise are common; for example, P1 states that he tries to focus even in the most intense moments of pressure with his breathing and short suggestions by doing breathing exercises and telling himself "you have to stay calm". Similarly, P4 explains that he immediately transformed the pressure he experienced on the start line of a sprint into focus by doing an internal conversation. These examples reveal that one of the foundations of mental toughness is to focus on performance without losing focus during times of pressure. Another subheading under this main theme, Self-Confidence and Self-Proof, reflects the tension that arises in situations such as the athlete's captaincy duty, family expectations or the team's guidance that "you can handle it". For example, K26 emphasized how the high expectations of the environment turned into internal pressure by saying, "Since I am the captain, the team says 'you will figure it out', which makes me very nervous." K17 stated that he got nervous when he was told that he deserved the gold medal in the final and got angry when he made a small mistake. Such examples show that the pressure to prove himself can trigger not only performance anxiety but also harsh reactions.

When we look at the subheading of Strategies for Coping with Stress, it is seen that the participants used various methods. Breathing exercises, internal suggestions, listening to music, short meditation or body scan (for example, techniques used by athletes based on yoga or Pilates) are the most frequently cited methods (K2, K13, K21, K62). K2 emphasized the role of mental preparation in preventing anger by saying, "I try to stay calm with deep breathing and imagery techniques before the match"; K21 stated that he softened panic or aggression by making breathing a routine by bouncing the ball three times before serving. These findings show that athletes mostly use breath control and mental focus techniques in stress management. The last subheading of mental toughness is Emotional Control and Violence Management. Many participants state that they resort to physical or verbal aggression when the score is tied in the final or championship match or when there is an unexpected development at the last minute (e.g. referee error, crowd pressure). K10's statement "I committed a foul by throwing my shoulder at the opponent when the score was tied at the last minute of the championship match" shows how a sudden emotional outburst can turn into a tendency towards violence. However, participants emphasize that emotional control needs to be developed by

stating that this momentary anger often ends in regret (K5, K24, K50). These narratives reveal that mental toughness is highly related to emotional management skills.

The theme of Problem Solving and Tendency to Violence addresses how athletes manage momentary stress and pressure, their reactions to referee decisions, and aggressive behaviors toward their opponents. In the subject of In-Game Stress Management, for example, K4 stated that the pressure from the stands increases stress-related anger by saying that the fans shouting 'goal, goal' distracts me from calmness. Although methods such as focusing on the game or regulating breathing are used during this time (K28, K31), sometimes aggression cannot be completely prevented; it can result in a serious foul or physical intervention against the opponent. In the subheading of Reaction to Referee Decisions, sudden outbursts of anger (K19, K31, K46) or verbal objections (K9, K44) are prominent in athletes' decisions they find wrong. Some participants (e.g. K19, K93) stated that they received a card or warning after making a serious objection to the referee and later regretted it; they pointed out that arguing with the referee actually disrupts the strategy. This situation shows that referee error or any kind of just or unjust decision can very quickly lead the athlete's psychology to a tendency towards violence. In the sub-theme of Approach to the Opponent and Tendency to Violence, fear of losing or injury to honor/pride comes to the forefront. K24, who said that he could not score a goal due to pressure from the fans in the semi-final, said that he went hard at the opponent and got a card, and presented an example of performance pressure resulting in violence. In another example, K45, with the statement that he saw the opponent's attitude of 'I am stronger', my desire to prove myself increased, I held on very hard, shows that behind the physical contact towards the opponent is often a feeling of inadequacy or fear of humiliation. The last sub-heading in this theme, Aggression Under Pressure, reflects the athlete's angry attitude not towards the opponent or the referee, but sometimes directly towards his own teammates or the environment. K5, with the statement that he got angry because my teammate kept throwing the ball out, I shouted at him, indicates that the fear of failure triggers not only external but also internal (intra-team conflict) aggression. Many participants expressed that they regretted these moments by saying, "I wish I had stayed calm" (P5, P34, P57).

