

PSYCHOLOGICAL PROFILES OF INDIVIDUAL- AND TEAM-SPORT ATHLETES IN KARNATAKA: A DESCRIPTIVE COMPARATIVE ASSESSMENT

¹JETTEMMA & ² PROF. D. M. JYOTI

¹Research Scholar Karnataka State Akkamahadevi Women University Vijayapur

²Research Guide KSAWU Vijayapur

ABSTRACT

Psychological preparation is central to consistent performance, athlete well-being, and long-term participation, yet the demands of individual and team sports are not identical. This paper presents a descriptive-comparative synthesis of competitive anxiety, motivation, self-efficacy, mental toughness, resilience, coping, attentional control, social support, and cohesion, with specific reference to athletes in Karnataka. A structured narrative review of peer-reviewed literature and validated sport-psychology measures was undertaken, retaining foundational instrument studies and recent comparative evidence. The synthesis indicates that individual-sport athletes often experience greater personal accountability and may report higher competitive anxiety or mental-health vulnerability, while also developing autonomy, self-regulation, and mastery-based confidence. Team-sport athletes generally benefit from relatedness, shared coping, and social support, but must manage role ambiguity, interpersonal conflict, evaluation by teammates, and coordination pressure. Recent evidence suggests that autonomous motivation need not differ greatly between sport types; rather, its psychological sources differ. Karnataka-based research among state sports-hostel youth further identifies sustained motivation, self-esteem, disappointment, anger, and injury-related stress as priority areas for mental-skills training. The review therefore rejects a simple 'better' sport-type conclusion and recommends differentiated, evidence-based psychological support: autonomy and support-network building for individual athletes, and role clarity, communication, collective efficacy, and psychologically safe team climates for team athletes. A contextual research framework is proposed for future primary data collection across Karnataka.

KEYWORDS: competitive anxiety; motivation; self-efficacy; mental toughness; resilience; team cohesion; Karnataka athletes

1. INTRODUCTION

Sport performance emerges from the interaction of physical capacity, technical skill, tactical judgment, and psychological functioning. Athletes must regulate arousal, direct attention, recover from error, preserve confidence, and remain motivated during uncertainty. These demands are shaped by the structure of the sport itself. In an individual event, the athlete's execution is visibly tied to the final outcome; in a team event, performance depends on coordinated roles and a shared social environment. Sport type therefore provides a useful though incomplete lens for understanding athlete psychology.

Individual sports such as athletics, badminton singles, boxing, swimming, tennis, weightlifting, wrestling, and selected shooting events place substantial emphasis on self-paced preparation, personal control, and direct responsibility for success or failure. These conditions may strengthen discipline and self-reliance, but they can also intensify self-blame, perfectionist evaluation, and pre-competition worry. Team sports such as cricket, football, hockey, basketball, volleyball, kabaddi, and kho-kho distribute responsibility across interdependent performers. Teammates can provide belonging, feedback, and emotional buffering; however, team athletes also face selection pressure, role conflict, status competition, communication failures, and collective expectations.

The distinction should not be treated as a fixed personality divide. Athletes self-select into sports, coaching climates differ, and many disciplines combine individual and collective elements. Doubles badminton, relay events, rowing, and team-format combat competitions illustrate the limits of a binary classification. Gender, age, competitive level, injury history, socioeconomic support, training load, and coach behavior may explain as much variation as sport type. Accordingly, the most defensible question is not which sport category produces a superior psychological profile, but which psychological resources and risks become more salient in each context.

This question is especially relevant in Karnataka, where athletes train across government sports hostels, schools, colleges, universities, academies, clubs, and state associations. A Karnataka study of 166 youth aged 16–21 years in state sports hostels in Bengaluru and Mysuru found strong demand for help with sustaining motivation, protecting self-esteem, managing disappointment and anger, and coping with injury-related stress (Udayakumar et al., 2017). Those priorities demonstrate that psychological support is not an optional addition to physical preparation; it is a locally expressed training need.

