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Techno-challenge: Implications of technology on sports coaching in Sweden

Introduktion/Introduction

Over the past century, we have seen technology and applied science contribute to increasing performance levels in sports (e.g. Haake 2009, Park 2011, Fouché 2017). While the use of technologies is part of a broader sportification process (e.g. Guttmann 1978, Svensson 2016, Svensson 2019), the types of technologies used has changed over time. At present, global positioning systems, microtechnology sensors and video- and computer-assisted performance analysis (PA) has gained prominence (Cummins et al. 2013, Rein & Memmert 2016). British football clubs have been driving the techno-scientific development, a development which is currently starting to establish itself in Sweden. The use of PA methods has been found to benefit training, performance, and safety (esp. injury prevention) and to create positive effects on coach-athlete relations and athlete learning and agency (Cronin et al. 2018, Kerr 2014). However, uses of PA technologies also have negative consequences for coaches and athletes. For instance, research demonstrates that PA technologies monitor athletes (Williams & Manley 2016); depend on effective communication between stakeholders (i.e., performance analyst and coach; coach and athlete) (Baerg 2017) and generate unrealistic training and performance expectations (Kohe & Purdy 2018). Despite these emerging insights, many research gaps exist. Knowledge on how governing bodies understand and implement PA and how PA affects the coaching process and practice are currently key questions that remain unanswered.

Syfte och teoretisk ram/Aim and theoretical framework

We use historical sociology (e.g. Abrams 1982) to critically reflect over the development, use and consequences of PA methods in sport. Specifically, we (1) demonstrate that a number of historical, contextual, and situational factors indicate that PA is about to become implemented on a large scale in Sweden; and (2) critically reflect on what this upcoming change means. Our theoretical framework will consist of the sportification model (Guttmann 1978, Yttergren 1996, Svensson 2016, Svensson 2019) to historicize the increasing role of technology in elite sport and to predict its current and future role in Sweden.

Metod/Method

The empirical material included in our presentation is taken from existing research on the sportification in Swedish elite sport (e.g. Andersson 2019, Svensson 2019, Svensson 2016a, Yttergren 1996), existing literature that documents the use and consequences of technologies in elite sport in the UK (e.g. Williams & Manley 2016, Cummins et. al 2013), and our own insider observations of the developments and current situation of PA in Sweden. To make sense of this material, the authors met on several occasions to discuss meanings and draw out implications for science, education, and practice.

Resultat/Results

The interest for and impact of PA methods in Swedish elite sports coaching is growing. Scientific production has increased incredibly since 2015, courses and lectures on PA are popular among students, and more clubs are buying (into) these new technologies. Historical examples analyzed through the sportification model suggest that this development will accelerate. Despite the rising interest in techno-scientific PA, critical discussion is lacking about how potential risks (e.g. for personal integrity, coaching) can be managed.

Diskussion och slutsatser/Discussion and conclusions

The uses of new technology in PA has implications for elite sports in general and coaching in particular. Experiences from British football suggest that there are potential risks with uncritically adopting new technologies. We argue that these risks can be addressed through adopting a more reflective approach. One area where this could be done is within coach education.