

Research Paper

Breaking the Fear Cycle: How Irrational Beliefs Contribute to Sports Injury Anxiety in Volleyball Players

Rahmath Nishada K.¹, Nandhana B.², Muhamed Shahal T.², Dr. Guneet Inder Jit Kaur^{3*}

ABSTRACT

Injury anxiety is a pressing psychological issue in high-impact sports like volleyball. This study examines how irrational beliefs—such as demandingness, awfulizing, low frustration tolerance, and self-depreciation—contribute to injury-related anxiety. The study comprised 40 volleyball athletes competing at regional and national levels. Participants were recruited from university teams, sports academies, and local volleyball clubs. Inclusion criteria required that athletes be actively competing and have experienced injury-related concerns in their playing history. Exclusion criteria included athletes currently undergoing psychological treatment for anxiety or those with severe injuries preventing participation in volleyball. All participants completed the Irrational Beliefs Scale (IBS) and the Sports Injury Anxiety Scale (SIAS). The analysis revealed a significant positive correlation between irrational beliefs and injury anxiety. Players with higher irrational thinking reported greater anxiety about potential injuries, especially those prone to catastrophizing. These findings highlight the importance of cognitive restructuring techniques to reduce anxiety and enhance mental resilience in athletes.

Keywords: *Irrational Beliefs, Sports Injury Anxiety, Volleyball Players*

Injury anxiety is a prevalent psychological concern among athletes. It stems from the fear of sustaining injuries, reinjury, or failing to recover fully, and can significantly influence an athlete's mental and physical performance. Research highlights that competitive trait anxiety is strongly linked to injury occurrence, rehabilitation outcomes, and the return-to-sport process (Ford, et al. 2017). Athletes with heightened anxiety may exhibit maladaptive stress responses, increasing their risk of injury and prolonging recovery. Fear-avoidance behaviors, such as reluctance to use an injured body part, further exacerbate physical dysfunction and delay recovery (Fischerbauer et al., 2018). Research indicates that fear-avoidance can lead to a cycle of psychological distress and physical limitations, where

¹Research Scholar, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan

²Masters Student, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan

³Assistant Professor and Coordinator, Department of Sports Psychology, School of Sports Sciences, Central University of Rajasthan, Rajasthan

*Corresponding Author

Received: July 15, 2025; Revision Received: September 26, 2025; Accepted: September 30, 2025

Breaking the Fear Cycle: How Irrational Beliefs Contribute to Sports Injury Anxiety in Volleyball Players

athletes develop excessive worry about re-injury, ultimately hindering their rehabilitation and return to play (Hsu et al., 2017).

Athletes experience failures, adversities, and stressors of different magnitudes in their careers (Mellalieu et al., 2009; Tamminen et al., 2013). Mental resilience equips athletes to recover quickly from setbacks, maintain focus under pressure, and adapt to challenges. Resilience in sport performers arises out of protective factors (Sarkar & Fletcher, 2014). Resilient individuals can engage these protective factors to adapt successfully to adversity and stressors (Waaktaar & Torgersen, 2010). Injury-related fears can profoundly influence an athlete's career trajectory: Anxiety about reinjury often leads to cautious play, reduced confidence, and suboptimal performance. Athletes may hesitate to give full effort due to fear of exacerbating their injuries (Ford et al., 2017). Emotional distress, including catastrophic thinking about pain or recovery uncertainty, can prolong rehabilitation periods and hinder progress toward pre-injury performance levels (Brewer et al., 2000). Persistent injury anxiety can lead to avoidance behaviors or early retirement due to diminished physical function and mental strain. Athletes with strong resilience are better equipped to overcome these fears and sustain longer careers (Zurita-Ortega et al., 2018).

REBT posits that irrational beliefs, not events themselves, drive unhealthy emotional responses (Turner, 2016). In sports contexts, this means an athlete's interpretation of setbacks (e.g., missed goals or injuries) matters more than the events themselves. There are four types of irrational beliefs which are destructive thought patterns, namely demandingness, awfulizing, low frustration tolerance, and depreciation. Demandingness is a rigid "must-win" mentality, studies show that demandingness is directly linked to injury risk: 66% of studies show athletes with competitive trait anxiety are more prone to musculoskeletal injuries (Cagle et al., 2017). Awfulizing is catastrophizing minor setbacks (e.g. this injury ruins everything). Low Frustration Tolerance, "I can't handle this pain" beliefs lead to either avoidance behaviors or dangerous overexertion. Depreciation Self-critical thoughts ("I'm worthless if injured").