2. AIM AND OBJECTIVES

The aim is to describe and compare major psychological parameters associated with individual- and team-sport participation and to translate the evidence into a context-sensitive framework for Karnataka. The objectives are to examine competitive anxiety and emotional regulation; compare motivational and confidence-related processes; evaluate mental toughness, resilience, coping, social support, and cohesion; identify implications for coaches and institutions; and specify a rigorous design for future primary research among Karnataka athletes.

3. METHODOLOGY

A structured narrative review and contextual synthesis was used because no participant-level dataset accompanied the proposed topic. Searches conducted in July 2026 drew on PubMed-indexed literature, peer-reviewed sport and exercise psychology journals, and reference tracing. Search concepts combined individual sport, team sport, athlete, anxiety, motivation, self-efficacy, mental toughness, resilience, coping, cohesion, mental health, India, and Karnataka. Comparative studies, reviews, theory papers, and validated measurement studies were prioritized. Foundational sources published before 2000 were retained when they established widely used constructs or instruments.

Evidence was organized by psychological domain and interpreted according to the direction, consistency, and practical meaning of reported differences. Because designs, age groups, sports, and measures varied, no pooled effect estimate was calculated. The resulting conclusions are therefore evidence-informed patterns rather than prevalence estimates for Karnataka. This distinction protects against presenting uncollected scores as empirical findings.

4. CONCEPTUAL FRAMEWORK AND PSYCHOLOGICAL PARAMETERS

4.1 Competitive Anxiety and Emotional Regulation

Competitive anxiety includes cognitive worry, somatic activation, and disrupted concentration. Its effect depends partly on intensity, interpretation, timing, and the athlete's perceived control; anxiety is not uniformly harmful (Raglin, 1992). Comparative evidence nevertheless shows a recurring tendency for individual-sport athletes to report greater general or competitive anxiety than team-sport athletes (Correia & Rosado, 2019; Kemarat et al., 2022). Direct accountability, fewer opportunities to diffuse failure, and uninterrupted public evaluation may contribute. Team membership can buffer pressure through shared emotion regulation, although poor cohesion or selection insecurity may reverse this advantage.

4.2 Motivation and Basic Psychological Needs

Self-Determination Theory distinguishes autonomous motivation—participation experienced as chosen and personally meaningful—from controlled motivation and amotivation (Ryan & Deci, 2020). The revised Sport Motivation Scale (SMS-II) offers an efficient assessment of this continuum (Pelletier et al., 2013). Recent comparative work suggests that overall autonomous motivation may be similar across sport types even when its sources differ: individual athletes report greater autonomy satisfaction, whereas team athletes report greater relatedness and, in some samples, competence satisfaction (Van Yperen, 2025).

4.3 Self-Efficacy, Confidence, and Attentional Control

Self-efficacy is an athlete's belief in the capacity to organize and execute actions required for a specific performance (Bandura, 1997). Individual sports can provide clear mastery feedback—times, scores, lifts, accuracy, or rankings—that strengthens personal agency. Team athletes additionally depend on collective efficacy: confidence that teammates can coordinate successfully. Concentration is required in both contexts, but

its target differs. Individual athletes often sustain an internal performance routine, while team athletes rapidly alternate attention among the ball, space, opponents, teammates, and tactical cues.

4.4 Mental Toughness, Resilience, Coping, and Cohesion

Mental toughness is best regarded as a dynamic psychological resource rather than an unchanging trait (Gucciardi, 2017). Resilience concerns positive adaptation under significant pressure or adversity; elite performance research highlights challenge appraisal, focused support, confidence, motivation, and metacognitive regulation (Fletcher & Sarkar, 2012). Individual sports may cultivate independent problem solving, whereas team sports offer relational coping and collective resilience. Cohesion is specifically central to teams and includes task and social dimensions measured by the Group Environment Questionnaire (Carron et al., 1985). It should not be assumed, however, that mere membership guarantees meaningful support.

