2025 Volume: 01 Issue: 06 www.ijrpa.com Review Article

International Journal Research Publication Analysis

Page: 01-14

EXPLORING COACH-ATHLETE RELATIONSHIP AND ATHLETES' COPING MECHANISMS AMONG INDIVIDUAL AND TEAM SPORTS

***Manish Acharjee**

Department of Physical Education, Swarnim Gujarat Sports University, Desar, Gujarat-391774.

Article Received: 20 Octomber 2025

Article Revised: 09 November 2025

Published on: 29 November 2025

***Corresponding Author: Manish Acharjee**

Department of Physical Education, Swarnim Gujarat Sports University, Desar, Gujarat-391774. DOI: https://doi-doi.org/101555/ijrpa.6385

ABSTRACT

This study investigates the interaction between coping strategies and the coach-athlete relationship in both individual and team sports. 60 athletes from university, state, and national levels were sampled for the study using a cross-sectional, comparative design. Coach-athlete relationship and coping strategies of athletes were evaluated using the Coach-Athlete Relationship Questionnaire (CART-Q) and the Athletic Coping Skills Inventory-28 (ACSI-28), respectively. There were no significant differences in the two groups' levels of commitment or closeness, according to statistical analyses using the Mann-Whitney U test. Personalized one-on-one coaching may promote better cooperative dynamics, as seen by the much higher complementarity and overall coach attitude displayed by individual sport participants. tension brought on by competition. Additionally, neither group's athletes' coping skills nor the general quality of coach-athlete interactions were found to be significantly correlated by the study. According to these findings, coping strategies are more influenced by contextual and personal factors than by relational quality alone, even though close coach-athlete relationships are especially advantageous in individual sports. They also highlight the complex roles that interpersonal dynamics and individual psychological skills play in forming athletic experiences.

KEYWORDS: Athletes' Coping Mechanism, Coach-Athlete Relationship, Sports Psychology, Team Sports, and Individual Sports.

INTRODUCTION

Athlete performance is significantly influenced by psychological factors, particularly in competitive settings where mental toughness often determines success or failure. Beyond physical preparation, athletes need to be able to control their emotions, cope with stress and worry, and stay focused under pressure, as these skills significantly impact their consistency and ability to perform at their best (Weinberg & Gould, 2019). Birrer & Morgan, (2010) highlights that psychological abilities like self-assurance, drive, and coping mechanisms have been shown to improve performance and safeguard athletes' mental health. Integrating psychological training into sports is essential for achieving holistic athletic excellence. Athletes' coping strategies and the coach-athlete relationship are important factors that influence their psychological health and athletic success. A supportive Coach-Athlete Relationship, characterized by trust, communication, and mutual respect, enhances athletes' confidence and resilience (Jowett & Cockerill, 2003). At the same time, athletes can manage the stress and pressure of competition by using effective coping mechanisms such as goal-setting, emotional control, and attention maintenance (Nicholls & Polman, 2007). Importantly, as per Mageau & Vallerand, (2003) these constructs are connected; a solid coach-athlete relationship encourages the growth of flexible coping mechanisms, which in turn support mental health and performance. Gould & Maynard, (2009) said that while physical training is essential for improving sports performance, psychosocial factors are just as important in determining mental health and performance outcomes. Athletes' ability to handle pressure from competition, injuries, and disappointments is greatly influenced by their psychological toughness, drive, and emotional control.

Relational quality has been conceptualized through the 3 + 1 Cs model, which emphasizes closeness, commitment, and complementarity as key elements of effective coach-athlete partnership (Jowett, 2007). Strong relational quality enhances trust, respect, and shared goals, thereby motivating athletes to engage fully in training and competition (Jowett & Ntoumanis, 2004; Mageau & Vallerand, 2003). Empirical evidence shows that positive coach-athlete relationships foster resilience, psychological well-being, and improved performance across both individual and team sports (Jowett & Cockerill, 2003; Poczwardowski et al., 2006; Felton & Jowett, 2013; Jowett & Shanmugam, 2016). Such relationships are also associated with reduced risk of burnout (Isoard-Gautheur et al., 2016) and better self-regulation during competition (Backer et al., 2011). Collectively, these findings reinforce the role of high-

quality coach–athlete relationships in promoting both motivation and performance outcomes in sporting contexts.