Research has shown that irrational beliefs, such as dogmatic self-demands and fear of failure, are strongly associated with competitive anxiety in athletes. These beliefs often manifest as cognitive and somatic anxiety, influenced by perfectionistic traits (both adaptive and maladaptive) (Tóth et al., 2022). Self-deprecating beliefs, such as "If I lose, I am a failure," have been identified as a major predictor of low self-confidence, which exacerbates competitive anxiety and potentially increases the risk of injury due to heightened stress responses.

Athletes with irrational beliefs are more likely to experience poor mental health outcomes, including increased injury-related anxiety. This is particularly relevant in high-pressure scenarios where performance expectations are rigid and extreme (Putukian, 2016). Poor mental health driven by irrational beliefs can delay recovery post-injury by increasing psychological distress and reducing adherence to rehabilitation programs. This highlights the importance of addressing cognitive distortions during recovery (Rogers et al., 2023). Factors like neuroticism and perceived susceptibility to injury (PSSI) interact with cognitive distortions to amplify injury-related anxiety. These constructs are underexplored but hold potential for explaining the psychological mechanisms behind injury perception (Binboga et al., 2012). Cognitive distortions, such as exaggerated perceptions of injury risk or fear of reinjury, contribute to heightened anxiety levels. This fear can lead to avoidance behaviors

Breaking the Fear Cycle: How Irrational Beliefs Contribute to Sports Injury Anxiety in Volleyball Players

or reduced confidence in recovery, thereby impairing performance or rehabilitation outcomes.

Existing literature establishes a strong link between irrational beliefs, cognitive distortions, and sports injury anxiety. However, significant gaps remain, particularly in understanding these dynamics within volleyball players and developing targeted interventions for managing injury-related fears. Future research should prioritize sport-specific studies, refine psychological constructs related to injury anxiety, and explore long-term impacts through longitudinal designs.

METHOD

Participants

The study comprised 40 volleyball athletes competing at regional and national levels. Participants were recruited from university teams, sports academies, and local volleyball clubs. Inclusion criteria required that athletes be actively competing and have experienced injury-related concerns in their playing history. Exclusion criteria included athletes currently undergoing psychological treatment for anxiety or those with severe injuries preventing participation in volleyball.

Research Design

A correlational research design was employed to examine the relationship between irrational beliefs and sports injury anxiety. The study aimed to determine whether higher levels of irrational beliefs were associated with increased anxiety about injuries in volleyball players.

Measures

1. Irrational Beliefs Scale (IBS): A validated self-report questionnaire used to assess irrational thinking patterns, including demandingness, low frustration tolerance, awfulizing, and self-depreciation. Participants rated items on a 5-point Likert scale, with higher scores indicating stronger irrational beliefs.
2. Sports Injury Anxiety Scale (SIAS): A standardized measure assessing fear of injury, worry about re-injury, and anxiety regarding performance limitations due to injuries. Items were rated on a Likert scale, with higher scores reflecting greater injury-related anxiety.

Procedure

Participants were briefed about the study objectives and provided informed consent before participation. The questionnaires were administered in a controlled environment at training centers or online for convenience. Responses were collected anonymously to ensure confidentiality and reduce response bias. Data collection was completed over a two-week period.

Data Analysis

Descriptive statistics (mean, standard deviation) were computed to summarize participant characteristics and questionnaire scores. Pearson's correlation analysis was conducted to examine the relationship between irrational beliefs and sports injury anxiety. Additionally, a regression analysis was performed to determine whether irrational beliefs significantly predicted injury anxiety levels. All statistical analyses were conducted using SPSS (Version XX), with a significance level set at $p < 0.05$.

Breaking the Fear Cycle: How Irrational Beliefs Contribute to Sports Injury Anxiety in Volleyball Players

RESULTS

Table 1 Descriptive statistics

	Mean	Std. Deviation	N
Demandingness	2.9500	.80607	40
LFT	2.9300	.62520	40
Awfulizing	2.8700	.78388	40
Depreciation	2.7300	.78779	40
Performance belief	11.4800	2.72982	40
Loss of athleticism	9.03	2.224	40
Being perceived as weak	9.80	2.255	40
Experiencing pain	8.78	2.402	40
Letting down important others	8.63	2.272	40
Reinjury	9.53	2.396	40
Loss of social support	9.78	2.506	40
Impaired self-image	8.35	2.466	40
Sport Injury Anxiety	63.88	12.746	40

Table II Pearson Correlation Matrix between Irrational Beliefs, and Sport Injury Anxiety among Volleyball Players