Table 1. Comparative psychological patterns reported in the literature

Parameter	Individual-sport tendency	Team-sport tendency	Interpretive caution
Anxiety	Often higher personal accountability and worry	Shared coping may buffer pressure	Effects vary by gender, level, and coaching climate
Motivation	Autonomy and mastery are prominent sources	Relatedness and competence are prominent sources	Overall autonomous motivation may be similar
Resilience	Self-efficacy and self-regulation pathways	Social support and collective regulation pathways	Both contexts can build resilience
Cohesion/support	Coach, family, and training-group networks matter	Task clarity, trust, and communication are central	Support quality matters more than mere availability

5. RESULTS OF THE COMPARATIVE SYNTHESIS

5.1 Anxiety and Mental-Health Vulnerability

Across comparative studies and reviews, the most consistent difference concerns anxiety and related mental-health risk. Correia and Rosado (2019), studying athletes from multiple disciplines, found higher sport-anxiety levels among individual-sport participants. Kemarat et al. (2022) likewise reported a statistically significant but small difference, with greater competitive anxiety in individual athletes. Among child and adolescent athletes, Pluhar et al. (2019) observed self-reported anxiety or depression in 13% of individual-sport athletes compared

with 7% of team-sport athletes. A later narrative review concluded that individual sports may carry relatively greater risk for depression, anxiety, eating pathology, and exercise-addiction-related concerns, although team sports may show higher risk for some forms of substance misuse (Reardon & Hitchcock, 2024).

These findings should not be interpreted causally. Vulnerable athletes may select particular sports, and aesthetic, weight-sensitive, judged, endurance, or combat disciplines may produce different risks from other individual sports. Similarly, a hostile team environment can undermine the protective value of belonging. The practical conclusion is targeted screening, not the assumption that every individual athlete is anxious or every team athlete is protected.

5.2 Motivation and Need Satisfaction

The evidence favors a differentiated-needs model. In two studies including 1,215 athletes in total, Van Yperen (2025) found higher autonomy satisfaction among individual-sport athletes and higher relatedness satisfaction among team-sport athletes; competence satisfaction was also higher for team athletes in the larger study. Yet autonomous motivation itself did not significantly differ by sport type. Thus, both groups can be deeply self-determined, but coaches may reach that outcome through different psychological routes. Individual athletes benefit when they participate in planning and understand the purpose of training. Team athletes benefit when roles are meaningful, relationships are respectful, and improvement is visibly linked to collective objectives.

5.3 Self-Efficacy, Mental Toughness, and Resilience

Recent adolescent evidence indicates that both sport types can predict resilience, but team sports operate more strongly through social support and shared emotion regulation, whereas individual sports operate more strongly through self-efficacy (Wei et al., 2025). In adult futsal athletes, self-efficacy and mental toughness were linked to sport performance indicators, supporting their practical relevance within team settings (Aizava et al., 2023). The common denominator is not toughness as emotional suppression; it is confidence, adaptability, attention, and effective action under pressure.

5.4 Coping, Cohesion, and Social Support

Individual athletes may rely more on self-talk, routines, goal setting, and problem-focused coping. Team athletes can draw on shared appraisal and assistance, but effective support depends on trust, inclusion, and role clarity. Cohesion is associated with team success, particularly when athletes are united around task goals (Carron et al., 2002). Psychological assessment must therefore examine the quality of the environment: coach autonomy support, teammate relationships, communication norms, and access to confidential help. Eime et al. (2013) similarly showed that the psychosocial benefits of sport extend beyond physical activity, with social interaction and self-esteem among frequently reported outcomes.

5.5 Overall Comparative Judgment

No evidence supports ranking one sport type as psychologically superior. Individual sports appear to concentrate responsibility and autonomy; team sports distribute responsibility and increase relational resources. Each structure

creates both assets and vulnerabilities. The most accurate conclusion is that sport type changes the pathway through which psychological strengths are developed and risks are experienced.

