BASES

The British Association of Sport and Exercise Sciences

HUMAN KINETICS

Psychosocial considerations in sports injury risk and prevention

DR ADAM GLEDHILL

CARNEGIE SCHOOL OF SPORT

LEEDS BECKETT UNIVERSITY

@gleds13 dr.adamgledhill

About Today's Webinar

Today's webinar is being produced jointly by the British Association of Sport and Exercise Sciences (BASES) and Human Kinetics.

It is scheduled to last for about an hour and will be recorded and made available for download and playback. You will receive an email containing a link to the recording when it is available.

All microphones and phone lines are muted so we ask that you submit questions by using the question box located in the lower right corner of your screen

We'll collect any questions sent throughout the presentation for Adam and he will answer as many as possible during the Q&A segment at the end.

Join the conversation through Twitter

@HumanKineticsEU #PsychInjWebinar @BASESUK

@gleds13 dr.adamgledhill

About Today's Presenter

Dr Adam Gledhill is the Course Director for Undergraduate Sport and Exercise Science within the Carnegie School of Sport at Leeds Beckett University.

He has written academic modules, book chapters, conference presentations and peer-reviewed articles within the realms of the psychology of sports injury risk, rehabilitation and return to competition. Adam has worked in a range youth and senior sport settings with elite athletes, providing sport science support within interdisciplinary support teams. He currently works within female youth football as Head of Psychosocial Development at a Tier 1 Girls' Regional Talent Club and is an Associate Editor (Psychology of Sports Injury) for the British Journal of Sports Medicine.

@gleds13 dr.adamgledhill

Scope of today…

- Responses to injury
- Rehabilitation
- Return to competition
- Retirement from injury

Why should we be considering injury risk and prevention?

@gleds13 dr.adamgledhill

Why is this topic important?

Keeping your top players on the pitch: the key to football medicine at a professional level

Jan Ekstrand[1,2,3]

1 month's participation time-loss, for an elite football player, costs the club on aver… €500,000

Original article

Injuries affect… in prof… of…

…e negatively …ar follow-up …jury study

…son,[1,2] Karolina Kristenson,[2,3]

…uccessful

The psyc… ath…

Injury … ideatio… substanc… …use

…uicidal …ating, and

…NE AND HEALTH

…juries as the main cause of sport career …mination among Finnish top-level athletes

Leena Ristolainen, Jyrki A. Kettunen, Urho M. Kujala & Ari Heinonen

Pages 274-282 | Received 28 Sep 2010, Accepted 31 Jan 2011, Published online: 28 Oct 2011

Download citation https://doi.org/10.1080/17461391.2011.566365

Reasons for Career Termination in Danish Elite Athletes: Investigating Gender Differences and the Time-point as Potential Correlates

Karin MOESCH[1,2] • Cecilie MAYER[1] • Anne-Marie ELBE[1]

Shouldn't we be doing EVERYTHING possible to reduce (or prevent) sports injuries?

