**Project Duncan (Canada)**

**Dr. Lindsay Duncan, McGill University.**

**Enhancing Attention and Recall of Doping Prevention Messages by Testing the Influence of Adolescent Athletes’ Perceived Vulnerability to Doping**

Doping is a worldwide problem that compromises the health of athletes and the integrity of sport, and occurs among athletes of all levels and types of sports. Researchers have reported that doping often begins during adolescence, with some athletes doping as young as 10 years old. The World Anti-Doping Agency emphasizes the need for educational anti-doping programs targeting young people, given adolescence is a developmental period during which attitudes, values, and decision-making skills are forming. The anti-doping programs should inform adolescents about the risks of doping and motivate them to avoid it. One strategy for informing and motivating adolescents about doping is with health promotion messages, which has been previously shown to be effective in our research. However, the impact of current doping-prevention messages is limited and WADA has identified a particular need to determine the most effective methods of education for athletes on supplements, including the best way to communicate messages. Our previous research shows that many adolescents do not consider doping to be relevant enough in their age group or competition level to attract their attention to messages. Therefore, there is a distinct need to increase adolescents’ awareness of their personal risk (or vulnerability) to doping to increase the personal relevance and effectiveness of doping-prevention messages. The goal of this two-phase study is to improve the effectiveness of doping-prevention messages by testing a new strategy for increasing the perceived relevance of the messages among adolescent athletes aged 12 to 16 years.

In phase 1, we will conduct a series of six focus groups to discuss adolescents’ perceptions of doping among athletes their age. These discussions will help refine the brief vulnerability intervention to enhance their perceived personal relevance of the issue of doping. In phase 2, we will conduct a randomized trial with 88 adolescent athletes to determine the impact of the vulnerability intervention and doping prevention message compared to doping prevention message alone on attention to and recall of the messages (primary outcomes). We will use state-of-the-art eye tracking technology to assess whether enhancing adolescents’ perceived vulnerability to doping increases their attention to prevention messages. We will also assess whether this vulnerability intervention can influence adolescents recall of doping-prevention messages and effectiveness of the messages for improving motivational factors related to doping prevention (secondary outcomes). We predict that compared to adolescents who view the messages alone, adolescents who receive the vulnerability intervention and view the messages will (1) pay significantly more attention to the messages, (2) have better recall of the message content), and (3) report significantly greater improvements in the doping-related risk factors targeted in the doping prevention messages.

The findings from this research can be used by WADA and their stakeholders to make anti-doping messages more effective by being relevant to adolescent athletes, with the view of reducing favorable
attitudes and susceptibility towards using PEDs and thus reduce the prevalence of doping among young people.