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Predicting Coping with Performance Failure by Self-Compassion and Growth Mindset in Professional Athletes

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A B S T R A C T

The objective of this study was to examine the predictive roles of self-compassion and growth mindset in coping with performance failure among professional athletes. This study employed a correlational descriptive design involving 396 professional athletes from Turkey. Participants were selected according to the Morgan and Krejcie (1970) table and completed standardized questionnaires measuring self-compassion, growth mindset, and coping with performance failure. Data analysis was conducted using SPSS-27. Pearson correlation was utilized to assess the relationships between coping with performance failure and each independent variable separately, and multiple linear regression analysis was conducted to evaluate the predictive power of self-compassion and growth mindset on coping with performance failure. Pearson correlation analysis indicated that coping with performance failure was positively and significantly correlated with self-compassion ($r = .54$, $p < 0.01$) and growth mindset ($r = .48$, $p < 0.01$). Multiple linear regression results revealed that self-compassion and growth mindset together significantly predicted coping with performance failure ($R = .58$, $R^2 = .34$, $F(2, 393) = 101.63$, $p < 0.01$). Both self-compassion ($\beta = .44$, $t = 8.91$, $p < 0.01$) and growth mindset ($\beta = .29$, $t = 7.09$, $p < 0.01$) were significant positive predictors, with self-compassion emerging as the stronger predictor. The findings highlight the critical roles of self-compassion and growth mindset in facilitating more adaptive coping with performance failure among professional athletes. Enhancing both emotional regulation through self-compassion and cognitive beliefs through growth mindset may contribute to improved resilience and performance outcomes in competitive sports settings.

Keywords: *Self-Compassion, Growth Mindset, Coping with Performance Failure, Professional Athletes, Psychological Resilience*

1. Introduction

Self-compassion, defined as a kind and understanding attitude toward oneself in instances of pain or failure, has been extensively explored in sport psychology. Researchers have shown that athletes with higher self-compassion are better equipped to manage the emotional challenges that arise from performance setbacks (1). This construct comprises self-kindness, common humanity, and mindfulness, which together create a nurturing self-attitude that buffers the negative effects of failure. Self-compassion has been linked to reduced anxiety, enhanced resilience, and more adaptive achievement behaviors (2, 3). For instance, Adam et al. (2021) found that female athletes who demonstrated higher self-compassion perceived their sport performances more positively and experienced greater overall well-being (2). Moreover, self-compassion appears to help athletes reframe mistakes as learning opportunities rather than threats to self-worth (4). This reframing can be vital in protecting against the debilitating effects of failure, particularly in high-pressure sports contexts (5).

Research has further highlighted the mediating role of self-compassion in enhancing emotional resilience following performance failures. Zhang et al. (2023) showed that athletes with greater self-compassion demonstrated better emotional resilience, mediated by physiological regulation mechanisms such as vagal reactivity (6). Similarly, Póka et al. (2023) found that self-compassion significantly predicted lower levels of negative affect and higher positive affect after recalling exercise-related setbacks (7). These findings underline the critical emotional self-regulation function of self-compassion, which may help athletes move beyond immediate performance disappointments and maintain motivation for future efforts.

The benefits of self-compassion extend beyond emotional coping to cognitive performance processes as well. Research by Mosewich et al. (2021) indicated that athletes who endorse self-compassion are more likely to sustain domain-specific grit, suggesting that a self-compassionate orientation fosters perseverance despite challenges (1). Additionally, in a study involving football players, James et al. (2022) demonstrated that self-compassion techniques helped athletes reinterpret mistakes as learning opportunities, thus improving overall performance and reducing fear of failure (4). These findings are consistent with evidence that self-compassion may mediate relationships between dispositional mindfulness and athlete burnout (5), indicating that self-compassion functions as a core resilience factor across diverse sporting contexts.