BASES The British Association of Sport and Exercise Sciences

HUMAN KINETICS

LEEDS BECKETT UNIVERSITY

@gleds13 dr.adamgledhill

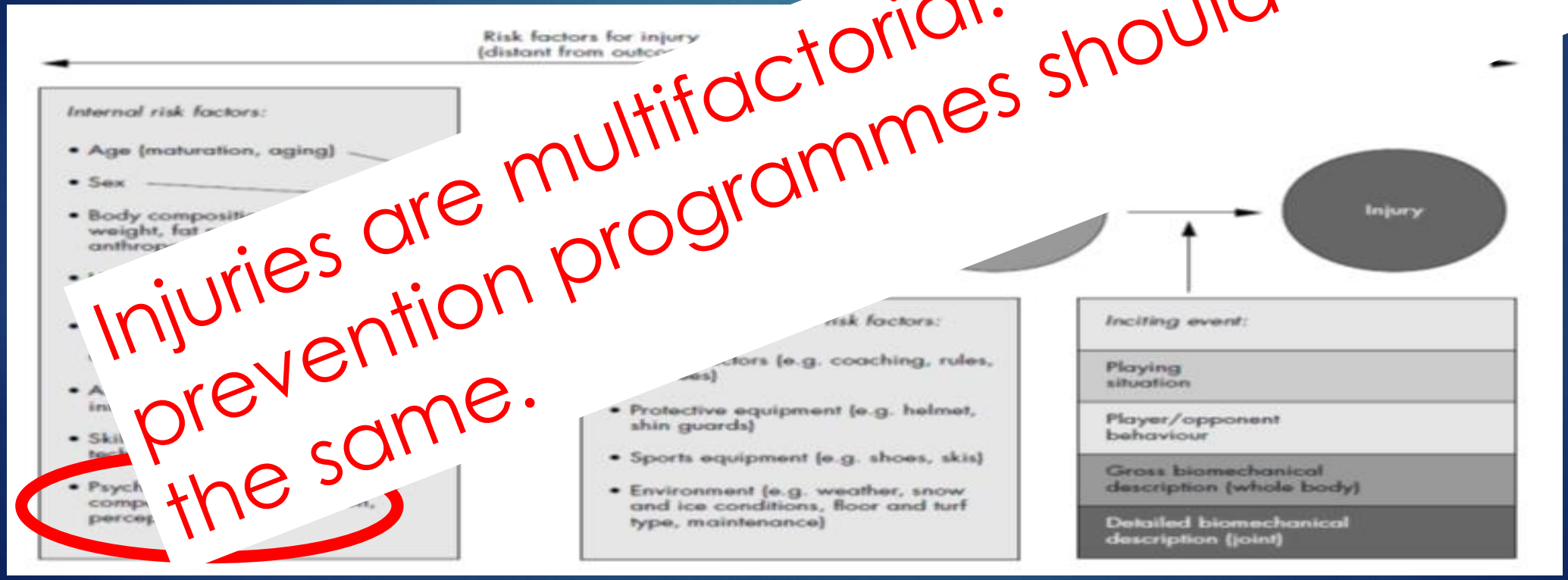
Why is this topic important?

REVIEW

Understanding injury mechanisms: a key component of preventing injuries in sport

R Bahr, T Krosshaug

Br J Sports Med 2005;39:324–329. doi: 10.1136/bjsm.2005.018341



Injuries are multifactorial. Our injury prevention programmes should be the same.

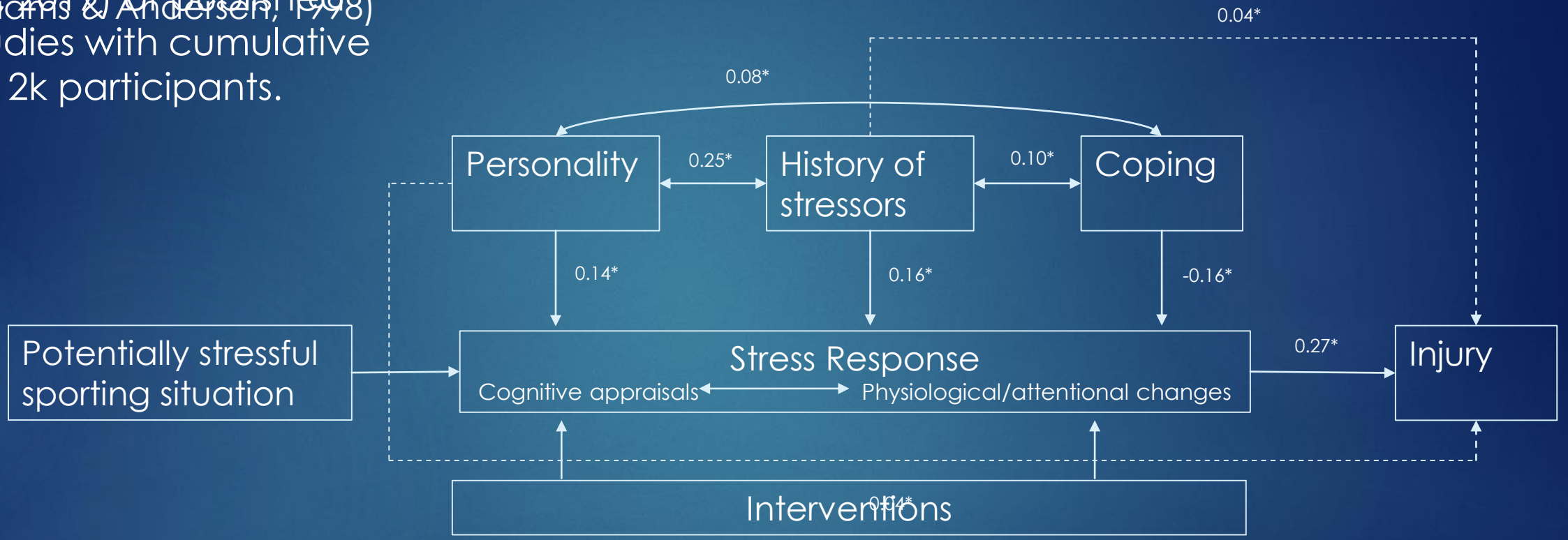
Where does sport psychology fit, within injury risk?