Coping mechanisms are the cognitive and behavioural strategies athletes employ to regulate emotions, handle stress, and maintain performance when faced with competitive demands (Nicholls & Polman, 2007). These strategies are central to sport psychology because they allow athletes to sustain focus, adapt to setbacks, and reduce the risk of performance breakdown under pressure. Prior research has highlighted that coping strategies such as goal setting, emotional regulation, relaxation, and attention control are consistently associated with lower levels of competitive anxiety and improved performance stability (Smith et al., 1995; Gould et al., 2002; Birrer & Morgan, 2010). More recently, adaptive approaches such as self-compassion, cognitive reappraisal, and seeking social support have been shown to enhance resilience and protect athletes' mental health across diverse sporting contexts (Mosewich et al., 2018; Davis et al., 2019; Acharjee et al., 2025). However, the extent to which coping skills are influenced by the coach–athlete relationship, particularly across different sport structures, remains insufficiently understood, thereby highlighting the need for empirical comparisons between team and individual sports.

Objectives of the Study

1. To compare the overall coping mechanism and sub-scales of coping, i.e., coping with adversity, peaking under pressure, goal setting, concentration, freedom from worry, confidence and achievement motivation, and coachability of athletes participating in team and individual sports.
2. To compare the commitment, closeness, and complementarity of the team and individual game coaches towards their athletes.
3. To assess the relation between the coach-athlete relations and the athletes' ability to cope with adverse sporting situations across two different types of sports.

Significance of the study

This study aims to enhance understanding of how coach–athlete relationships influence athletes' coping strategies under competitive stress. By comparing individual and team sports, it addresses a key gap, exploring whether positive relationships foster flexible coping mechanisms. Findings can guide athlete-centred support systems that improve performance, resilience, and mental health. They may inform strategies to strengthen coach–athlete bonds, reduce anxiety, and promote sustained sports participation.

Methodology

***Research Design*:** To assess the variation in coach-athlete relationships and coping strategies between athletes participating in individual and team sports, the present study used a cross-sectional comparative research approach. This design was employed because it enables a systematic comparison of psychological constructs across groups, while also identifying correlations between variables in a sporting context.

***Participants*:** Athletes actively participating in structured training and competition at the university, state, or national level were recruited using a purposive sampling method; the sample consisted of approximately N = 60 athletes, split into two groups: those participating in team sports (e.g., volleyball, basketball, football) and those participating in individual sports (e.g., athletics, swimming, badminton); eligibility requirements included frequent contact with a coach and at least two years of competitive experience; athletes who had recently sustained an injury or were not actively competing during the data collection period were excluded; all participants provided informed consent before the data collection process.

Variables & Instruments:

1. **Coach-Athlete Relationship Questionnaire (CART-Q; Jowett & Ntoumanis, 2004):** This standardized tool was used to measure the quality of the coach-athlete relationship, focusing on the key dimensions of closeness, commitment, and complementarity. Responses were recorded on a Likert-type scale, with higher scores indicating stronger relational quality.
2. **Athletic Coping Skills Inventory-28 (ACSI-28; Smith et al., 1995):** To assess athletes' coping skills, this instrument was administered. It consists of seven sub-scales, including coping with adversity, peaking under pressure, goal setting/mental preparation, concentration, freedom from worry, confidence & achievement motivation, and coachability. Higher scores reflected stronger coping capacities. Both instruments have been widely validated in previous sports psychology research.

Reliability of Measures: All psychological measures employed in the study were standardized and validated instruments, specifically the Coach-Athlete Relationship Questionnaire (CART-Q) and the Athletic Coping Skills Inventory-28 (ACSI-28). To ensure methodological transparency, internal consistency was calculated for the current sample. For the CART-Q, Cronbach's alpha values were 0.87 (Closeness), 0.85 (Commitment), 0.82 (Complementarity), and 0.79 (Co-orientation). For the ACSI-28, Cronbach's alpha values

were 0.81 for Coping with Adversity, 0.83 for Peaking Under Pressure, 0.88 for Goal Setting/Mental Preparation, 0.80 for Concentration, 0.76 for Freedom from Worry, 0.84 for Confidence and Achievement Motivation, and 0.79 for Coachability, indicating satisfactory to high reliability across all subscales in the present sample.

