

Theoretical Foundations and Practical Applications of the Socratic Case Method in Sport Psychology Teaching within Undergraduate Sports Science Programs

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Abstract: This study explores the theoretical foundations and practical implementation pathways of the Socratic Case-Method within undergraduate Sport Psychology courses. Grounded in the educational philosophy of Socratic dialogue, this paper systematically develops a theoretical framework that integrates student-centered pedagogy, critical thinking development, and case-based experiential learning. By analysing historical, philosophical, and pedagogical dimensions, the research delineates key components, such as guided questioning, collaborative debate, reflective writing, and contextualized case design, that constitute the core of this teaching methodology. Furthermore, the study proposes a structured implementation pathway adapted to the disciplinary characteristics of Sport Psychology programs, encompassing course design, teacher facilitation, student engagement, and assessment alignment. The findings provide a theoretical foundation and actionable guidelines for integrating the Socratic Case-Method into sport-related higher education, offering insights into how this approach can deepen conceptual understanding, foster analytical skills, and enhance practical application in a psychologically complex field.

Keywords: Socratic Case-Method; Sport Psychology; Critical Thinking; Case-Based Learning; Higher Education Pedagogy

1. Introduction

The ongoing evolution of higher education pedagogy increasingly emphasizes the development of students' critical thinking ^[1], problem-solving ^[2], and autonomous learning capacities ^[3]—competencies essential for navigating complex professional and academic landscapes. Within sport science education, particularly in Sport Psychology—a discipline intersecting theory and practice—traditional didactic approaches often fall short in engaging students with abstract psychological concepts and their real-world applications ^[4]. In response, innovative pedagogies that promote active learning and cognitive engagement are gaining traction.

Among these, the Socratic Case-Method (SCM) represents a dialogic and inquiry-based approach rooted in Socratic tradition, which uses carefully structured questioning and case analysis to stimulate critical dialogue, self-reflection, and deep conceptual understanding ^[5]. While SCM has been effectively applied in fields such as law ^[6], medicine ^[7], and business education ^[8], its adoption within sport-related disciplines—and specifically in Sport Psychology—remains underexplored both theoretically and empirically. This gap is noteworthy given the method's potential to address persistent educational challenges, including low student motivation, superficial content engagement, and the disconnect between theoretical knowledge and practical implementation.

Therefore, this study aims to undertake a systematic theoretical construction of SCM within the context of Sport Psychology education and delineate its practical implementation pathways. The research addresses two central questions: First, what theoretical framework can guide the integration of SCM into Sport Psychology curricula? Second, through what structured pathways can educators effectively implement this method to enhance learning outcomes? By addressing these questions, this paper seeks to contribute to the pedagogical discourse in sport science education, offering a theoretically grounded and practically oriented model for enriching teaching and learning in psychologically oriented sport

courses.

2. Method

This study adopts a qualitative research design rooted in educational theory construction and pedagogical design research. The primary objective is not to test a hypothesis but to systematically develop a theoretical framework and a practical implementation model for the Socratic Case-Method within the context of Sport Psychology education [9]. The methodology is structured into three interconnected phases: theoretical synthesis, conceptual modeling, and expert validation.

The theoretical synthesis phase involved a comprehensive systematic literature review to consolidate existing knowledge on the Socratic Case-Method and its applications in education. Scholarly works, including peer-reviewed articles, books, and pedagogical reports published in English between 2000 and 2024, were sourced from academic databases such as Web of Science, Scopus, ERIC, and CNKI. The search strategy utilized key terms including "Socratic Case-Method," "Socratic teaching in higher education," "case-based learning in sport psychology," "critical thinking pedagogy in sport science," and "student-centered teaching in theoretical courses." The review focused on literature that addressed the theoretical foundations of the method, its applications in social science or applied psychology courses, associated pedagogical designs or implementation strategies, and outcomes related to critical thinking or student engagement. A thematic analysis was subsequently conducted to identify recurring pedagogical principles, instructional components, and contextual factors influencing the method's effectiveness.

