

## Sport and Exercise Psychology

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Although sport is played with the body, it's *won* in the mind ...



- If so, psychologists can help athletes to do their best when it matters most
- But what is 'sport psychology' and why study mental processes in sport?



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## What is sport and exercise psychology?

- A field of psychology concerned with **understanding the performance, mental processes, and well-being of people who are involved in sport and exercise**
- Includes study of mental practice - 'seeing' and 'feeling' skills in one's imagination before executing them



## Sport as a natural lab for study of mind



- Expertise: What areas of brain "light up" when athletes *imagine* performing a skill? (Milton et al., 2007)
- Perception: How do top tennis players return serves travelling at 140 mph? (Müller et al., 2009)



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## Mental aspects of penalty taking

- In penalty shootouts, when teams are level and scoring next penalty will ensure one team's immediate *win*, **success rate is approx 92%**
- But when teams are level, and *missing* the next penalty means certain *defeat* for the kicker's team, **success rate drops to approx 60%** (Jordet, 2010)
- Why? Fear of failure ... see Gareth Southgate (Euro 1996 playoff against Germany in Wembley)



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## Fear of failure

“When it came to 4-4, and nobody had failed, my mind slipped to the negative. **‘What if I miss?’** ...”  
(England lost 6-5 on penalties)

Note how *language* may influences attention ...

- “Keep it **away from the keeper**” (negative target)
- “**Aim for the corner**” (positive target)



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## Where do anxious penalty takers look?

Wood & Wilson (2010) used eye-tracker to analyse where penalty-takers looked under conditions of low- and high-anxiety

- ACT theory (Eysenck et al., 2007) - anxiety prevents us from resisting distractions/irrelevant info
- Results showed that highly anxious kickers looked at *goalkeepers* more, and *missed more penalties*, than did less anxious penalty-takers
- Our attention is drawn to what we fear ...



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## Concentration as a spotlight

Concentration is like a mental spotlight that we shine at what we're interested in ...



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## Implications of spotlight theory

We cannot 'lose' our concentration - it has to be shining somewhere

- So, what happens if we focus on the 'wrong' target - something irrelevant to the task at hand?



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## Danger of thinking too far ahead

"I made the mistake about thinking which section of the crowd I was going to bow to!"

- Cost him estimated \$10 million!
- Recently asked if he had reconciled himself to this mistake ...



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## What do sport psychologists do?

- Research
- Education/training - advising athletes and coaches on performance enhancement
- Clinical - helping athletes with specific problems (e.g., depression, eating disorders)



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## Becoming a sport psychologist

- Primary degree in psychology (or sport science)
- Postgraduate degree (MSc/PhD) in sport psychology (accredited by BPS) - see masters programmes in UK (and new MSc in UU)
- Supervised experience



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## Further information

- Kremer, J. and Moran, A. (2008). *Pure Sport: Practical Sport Psychology*. London: Routledge.
- Moran, A. (in press, 2011). *Sport and Exercise Psychology: A Critical Introduction*. London: Routledge.

Division of Sport and Ex Psychology - BPS website  
<http://www.bps.org.uk/spex/>



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