***Procedure*:** Following institutional approval, athletes were approached during practices and competitions and given a thorough explanation of the study's goal. To reduce distractions, questionnaires were given in a calm setting, and participants were urged to answer truthfully. To lessen social desirability bias, replies were guaranteed anonymity and confidentiality. Four weeks were allotted for the collection of data.

***Statistical Analysis*:** The IBM SPSS Version 27 was used for statistical analysis of the data. First, the nature of the data is explained through descriptive statistics (mean & standard deviation). Then the nature of the data was checked through the Shapiro-Wilk test at 0.05. Based on the result of the normality test, the independent sample t-test, and the Mann-Whitney U test were used for group-wise comparison of the study variables. Later, the Pearson Correlation was used to identify the strength and direction of the relationship between the coach-athlete relationship and the athletes' coping mechanisms.

Findings

"All variables were initially assessed for normality using the Shapiro-Wilk test at 0.05 significance. Independent-samples t-tests were applied to variables meeting normality assumptions to compare mean scores between individual and team sport athletes, whereas Mann-Whitney U tests were used for variables that violated normality, ensuring appropriate statistical methods for each dataset. This approach maintained the validity of group comparisons, and effect sizes (Cohen's d for t-tests; Z for Mann-Whitney U tests) were calculated for all significant differences to provide a meaningful interpretation of the magnitude of effects."

Table No. 1: Descriptive statistics, test of normality, & group-wise comparison of coach-athlete relationship & athletes' coping mechanism between team &individual sports athletes across variables.

Variables	Individual (Mean ± SD)	Team (Mean ± SD)	Shapiro-Wilk (*p*) Individual	Shapiro-Wilk (*p*) Team	Normality Assumption	Statistical Test Used	Test Statistics	*p*-value	Cohen's d/ Z
Coach Athlete Relationship									
Closeness	5.37 ± 1.29	5.03 ± 1.35	.008	.004	Not Normal	Mann-Whitney U	388.00	.347	N/A
Commitment	5.03 ± 1.56	4.67 ± 1.34	.001	.004	Not Normal	Mann-Whitney U	388.00	.353	N/A
Complementarity	5.63 ± 1.21	4.40 ± 1.45	.002	.001	Not Normal	Mann-Whitney U	236.00	.001	-3.235
Overall Coach Attitude	16.03 ± 2.38	14.10 ± 2.73	.113	.167	Normal	Independent Sample t	2.919	.005	0.754
Athlete Coping Mechanism									
Coping With Adversity	6.67 ± 2.75	7.17 ± 3.15	.026	.005	Not Normal	Mann-Whitney U	402.00	.475	N/A
Peaking Under Pressure	7.10 ± 2.64	6.37 ± 2.44	.015	.068	Not Normal	Mann-Whitney U	381.50	.307	N/A
Goal Setting	7.03 ± 3.04	7.83 ± 3.16	.030	.006	Not Normal	Mann-Whitney U	381.00	.305	N/A
Concentration	7.77 ± 2.90	7.93 ± 2.97	.056	.026	Not Normal	Mann-Whitney U	433.00	.800	N/A

Freedom from Worry	7.73 ± 3.02	7.07 ± 3.43	.013	.001	Not Normal	Mann-Whitney U	381.50	.306	N/A
Confidence & Achievement Motivation	7.20 ± 2.99	8.03 ± 2.65	.015	.021	Not Normal	Mann-Whitney U	370.50	.236	N/A
Coachability	7.70 ± 2.96	7.67 ± 2.91	.067	.075	Normal	Independent Sample t	0.044	.965	N/A
Overall Coping Mechanism	51.20 ± 8.24	52.07 ± 7.79	.784	.268	Normal	Independent Sample t	-0.419	.677	N/A