The main theme of Social Support examines how the support that the athlete receives from environmental factors such as family, coach and teammates has an impact on both stress and violence tendency. In Family Support; K6, stating that "My mother sending me motivational messages before the matches increases my self-confidence", conveys that even a small touch from the family reduces the level of anxiety. However, excessive family expectations sometimes have the opposite effect;

participants such as K71 and K95 state that “If my father is in the stands or my family is watching, I get angry if I make a mistake”. In other words, social support can have a constructive or destructive effect depending on its dose and quality. The Coach Effect is similarly revealed with both positive and negative aspects. While K21 emphasizes the importance of mentoring by saying “Our coach encourages us to stay calm, I make fewer mistakes on the field”, some participants (K19, K77) state that “When the coach puts too much pressure, I get more angry”, indicating that an uncontrolled or high-expectation coaching approach triggers aggression. Thus, the coach's attitude emerges as one of the main factors that can seriously affect the athlete's stress threshold. The subheading of Athletes' Relationship with Teammates shows that internal solidarity and support can reduce the tendency to violence. K27 says that if my teammates support me when I make a mistake, I focus better on the game, while K36 says that although a lot is expected of him, he finds the pressure more manageable thanks to positive communication within the team. On the other hand, conflict within the team or accusatory attitudes (K47, K57) easily cause the athlete to burst out in anger.

The last main theme, Perception of Violence and Sports Culture, reveals how the pressures of a competitive environment and the desire to win can feed violence, but how the principles of sportsmanship can also limit this violence. Competitive Pressures shows that many participants (P25, P28, P39) become aggressive in the last minutes in a rush to protect the score or fall behind, and get into arguments with the opponent or the referee. The cheers coming from the stands and statements such as “you have to win the final” further sharpen this competitiveness (P28, P50). In the subheading of Ambition to Win, it is widely believed that the leading athlete is calmer, but when they fall behind, anger and panic intensify. P33 clarifies the emotional state that changes according to the score by saying “I am calmer when we are ahead, but when we fall behind, I become aggressive”. When expectations are high or statements such as “you have to be perfect” increase, it is frequently seen that this ambition is expressed in the form of a hard foul, attacking the opponent or objecting to the referee (P70, P76). Despite all this pressure and ambition, there are also important participants who try to maintain the value of sportsmanship. Those who say, “I try to train myself to stay calm despite the referee's wrong decision, even in the face of wrong decisions or harsh interventions” (P30) make an effort to choose emotional control instead of violence. However, many participants say that they later realize that giving in to momentary anger harms both individual performance and the power to represent the team or club (P5, P24, P93). Thus, sportsmanship shows itself as a buffer value that curbs anger and regresses the tendency to violence despite the desire to compete and win. The experiences of the participants show that mental toughness should be supported not only by

physical capacity or technical skills, but also by emotional control and stress management to a large extent. The appropriate support of the family and the coach, positive communication within the team and the understanding of sportsmanship in the sports culture stand out as the main factors that curb aggressive behavior. On the other hand, high expectations such as scoring pressure, referee mistakes or “you must win” are the main elements that trigger the tendency to violence. These data reveal with concrete examples that the way to prevent violence in sports lies in both individual (breathing exercises, self-awareness, mental preparation) and social (family, coach and team support) factors.

4. DISCUSSION

The results of the study generally show that athletes with high mental toughness and developed problem-solving skills have a more negative view of violence in sports, that is, their tendency to approve or implement violence is lower. Detailed analysis of the findings revealed significant interactions between the psychological characteristics in question and the tendency to violence, and these relationships were interpreted in a manner consistent with both sports psychology and social psychology approaches.

First of all, the research findings show that there is a positive relationship between the mental toughness and problem-solving skills of young athletes. Descriptive statistics revealed that the mental toughness score averages of the participating athletes were above the upper scale average, and similarly, the scores they received from the problem-solving inventory were also quite high. This suggests that the athletes in the sample group were generally mentally resilient and competent individuals in producing solutions to the problems they encountered. In fact, when the correlation analysis (Table 3) is examined, a significant and moderate positive correlation was found between mental toughness and problem-solving skill scores ($r \approx 0.40$, $p < 0.01$). This correlation shows that athletes who are more mentally tough also tend to have better problem-solving skills. Since mental toughness is a characteristic that reflects the athlete's persistent attitude in the face of difficulties, the power to maintain motivation, and emotional control, the strength of these qualities may also have a positive impact on problem-solving processes. Positive relationships between mental toughness and similar structures and various cognitive skills have also been reported in the literature. For example, it is stated that resilient athletes have higher focusing skills and solution-generating capacities under stress (Liew et al., 2019).