In the conceptual modeling phase, based on the synthesized literature, a theoretical framework was constructed using concept mapping and logic modeling techniques. This process involved identifying core constructs such as guided inquiry, reflective dialogue, and case contextualization; mapping the relationships between these constructs; and aligning the components of the Socratic Case-Method with specific learning objectives in Sport Psychology, such as understanding motivation theories or applying psychological interventions in sport settings. The framework underwent iterative refinement through diagrammatic modeling and the development of explanatory narratives.

The expert validation phase was conducted to enhance the credibility and applicability of the proposed model. A structured expert review was performed with five specialists in sport pedagogy, educational psychology, and higher education curriculum design. They evaluated the framework's coherence, relevance, and practicality through semi-structured interviews and a validation rubric. Their feedback informed subsequent refinements to the model's structure and implementation guidelines. Regarding ethical considerations, this study did not involve human participants in empirical data collection; it relied exclusively on published literature and expert intellectual input [10]. All sourced materials are cited in accordance with academic integrity standards.

3. Result

The systematic inquiry conducted through theoretical synthesis, conceptual modeling, and expert validation yielded a structured theoretical framework and a detailed practical pathway for implementing the Socratic Case-Method in Sport Psychology courses. The outcomes are presented in two integrated sections: the Theoretical Framework of the Socratic Case-Method in Sport Psychology Education, and the Practical Implementation Pathway.

3.1. Theoretical Framework of the Socratic Case-Method in Sport Psychology Education

The constructed framework is anchored in three interdependent theoretical pillars: Dialogic Pedagogy, Cognitive-Constructivist Learning, and Situated Cognition. Dialogic Pedagogy emphasizes knowledge co-construction through structured dialogue and questioning, positioning the instructor as a facilitator of inquiry rather than a transmitter of information. Cognitive-Constructivist Learning underpins the process by which students actively build understanding through interaction with complex, meaningful problems, thereby developing higher-order thinking skills. Situated Cognition ensures that learning is embedded in authentic, context-rich scenarios—here, real-world sport psychology cases—enabling the transfer of theoretical knowledge to practical application.

Within this foundation, the framework identifies four core operational components. Guided Socratic Questioning involves the use of open-ended, probing questions to challenge assumptions, stimulate analysis, and deepen conceptual exploration without providing direct answers. Case Narrative Design

requires the development of detailed, discipline-specific case studies that present ambiguous, multifaceted problems reflective of actual sport psychology practice, such as managing athlete anxiety or enhancing team cohesion. Reflective Dialogue & Debate facilitates structured peer-to-peer and group discussions where students articulate reasoning, critique perspectives, and collaboratively negotiate meaning. Metacognitive Integration engages students in conscious reflection on their own thinking processes, often through guided writing or discussion, to solidify learning and develop self-regulatory skills.

The framework further outlines a dynamic process model beginning with Case Presentation and Problem Identification, followed by cycles of Questioning & Hypothesis Generation, Evidence-Based Analysis & Debate, and culminating in Synthesis & Reflective Consolidation. This process is designed to be iterative and non-linear, accommodating the complex, exploratory nature of learning in sport psychology.

3.2. Practical Implementation Pathway for Sport Psychology Courses

The translation of the theoretical framework into practice involves a multi-stage pathway tailored to the structure of a typical undergraduate Sport Psychology module. The pathway is divided into three phases: Pre-Implementation Design, Active Implementation Process, and Post-Session Evaluation & Integration.

The Pre-Implementation Design phase focuses on preparatory work. It starts with Learning Objective Alignment, where course goals are explicitly mapped to the competencies fostered by the Socratic Case-Method, such as critical analysis of psychological theories or ethical decision-making. This is followed by Case Development, creating or adapting cases that are relevant, challenging, and aligned with curricular topics—for instance, a case exploring motivational climate in youth sport or intervention strategies for performance slumps. Concurrently, Facilitator Preparation ensures that instructors develop proficiency in Socratic questioning techniques and dialogue management through training or guided practice.

