
Citation:

Backhouse, SH and Griffiths, C and McKenna, J (2017) Tackling doping in sport : a call to take action on the dopogenic environment. British Journal of Sports Medicine, 52. pp. 1485-1486. ISSN 1473-0480 DOI: <https://doi.org/10.1136/bjsports-2016-097169>

Link to Leeds Beckett Repository record:

<https://eprints.leedsbeckett.ac.uk/id/eprint/3866/>

Document Version:

Article (Accepted Version)

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please [contact us](#) and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on openaccess@leedsbeckett.ac.uk and we will investigate on a case-by-case basis.

Tackling doping in sport: a call to take action on the *dopogenic* environment

Susan H. Backhouse, Claire Griffiths & Jim McKenna

Leeds Beckett University, United Kingdom

Author Note

Authors: Susan H. Backhouse, Claire Griffiths & Jim McKenna; Institute for Sport, Physical Activity and Leisure, Fairfax Hall, Headingley Campus, Leeds Beckett University, United Kingdom.

Correspondence concerning this article should be addressed to Susan H. Backhouse; Institute for Sport, Physical Activity and Leisure, Fairfax Hall, Headingley Campus, Leeds Beckett University, Leeds, LS6 3QS, United Kingdom. Telephone: 4411-3812-4684. E-mail: S.Backhouse@leedsbeckett.ac.uk

Tackling doping in sport: a call to take action on the *dopogenic* environment

Widespread allegations of doping in sport consistently make front page news. The findings of an independent commission for the WADA [1] underscore the importance of moving beyond a focus on individual athletes to concurrently address individual, social and environmental factors in anti-doping policy and practice (socioecological perspective).

The concept of such a complex inter- active system has successfully generated positive behaviour change in other domains. Many sports physicians will be familiar with the Foresight Report [2], the UK's most comprehensive investigation into obesity and its causes. This report highlighted that many obesity risk factors emerge from multiple contexts and interact to place individuals at risk. Building on this, researchers and policy makers are increasingly engaging with the idea that 'whole systems' create the deep harm associated with obesity and this has spawned the term 'obesogenic environment' [3].

Defining the dopogenic environment

Appreciating the equivalent complexity of doping in sport, we define a 'dopogenic environment' to acknowledge the sum of influences produced by the surroundings, opportunities and conditions that promote anti-doping rule violations (ADRVs). Local level factors (e.g., team, sports clubs, home, neighbourhood, school) work alongside structural factors (e.g., education systems, national and international sport organisations, health systems, government policies and societal attitudes and beliefs) to create the 'dopogenic' milieu. This shifts attention away from a focus on individual morality, ethics and shortcomings towards the powerful interactions between individuals, their social networks and the structures that direct how athletes live and make decisions. We contend that few incidences of ADRV are the sole result of individual factors [1].

A change in emphasis – taking context into account

If only because evidence points to its shortcomings, it is timely to shift our emphasis from fixing ‘cheats’ to modifying the dopogenic environment. This shift may be more effective and delivered at relatively lower cost than contemporary approaches. Empirical research has highlighted that athletes become vulnerable to committing an ADRV when they can no longer cope with the overall demands of sporting life [4].

We argue that we need to overdetermine change by substantially modifying the prevailing sporting environment, so that demands do not exceed athletes’ personal resources. While supporting ongoing efforts to ensure that athletes and athlete support personnel act responsibly, at least five social and structural initiatives—delivered concurrently— will contribute to an overdetermining approach to change:

- Improve access to qualified coaching, sports science and medical professionals, at all levels of sport, to actively prescribe and promote evidence-informed functional alternatives to doping.
- Address the structural issues of working conditions in sport by shifting focus away from unstable employment contracts. In turn, this might suppress any ‘need’ for quick- fix strategies to achieve performance results [5].
- Modify the sporting calendar—and with it the training and competition load—to optimise athletes’ recovery times, and reduce the need for prohibited substances for recovery/ rehabilitation.
- Promote and reward a ‘welfare-over- winning’ culture in sport. Governing bodies must prioritise athlete welfare; appropriate channels need to be established across the sporting landscape to ensure that any wrongdoing is actively discouraged and confronted without fear of retaliation for speaking up. Candour must be encouraged.

- While sceptics may call this idealistic and unrealistic, structurally regulating the nutritional supplement industry would lessen the risk of inadvertent doping through contaminated or adulterated supplements. At the same time, accessibility will be reduced by tackling the rise in trafficking of illegal doping products [7].

An idealised whole system operationalisation of the ‘dopogenic environment’ concept will optimise both the concurrence and the inter- play of these initiatives. This will not only advance practice, but also refine the ongoing policy debate. Indeed, this proposed paradigm shift addresses the myopia of the existing domain-specific approach to anti-doping.⁴ Yet, we fully recognise that the proposed modifications will require further refinement because the existing ‘answers’ in anti- doping are neither straightforward nor, as is popularly supposed, known. All these point to a need for researchers and practitioners to explore the applicability and value of adopting the ‘dopogenic’ approach through more innovative designs and analytical approaches. Consistent with the paradigmatic framework, better prevention programmes can be developed by coalitions of experts from the different elements of whole systems; collectively, they are well placed to identify and then overwhelm all of what would otherwise activate doping.

Successfully tackling these issues will require a thorough and thoughtful approach applied across multiple levels of influence (individual, social and structural). A first step in that process is to stimulate a call to action so that doping prevention agencies respond quickly and appropriately to the latest thinking in policy development in other fields. Because conversations create culture, sport physicians are encouraged to forge coalitions to challenge any practices that feed the dopogenic environment. Now is the time to reduce the tendency to blame, raise the silenced voices and make the undiscussable, discussable.

Competing interests: None.

All authors contributed equally to this Editorial.

Twitter: Follow Susan Backhouse at @susanbackhouse

Reference list

1. McLaren, R. (2016). The Independent Person Report. Commissioned Report for the World Anti-Doping Agency. Accessed 10th October 2016 at https://wada-main-prod.s3.amazonaws.com/resources/files/20160718_ip_report_newfinal.pdf
2. Foresight. Tackling Obesities: Future Choices In: Government Office for Science, ed: Stationary Office, London 2007.
3. Swinburn B, Egger G, Raza F. (1999). Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity. *Preventive Medicine*, 29, 63-70.
4. Backhouse, S.H., Whitaker, L., Patterson, L., Erickson, K. & McKenna, J. (2015). Social Psychology of Doping in Sport: A Mixed Studies Narrative Synthesis. Commissioned report for the World Anti-Doping Agency.
5. Aubel, O. & Ohl, F. (2014). An alternative approach to the prevention of doping in cycling. *International Journal of Drug Policy*, 25 (6), 1094 – 1102.
6. Geyer, H., Parr, M.K., Koehler, K., Mareck, U., Schanzer, W. & Thevis, M. (2008). Nutritional supplements cross-contaminated and faked with doping substances. *Journal of Mass Spectrometry*, 43, 892–902.
7. Weber, C., Kamber, M., Lentillon-Kaestner, V., Krug, O. & Thevis, M. (2015). Seizures of doping substances at the Swiss Border — a descriptive investigation. *Forensic Science International*, 257, 359 – 368.