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Demandingness	1												
2. LFT	.844**	1											
3. Awfulizing	.859**	.793**	1										
4. Depreciation	.644**	.689**	.782**	1									
5. Performance belief	.921**	.905**	.948**	.861**	1								
6. Loss of athleticism	.224	.171	.208	.156	.210	1							
7. Being perceived as weak	.099	.084	.255	.304*	.209	.579**	1						
8. Experiencing pain	-.115	.047	.090	.200	.061	.563**	.649**	1					
9. Letting down important others	.129	.187	.240	.463**	.284*	.403**	.540**	.548**	1				
10. Reinjury	.046	.046	.122	.077	.081	.806**	.765**	.640**	.334*	1			
11. Loss of social support	.497**	.373**	.397**	.296*	.431**	.723**	.504**	.370**	.264*	.477**	1		
12. Impaired self-image	.117	.252	.226	.443**	.285*	.363*	.515**	.685**	.710**	.272*	.416**	1	
13. Sport Injury Anxiety	.187	.218	.286*	.360*	.291*	.819**	.839**	.825**	.699**	.790**	.699**	.737**	1

Pearson product-moment correlation analysis was conducted to examine the relationships between irrational beliefs, injury-related cognitive factors, and sport injury anxiety among volleyball players. As presented in Table II, sport injury anxiety was found to have significant positive correlations with several irrational belief domains, including awfulizing ($r = .286, p < .05$), depreciation ($r = .360, p < .01$), and the performance belief inventory total score ($r = .291, p < .05$). However, no significant associations were observed between sport injury anxiety and demandingness ($r = .187, p > .05$) or low frustration tolerance (LFT)

Breaking the Fear Cycle: How Irrational Beliefs Contribute to Sports Injury Anxiety in Volleyball Players

($r = .218, p > .05$), although these beliefs were strongly intercorrelated with each other and with other irrational belief subscales.

Injury-specific cognitive concerns demonstrated notably stronger associations with sport injury anxiety compared to irrational belief dimensions. Among these, the perception of being perceived as weak ($r = .839, p < .01$), loss of athleticism ($r = .819, p < .01$), and experiencing pain ($r = .825, p < .01$) showed the highest correlations with sport injury anxiety. These concerns reflect deeply rooted fears related to identity and vulnerability in athletic contexts. Furthermore, the fear of letting down important others ($r = .699, p < .01$) and loss of social support ($r = .699, p < .01$) were also significantly correlated with injury anxiety, highlighting the role of interpersonal pressure and the importance of connectedness in athletes' psychological experiences. Additionally, fear of reinjury ($r = .790, p < .01$) and impaired self-image ($r = .737, p < .01$) were significant predictors of sport injury anxiety, suggesting that athletes may internalize physical injury as a threat not only to performance but also to self-worth and identity. Collectively, these findings underscore the multifaceted psychological impact of injury in sport, wherein both self-evaluative and social dimensions contribute to heightened anxiety, reinforcing the need for holistic approaches to injury rehabilitation that address cognitive, emotional, and relational domains.

DISCUSSION

The present study aimed to explore the relationship between irrational beliefs and sport injury anxiety in volleyball players, drawing upon the theoretical framework of Rational Emotive Behaviour Therapy (REBT). REBT posits that irrational beliefs, such as demandingness, catastrophizing (or awfulizing), low frustration tolerance, and self-depreciation are central contributors to maladaptive emotional responses (Ellis, 1962; Dryden, 2008). The findings of the present study offer empirical support for this proposition, particularly in the context of sports injury, where irrational beliefs were associated with heightened anxiety related to injury.

Specifically, the results demonstrated that awfulizing, depreciation, and the composite score on the performance belief inventory were significantly associated with sport injury anxiety. These cognitive distortions may exacerbate athletes' perceptions of injury as catastrophic or indicative of personal failure, thus intensifying emotional distress (Turner & Barker, 2014). In contrast, demandingness and low frustration tolerance did not show significant correlations with injury anxiety, which may suggest that these beliefs are less salient in injury contexts unless reinforced by evaluative or catastrophic appraisals.

Importantly, the most robust predictors of sport injury anxiety were injury-related cognitive concerns. Perceived loss of athleticism, fear of being viewed as weak, experiencing pain, and reinjury concerns were significantly associated with heightened anxiety. These findings are consistent with previous research suggesting that injury experiences are closely tied to athletes' identity, self-worth, and social perception (Podlog & Eklund, 2007; Wiese-Bjornstal et al., 1998). The psychological consequences of injury often extend beyond physical limitations, encompassing fears of exclusion, diminished competence, and disrupted career trajectories (Tracey, 2003; Brewer, 2001).