Similarly, growth mindset—the belief that one's abilities and intelligence can be developed with effort—has been extensively recognized as a critical psychological resource for athletes. According to Dweck's theory of implicit beliefs, individuals with a growth mindset view challenges and failures as opportunities for learning and improvement (8, 9). Numerous studies have confirmed the relevance of growth mindset to sports contexts, suggesting that athletes who believe in the malleability of their abilities are better able to sustain effort, remain motivated, and ultimately improve performance (10). A systematic review by Gontijo et al. (2023) emphasized that fostering a growth mindset contributes positively to sports performance by encouraging persistent engagement and adaptive goal-setting behaviors (10).

Moreover, the interplay between mindset and emotional coping mechanisms has become an important area of research. Zhao et al. (2023) demonstrated that growth mindset positively predicts self-efficacy and grit, which in turn influence academic delay of gratification, suggesting important implications for sports where persistence is critical (11). Cury et al. (2022) also highlighted the importance of growth mindset for optimizing metabolism and immunity, indirectly affecting athletes' physical performance under stress (12). These findings support the idea that adopting a growth mindset equips athletes with the psychological flexibility needed to navigate the emotional toll of performance failures.

Furthermore, recent studies have explored the role of self-reflection and self-compassion as psychological pathways through which growth mindset enhances learning outcomes (13). Kwan et al. (2022) found that individuals with growth mindsets who engaged in self-reflection and practiced self-compassion were better able to internalize positive learning outcomes from both successes and failures (13). Similarly, Justus et al. (2022) emphasized that a growth mindset promotes enhanced performance outcomes by strengthening principal self-efficacy and perseverance through adversity (14).

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Self-compassion and growth mindset, therefore, appear to operate synergistically in promoting positive adaptation to performance setbacks. As noted by Jennings et al. (2022), self-compassion acts as a self-regulatory resource that enhances work performance and well-being, which could similarly apply to athletic performance (15). This synergistic effect has critical implications for professional athletes who must constantly cope with the emotional and cognitive demands of high-stakes competition (16). Ponomarov et al. (2024) provided further evidence by emphasizing that cultivating a "winner's mindset"—aligned with growth mindset principles—can significantly improve athletes' mental preparedness and competitive success (17).

In addition, psychological flexibility, which has been shown to mediate the relationship between self-compassion and post-traumatic growth (18), might serve as another important mechanism linking self-compassion and growth mindset to successful coping with performance failure. Athletes who display high psychological flexibility are better able to manage the emotional challenges that accompany performance pressures, reducing the likelihood of emotional exhaustion or disengagement from their sport (18).

Other researchers have focused on specific domains within athletic populations. For example, Mohebi et al. (2021) demonstrated that mindfulness-acceptance-commitment training significantly improved self-compassion and grit among elite female athletes (19), while Ataabadi et al. (2022) found that self-compassion moderated the negative effects of biomechanical feedback on self-criticism among athletes (20). These findings further support the role of self-compassion in building psychological resilience within athletic contexts.

Moreover, Reis et al. (2021) explored male athletes' experiences of self-compassion through the lens of masculinity, revealing that higher self-compassion helped them navigate cultural expectations around toughness and invulnerability (21). Such findings are crucial, as gendered expectations often intensify the emotional consequences of failure in male athletes. Ziarat et al. (2021) also highlighted the predictive value of self-compassion for mental well-being and general health among female athletes, reinforcing the generalizability of self-compassion's benefits across genders and cultures (22).

Given the intense physical and psychological demands of competitive sports in Turkey, and the critical importance of psychological resilience in sustaining athletic careers, exploring these relationships is particularly timely. Turkish athletes often face unique pressures related to both national pride and rapidly evolving professional sports infrastructures, which may heighten the emotional stakes associated with performance outcomes (23). Thus, the present study aims to investigate the predictive role of self-compassion and growth mindset in coping with performance failure among professional athletes.

2. Methods and Materials

2.1. Study Design and Participants

This study employed a correlational descriptive design to investigate the predictive role of self-compassion and growth mindset on coping with performance failure among professional athletes. The participants consisted of 396 professional athletes from Turkey, selected based on the sample size recommendations of the Morgan and Krejcie (1970) table. Participants were recruited using a convenience sampling method and voluntarily completed standardized questionnaires designed to measure coping with performance failure, self-compassion, and growth mindset. Inclusion criteria required participants to have at least three years of professional athletic experience and active competition involvement at national or international levels.