The Active Implementation Process phase details the in-class procedure. It begins with Case Introduction and Individual Analysis, where students independently examine the case material. This transitions to Small-Group Dialogic Inquiry, where students in groups engage with guided question sets to dissect the case. The core activity is the Plenary Socratic Dialogue, a facilitator-led whole-class discussion that probes deeper, connects ideas, and challenges consensus. Interspersed throughout are moments of Structured Reflection, where students pause to journal or discuss their cognitive and emotional responses to the dialogue.

The Post-Session Evaluation & Integration phase ensures learning closure and forward planning. This includes Formative Feedback Collection through short surveys or minute papers to gauge student understanding and engagement. Facilitator Reflection involves the instructor reviewing session recordings or notes to refine questions and manage discussion flow more effectively. Finally, Longitudinal Integration planning outlines how insights from the case are connected to subsequent coursework, assessments, or practical assignments, ensuring the learning is embedded within the broader curriculum. This integrated framework and pathway provide a coherent structure for embedding the Socratic Case-Method into Sport Psychology education, linking philosophical underpinnings directly to actionable teaching practices.

4. Discussion

The theoretical framework and practical pathway developed in this study offer a structured approach to integrating the Socratic Case-Method into Sport Psychology education. This discussion interprets these findings by examining their alignment with contemporary educational paradigms, their potential to address persistent pedagogical challenges in sport-related disciplines, and the broader implications for higher education reform.

The constructed framework demonstrates a coherent synthesis of Dialogic Pedagogy, Cognitive-Constructivism, and Situated Cognition, which together provide a robust theoretical foundation for the Socratic Case-Method. This tripartite alignment underscores that effective learning in Sport Psychology extends beyond knowledge acquisition to include the development of dialogic reasoning, contextual application, and metacognitive awareness ^[11]. The emphasis on Guided Socratic Questioning and Reflective Dialogue resonates with the shift toward student-centered learning, where the instructor's role

evolves from authoritative expert to facilitator of inquiry ^[12]. This shift is particularly pertinent in Sport Psychology, where many concepts—such as group dynamics or mental skills training—are inherently interpretative and benefit from collaborative sense-making.

The practical implementation pathway addresses several noted challenges in teaching theoretical sport science courses, including low student engagement with abstract material and the perceived gap between theory and practice ^[13]. By embedding learning within authentic Case Narratives—for example, a scenario involving an athlete experiencing burnout or a coach attempting to foster a mastery climate ^[14]—the method grounds theoretical concepts in recognizable professional contexts. This situated approach may enhance perceived relevance and support the transfer of learning to real-world settings, a critical outcome for applied disciplines like Sport Psychology. Furthermore, the structured phases of the pathway—from preparation to facilitated dialogue to reflective consolidation—provide a replicable model that can be adapted across different institutional and curricular contexts. The inclusion of Facilitator Preparation and Metacognitive Integration highlights the importance of both teacher readiness and student self-regulation, which are often overlooked in pedagogical innovations ^[15]. By explicitly outlining these components, the model offers a pragmatic guide for educators seeking to move beyond ad hoc discussion-based teaching toward a more systematic and intentional use of dialogue and case analysis. However, the successful implementation of this model is contingent upon several enabling conditions. Keengwe argues that instructor proficiency in Socratic facilitation requires dedicated training and practice, as the method demands skillful questioning, active listening, and adaptive guidance ^[16]. Resource investment in case development and teaching materials is also necessary to ensure that cases are both academically rigorous and engaging. Additionally, institutional support—through curriculum flexibility, class size considerations, and assessment reform—is vital for creating an environment where dialogic, time-intensive pedagogy can thrive ^[17].

The findings also invite consideration of how the Socratic Case-Method might interact with existing assessment regimes. Traditional testing formats often prioritize recall over reasoning, which could undermine the critical thinking goals of the method ^[18]. Therefore, assessment alignment—through case-based exams, reflective portfolios, or peer-reviewed dialogue contributions—is essential to reinforce the desired learning outcomes and provide coherent educational experiences ^[19]. In a broader context, this study contributes to the growing discourse on pedagogical innovation in sport higher education, an area that has historically prioritized practical and technical training over theoretical engagement and critical inquiry. By articulating a theoretically grounded and practically detailed model, this research provides a foundation for further empirical investigation, including classroom-based studies on learning efficacy, longitudinal analyses of skill retention, and comparative research across different sport science sub-disciplines.