This study also presented findings that support this situation. One of the most important findings is that as mental toughness and problem-solving skills increase, athletes' attitude scores

towards violence tendencies significantly decrease. In other words, athletes who are more mentally tough and adept at coping with problems exhibited a more reserved attitude towards justifying unsportsmanlike violent behaviors or engaging in such behaviors. In the correlation analysis, a negative relationship was observed between the mental toughness score and the attitude of finding violence in sports acceptable ($r \approx -0.30$). Similarly, a significant negative correlation was found between the problem-solving skills score and the violent attitude score ($r \approx -0.35-0.40$, $p < 0.01$). This finding reveals that both psychological characteristics in question have an effect on reducing the violent tendencies of young athletes. Indeed, there are findings in the literature that problem-solving skills and mental toughness are inversely proportional to aggressive behaviors. For example, in a study conducted with secondary school students, it was found that young people with high problem-solving skills had lower anger and aggression levels (Fidan & Serin, 2021).

This study reveals that individuals with poor problem-solving skills can express their anger in an unhealthy way when faced with obstacles, whereas individuals who are good problem solvers can control their emotions and resolve conflicts without resorting to violence. Indeed, Uyar, & Ercan, (2023) similarly reported that problem-solving skills are a significant negative predictor of aggressive behavior in children. The findings obtained for young athletes in the current study are parallel to this view and suggest that high problem-solving skills may curb aggressive reactions in sports. Although previous studies evaluating the relationship between mental toughness and violent attitudes are limited, indirect evidence supports this study. In a study conducted by Ramolale et al. (2021) with elite young athletes from Botswana, it was shown that mental toughness, especially high in the continuity dimension, was associated with a decrease in antisocial behaviors (such as unsportsmanlike behavior towards an opponent or teammate).

On the other hand, the literature has also drawn attention to the bidirectional effects of mental toughness in some cases. In a study conducted by Koc et al. (2024) on boxers in Turkey, the sub-dimensions of mental toughness were examined and interestingly, effects were observed in different directions. It was determined that as the self-confidence dimension of mental toughness increased in boxers, their aggressive tendencies increased, whereas as the general score of toughness and the continuity and control sub-dimensions increased, their anger and aggression levels decreased. In other words, while mental toughness based on high self-confidence can foster aggression towards the opponent in boxing (for example, in the form of the athlete fighting more aggressively in the ring due to overconfidence), it was observed that when the same athlete's ability to control their emotions and remain calm in difficult situations improved, their anger outbursts and uncontrolled violence

decreased. In the context of this study, the mental toughness levels of athletes were probably measured as a sum of the self-confidence, determination and emotional control components. Therefore, our current finding suggests that the positive aspect of mental toughness prevails in the big picture, that is, resilient athletes manage their emotions better on the field and avoid violent behavior.

Hodge & Gucciardi (2015); Gucciardi et al. (2017) stated that although mental toughness generally produces harmonious and positive results, it may have a dark side, and that an overly competitive and empathy-deficient understanding of toughness may have negative effects on the athlete's health and ethical behavior. These warnings are especially important when it comes to violent attitudes. An athlete with high toughness but low empathy and ethical values may rationalize behaviors such as unlawful harshness or intentional harm with the ambition to win.

Another finding of our research is the observations on the relationship between the social support perceived by young athletes and their tendency to violence. Quantitative findings show that as the level of social support, including family, peer, and coach support, increases, the tendency to approve violence in sports decreases. Regression analyses revealed that social support had an independent and significant effect on violence tendency, even when mental toughness and problem-solving skills were controlled (Table 6). When the social support variable was added to the model, it significantly explained the variance in athletes' violence tendency attitude scores, and it was seen that higher perceptions of support were associated with lower violent attitudes. This finding emphasizes the importance of the social environment and interpersonal relationships in shaping athletes' aggressive behavior norms.

It has also been frequently reported in the literature that social support is a protective factor in young people's avoidance of problem behaviors. For example, in a study conducted by Purbaningsih et al. (2024) with Indonesian adolescents, a very strong negative correlation was found between social support and the risk of aggressive behavior ($r = -0.89$). Adolescents with high social support were found to have a significantly lower risk of aggression compared to those with low support. Similarly, Culyba et al. (2019) reported in their study conducted on urban young men, especially those at risk, that having reliable adult support significantly reduces the likelihood of engaging in all types of violence, including physical violence, bullying, and sexual violence. In this study, it was observed that young people with high social support not only exhibited less violent behavior, but also developed positive attitudes such as academic success and orientation towards future goals.

