

Measurement tool for estimating the prevalence of doping: development and validation of a self-report measure of performance enhancing drug use

The WADA report *International Literature Review: Attitudes, Behaviours, Knowledge and Education – Drugs in Sport: Past, Present and Future* identified that the absence of psychometrically validated measures for survey based research was a significant problem for social science based research of anti-doping issues. The authors of the report were particularly concerned by unreliable estimates of self-reported performance enhancing drug (PED) use which formed the basis for much of this research. The current project seeks to develop and validate a method that may yield reliable self-report use of PED use.

The method is based around a bias in the way people estimate the prevalence of behaviour in which they engage, the false consensus effect (Ross, Greene & House, 1977). Research into the false consensus effect has shown that people tend to slightly underestimate the proportion of people from the general population who engage in behaviour they do not engage in, and that they considerably overestimate the proportion of people who engage in behaviour they do engage in. For example, in the context of asking athletes about the use of PED, athletes who underestimate the proportion of athletes are likely to be non-users, and athletes who overestimate are likely to be users.

While this effect is fairly well established for a range of social phenomena (including drug use), it still needs to be validated. Past use of the method relied on self-reported behaviour, which may or may not be an accurate estimation of the behaviour the respondent is engaged in. Establishing the validity is to be done in two stages. The first is to ask a sample from the general population about their substance use behaviour, such as vitamin and social drug use, and at the same time biochemically test whether self-reports give a correct picture of the use. If the false consensus effect is confirmed in the general population, then the second assessment repeats the method for a group of athletes. If the effect is confirmed by the second assessment, then the possibility that the false consensus effect could serve as a basis for a reliable indicator of self-reported PED has been established. Hence athletes' questionnaire will include questions regarding the use and estimation of population use of PEDs.