The observed associations between irrational beliefs and injury-specific fears such as loss of social support and impaired self-image further support the idea that athletes who hold maladaptive cognitive appraisals may interpret injury as a threat to their broader personal

Breaking the Fear Cycle: How Irrational Beliefs Contribute to Sports Injury Anxiety in Volleyball Players

and social identity (Martin et al., 2020). These beliefs can contribute to a negative feedback loop, wherein fear, avoidance, and performance pressure intensify emotional distress and impede recovery (Walker et al., 2007).

These findings underscore the need for psychological interventions that address both cognitive and emotional dimensions of injury recovery. Integrating REBT-informed strategies into rehabilitation programs may offer a structured and effective approach to modifying irrational beliefs and reducing injury-related anxiety (Turner et al., 2020). In particular, targeting catastrophic thinking (awfulizing) and self-depreciation through cognitive restructuring and psychoeducation could help athletes build more adaptive coping mechanisms and maintain resilience throughout the rehabilitation process.

CONCLUSION

This study underscores the significant role of irrational beliefs and injury-related cognitive concerns in shaping sport injury anxiety among volleyball players. Findings revealed that athletes who perceive injury through a lens of catastrophic thinking, self-depreciation, and social evaluative fears are more susceptible to heightened anxiety. While certain irrational beliefs—such as awfulizing and depreciation—were moderately associated with injury anxiety, it was the injury-specific concerns, including fear of being perceived as weak, loss of athletic identity, and reinjury anxiety that demonstrated the strongest correlations.

These results highlight the intricate interplay between cognitive distortions and identity-driven fears in athletic contexts. They also reinforce the theoretical assertions of Rational Emotive Behaviour Therapy (REBT), suggesting that irrational beliefs can amplify emotional distress in injury scenarios. The findings advocate for the inclusion of cognitive-behavioral strategies, particularly REBT-based interventions, in injury prevention and rehabilitation programs to foster resilience and emotional regulation among athletes. Future research should explore longitudinal and intervention-based designs to assess the causal impact of modifying irrational beliefs on recovery outcomes and performance sustainability in high-stress sporting environments.

REFERENCES

- Yang, J., Peek-Asa, C., Covassin, T., & Torner, J. C. (2015). Post-concussion symptoms of depression and anxiety in Division I collegiate athletes. *Developmental Neuro psychology, 40*(1), 18–23.
- Binboga, E., Guven, S., Çatıkkaş, F., Bayazıt, O., & Tok, S. (2012). Psychophysiological responses to competition and the big five personality traits. *Journal of human kinetics, 33*, 187.
- Brewer, B. W. (2001). Psychology of sport injury rehabilitation. In R. N. Singer, H. A. Hausenblas, & C. M. Janelle (Eds.), *Handbook of Sport Psychology* (2nd ed., pp. 86–107). Wiley.
- Brewer, B. W., Cornelius, A. E., Van Raalte, J. L., Petitpas, A. J., Sklar, J. H., Pohlman, M. H., ... & Ditmar, T. D. (2000). Attributions for recovery and adherence to rehabilitation following anterior cruciate ligament reconstruction: a prospective analysis. *Psychology and Health, 15*(2), 283-291.
- Cagle, J. A., Overcash, K. B., Rowe, D. P., & Needle, A. R. (2017). Trait Anxiety as a Risk Factor for Musculoskeletal Injury in Athletes: A Critically Appraised Topic. *International Journal of Athletic Therapy & Training, 22*(3).
- Dryden, W. (2008). *Rational emotive behaviour therapy: Distinctive features*. Routledge.

Breaking the Fear Cycle: How Irrational Beliefs Contribute to Sports Injury Anxiety in Volleyball Players