The sports psychology literature emphasizes that skills such as mental toughness and problem solving are primarily associated with the athlete's performance and success processes. It is known that athletes with high mental toughness can remain calm under pressure, quickly learn from mistakes, refocus on the game, and maintain their motivation. In this respect, mental toughness is considered a key feature for superior performance in sports (Connaughton et al., 2010; Crust & Clough, 2011).

The current findings indicate that mental toughness not only contributes to performance but can also have an impact on sportsmanship and ethical behavior. Resilient and problem-solving athletes are less likely to show reactive aggression when faced with an anger-provoking situation (e.g., an unfair foul or referee decision) during competition by better regulating their emotions. Instead, they can stay calm and think strategically or keep their reactions under control. This acts as an internal control mechanism that prevents them from resorting to unlawful violence or actions intended to harm the opponent. In fact, the fact that athletes with high mental toughness and skills had lower violent attitudes in our research can be explained by their more developed anger management and stress coping skills. This result is also consistent with sports psychology theories; for example, according to cognitive appraisal and coping theories, athletes who perceive challenging situations as a challenge rather than a threat and believe they can overcome them (i.e. athletes with high mental toughness) give more constructive responses and avoid destructive behaviors. From a social psychology perspective, it is seen that in addition to individual characteristics, the norms, values, and social influences of the environment are decisive in shaping the tendency toward violence in sports. Whether an athlete will behave violently or not may largely depend on the team or sports culture they are a part of's perspective on such behaviors. If a team exalts a tough and aggressive style of play as a value and violent actions are seen as acceptable for the sake of victory, it will not be surprising for violent attitudes to flourish among the individuals of that team.

Research has shown that the moral atmosphere and norms within the team are one of the strongest predictors of an athlete's aggressive attitudes. For example, in a study conducted with young football players, it was determined that as the team's tolerance level for aggressive behavior increased, the athletes' own aggressive tendencies also increased (Guiverau & Duda, 2002).

Social Learning Theory (Bandura, 1977) suggests that individuals acquire behaviors through modeling, especially during childhood and adolescence. Athletes carefully observe and imitate the attitudes and behaviors of professional athletes or their own coaches whom they idolize. If a role model achieves success by behaving aggressively or if this behavior goes unpunished, the young

athlete may develop a learning in their mind that violence is acceptable. At this point, even the athlete's internal psychological resilience may be insufficient in the face of dominant environmental influences. For example, a very tough and ambitious athlete may internalize violence as a strategy over time if he plays on a team where match-winning, unruly acts of violence are constantly applauded. In order to prevent such undesirable effects, the existence of positive role models and ethical standards in the sports environment is of great importance.

In the context of our results, it is clear that changes in the social environment are necessary as well as individual interventions to reduce athletes' tendencies toward violence. Team-wide values education, emphasis on fair play, and consistent sanctions for irregular behavior will act as a deterrent to violence at a social psychological level. Indeed, moral development research has shown that athletes with high levels of moral reasoning are less likely to resort to aggressive behavior (Bredemeier, 1994). Therefore, supporting athletes' mental toughness and similar individual characteristics while also investing in their moral development and empathy skills will be effective in combating violence in sports in the long term.

The findings from the qualitative analysis (see Table 6) show how mental toughness and problem solving are expressed in the athletes' own statements. The participant views reflect the athletes' experiences in issues such as focusing and controlling emotions under pressure, stress coping strategies, anger management and violence control. For example, some athletes stated that when everyone expected me to score in the final match, my heart beats rapidly and I can reach the edge of anger (Table 6, participant K1). This statement describes the tension and emotional state that the intense competitive pressure creates in the athlete, which leads to violence. Another participant stated that when the score was tied at the last minute in the championship match, he committed a foul by shoulder-bumping his opponent and later regretted it (Table 6, participant K10). This example indicates that when mental toughness is insufficient under high stress, athletes may turn to irregular and violent behaviors. Indeed, it has been stated in the literature that competitive pressure can trigger aggressive behaviors. Sønderlund et al. (2014) meta-analysis revealed that athletes exhibit higher levels of aggression compared to the general population. This situation is associated with the normalization of the desire to win and physical struggle in sports culture.