2.2. Measures

2.2.1. Coping with Performance Failure

To measure coping with performance failure, the Performance Failure Appraisal Inventory (PFAI) developed by Conroy et al. (2002) was used. The PFAI is a standardized instrument consisting of 25 items designed to assess individuals' beliefs related to the aversive consequences of failing. It includes five subscales: fear of experiencing shame and embarrassment, fear of devaluing one's self-estimate, fear of having an uncertain future, fear of important others losing interest, and fear of upsetting important others. Respondents rate each item on a 5-point Likert scale ranging from 1 (do not believe at all) to 5 (believe 100% of the time), with higher scores indicating greater fear of failure-related

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coping difficulties. The validity and reliability of the PFAI have been confirmed in multiple studies across athletic and non-athletic populations, showing good internal consistency (Cronbach's alpha coefficients typically above 0.80) and strong construct validity.

2.2.2. Self-Compassion

Self-compassion was assessed using the Self-Compassion Scale (SCS) developed by Neff (2003). The SCS is a widely used and validated instrument composed of 26 items that measure six subscales: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. Participants respond on a 5-point Likert scale ranging from 1 (almost never) to 5 (almost always), with higher total scores indicating higher levels of self-compassion. Several studies have consistently confirmed the psychometric properties of the SCS, demonstrating excellent internal reliability (with Cronbach's alpha coefficients generally reported above 0.90) and strong construct and convergent validity across diverse samples, including athletes.

2.2.3. Growth Mindset

Growth mindset was measured using the Implicit Theories of Intelligence Scale developed by Dweck (1999). This standard tool consists of 8 items assessing individuals' beliefs about the malleability of intelligence, reflecting a general orientation toward a growth versus fixed mindset. Participants indicate their agreement with each statement on a 6-point Likert scale from 1 (strongly agree) to 6 (strongly disagree), with higher scores representing a stronger growth mindset. Four items are reverse-scored to control for response bias. The validity and reliability of the Implicit Theories of Intelligence Scale have been widely supported in prior research, with internal consistency coefficients typically exceeding 0.80 and substantial evidence for its predictive validity in academic, athletic, and performance domains.

2.3. Data Analysis

Data analysis was performed using SPSS version 27. To examine the relationships between coping with performance failure and the independent variables (self-compassion and growth mindset), Pearson correlation coefficients were calculated. Furthermore, a standard multiple linear regression analysis was conducted to determine the predictive power of self-compassion and growth mindset on coping with performance failure simultaneously. Prior to conducting the analyses, the assumptions of normality, linearity, multicollinearity, and homoscedasticity were checked and confirmed.

3. Findings and Results

The sample included 396 professional athletes, of whom 232 (58.6%) were male and 164 (41.4%) were female. The age of participants ranged from 18 to 34 years, with a mean age of 24.7 years (SD = 4.1). Regarding the type of sport, 162 (40.9%) participants were engaged in individual sports, and 234 (59.1%) were engaged in team sports. In terms of competition level, 172 (43.4%) competed primarily at the national level, while 224 (56.6%) participated in international competitions. Additionally, the majority of participants (n = 287, 72.5%) reported having more than five years of professional experience, while 109 (27.5%) had between three and five years of experience.

Table 1

Descriptive Statistics for Study Variables

Variable	Mean (M)	Standard Deviation (SD)
Coping with Performance Failure	87.52	10.34
Self-Compassion	96.47	11.15
Growth Mindset	28.61	4.72

The results of descriptive statistics showed that the mean score for coping with performance failure was 87.52 with a standard deviation of 10.34. The mean score for self-compassion was 96.47 with a standard deviation of 11.15, while the mean score for growth mindset was 28.61 with a standard deviation of 4.72. These values indicate moderate

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to high levels of the measured constructs among the participating athletes (Table 1).

