

# “An investigation of doping attitudes and behaviours from a sport psychology perspective”

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# Doping in Sport

- All elite athletes want to enhance performance, so why do some choose to dope and others choose not to?
- Only 3 studies in the sport psychology literature have attempted to *empirically* explain these individual differences.
- Surprising oversight, given the extent of the problem



# A new avenue in anti-doping research since 2005: The social sciences

- WADA: “Anti-doping education & interventions should emanate from evidence-based practice.”
- Aims of program:
  - Develop a deeper understanding of the factors that lead athletes to commit doping violations
  - Enable more efficient doping prevention strategies



“...we have to learn a lot more on a human level, a psychological level, about why athletes dope.”

David Millar (2007); British cyclist.

## Phase 1 of research:

What are the psychological correlates of athletes' attitudes to doping?

- 4 potentially significant variables identified
- Based on theoretical links & availability of psychometrically sound scales
  - Achievement Goal Orientation
  - Motivational Climate
  - Perfectionism
  - Self-confidence



# Participants

- N = 375 (240 male; 135 females)
- Mean age = 23.8 yrs; Mean years experience = 11.1
- 16 nationalities from 27 different sports
- Level (Club: 14.5%; County/Interpro: 18.5%; National: 20.7%; International: 46.2%)
- 49.3% completed questionnaires in hardcopy; 50.7% completed online

# Measures

1. Demographic information
2. Performance Enhancement Attitude Scale (*PEA; Petroczi, 2006*)
3. Task & Ego Orientation in Sport Scale (*TEOSQ; Duda & Nicholls, 1992*)
4. Perceived Motivational Climate in Sport Questionnaire-2 (*PMCSQ-2; Newton, Duda & Yin, 2000*)
5. Perfectionism in Sport Scale (*PSS; Anshel & Eom, 2003*)
6. Trait Sport Confidence Inventory (*TSCI; Vealey, 1986*)