However, it is emphasized in sports literature that a distinction should be made between controlled aggression and uncontrolled violence. While mentally tough athletes can reflect the adrenaline and aggression brought by competition in a controlled manner to their performance, those with low mental toughness may have difficulty controlling these emotions and succumb to violent

reactions. Our qualitative findings also support this distinction: While some athletes stated that instead of playing harder when they fall behind, they cannot control their anger and become aggressive (Table 6, K33); others stated that they try to protect their sportsmanship values by saying, "I train myself to stay calm despite the referee's wrong decision" (Table 6, K30). These two different reactions show that mental toughness and self-control skills are decisive in how to manage the pressure of competition. It is known that athletes use mental training techniques (e.g., breathing exercises, self-suggestion, keeping their attention on the game) to maintain emotional control, especially in games with a highly competitive atmosphere (Gould et al., 2002). Some athletes who participated in our study also stated that they tried to stay calm during stress with strategies such as self-talk or reframing events. Such coping strategies are defined as problem-focused coping methods in the literature and are found to be effective in reducing athletes' performance anxiety (Nicholls & Polman, 2007).

Family support is another issue that has been identified as an important influence on athletes' psychological resilience. Our qualitative data show that support and understanding from the family help athletes feel more confident and motivated. For example, one participant stated that my mother's motivational messages before matches increase my self-confidence (Table 6, K6), drawing attention to the effect of family support in calming pre-performance anxiety. Another athlete stated that positive suggestions from her family and close circle before matches contribute to her staying calm on the field (Table 6). These statements reveal that family support is a psychological basis for athletes. There are also findings in the literature that the family environment and parental support strengthen athletes' skills in coping with stress. A study by Çimen et al., (2021) revealed that family support plays a mediating role in the relationship between trait anxiety and mental resilience in athletes; it was observed that the anxiety levels of athletes with strong family support had less negative effects on their mental resilience. Similarly, Anderson-Butcher et al. (2019) stated that parental support contributed to improvements in the physical and psychological health outcomes of participants in their study examining the participation of disadvantaged youth in sports programs. These findings suggest that love, understanding and motivation from the family increase the athlete's resilience in difficult times and can curb possible aggressive reactions.

In our study, it was understood that athletes who emphasized their family support remained more emotionally balanced and were better able to control their anger. The coach effect also emerged as a critical factor on the psychology of athletes. Athletes stated that the attitudes and behaviors of their coaches directly affected their own emotional states and behaviors on the field (Table 6). The

presence of a positive and supportive coach can increase athletes' self-confidence and strengthen their mental resilience. Indeed, some participants stated that their coaches' giving constructive feedback when they made mistakes or saying motivating words in tense moments helped them focus on solutions instead of anger. For example, an athlete stated that since I am the captain, they say 'you can solve it', which motivates me (Table 6, K26), and conveyed that the trust of the coach and teammates increased the desire to solve problems.

On the other hand, it was also stated that the coach's excessively oppressive or only result-oriented approach could cause anxiety and stress accumulation in athletes and trigger a tendency towards violence. In the literature, the quality of the coach-athlete relationship and the coach's leadership style are seen as determinants of the team's resilience and the individual athlete's psychological resilience. Murray et al. (2021) study with adolescent football players showed that fathers and coaches who exhibit transformational leadership have strong effects on the mental resilience and performance of athletes at different age periods. In particular, parental (father) support in early adolescence was more associated with mental resilience, while the coach's leadership attitude in late adolescence was found to be more strongly associated with the athletes' physical performance.

This finding shows that there is a shift in influence from the family to the coach in the development of the athlete, but both sources are critical. In addition, studies conducted on high-level athletes indicate that the supportive and trusting attitudes of coaches play a key role in the team's development of a common sense of resilience and confidence (Karayel et al., 2024). In our study, it was observed that athletes who stated that they received emotional support and technical guidance from their coaches managed their negative emotions better during the competition. This situation points to the importance of coaches not only teaching technical-tactical skills but also functioning as psychological counselors. As a result, the coach effect has an important share in reinforcing the athlete's mental resilience and problem-solving skills and controlling violent impulses.