The findings presented in Table 1 highlight distinct patterns in the coach–athlete relationship and coping mechanisms across individual and team sport athletes. Within the coach–athlete relationship dimensions, no significant differences were observed for closeness (p = .347) and commitment (p = .353), suggesting that athletes, regardless of sport type, generally reported similar levels of emotional connection and dedication to their coaches. However, complementarity emerged as a significant differentiator, with individual sport athletes scoring notably higher than their team sport counterparts (p = .001), with a moderate effect size of 0.754, indicating that athletes competing individually perceived greater cooperative interaction and mutual responsiveness with their coaches. Consistent with this, the composite score for overall coach attitude also favoured individual sport athletes (p = .005), with a very small effect size of -3.235, reinforcing the notion that one-to-one coaching relationships may foster stronger interpersonal bonds. This trend is also clearly illustrated in Figure 1, where the bar graphs show individual athletes reporting higher complementarity and overall coach attitude compared to team athletes.

Turning to coping mechanisms, no statistically significant differences were detected across any of the subscales or in the overall coping score. This suggests that athletes, whether engaged in individual or team sports, demonstrated comparable psychological strategies for managing competitive stress, including dealing with adversity, maintaining focus, and regulating worry. While some mean differences were noted—for example, team sport athletes reported slightly higher goal setting and confidence and achievement motivation, whereas

individual sport athletes scored marginally higher on freedom from worry—these did not reach statistical significance. These patterns are also reflected in Figure 2, which depicts the comparative mean coping profiles of individual and team athletes, showing largely overlapping trends despite small differences in certain subscales. The absence of meaningful group differences in coping skills implies that the ability to manage stress and pressure may be more strongly influenced by individual psychological traits and training environments than by the structural nature of the sport itself.

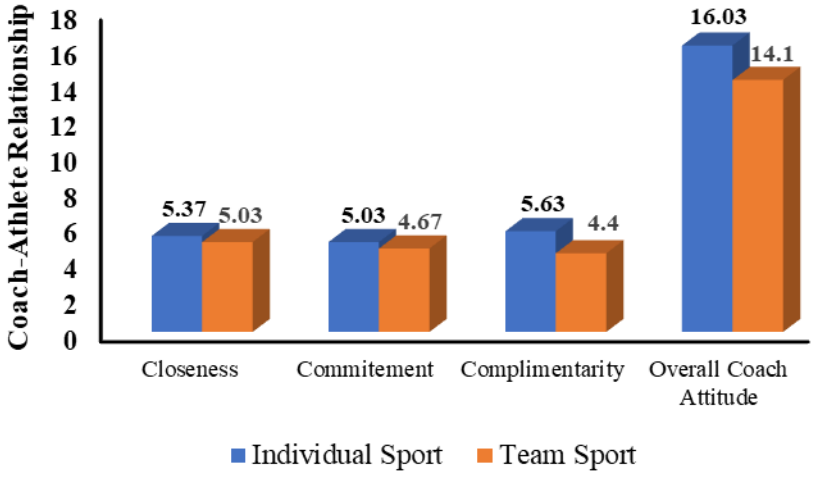

Figure No. 1: Graphical representation of the mean value of the Coach-Athlete Relationship across Team and Individual Game.