# Descriptive Results

- **35 athletes** (9.4%) had *inadvertently* taken banned substances

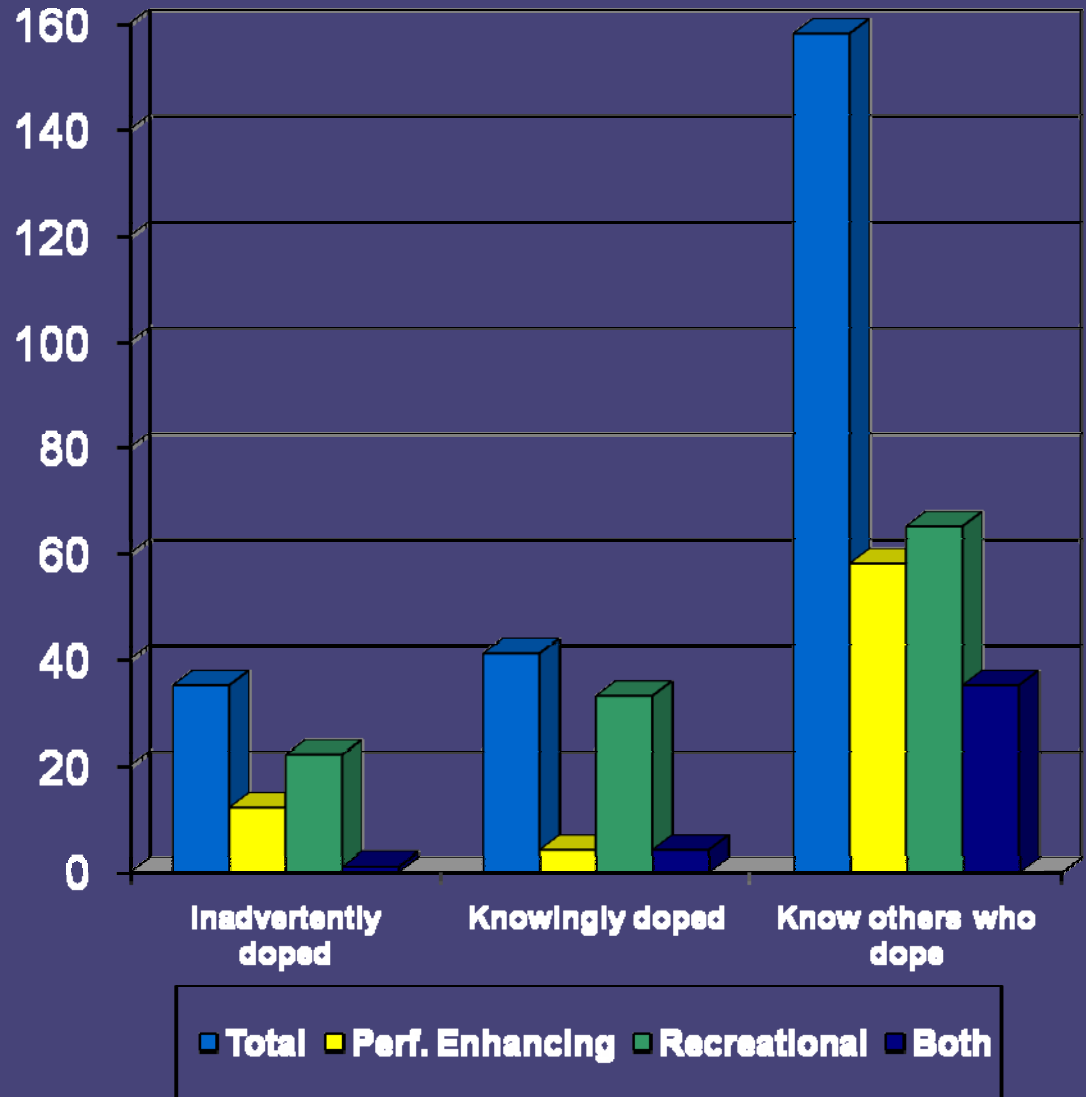
- 22 recreational
- 12 PE
- 1 both

- **41 athletes** (11%) had *knowingly* taken banned substances

- 33 recreational
- 4 PE
- 4 both

- **158 athletes** (42.2%) *personally knew* athletes taking banned substances

- 65 recreational
- 58 PE
- 35 both



# Significant group differences in positive attitudes toward doping

- Males > Females
- Speed/power sport athletes > Team sport athletes
- Online participants > Hardcopy participants
- International athletes > Irish athletes



# Significant Correlations

(\* p < .05; \*\* p < .01)

Scale	Subscale	Correlation with Performance Enhancement Attitude
Perfectionism in Sport Scale	Criticism from coach	.235**
	Personal standards	.113*
Perceived Motivational Climate	Effort/improvement rewarded by coach	-.124*
	Punishment for mistakes by coach	.198**
	Unequal recognition for players by coach	.223**
	Intra-team rivalry**	.162**
Task & Ego Orientation	Ego orientation	.236**
	Task orientation	-.111*



- Correlations are low but in predicted direction
- Results are in line with previous studies (Sas-Nowosielski, 2008)

# Implications

## Theoretical

- Framing doping as a form of '*cheating*' is valid for future psychological research
- Doping is a *collective*, not just an individual phenomenon
- The '*common sense*' approach to prevention is *insufficient*. A theoretical approach is necessary to understand reasons for doping

## Practical

- Interventions for males and females, across various sports and in different countries may need to be differentiated
- Anti-doping education not just for athletes
- Support staff (medical, technical and coaching) need instructions on shaping appropriate motivational climate to deter athletes



# Phase 2: Qualitative Research

## Methodology:

- Semi-structured interviews with athletes who admitted to doping with the aim of illegally enhancing performance

## Aims:

- Explore motivations, influences, decision-making processes
- Expand on significant correlates from phase 1



Explore possible new correlates; morality, mental toughness

## Participants:

- N = 4 (2 Irish, 2 US)
- 3 professional cyclists
- 1 Olympic weightlifter



## Preliminary findings

- Doping precipitated by 'critical incident'
- Usually initiated to prolong career
- Not considered to be cheating due to pervasiveness
- Health concerns not considered initially; concern later in regime
- High personal standards & 'win at all costs' from coaches contributes to doping
- Morality/conscience strongest deterrent
- Relied on other athletes and physicians for info. & access
- Criminalisation most effective anti-doping strategy



## Current & Future Directions

- Efforts to interview suitable athletes are ongoing
- Access to such athletes not possible without co-operation of anti-doping bodies
- Can you help?

### Phase 3: Interviews with sports physicians on their attitudes to doping in sport.


"...we need to move away from a focus on the individual drug-using athlete & focus instead on the complex figurations which athletes form...in this context the relationship between sports physicians and the development and use of performance-enhancing drugs is particularly problematic..." Waddington & Smith (2009, p.7).



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# Comparative studies...

Study	Variables	Participants
Anshel (1991)	Fear of failure Low confidence Superman complex	N = 126 Age 18-24 US 'elite' athletes
Donahue et al. (2006)	Intrinsic/extrinsic motivation Sportspersonship	N = 1,290 Mean age = 16 Canadian provincial
Sas–Nowosielski (2008, International Journal of Sports Medicine)	Achievement goal orientation	N = 830 Mean age = 20 Polish athletes level unknown
Kirby, Moran & Guerin (2007) 	AGO Motivational Climate Perfectionism Sport-confidence	N = 375 Mean age = 24 International high performance adults