Before conducting Pearson correlation and linear regression analyses, statistical assumptions were assessed and confirmed. The normality of the variables was examined using skewness and kurtosis values, which ranged between -0.71 and 0.68, falling within the acceptable range of -1 to +1. Linearity was confirmed through scatterplots that showed a linear relationship between the independent variables and coping with performance failure. Multicollinearity was checked by calculating Variance Inflation Factors (VIF), with all VIF values ranging between 1.23 and 1.41, indicating no multicollinearity concerns. Homoscedasticity was verified using the scatterplot of standardized residuals, showing a random pattern, and the Durbin-Watson statistic was 1.92, confirming the absence of autocorrelation.

Table 2

Correlation Coefficients Between Study Variables

Variables	1	2	3
1. Coping with Performance Failure	—		
2. Self-Compassion	.54** ($p < 0.01$)	—	
3. Growth Mindset	.48** ($p < 0.01$)	.41** ($p < 0.01$)	—

The Pearson correlation analysis indicated that coping with performance failure was significantly and positively correlated with self-compassion ($r = .54$, $p < 0.01$) and growth mindset ($r = .48$, $p < 0.01$). Additionally, self-compassion and growth mindset were significantly correlated with each other ($r = .41$, $p < 0.01$), suggesting interconnectedness among these psychological constructs (Table 2).

Table 3

Summary of Regression Analysis for Coping with Performance Failure

Source	Sum of Squares	Degrees of Freedom (df)	Mean Squares	R	R^2	Adjusted R^2	F	p
Regression	3896.74	2	1948.37	.58	.34	.34	101.63	<0.01
Residual	7516.28	393	19.13					
Total	11413.02	395						

The results of the multiple regression analysis indicated that the model was statistically significant ($F(2, 393) = 101.63$, $p < 0.01$). The overall model explained approximately 34% of the variance in coping with performance failure ($R^2 = .34$, Adjusted $R^2 = .34$), indicating a moderate predictive effect of self-compassion and growth mindset together (Table 3).

Table 4

Regression Coefficients Predicting Coping with Performance Failure

Predictor	B	Standard Error	β	t	p
Constant	27.81	5.42	—	5.13	<0.01
Self-Compassion	0.52	0.06	.44	8.91	<0.01
Growth Mindset	0.78	0.11	.29	7.09	<0.01

The multivariate regression results revealed that both self-compassion and growth mindset significantly predicted coping with performance failure. Specifically, self-compassion had a standardized beta coefficient (β) of .44 ($t = 8.91$, $p < 0.01$), and growth mindset had a standardized beta coefficient (β) of .29 ($t = 7.09$, $p < 0.01$). The positive B coefficients for both predictors indicate that increases in self-compassion and growth mindset were associated with increases in coping with performance failure among athletes (Table 4).

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4. Discussion and Conclusion

The present study aimed to investigate the predictive role of self-compassion and growth mindset in coping with performance failure among professional athletes in Turkey. The findings revealed significant positive correlations between coping with performance failure and both self-compassion and growth mindset. Furthermore, the results of the multiple linear regression analysis indicated that self-compassion and growth mindset together significantly predicted coping with performance failure, accounting for a meaningful proportion of the variance. Specifically, self-compassion emerged as the stronger predictor, although growth mindset also contributed significantly.

The positive correlation between self-compassion and coping with performance failure is consistent with previous research emphasizing the protective role of self-compassion in the face of setbacks and challenges in athletic contexts (1, 2). Athletes high in self-compassion tend to approach their failures with kindness rather than harsh self-criticism, allowing them to regulate negative emotions effectively and maintain motivation. This aligns with findings from Casali et al. (2021), who showed that self-compassion reduces competition anxiety and repetitive negative thinking among athletes (3). Similarly, Walker (2021) demonstrated that self-compassion mediates the relationship between mindfulness and burnout, suggesting that self-compassion serves as a critical emotional buffer for athletes dealing with stress and failure (5).

In addition, the results support prior findings showing that athletes with greater self-compassion display greater emotional resilience. For example, Zhang et al. (2023) found that vagal reactivity—an indicator of emotional regulation—mediates the relationship between self-compassion and emotional resilience following athletic failure (6). Likewise, Póka et al. (2023) reported that self-compassion significantly predicts positive affect after recalling setbacks (7). Thus, our findings reinforce the argument that self-compassion enables athletes to respond more adaptively to performance failures by fostering emotional stability and psychological recovery.