6. DISCUSSION

The reviewed evidence supports an ecological interpretation: the sport environment repeatedly rewards certain forms of attention, motivation, coping, and social behavior. An individual athlete must often execute without in-competition assistance and cannot easily attribute the outcome to collective action. This encourages ownership and detailed self-monitoring, but it can also turn a correctable error into a global judgment of personal worth. A team athlete operates within an interpersonal system where communication, mutual trust, role acceptance, and coordination affect performance. This environment can normalize setbacks and provide support, but it can also expose the athlete to exclusion, comparison, blame, or uncertainty.

Competitive anxiety illustrates why interpretation matters. Somatic activation can signal readiness, whereas catastrophic interpretation of the same sensations can narrow attention and disrupt technique. Interventions should therefore improve recognition and regulation rather than promise complete elimination of anxiety. A pre-performance routine paced breathing, attention cue words, imagery, and simulation under pressure can benefit both groups. For individual athletes, the routine should include a recovery plan after error and a process-focused attribution style. For teams, regulation should also include communication scripts, shared reset cues, and brief collective debriefing.

The motivation findings have an equally important implication. Coaches should not presume that team athletes are mainly externally motivated or that individual athletes are inherently more committed. Van Yperen's (2025) findings indicate similar autonomous motivation supported by different needs. In individual sports, choice within structure can protect autonomy: athletes may help set process goals, select cue words, and review performance data. In teams, meaningful connection and competence should be built through clear roles, specific feedback, peer leadership, and recognition of contribution beyond scoring or selection status.

Mental toughness also requires careful use. When framed as silence, denial of injury, or emotional hardness, the concept may discourage help-seeking. Contemporary work instead treats mental toughness as adaptable and context-dependent (Gucciardi, 2017). A psychologically skilled athlete can acknowledge fear, seek appropriate support, and still act effectively. This understanding aligns with resilience research showing that high performance is supported by positive personality, motivation, confidence, focus, and perceived social support rather than by invulnerability (Fletcher & Sarkar, 2012).

Assessment should therefore combine performance-oriented and well-being measures. Competitive anxiety, motivation, coping, confidence, and mental toughness can be assessed with the CSAI-2R, SMS-II, ACSI-28, and SMTQ, respectively (Cox et al., 2003; Pelletier et al., 2013; Sheard et al., 2009; Smith et al., 1995). Team cohesion can be assessed with the Group Environment Questionnaire, while a brief validated measure of psychological distress should be administered under a clear referral protocol. Instruments should be used in languages athletes understand, with local piloting and reliability testing. Scores are starting points for conversation and program design, not labels of talent or mental strength.

7. PRACTICAL RECOMMENDATIONS

For individual-sport programs. Embed mastery goals, self-compassion after error, attentional routines, injury coping, and planned peer or mentor contact. Review performance using controllable processes before outcomes.

For team-sport programs. Strengthen role clarity, communication, collective efficacy, peer leadership, conflict repair, and psychological safety. Monitor isolated substitutes, injured athletes, and those facing selection uncertainty.

For both settings. Provide confidential screening, qualified referral pathways, coach education, workload monitoring, and brief mental-skills sessions integrated into normal practice rather than offered only during crisis.

8. IMPLICATIONS FOR KARNATAKA

Karnataka's sporting system includes athletes from metropolitan, semi-urban, rural, residential-hostel, school, collegiate, academy, and club environments. A single generic workshop is unlikely to meet this diversity. The local evidence reported by Udayakumar et al. (2017) provides a practical starting point: motivation during performance fluctuations, self-esteem, disappointment, anger, and injury stress should form the core curriculum. Delivery can then be differentiated by sport type. Individual athletes need structured social support and healthy attribution after failure; teams need communication, role clarity, and methods for collective emotional recovery.