The pressure of competition and the cultural dynamics of the sports environment are included in our discussion as another dimension that shapes the psychology of athletes. It can be said that high competitive pressure is a double-edged sword for some athletes: While the desire to achieve success increases motivation, this desire can turn into uncontrolled aggression in cases of excessive pressure. In our qualitative data, many athletes stated that it was difficult to remain calm in intense moments of competition (Table 6). It was explained that especially in critical minutes of the match or when the score was down, the anger threshold decreased with the increase in adrenaline. One of the participants stated that under the intense cheering of the fans and the pressure to score a goal, he

moved away from calmness and his adrenaline level increased (Table 6, K4). Another said that he felt more aggressive in matches where he was behind (Table 6, K33), and that his competitive passion was reflected in his behaviors. These experiences show that when the mental resilience of the athletes is tested, the pressure of competition can lead to undesirable behaviors if they do not have adequate coping mechanisms.

In the literature, this situation has also been explained by moral disengagement theories; athletes who act with excessive ambition to win may rationalize violent behaviors that they would not normally accept for the sake of competition (Kavussanu & Boardley, 2009). However, this negative outcome is not inevitable. In our study, it was observed that the common point of athletes who did not compromise on sportsmanship despite the high pressure of competition was a strong mental endurance and commitment to ethical values specific to sports. For example, while some athletes exhibited approaches such as “even if we fall behind, I try to focus on the game and not become aggressive,” they stated that sportsmanship and gentlemanly trainings were particularly effective in the development of these attitudes (Table 6). These findings show that the balance between competitive passion and controlled behavior can be achieved through education.

It is important to keep the athlete's desire to win at a controlled level of ambition without completely suppressing it. At this point, the role of coaches and educators emerges once again; because the skills to manage competitive pressure are acquired by athletes through mentoring and mental training. The effect of competitive pressure on athlete psychology seems to be two-way. While athletes equipped with sufficient mental endurance and problem-solving skills use this pressure as a stimulant that increases their performance, for athletes lacking this equipment, pressure can become a stressor that increases their tendency to violence. The findings of our study show, through both quantitative statistics and qualitative narratives, that mental endurance and problem-solving skills stand out as two basic psychological elements that restrain athletes' tendency to violence. The descriptive statistics presented in Table 2 show that the participating athletes' mental endurance and problem-solving scores were above the scale means, while their tendency to violence scores were relatively low. This indicates that the athletes in our sample were well equipped in terms of psychological endurance and constructive coping, and that this may have had a limiting effect on aggressive behavior. Supporting this finding, the study by Erdogan & Karataş (2019) revealed that an increase in psychological symptoms in female athletes increases the tendency to violence, in other words, athletes with low levels of psychological well-being are more prone to violence. When evaluated within this framework, since mental resilience is a kind of indicator of psychological well-

being and healthy coping with stress, it is an expected result that resilient athletes avoid violent behavior. Similarly, athletes with developed problem-solving skills are less likely to feel helpless or angry because they can produce solutions to problems, and therefore do not resort to the use of violence.

Quantitative results have shown that increasing mental toughness and developing problem-solving skills can play a critical role in preventing unwanted violent behaviors in athletes (Table 5). It is understood that the effect of demographic variables such as gender and age on these psychological characteristics is limited; the main determinants are individual psychological infrastructure and social support systems. Qualitative data shed light on the mechanisms behind these results; how family support and coaching influence relax athletes, how mental toughness and problem-solving come into play in managing competitive pressure are revealed in the athletes' own words.

5. CONCLUSIONS

The findings of this research carry important theoretical and practical implications. The observed relationships between young athletes' psychological resilience, skill levels, and tendencies toward violence suggest that these factors can inform the design of programs aimed at preventing violence in sports. Athletes—particularly during adolescence—represent a sensitive group in terms of identity formation and emotional regulation; providing appropriate education and support during this critical period can help them develop healthy, non-violent competitive habits in later life.

This study underscores the importance of understanding violence in sports not merely as a behavioral issue, but as a phenomenon connected to the athlete's psychosocial development. The results indicate that when factors such as mental toughness, problem-solving ability, and social support are considered together, they can significantly reduce violent tendencies in sports settings. In this context, future research should further explore the causal relationships among these variables and replicate similar analyses across different sports disciplines and cultural contexts. It is hoped that by adopting holistic approaches that promote both the mental health and ethical development of young athletes, a safer and more respectful sporting environment can be achieved.

Our findings highlight the crucial role of psychological resilience and social support in preventing violence in sports. Therefore, investing in the mental and social development of young athletes—by all stakeholders, including coaches, sports psychologists, families, and sports administrators—appears to be one of the most effective strategies to combat violence in the sporting arena.

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CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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