@gleds13 dr.adamgledhill

Psychological injury risk factors…

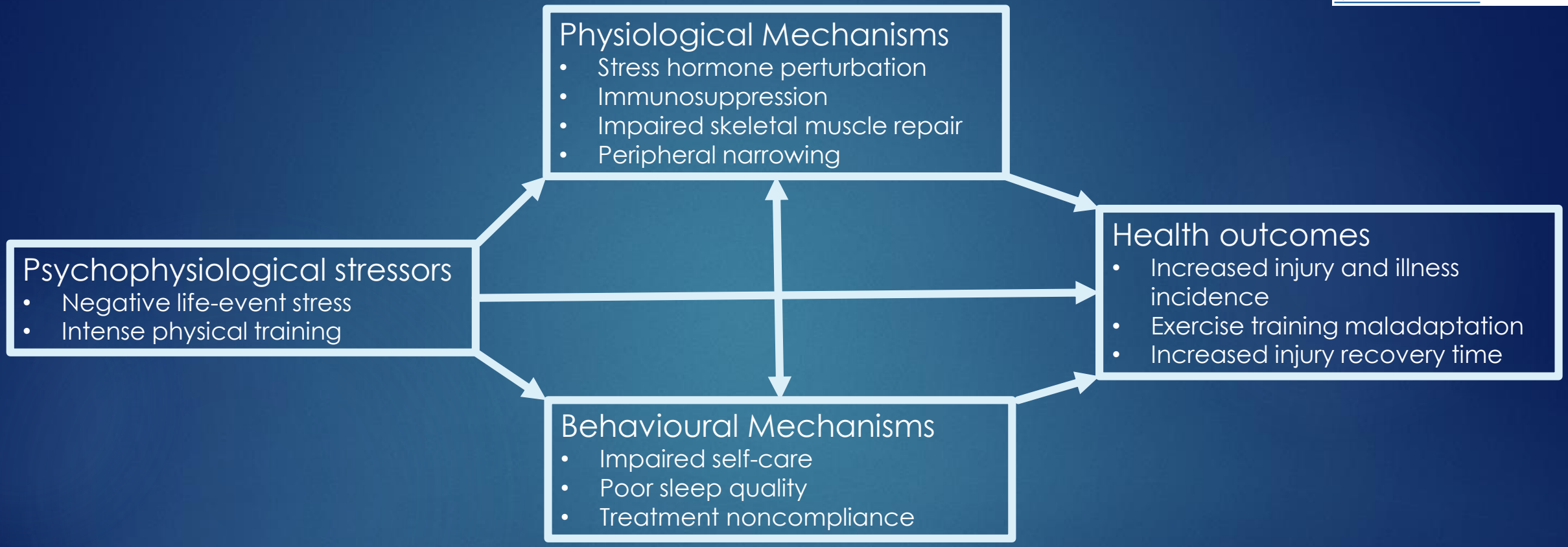
Meta-analysis (Ivarsson et al., 2017) of published studies with cumulative c.12k participants.

Model of Stress and Athletic Injury (Williams & Andersen, 1998)



High levels of negative life-event stress and stress responsivity have strongest associations with injury risk (Ivarsson et al., 2017)