The positive correlation between growth mindset and coping with performance failure also aligns with a large body of literature on the benefits of a malleable self-belief system in performance contexts. Growth mindset emphasizes that abilities can be developed through effort and learning, thereby encouraging persistence in the face of difficulties (8, 9). In this study, athletes with a stronger growth mindset were more likely to cope successfully with performance failures, consistent with prior findings showing that a growth mindset facilitates perseverance and goal re-engagement after setbacks (10). Moreover, Zhao et al. (2023) highlighted that growth mindset predicts grit and academic self-efficacy, which are crucial for long-term goal pursuit even after experiencing failures (11).

The regression analysis demonstrated that both self-compassion and growth mindset are significant predictors of coping with performance failure, suggesting that these two constructs may operate synergistically. This is consistent with Kwan et al. (2022), who found that self-reflection and self-compassion mediate the benefits of a growth mindset on learning outcomes (13). Athletes who believe in their capacity to improve and treat themselves kindly after mistakes are more likely to persist and adaptively cope with failures, supporting a holistic model of psychological resilience in sports settings.

Additionally, the finding that self-compassion was a stronger predictor than growth mindset highlights the critical emotional regulation role that self-compassion plays beyond cognitive beliefs about ability. While growth mindset provides a cognitive framework for interpreting failure as a learning opportunity, self-compassion addresses the emotional pain associated with failure, offering immediate affective relief (4, 15). As such, interventions aiming to improve coping with performance failure in athletes may benefit from targeting both cognitive and emotional strategies simultaneously.

Several studies also support the notion that self-compassion enhances perseverance and psychological flexibility, which are essential for effective coping. For example, Misurya et al. (2021) demonstrated that self-compassion indirectly promotes post-traumatic growth through psychological flexibility (18). Likewise, Mohebi et al. (2021) found that mindfulness-acceptance-commitment training improved both self-compassion and grit in elite female athletes (19). These findings suggest that self-compassion not only helps athletes emotionally recover from failures but also equips them with the resilience to persist toward their goals.

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From a broader perspective, cultivating a growth mindset and a winner's mentality, as emphasized by Ponomarov et al. (2024), is critical for optimizing athletes' mental preparation and competitive performance (17). However, the present study suggests that without emotional self-compassion, the cognitive advantages of a growth mindset might be insufficient for fully adaptive coping. Athletes who lack self-compassion might continue to experience maladaptive emotional responses to failure, even if they intellectually believe that effort leads to improvement.

Furthermore, gendered and cultural factors may influence how self-compassion and growth mindset operate in sports contexts. Reis et al. (2021) explored male athletes' experiences of self-compassion through the lens of masculinity and found that higher self-compassion helped them manage cultural pressures emphasizing toughness and invulnerability (21). Similarly, Ziarat et al. (2021) found that self-compassion positively predicted mental well-being among female athletes in Tehran (22). These findings suggest that promoting self-compassion and growth mindset in professional athletes should consider contextual factors such as cultural norms around success, failure, and emotional expression.

In sum, the present study corroborates and extends previous findings by demonstrating that self-compassion and growth mindset are important psychological resources for coping with performance failure among professional athletes. The results emphasize the need for holistic approaches that address both cognitive and emotional aspects of resilience to optimize athletes' long-term performance and mental health.

Despite its contributions, this study has several limitations. First, the cross-sectional design precludes causal inferences regarding the relationships among self-compassion, growth mindset, and coping with performance failure. Longitudinal studies are necessary to confirm the directionality of these relationships over time. Second, the use of self-report measures may introduce social desirability or response biases, particularly given that self-compassion and coping are sensitive psychological constructs. Third, the sample was limited to professional athletes from Turkey, which may affect the generalizability of the findings to athletes from different cultural or amateur athletic contexts. Finally, other psychological variables such as perfectionism, mental toughness, or self-efficacy, which might also influence coping with failure, were not included in the current model.