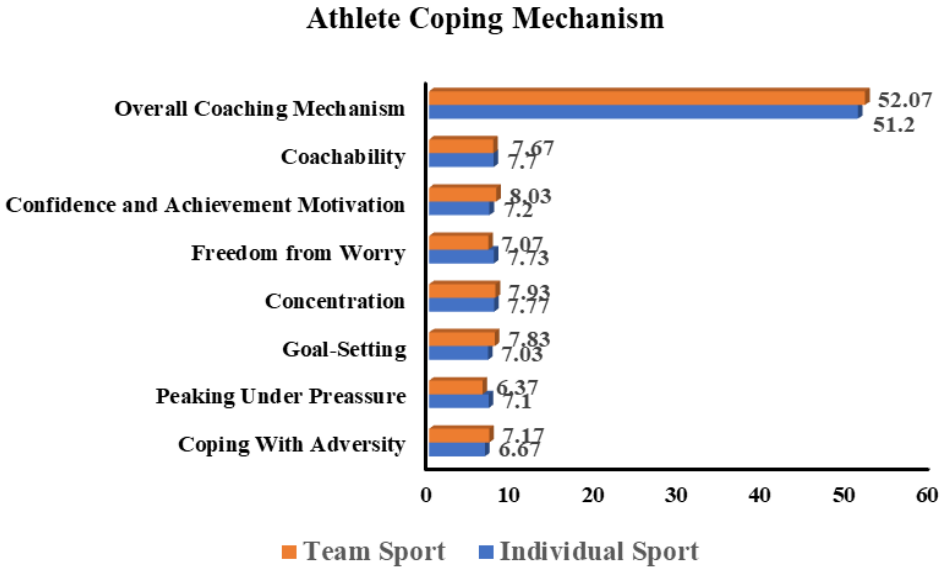

Figure No. 2: Graphical representation of the mean value of the Athletes' Coping Mechanism across Team and Individual Game.

As we know that the data of the overall coach-athlete relationship and athletes' coping mechanisms across both groups are normally distributed. Thus, the Pearson Correlation test will be used to identify the direction of the relationship between the variables.

Table No. 2: Result of Pearson Correlation analysis of Coach-Athlete Relationship and Coping Mechanism of athletes participating in team and individual sports.

Pearson Correlation Results of Individual Sports			
		Coach Attitude	Overall Coping Mechanism
Coach Attitude	Pearson Correlation	1	-0.118
	Sig. (2-tailed)		0.535
	N	30	30
Overall Coping Mechanism	Pearson Correlation	-0.118	1
	Sig. (2-tailed)	0.535	
	N	30	30

Pearson Correlation Result of Team Sports			
		Coach Attitude	Overall Coping Mechanism
Coach Attitude	Pearson Correlation	1	0.030
	Sig. (2-tailed)		0.873
	N	30	30
Overall Coping Mechanism	Pearson Correlation	0.030	1
	Sig. (2-tailed)	0.873	
	N	30	30

The correlation analysis revealed no significant association between the overall coach–athlete relationship and athletes' coping mechanisms in either sport context. For individual sport athletes, the relationship between overall coach attitude and coping ability was negative but weak and statistically non-significant ($r = –0.118$, $p = .535$). This suggests that the quality of the coach–athlete bond did not exert a measurable influence on how individual athletes managed competitive demands. Similarly, among team sport athletes, the correlation was negligible and non-significant ($r = 0.030$, $p = .873$), indicating that coping strategies were not meaningfully linked to perceptions of coach support within team settings. Taken together, these findings suggest that coping mechanisms may operate largely independently of coach–athlete dynamics, potentially reflecting the influence of personal psychological attributes, situational pressures, or broader environmental factors, rather than interpersonal coaching relationships alone.

DISCUSSION

This study aimed to investigate how athletes participating in individual and team sports differ in their relationships with their coaches and coping strategies, as well as whether these variables are connected. The results showed that individual sport athletes had significantly higher levels of complementarity and overall coach attitude, even though the majority of the coach-athlete relationship was similar across groups. This is consistent with previous research showing the advantages of direct interpersonal engagement in individual sport contexts (Jowett & Cockerill, 2003; Jowett & Shanmugam, 2016), which suggests that individual sport settings may naturally foster stronger dyadic relationships between coach and athlete due to greater one-on-one interaction. One reason could be that players in individual sports rely largely on their coaches for tailored advice and criticism, which fosters an environment where collaboration and responsiveness are easier to develop (Isoard-Gautheur et al., 2016). Conversely, there was no significant difference in coping strategies between athletes participating in team and individual sports. This result supports the idea that the training environment and personal psychological resources have a greater impact on coping than the sport's structural characteristics (Nicholls & Polman, 2007; Nuetzel, 2023; Eather et al., 2023). According to earlier research, athletes in a variety of sports use comparable coping mechanisms, like goal-setting, emotional control, and concentration, to manage their anxiety and maintain performance under pressure (Birrer & Morgan, 2010; Gould & Maynard, 2009). Minor differences were noted, such as slightly greater freedom from worry among individual athletes and higher goal-setting and confidence among team athletes, but these differences did not reach statistical significance, supporting the idea that coping mechanisms frequently work consistently across competitive domains (Smith et al., 1995). The distinct pattern in Figure 1 underscores that one-to-one coaching in individual sports fosters stronger complementarity, echoing Jowett and Shanmugam's (2016) findings on dyadic coach–athlete bonds. Conversely, the overlap in coping scores in Figure 2 reinforces the argument by Nicholls and Polman (2007) that coping strategies are shaped more by psychological resources than sport type."

