

A Multidimensional Intervention Content: Integrated Recreational Physical Activity for Enhancing Cognitive, Sleep, and Self-Efficacy Outcomes in Sport Educators

Andra Fernate, Juris Grants, Zermena Vazne, Katrina Volgemute, Viktors Veliks, Valerija Steinmane, Dinass Talents, Eilina Antapsone

Rīga Stradiņš University, Riga, Latvia

Purpose: This study addresses the increasing mental and physical demands placed on sports educators by developing a structured, evidence-based intervention to enhance their cognitive, emotional, and physical wellbeing. The primary purpose was to design the content of a multidimensional intervention programme that integrates recreational physical activity to improve sports educators' cognitive functioning, sleep quality, and self-efficacy.

Methods: A mixed-methods approach was employed, combining a systematic literature review with an empirical needs assessment for sports educators, to develop the intervention design. The review identified evidence-based practices linking physical activity with psychological and sleep-related outcomes. The needs assessment involved 338 sports educators (48% coaches, 22% PE teachers, 30% coaches and PE teachers), who participated anonymously in accordance with the Vienna Convention on Human Rights. Data were collected using validated instruments adapted into Latvian: the General Self-Efficacy Scale (GSES), Perceived Stress Scale (PSS), International Physical Activity Questionnaire (IPAQ), and Pittsburgh Sleep Quality Index (PSQI). To evaluate the baseline needs indicators of sports educators and develop the content of the intervention framework, both descriptive and inferential statistics were utilised. This research was funded by the framework of the Plan of the European Union Recovery and Resilience Facility and the State Budget Grant No. RSU/LSPA-PA-2024/1-0009.

Results: The results indicated notable variations in participants' stress levels, sleep quality, and self-efficacy ($p < .05$), highlighting the need for a comprehensive, preventive approach. One key challenge identified was balancing cognitive, sleep, and psychological goals within a single enjoyable and socially engaging intervention programme. These insights shaped the intervention structure: a 90-day programme featuring modular sessions that integrate recreational physical activity, cognitive tasks, and breathing exercises intervention. Sessions will be conducted 2–3 times weekly, lasting 45–60 minutes each, with content tailored to address all three targeted outcomes cohesively.

Conclusion: The proposed intervention content aligns with the Health-Enhancing Physical Activity principles by promoting accessible, intrinsically motivating physical activity that supports not only physical but also cognitive and emotional wellbeing. The intervention programme provides a novel, evidence-based model that contributes to sustainable professional performance and resilience. Future steps include implementing and evaluating the programme's effectiveness across diverse sports educators.