Future research should employ longitudinal or experimental designs to better understand the causal pathways linking self-compassion, growth mindset, and coping with performance failure. It would be valuable to investigate whether interventions specifically designed to enhance self-compassion and growth mindset can causally improve coping strategies and performance outcomes in athletes. Future studies should also explore these relationships in diverse cultural contexts and among athletes at different competition levels (e.g., amateur vs. elite) to enhance the generalizability of the findings. Additionally, incorporating other relevant psychological constructs such as grit, resilience, and emotional intelligence could provide a more comprehensive understanding of the psychological factors involved in coping with failure.

Based on the findings of this study, it is recommended that sports psychologists and coaches develop intervention programs that simultaneously target the development of self-compassion and growth mindset among athletes. Workshops and training sessions that teach athletes to approach their failures with kindness and view setbacks as opportunities for growth could foster more adaptive coping responses. Coaches should create team cultures that normalize mistakes and emphasize effort and learning rather than only outcome-focused success. Integrating emotional regulation strategies with cognitive reframing techniques may offer a powerful approach to enhancing athletes' resilience, promoting sustained performance, and protecting mental health throughout their athletic careers.

Authors' Contributions

All authors equally contributed to this study.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

The study placed a high emphasis on ethical considerations. Informed consent obtained from all participants, ensuring they are fully aware of the nature of the study and their role in it. Confidentiality strictly maintained, with data anonymized to protect individual privacy. The study adhered to the ethical guidelines for research with human subjects as outlined in the Declaration of Helsinki. Ethical considerations included obtaining informed consent, ensuring confidentiality and anonymity, and avoiding any harm to participants.