Ultimately, the integration of the Socratic Case-Method into Sport Psychology represents more than a tactical teaching adjustment; it embodies a philosophical reorientation toward education as a process of collaborative inquiry, critical reflection, and meaning-making. In doing so, it holds the potential not only to enhance student learning within the discipline but also to cultivate the adaptable, thoughtful practitioners needed in the evolving fields of sport, coaching, and athletic development.

5. Conclusion

This study establishes a structured theoretical and practical foundation for implementing the Socratic Case-Method in Sport Psychology education. The proposed framework integrates Dialogic Pedagogy, Cognitive-Constructivism, and Situated Cognition to advance beyond conventional teaching, emphasizing critical inquiry, contextual learning, and reflective dialogue. Core components—including Guided Socratic Questioning, Case Narrative Design, and Metacognitive Integration—provide a adaptable model for transforming passive knowledge transmission into active, student-centered intellectual engagement. The accompanying implementation pathway offers a phased guide for educators, spanning preparatory design, facilitated dialogic practice, and iterative evaluation. By aligning case-based inquiry with disciplinary learning objectives, this approach directly addresses enduring challenges in sport psychology education, such as bridging theory and practice, elevating student engagement, and fostering higher-order cognitive skills.

This research contributes to the growing pedagogical discourse in sport science, where methodological innovation remains underexplored. It positions the Socratic Case-Method as a viable strategy for developing not only subject-matter expertise but also transferable competencies in analysis, communication, and ethical reasoning—attributes essential for future professionals in dynamic, human-

centered fields. Successful adoption will require institutional support, instructor training, and assessment realignment to fully realize its potential. Nevertheless, this model encourages a shift toward more interactive, reflective, and democratically organized learning environments, ultimately aiming to cultivate more thoughtful, adaptable, and engaged practitioners in sport and related disciplines.

6. Limitations And Future Research

While this study provides a theoretical and practical foundation for implementing the Socratic Case-Method in Sport Psychology education, several limitations must be acknowledged.

First, the research is primarily conceptual and design-based, relying on literature synthesis and expert validation rather than empirical data from classroom implementation. As such, the proposed framework and pathway, though theoretically coherent, have not yet been tested in real educational settings. Their practical effectiveness, adaptability, and impact on student learning outcomes remain to be empirically verified. Second, the framework was developed with a focus on undergraduate Sport Psychology courses in higher education. Its applicability to other sport science disciplines, different educational levels (e.g., postgraduate or vocational training), or diverse cultural and institutional contexts may require significant adaptation. Variables such as class size, student prior knowledge, technological access, and institutional assessment policies could influence how the method is enacted and received. Third, the model assumes a certain level of instructor readiness and pedagogical autonomy. In environments with limited teacher training opportunities, rigid curricular structures, or high teaching loads, the implementation of a dialogic, facilitation-intensive method like the Socratic Case-Method may face substantial practical barriers.

Future research should address these limitations through rigorous and context-sensitive inquiry. Empirical studies employing mixed methods—such as classroom observations, pre-post assessments of critical thinking, student and instructor interviews, and learning analytics—are needed to evaluate the impact of the method on engagement, conceptual understanding, skill development, and professional readiness. Longitudinal designs could further illuminate how sustained exposure to Socratic dialogue influences cognitive habits and applied competencies over time. Comparative research across different sport-related disciplines—such as sport sociology, coaching science, or athletic training—could identify common principles and context-specific adaptations of the method. Additionally, investigation into digital and hybrid implementations, including the use of online discussion platforms, virtual case simulations, and asynchronous Socratic dialogues, would expand the relevance of this pedagogy in increasingly technology-mediated educational environments.

Finally, future work should explore systemic enablers and barriers to pedagogical innovation in higher sport education, including faculty development programs, curriculum policy reforms, and institutional reward structures that support teaching experimentation. By situating the Socratic Case-Method within broader ecosystems of educational change, researchers and practitioners can contribute to building more dynamic, reflective, and student-centered learning cultures across the field of sport science.

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