Boredom and Performance: An Underexplored Link in Sports Sciences

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Résumé

Introduction

Boredom is a psychological state characterised by a sense of dissatisfaction and a difficulty in maintaining attention on an ongoing activity. Boredom can arise from a lack of stimulation, overstimulation, or a perceived lack of meaning in the task being performed (Wolff et al., 2021). It may lead to decreased task engagement and, consequently, to diminished performance (Mangin & Pageaux, 2024). In psychology, boredom has been studied across various contexts, including educational, occupational, and clinical settings. Several theoretical models, such as those proposed by Eastwood and collaborators, (2012) and Bench and Lench, (2013), conceptualise boredom as a motivational signal that drives individuals to seek more engaging stimulation.

While the impact of boredom on cognitive performance is relatively well-documented, its role in physical and sport activities remains largely underexplored. Yet, boredom could influence performance both when experienced prior to and during task execution.

Boredom prior to the task

When an individual experiences boredom but cannot switch tasks (e.g., during a coach's explanation, during repetitive warm-ups, or during laboratory tasks), they must invest effort to persist in the ongoing activity. This state of boredom can induce cognitive fatigue, subsequently leading to decreased performance in a following task (Mangin et al., 2021; Mangin & Pageaux, 2024). During a subsequent task, this fatigue reduces self-regulatory capacities, resulting in 1) a direct decline in performance, 2) greater difficulty managing boredom, thereby increasing the likelihood of an early termination of the task in favour of a more rewarding activity (Wolff et al., 2021).

Boredom during the task

More than 80% of athletes report having experienced boredom during their activities, with 35% attributing it to repetition or monotony (Velasco & Jorda, 2020). Furthermore, boredom proneness appears to be a predictor of performance (Velasco & Jorda, 2020). Boredom has been found to be strongly correlated with amotivation and negatively correlated with enjoyment (Pulido et al., 2014), which could explain reduced engagement during activity. Theoretically, boredom experienced during a task may impair task execution by diminishing attention and engagement. This task disengagement increases the perceived difficulty of the

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activity. According to the motivational intensity theory (Richter et al., 2016), an increase in perceived difficulty requires a corresponding increase in effort to maintain performance. If effort remains constant, performance will decline. Simultaneously, as boredom signals that resources should be allocated elsewhere, the individual must invest self-control to persist in the task, resulting in cognitive fatigue, which in turn further impairs task performance (Mangin & Pageaux, 2024).

Conclusion

Boredom is a factor that influences performance, and although its impact is well recognized in psychology, it remains underexplored in sports sciences. Theoretically, boredom appears to play a role in the perception of effort and motivation, thereby directly affecting performance in physical and sport activities. Boredom also indirectly affect performance by inducing cognitive fatigue. However, empirical research on this topic remains scarce, and further studies are needed to better understand the underlying mechanisms and to develop strategies to minimize the negative effects of boredom on performance.

References

Bench, S., & Lench, H. (2013). On the Function of Boredom. *Behavioral Sciences*, *3*(3), 459-472. https://doi.org/10.3390/bs3030459

Eastwood, J. D., Frischen, A., Fenske, M. J., & Smilek, D. (2012). The Unengaged Mind: Defining Boredom in Terms of Attention. *Perspectives on Psychological Science*, *7*(5), 482-495. https://doi.org/10.1177/1745691612456044

Mangin, T., André, N., Benraiss, A., Pageaux, B., & Audiffren, M. (2021). No ego-depletion effect without a good control task. *Psychology of Sport and Exercise*, *57*, 102033. https://doi.org/10.1016/j.psychsport.2021.102033

Mangin, T., & Pageaux, B. (2024). It Is Time to Stop Using the Terminology "Passive" Fatigue. *Motivation Science*. https://dx.doi.org/10.1037/mot0000375

Pulido, J., Sanchez-Oliva, D., Amado, D., Gonzalez-Ponce, I., & Sanchez-Miguel, P. (2014). Influence of Motivational Processes on Enjoyement, Boredom and Intention to Persist in Young Sportspersons.

Richter, M., Gendolla, G., & Wright, R. A. (2016). Three Decades of Research on Motivational Intensity Theory. In *Advances in Motivation Science* (Vol. 3, p. 149-186). Elsevier. https://doi.org/10.1016/bs.adms.2016.02.001

Velasco, F., & Jorda, R. (2020). Portrait of Boredom Among Athletes and Its Implications in Sports Management: A Multi-Method Approach. *Frontiers in Psychology*, *11*, 831. https://doi.org/10.3389/fpsyg.2020.00831

Wolff, W., Bieleke, M., Martarelli, C., & Danckert, J. (2021). A Primer on the Role of Boredom in Self-Controlled Sports and Exercise Behavior. *Frontiers in Psychology*, *12*, 637839. https://doi.org/10.3389/fpsyg.2021.637839