



Exploration of Coaches' Approaches and Strategies for Coaching Athletes in Sports that use Implements: Implications for Footwork, Style, and Motor Learning Literacy

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Abstract

Background: Using the research frameworks of existential phenomenology and grounded theory, this study explores how coaches in sports that use implements—specifically fencing, lacrosse, and badminton—approach the teaching and refinement of motor skills, with a particular focus on how coaches perceive footwork, style, the ‘feel’ of using implements, and the implicit or explicit use of motor learning principles, as well as how concepts such as proprioception, focus, and individuality influence their feedback (Whittier et al, 2023; Yilmaz, et al, 2024). The study also examines how coaches account for individual differences in athlete personality and style, and how these factors shape their feedback strategies regarding both footwork and implement control.

Methodology: Through semi-structured interviews, an accompanied ‘miked up’ practice session, and a follow up discussion after the ‘miked up’ session with 3-6 experienced coaches, the researcher investigates whether and how coaches draw upon motor learning concepts such as proprioception, internal and external attentional focus, and internal visual templates when observing and providing feedback on athlete performance. Data analysis includes using existential phenomenological techniques such as iterative and recursive constant comparison, applying the existential categories of body, space, time, and relation, recognizing revelatory phrases, and bracketing attributions and previously held assumptions. (Allen Collinson, 2017; Holt, 2017)) Further informed by the overarching structure of grounded theory, the researcher focuses on uncovering the lived experiences and meaning-making processes of coaches as they engage in observation, feedback, and skill instruction.

Results & Conclusions: Findings from this research may contribute to the emerging concept of motor learning literacy—a coach’s ability to recognize, articulate, and apply motor learning principles in practice. By identifying common cues, insights, and strategies across implement-based sports, the findings could inform knowledge translation efforts that enhance coaching education. Ultimately, this exploration may reveal how consciously or explicitly integrating motor learning literacy could refine coaching practices, enrich athlete understanding, and optimize performance outcomes across diverse sport contexts. The study emphasizes how coaches’ perceptions and embodied understanding influence their interpretations of performance and the pedagogical choices they make. It also seeks to capture the tacit dimensions of coaching knowledge that may remain unarticulated yet play a crucial role in guiding athletes’ motor development. The study proposes that particular attention paid to how coaches conceptualize the relationship between footwork and implement use, and how their awareness—or lack thereof—of motor learning principles shapes coaching effectiveness and athlete growth.

Keywords: motor learning literacy; coaching; effective feedback



References

- Allen-Collinson, J. (2017). Breathing in life: phenomenological perspectives on sport and exercise. In B. Smith & A. C. Sparkes (Eds.), *Routledge Handbook of Qualitative Research in Sport and Exercise* (pp. 33–45). Routledge. <https://doi.org/10.4324/9781315762012-11>
- Holt, N. L. (2017). Doing grounded theory in sport and exercise. In B. Smith & A. C. Sparkes (Eds.), *Routledge Handbook of Qualitative Research in Sport and Exercise* (pp. 46–58). Routledge. <https://doi.org/10.4324/9781315762012-12>
- Whittier, T. T., Patrick, C. M., & Fling, B. W. (2023). Somatosensory Information in Skilled Motor Performance: A Narrative Review. *Journal of Motor Behavior*, 55(5), 453–474. <https://doi.org.proxy.library.brocku.ca/10.1080/00222895.2023.2213198>.
- Yılmaz, O., Soylu, Y., Erkmén, N., Kaplan, T., & Batalik, L. (2024). Effects of proprioceptive training on sports performance: a systematic review. *BMC Sports Science, Medicine and Rehabilitation*, 16. <https://doi.org/10.1186/s13102-024-00936-z>.