- Ellis, A. (1962). *Reason and emotion in psychotherapy*. Lyle Stuart.
- Fischerauer, S. F., Talaei-Khoei, M., Bexkens, R., Ring, D. C., Oh, L. S., & Vranceanu, M. (2018). What Is the Relationship of Fear Avoidance to Physical Function and Pain Intensity in Injured Athletes? *Clinical Orthopaedics and Related Research*, 476(4), 754. <https://doi.org/10.1007/s11999.00000000000000085>
- Ford, J. L., Ildefonso, K., Jones, M. L., & Arvinen-Barrow, M. (2017). Sport-related anxiety: Current insights. *Open Access Journal of Sports Medicine*, 8, 205. <https://doi.org/10.2147/OAJSM.S125845>
- Hsu, C. J., Meierbachtol, A., George, S. Z., & Chmielewski, T. L. (2017). Fear of Reinjury in Athletes. *Sports health*, 9(2), 162–167. <https://doi.org/10.1177/1941738116666813>
- Martin, L. A., Byrd, B., Watts, M. L., & Dent, M. (2020). Psychological impact of sports injuries: A review of the literature. *Journal of Athletic Training*, 55(6), 590–601. <https://doi.org/10.4085/1062-6050-471-18>
- Mellalieu, S. D., Neil, R., Hanton, S., & Fletcher, D. (2009). Competition stress in sport performers: Stressors experienced in the competition environment. *Journal of sports sciences*, 27(7), 729-744.
- Podlog, L., & Eklund, R. C. (2007). Professional coaches' perspectives on the return to sport following serious injury. *Journal of Applied Sport Psychology*, 19(2), 207–225. <https://doi.org/10.1080/10413200701188951>
- Putukian, M. (2016). The psychological response to injury in student athletes: a narrative review with a focus on mental health. *British journal of sports medicine*, 50(3), 145-148.
- Rogers, D. L., Tanaka, M. J., Cosgarea, A. J., Ginsburg, R. D., & Dreher, G. M. (2023). How Mental Health Affects Injury Risk and Outcomes in Athletes. *Sports Health*, 16(2), 222. <https://doi.org/10.1177/19417381231179678>
- Sarkar, M., & Fletcher, D. (2014). Psychological resilience in sport performers: a review of stressors and protective factors. *Journal of sports sciences*, 32(15), 1419-1434.
- Tamminen, K. A., Holt, N. L., & Neely, K. C. (2013). Exploring adversity and the potential for growth among elite female athletes. *Psychology of sport and exercise*, 14(1), 28-36.
- Tóth, R., Turner, M. J., Kökény, T., & Tóth, L. (2022). “I must be perfect”: The role of irrational beliefs and perfectionism on the competitive anxiety of Hungarian athletes. *Frontiers in Psychology*, 13, 994126. <https://doi.org/10.3389/fpsyg.2022.994126>
- Tracey, J. (2003). The emotional response to the injury and rehabilitation process. *Journal of Applied Sport Psychology*, 15(4), 279–293. <https://doi.org/10.1080/714044197>
- Turner M. J. (2016). Rational Emotive Behavior Therapy (REBT), Irrational and Rational Beliefs, and the Mental Health of Athletes. *Frontiers in psychology*, 7, 1423. <https://doi.org/10.3389/fpsyg.2016.01423>
- Turner, M. J., & Barker, J. B. (2014). Using Rational Emotive Behavior Therapy with athletes. *The Sport Psychologist*, 28(1), 75–90. <https://doi.org/10.1123/tsp.2013-0012>
- Turner, M. J., Wood, A., Cotterill, S., & Barker, J. (2020). Irrational beliefs and mental health in athletes: A systematic review. *International Review of Sport and Exercise Psychology*, 13(1), 96–119. <https://doi.org/10.1080/1750984X.2019.1618857>
- Waaktaar, T., & Torgersen, S. (2010). How resilient are resilience scales? The Big Five scales outperform resilience scales in predicting adjustment in adolescents. *Scandinavian Journal of Psychology*, 51(2), 157-163.
- Walker, N., Thatcher, J., & Lavalley, D. (2007). Psychological responses to injury in competitive sport: A critical review. *The Journal of the Royal Society for the Promotion of Health*, 127(4), 174–180. <https://doi.org/10.1177/1466424007077340>

Breaking the Fear Cycle: How Irrational Beliefs Contribute to Sports Injury Anxiety in Volleyball Players

- Wiese-Bjornstal, D. M., Smith, A. M., Shaffer, S. M., & Morrey, M. A. (1998). An integrated model of response to sport injury: Psychological and sociological dynamics. *Journal of Applied Sport Psychology*, 10(1), 46–69. <https://doi.org/10.1080/10413209808406377>
- Zurita-Ortega, F., Chacón-Cuberos, R., Cofre-Bolados, C., Knox, E., & Muros, J. J. (2018). Relationship of resilience, anxiety and injuries in footballers: Structural equations analysis. *PLoS ONE*, 13(11), e0207860. <https://doi.org/10.1371/journal.pone.0207860>

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Nishada, R.K., Nandhana, B., Shahal, T.M. & Kaur, G.I.J. (2025). Breaking the Fear Cycle: How Irrational Beliefs Contribute to Sports Injury Anxiety in Volleyball Players. *International Journal of Indian Psychology*, 13(3), 4535-4542. DIP:18.01.415.20251303, DOI:10.25215/1303.415