A feasible state-level model would use three tiers. Universal support would provide mental-health literacy, goal setting, sleep and recovery education, and help-seeking information to all athletes. Targeted group support would address sport-specific needs through six- to eight-session modules integrated with practice. Specialist care would provide confidential assessment and referral for persistent anxiety, depression, disordered eating, substance misuse, trauma, self-harm risk, or severe adjustment difficulties. Coaches should receive parallel training so daily feedback reinforces rather than contradicts the intervention.

9. PROPOSED FRAMEWORK FOR PRIMARY RESEARCH

A future descriptive-comparative study should recruit a stratified sample of male and female athletes from individual and team sports across multiple Karnataka regions and competition levels. Eligibility criteria should specify age, minimum training duration, current competitive status, and primary sport. A balanced sample of approximately 240–320 athletes would permit adjusted group comparisons while remaining feasible; the final size should be determined through an a priori power analysis. Sampling should avoid treating all athletes from one academy or one sport as representative of the state.

The core battery may include the CSAI-2R for competitive state anxiety, SMS-II for motivation, ACSI-28 for coping skills, SMTQ for mental toughness, and a common measure of self-efficacy, resilience, perceived support, and psychological distress. The GEQ may be added for team-specific analysis. Kannada versions should undergo translation, back-translation, cognitive interviewing, and pilot testing rather than simple literal translation. Institutional ethics approval, written informed consent, assent and guardian consent where applicable, privacy safeguards, and a risk-referral protocol are essential.

Analysis should report means, standard deviations, reliability coefficients, missing-data handling, and distributional checks. Multivariate analysis of covariance can compare sport types while adjusting for age, gender, competition level, training hours, injury status, and years of experience. Effect sizes and 95% confidence intervals should accompany p values. Measurement invariance should be examined before interpreting group mean differences, and athletes nested within teams or academies may require multilevel modeling.

10. LIMITATIONS

This paper is a structured narrative review, not a systematic review or an original survey. The literature contains heterogeneous samples and many cross-sectional designs, limiting causal inference. Sport categories may conceal important differences among aesthetic, combat, endurance, precision, invasion, and net games. Published findings from other countries may not transfer directly to Karnataka, and self-report measures are susceptible to response bias. These limitations reinforce the need for culturally tested instruments, representative sampling, longitudinal follow-up, and qualitative interviews.

11. CONCLUSION

Individual- and team-sport athletes face distinguishable psychological environments but do not form two uniform personality types. Individual sports commonly emphasize autonomy, self-regulation, and personal accountability, with a recurring risk of heightened competitive anxiety and self-blame. Team sports commonly offer relatedness, shared coping, and collective confidence, while introducing interpersonal and role-based stressors. Karnataka programs should preserve the strengths of each environment and directly compensate for its vulnerabilities. The most effective policy is therefore a differentiated system of routine mental-skills training, confidential screening, coach development, and accessible specialist care.

REFERENCES

1. Aizava, P. V. S., Codonhato, R., & Fiorese, L. (2023). Association of self-efficacy and mental toughness with sport performance in Brazilian futsal athletes. *Frontiers in Psychology*, 14, 1195721. <https://doi.org/10.3389/fpsyg.2023.1195721>
2. Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
3. Carron, A. V., Colman, M. M., Wheeler, J., & Stevens, D. (2002). Cohesion and performance in sport: A meta-analysis. *Journal of Sport & Exercise Psychology*, 24(2), 168–188. <https://doi.org/10.1123/jsep.24.2.168>
4. Carron, A. V., Widmeyer, W. N., & Brawley, L. R. (1985). The development of an instrument to assess cohesion in sport teams: The Group Environment Questionnaire. *Journal of Sport Psychology*, 7(3), 244–266. <https://doi.org/10.1123/jsp.7.3.244>
5. Correia, M., & Rosado, A. (2019). Anxiety in athletes: Gender and type of sport differences. *International Journal of Psychological Research*, 12(1), 9–17. <https://doi.org/10.21500/20112084.3552>
6. Cox, R. H., Martens, M. P., & Russell, W. D. (2003). Measuring anxiety in athletics: The Revised Competitive State Anxiety Inventory-2. *Journal of Sport & Exercise Psychology*, 25(4), 519–533. <https://doi.org/10.1123/jsep.25.4.519>

7. Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents. *International Journal of Behavioral Nutrition and Physical Activity*, 10, 98. <https://doi.org/10.1186/1479-5868-10-98>
8. Fletcher, D., & Sarkar, M. (2012). A grounded theory of psychological resilience in Olympic champions. *Psychology of Sport and Exercise*, 13(5), 669–678. <https://doi.org/10.1016/j.psychsport.2012.04.007>
9. Gucciardi, D. F. (2017). Mental toughness: Progress and prospects. *Current Opinion in Psychology*, 16, 17–23. <https://doi.org/10.1016/j.copsyc.2017.03.010>
10. Hanton, S., Fletcher, D., & Coughlan, G. (2005). Stress in elite sport performers: A comparative study of competitive and organizational stressors. *Journal of Sports Sciences*, 23(10), 1129–1141. <https://doi.org/10.1080/02640410500131480>
11. Kemarat, S., Theanthong, A., Yeemin, W., & Suwankan, S. (2022). Personality characteristics and competitive anxiety in individual and team athletes. *PLOS ONE*, 17(1), e0262486. <https://doi.org/10.1371/journal.pone.0262486>
12. Pelletier, L. G., Rocchi, M. A., Vallerand, R. J., Deci, E. L., & Ryan, R. M. (2013). Validation of the revised Sport Motivation Scale (SMS-II). *Psychology of Sport and Exercise*, 14(3), 329–341. <https://doi.org/10.1016/j.psychsport.2012.12.002>
13. Pluhar, E., McCracken, C., Griffith, K. L., Christino, M. A., Sugimoto, D., & Meehan, W. P. (2019). Team sport athletes may be less likely to suffer anxiety or depression than individual sport athletes. *Journal of Sports Science & Medicine*, 18(3), 490–496.
14. Raglin, J. S. (1992). Anxiety and sport performance. *Exercise and Sport Sciences Reviews*, 20, 243–274.
15. Reardon, C. L., & Hitchcock, M. (2024). Mental health in individual versus team sports. *International Review of Psychiatry*, 36(3), 284–295. <https://doi.org/10.1080/09540261.2024.2349079>
16. Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
17. Sheard, M., Golby, J., & van Wersch, A. (2009). Progress toward construct validation of the Sports Mental Toughness Questionnaire (SMTQ). *European Journal of Psychological Assessment*, 25(3), 186–193. <https://doi.org/10.1027/1015-5759.25.3.186>
18. 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 & Exercise Psychology*, 17(4), 379–398. <https://doi.org/10.1123/jsep.17.4.379>
19. Udayakumar, S. G., Sharma, M. K., Munivenkatappa, M., Sudhir, P. M., Mehrotra, S., & Hameed, N. T. (2017). Felt needs for psychological training to enhance performance: Perspectives of youth engaged in competitive sports. *Industrial Psychiatry Journal*, 26(2), 233–238. https://doi.org/10.4103/ipj.ipj_8_17
20. Van Yperen, N. W. (2025). Athletes' basic psychological need satisfaction and autonomous motivation: Differences between individual vs. team sports. *Frontiers in Sports and Active Living*, 7, 1592356. <https://doi.org/10.3389/fspor.2025.1592356>
21. Wei, D., Xue, J., & Sun, B. (2025). Team vs. individual sports in adolescence: Gendered mechanisms linking emotion regulation, social support, and self-efficacy to psychological resilience. *Frontiers in Psychology*, 16, 1636707. <https://doi.org/10.3389/fpsyg.2025.1636707>