Additionally, the correlation analysis showed that neither group's coping techniques were substantially correlated with the quality of the coach-athlete connection. This finding is in line with research that suggests coping may be influenced more by contextual pressures, self-regulation abilities, and personal resilience than by relational dynamics alone (Gould & Maynard, 2009) even though it deviates from theoretical viewpoints such as the self-

determination framework, which contends that supportive coaching improves adaptive coping (Mageau & Vallerand, 2003). Athletes may eventually rely on their own cognitive and behavioural skills to manage competitive stress, regardless of the strength of their relationship with their coach, even though a positive coach-athlete relationship promotes motivation and engagement (Coussens et al., 2024; Choi et al., 2020). All of these findings emphasize the complex ways in which the coach-athlete connection shapes the athlete's experience. Although relationships with coaches seem to be especially important in individual sports, coping strategies tend to function regardless of the quality of the relationship, indicating that psychological skill development should continue to be a primary goal of athlete preparation for all sports. Practically speaking, these results emphasize the value of training regimens that incorporate relational and psychological elements, guaranteeing that athletes have the coping mechanisms and emotional support they need to handle the demands of competition.

Although significant Pearson correlations were observed between dimensions of the coach-athlete relationship and athletes' coping mechanisms, it is important to interpret these findings cautiously due to the relatively small sample size (n = 30 per group). Small sample sizes limit statistical power and increase the risk of Type II errors, meaning that small-to-moderate associations may not have been detected. Consequently, some potentially meaningful relationships could remain undetected, and the generalizability of these findings is constrained. Future research with larger samples is warranted to confirm these associations and provide more robust estimates of effect sizes, thereby enhancing confidence in the observed relationships between coach behaviour and athlete coping strategies.

CONCLUSION

This study assesses the coping strategies and the relationship between coaches and athletes in both individual and team sports. The benefit of direct one-on-one interactions in these situations was demonstrated by the results, which indicated that although closeness and commitment were similar across groups, individual sport participants reported much higher complementarity and overall coach attitude. Coping strategies, on the other hand, did not significantly differ, indicating that athletes in different sport forms use similar psychological techniques to deal with stress and the demands of competition. Additionally, no meaningful associations between relational quality and coping capacity were found, suggesting that environmental factors and individual resilience may have a greater influence on coping than

coach-athlete interactions alone. These results highlight how crucial it is to build supportive networks in addition to providing focused psychological training in order to improve well-being and performance in a variety of athletic contexts.

Funding: Self-Funded.

Conflict of Interest: The author declared no conflict of interest.

