Resilience in sports: A multidisciplinary and personalized approach in theory and practice

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Athletes are regularly exposed to various stressors, such as losing matches and high training loads. In order to maintain optimal performance, it is important that athletes quickly recover from such stressors, both psychologically and physically. In other words, athletes need to demonstrate resilience by quickly bouncing back from the stressors. Recent work suggests that resilience processes are dynamic and athlete-specific, which warrants a focus on psychological and physiological processes over time, within individual athletes (e.g., Hill et al., 2018, 2021; Neumann et al., 2021). Following this idea, a major challenge is to develop an infrastructure in professional sports organizations, allowing the measurement, integration, and analysis of stressors and athletes psychological and physical changes (Den Hartigh et al., 2022).

In this lecture, I will present a multidisciplinary and personalized approach to measure and improve resilience of athletes. Our research project involves a close collaboration between the departments of Human Movement Sciences (UMCG), Psychology (RUG), FC Groningen, as well as other universities and professional sports organizations (see project-ris.nl/english). We have developed an infrastructure to measure the stressors and states of soccer players through wearable sensors on the pitch and a tailor-made web application. I will demonstrate scientific insights, as well as how we provide practitioners at FC Groningen with visualizations on the resilience of the players.

References:


