Project Boardley

The effects of permitted forms of performance enhancement on determinants of doping in UK student-athletes

The incremental model of doping behaviour (IMDB) proposes that as athletes advance in their sport, there may be a tendency for them to progress from permitted (e.g., nutritional supplements, over the counter medicines, technology) forms of performance enhancement to prohibited (i.e., doping) forms (Petróczi, 2013a). As such, engagement in permitted performance enhancement activities may be a risk factor for subsequent engagement in doping. Such a process is consistent with what has been termed the gateway hypothesis of doping in sport (e.g., Backhouse et al., 2013), which has been supported in both qualitative (Boardley et al., 2015) and quantitative (Hildebrandt et al., 2012) research. Consistent with the gateway hypothesis, a recent meta-analysis of personal and psychosocial predictors of doping found use of legal supplements to be one of the strongest correlates of doping intentions and behaviour (Ntoumanis et al., 2014). This meta-analysis also found positive doping attitudes (i.e., favorable evaluations of doping) and moral disengagement (i.e., a series of psychosocial mechanisms used to justify and rationalize engagement in transgressive and harmful behaviour) were strong correlates of doping. However, researchers are yet to test the gateway hypothesis in longitudinal research and the effects of engagement in permitted forms of performance enhancement on determinants of doping over time have therefore not been examined. Furthermore, automatic preferences towards doping (i.e., evaluations of self-relevant thoughts regarding doping contextually retrieved from mental representations; Petróczi, 2013a) have not been investigated in research testing the gateway hypothesis of doping. In addition, more research is needed that seeks to determine ways in which permitted forms of performance enhancement can be promoted as alternatives to – as opposed to precursors of – doping. Finally, student-athletes may be a particularly important population to study in research testing the gateway hypothesis, as the IMDB suggests mid-to-late adolescence represents a key transitional life stage for the formation of doping attitudes and behaviour. As such, the current project aims to answer the following research questions:

1. What permitted forms of performance enhancement are commonly used by student athletes?

2. How can permitted forms of performance enhancement be presented most effectively to portray them as alternatives to – rather than precursors for – doping?

3. What are the effects over time of using nutritional supplements, medicines and performance enhancing technology on explicit functional and moral doping attitudes and automatic doping preferences in student athletes?

4. Does disparity between explicit functional and moral doping attitudes influence doping moral disengagement in student athletes over time?

By testing a number of aspects of the incremental model of doping behaviour (Petróczi, 2013a), this project will make several significant contributions to the fight against doping in sport. More specifically, the project will examine whether three potential gateway influences of doping (i.e., use of nutritional

supplements, medicines, and performance enhancing technology) affect explicit moral and functional attitudes towards doping and automatic preferences for doping over time. In doing so, the project will identify which of these three potential gateway influences may be key risk factors for doping in adolescent athletes. Next, the project will also determine whether moral disengagement increases to accommodate psychological discomfort that results from conflicting functional and moral attitudes towards doping. In addition, the project will investigate ways in which athletes can be encouraged to view permitted forms of performance enhancement as alternatives to doping. The knowledge gained from the project will inform the development of strategies aimed at preventing doping – and positive attitudes towards it – by allowing anti-doping education programs to be more specifically tailored towards known risk factors. It will also allow programs to be designed to more effectively present permitted means of performance enhancement as substitutes to doping, thus acting as protective factors against it. Furthermore, by further developing and validating an existing measure of automatic doping preferences, the project will make an important contribution to future anti-doping research. In sum, by addressing all aspects of the present call for research investigating potential gateway influences of doping, the current project clearly addresses a priority area of anti-doping research as identified by WADA's Education Committee. In doing so it will make an important contribution to the current knowledge base on potential causes of doping, whilst also developing an important technique for use in future anti-doping research.