



# Embodied Cognition in Sport Expertise: A Thematic Exploration of Sensorimotor Awareness in Professional Athletes

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| E d i t o r                                                                                                                                                                                   | R e v i e w e r s                                                                                                                                                                                                                                                                                                      |
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## 1. Round 1

### 1.1 Reviewer 1

Reviewer:

In the paragraph “Recent advances in neuroscience and sport psychology...” , the discussion of neural adaptations is compelling; however, the transition from neural evidence to experiential phenomena is abrupt, and you should include a bridging argument explaining how neural specialization translates into subjective sensorimotor awareness.

In the Methods section (“The participant group consisted of twenty-four professional athletes...” ), the sampling strategy is described as purposive, but you should clarify whether maximum variation, criterion-based, or homogeneous purposive sampling was applied, as this affects interpretive scope.

In the Measures section (“Each interview lasted between 60 to 90 minutes...” ), the interview protocol is described generally; however, the absence of sample questions or thematic domains limits methodological transparency and should be addressed.

In the Data Analysis section (“Coding was conducted manually to maintain close engagement...” ), the justification for manual coding is reasonable, but you should specify whether any qualitative data analysis software was considered or why it was excluded, as this impacts auditability.

In the Findings section (“The participant group consisted of twenty-four professional athletes...” ), the demographic description is clear, yet the inclusion of educational background appears tangential to the study’s focus; consider either justifying its relevance or removing it for conceptual coherence.

Authors revised the manuscript and uploaded the updated document.

## 1.2 Reviewer 2

Reviewer:

In the paragraph “A key component of embodied cognition in sport is sensorimotor awareness...” , the definitions of proprioception and interoception are accurate, but the conceptualization of exteroception is underdeveloped; given its importance in open-skill sports, you should expand its role in environmental attunement and perceptual coupling.

In the paragraph “The role of sensorimotor awareness extends beyond physical execution...” , the claim of bidirectional influence between bodily states and cognition is theoretically appropriate, but the paragraph would benefit from a more explicit integration of empirical evidence linking motor activity to specific cognitive outcomes (e.g., mental rotation tasks).

In the paragraph “Training practices in sport increasingly recognize the importance...” , the discussion of interventions is informative, yet the text lacks critical evaluation; you should discuss limitations or variability in intervention effectiveness across different athlete populations or skill levels.

In the paragraph “The concept of embodied decision-making further illustrates...” , the notion of “embodied choice” is introduced but not sufficiently operationalized; consider clarifying how this construct can be empirically observed or measured in qualitative data.

In the paragraph “In addition to performance optimization, embodied cognition has important implications for injury prevention...” , the link between sensorimotor disruption and injury risk is relevant, but the argument would benefit from more precise causal language and differentiation between correlation and mechanism.

In the paragraph “Despite the growing body of research in this area...” , the justification for qualitative methodology is appropriate; however, you should more explicitly articulate the epistemological rationale for choosing thematic analysis over alternative qualitative approaches such as phenomenology or grounded theory.

Authors revised the manuscript and uploaded the updated document.

## 2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.