References

1. Mosewich AD, Dunn JG, Dunn JC, Wright KS. Domain-Specific Grit, Identity, and Self-Compassion in Intercollegiate Athletes. Sport Exercise and Performance Psychology. 2021;10(2):257-72. [DOI]
2. Adam ME, Eke AO, Ferguson LJ. "Know That You're Not Just Settling": Exploring Women Athletes' Self-Compassion, Sport Performance Perceptions, and Well-Being Around Important Competitive Events. Journal of Sport and Exercise Psychology. 2021;43(3):268-78. [PMID: 33894692] [DOI]
3. Casali N, Ghisi M, Jansen P, Feraco T, Meneghetti C. What Can Affect Competition Anxiety in Athletes? The Role of Self-Compassion and Repetitive Negative Thinking. Psychological Reports. 2021;125(4):2009-28. [PMID: 34037483] [DOI]
4. James IA, Medea B, Harding M, Glover D, Bruno José de Oliveira C. The Use of Self-Compassion Techniques in Elite Footballers: Mistakes as Opportunities to Learn. The Cognitive Behaviour Therapist. 2022;15. [DOI]
5. Walker S. Self-Compassion Mediates the Relationship Between Dispositional Mindfulness and Athlete Burnout Among Adolescent Squash Players in South Africa. South African Journal of Sports Medicine. 2021;33(1). [PMID: 36816900] [PMCID: PMC9924516] [DOI]
6. Zhang N, Huang J, Yao J. Athletes' Self-Compassion and Emotional Resilience to Failure: The Mediating Role of Vagal Reactivity. Frontiers in Psychology. 2023;14. [PMID: 37359872] [PMCID: PMC10288131] [DOI]
7. Póka T, Veres A, Barta A. Self-Compassion Predicts Student Athletes' Negative and Positive Affect After Remembering Exercise-Related Setbacks. Studia Universitatis Babeş-Bolyai Educatio Artis Gymnasticae. 2023:31-44. [DOI]
8. Dong L, Jia X, Fei Y. How Growth Mindset Influences Mathematics Achievements: A Study of Chinese Middle School Students. Frontiers in Psychology. 2023;14. [PMID: 37057163] [PMCID: PMC10086334] [DOI]
9. Su A, Wan S, He W, Dong L. Effect of Intelligence Mindsets on Math Achievement for Chinese Primary School Students: Math Self-Efficacy and Failure Beliefs as Mediators. Frontiers in Psychology. 2021;12. [DOI]
10. Gontijo GM, Ishikawa VN, Ichikawa AIT, Bubna P, Conter FdS, Antonio Carlos Madeiro de Q, et al. Influences of Mindset and Lifestyle on Sports Performance: A Systematic Review. International Journal of Nutrology. 2023;16(2). [DOI]
11. Zhao H, Li Y, Wan L, Ke L. Grit and Academic Self-Efficacy as Serial Mediation in the Relationship Between Growth Mindset and Academic Delay of Gratification: A Cross-Sectional Study. Psychology Research and Behavior Management. 2023;Volume 16:3185-98. [PMID: 37588250] [PMCID: PMC10426458] [DOI]
12. Cury PR, Rajapaksa S, Vidanapathirana J, José I, Filho IJZ, Filho R. The Impact of Mindset and Lifestyle on Metabolism and Immunity for Sports Performance: A Concise Systematic Review. International Journal of Development Research. 2022:57794-7. [DOI]
13. Kwan LY, Hung YS, Lam L. How Can We Reap Learning Benefits for Individuals With Growth and Fixed Mindsets?: Understanding Self-Reflection and Self-Compassion as the Psychological Pathways to Maximize Positive Learning Outcomes. Frontiers in Education. 2022;7. [DOI]
14. Justus K, Arghode V, Barker D. Principal Self-Efficacy, Mindset and Performance Outcomes: Exploring the Connection. European Journal of Training and Development. 2022;47(5/6):565-85. [DOI]
15. Jennings RE, Lanaj K, Kim YJ. Self-compassion at Work: A Self-regulation Perspective on Its Beneficial Effects for Work Performance and Wellbeing. Personnel Psychology. 2022;76(1):279-309. [DOI]
16. Vealey RS, Wright E. Using Imagery to Build Confidence in Esports. Journal of Imagery Research in Sport and Physical Activity. 2023;18(s1). [DOI]
17. Ponomarov V, Korchagin M, Kostenko Y. Improvements in Training Settings and Recommendations for the Formation of a Winner's Mindset in the Training Process of Wrestlers. Scientific Journal of National Pedagogical Dragomanov University Series 15 Scientific and Pedagogical Problems of Physical Culture (Physical Culture and Sports). 2024(7(180)):137-42. [DOI]
18. Misurya P, udgirkar n, Shukla V, Anand PV. Self-Compassion and Post Traumatic Growth: The Mediating Role of Psychological Flexibility". 2021. [DOI]
19. Mohebi M, Bahmani DS, Zarei S, Zandi HG, Brand S. Examining the Effects of Mindfulness–Acceptance–Commitment Training on Self-Compassion and Grit Among Elite Female Athletes. International Journal of Environmental Research and Public Health. 2021;19(1):134. [PMID: 35010391] [PMCID: PMC8750224] [DOI]
20. Ataabadi YA, Cormier DL, Kowalski KC, Oates A, Ferguson LJ, Lanovaz JL. The Associations Among Self-Compassion, Self-Esteem, Self-Criticism, and Concern Over Mistakes in Response to Biomechanical Feedback in Athletes. Frontiers in Sports and Active Living. 2022;4. [PMID: 35520096] [PMCID: PMC9062879] [DOI]
21. Reis NA, Kowalski KC, Mosewich AD, Ferguson LJ. 'That's How I Am Dealing With It – That<i>is</I>dealing With It': Exploring Men Athletes' Self-Compassion Through the Lens of

Health Nexus
E-ISSN: 2981-2569

Masculinity. Qualitative Research in Sport Exercise and Health. 2021;14(2):245-67. [DOI]
22. Ziarat SKA, Taheri A, Abolmaali K. Prediction of Mental Well-Being and General Health Based on Perceived Stress and Body Image With Mediating the Role of Self-Compassion in Women Athletes in Tehran. International Journal of Motor Control and Learning. 2021;3(2):32-47. [DOI]
23. Tıngaz EO, Çakmak S. Mindfulness, Self-Compassion, and Athletic Performance in Student-Athletes. Journal of Rational-Emotive & Cognitive-Behavior Therapy. 2021;41(2):478-88. [DOI]

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