REFERENCES

1. Acharjee, M., Dutta, P. P., & Choudhury, R. D. (2025). Gender based disparities in anxiety experienced by *athletes* and their coping mechanisms. *Sports Science & Health Advances*, *3*(1), 359-367. https://doi.org/10.60081/SSHA.3.1.2025.359-367
2. Backer, M., Boen, F., Ceux, T., Cuyper, B. De, Hoigaard, R., & Broek, G. Vande. (2011). Do perceived autonomy-supportive and controlling coaching behaviors predict intrinsic motivation in youth soccer players? *International Journal of Sport Psychology*, *42*(5), 1–16.
3. Birrer, D., & Morgan, G. (2010). Psychological skills training as a way to enhance an athlete's performance in high-intensity sports. *Scandinavian Journal of Medicine & Science in Sports*, *20*(2), 78–87.
4. Choi, H., Jeong, Y., & Kim, S. K. (2020). The relationship between coaching behaviour and athlete burnout: Mediating effects of communication and the coach-athlete relationship. *International Journal of Environmental Research and Public Health, 17*(12), 2-17. https://doi.org/10.3390/ijerph17228618
5. Coussens, A. H., Stone, M. J., & Donachie, T. C. (2024). Coach-athlete relationships, self-confidence, and psychological wellbeing: The role of perceived and received coach support. *European Journal of Sports Science, 25*(1), 1-10. https://doi.org/10.1002/ejsc.12226
6. Davis, L., Appleby, R., Davis, P., Wetherell, M., & Gustafsson, H. (2019). The role of coach-athlete relationship quality in team sport athletes' well-being. *Journal of Sports Sciences, 37*(19), 2124-2133.
7. Eather, N., Wade, L., Pankowiak. A., & Eime. R. (2023). The impact of sports participation on mental health and social outcomes in adults: A systematic review and the mental health through sport conceptual model. *Systematic Review Update, 12*(10), 2-27.
8. Felton, L., & Jowett, S. (2013). "What do coaches do" and "how do they relate": Their effects on athletes' psychological needs and functioning. *Scandinavian Journal of*

Medicine & Science in Sports, *23*(2), 31-44.

9. Gould, D., & Maynard, I. (2009). Psychological preparation for the Olympic Games. *Journal of Sports Sciences*, *27*(13), 1393–1408.
10. Gould, D., Eklund, R. C., & Jackson, S. A. (2002). Coping strategies used by U.S. Olympic wrestlers. *Research Quarterly for Exercise and Sport*, *64*(1), 83–93.
11. Isoard-Gautheur, S., Trouilloud, D., Gustafsson, H., & Guillet-Descas, E. (2016). Associations between the perceived quality of the coach–athlete relationship and athlete burnout: An examination of the mediating role of achievement goals. *Psychology of Sport and Exercise*, *22*(3), 210–217.
12. Jowett, S. (2007). *Interpersonal approaches to coaching: The 3+1 Cs model*. Human Kinetics.
13. Jowett, S., & Cockerill, I. (2003). Olympic medallists' perspective of the althlete–coach relationship. *Psychology of Sport and Exercise*, *4*(4), 313–331.
14. Jowett, S., & Ntoumanis, N. (2004). The coach–athlete relationship questionnaire (CART-Q): Development and initial validation. *Scandinavian Journal of Medicine & Science in Sports*, *14*(4), 245–257.
15. Jowett, S., & Shanmugam, V. (2016). Relational coaching in sport: Its psychological underpinnings and practical effectiveness. In R. J. Schinke, K. R. McGannon, & B. Smith (Eds.), *Routledge International Handbook of Sport Psychology* (pp. 471–484). Routledge.
16. Mageau, G. A., & Vallerand, R. J. (2003). The coach–athlete relationship: a motivational model. *Journal of Sports Sciences*, *21*(11), 883–904.
17. Mosewich, A. D., Ferguson, L. J., McHugh, T.L.F., & Kowalski, K.C. (2018). Enhancing capacity: Integrating self-comparison in sport. *Journal of Applied Sport Psychology, 30*(6), 573-587.
18. Nicholls, A. R., & Polman, R. C. J. (2007). Coping in sport: A systematic review. *Journal of Sports Sciences*, *25*(1), 11–31.
19. Nuetzel, B. (2023). Coping strategies for handling stress and providing mental health in elite athletes: A systematic review. *Frontiers in Sports and Active Living*, *(16)*15, 1265783. https://doi.org/10.3389/fspor.2023.1265783
20. Poczwardowski, A., Barott, J. E., & Jowett, S. (2006). Diversifying approaches to research on athlete–coach relationships. *Psychology of Sport and Exercise*, *7*(2), 125–142.
21. Smith, R. E., Schutz, R. W., Smoll, F. L., & Ptacek, J. T. (1995). Development and validation of a multidimensional measure of sport-specific psychological skills: The Athletic Coping Skills Inventory-28. *Journal of Sport and Exercise Psychology*, *17*(4),

379–398.

22. Weinberg, R. S., & Gould, D. (2019). *Foundations of sport and exercise psychology* (7th ed.).