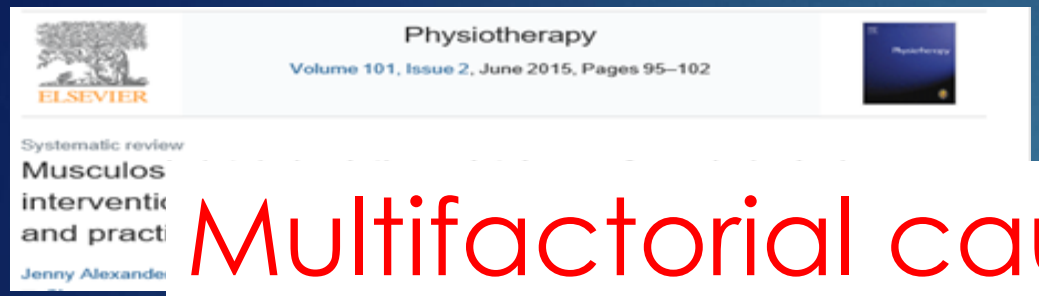
Psychological injury risk factors…

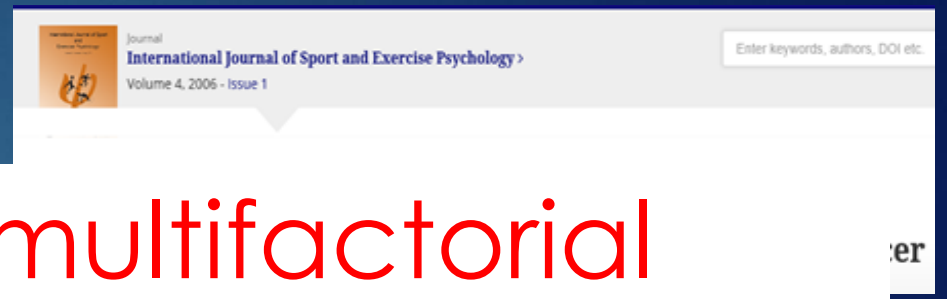


A Biopsychosocial Model of Stress, Athletic Injury and Health (Appaneal & Perna, 2014)

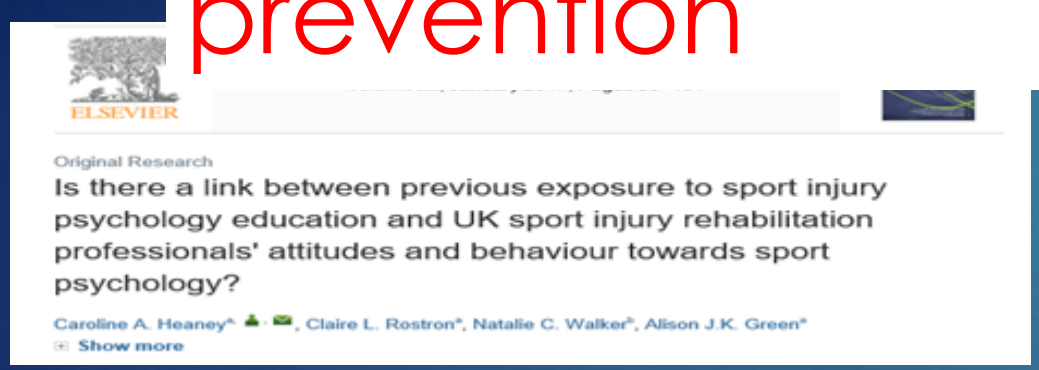
@gleds13 dr.adamgledhill

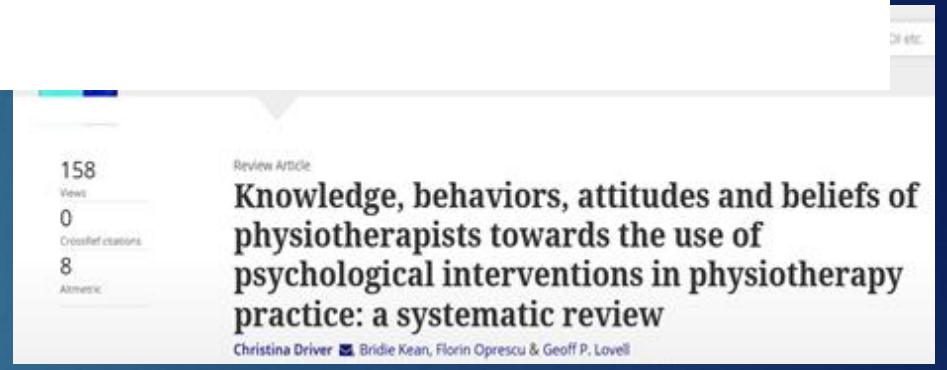
However…





Multifactorial causation ≠ multifactorial prevention





What does the evidence around intervention efficacy and effectiveness tell us?

Time constraints?
Resource constraints?
Uncertainty?
Intolerance?
Perceived benefits?

Organisation specific planning

@gleds13 dr.adamgledhill

Where might sport psychology sit, within injury prevention?

@gleds13 dr.adamgledhill

Potential benefits of psychological interventions…

↓ Psychosocial stress

↑ Perceived wellness

Altered hormone release

↑ Situational awareness

↓Muscle tension

Neuromuscular changes

Skill learning

↑ Thought clarity

↑ Decision making

↑ Concentration

Altered risk perception and risk-taking behaviours

↑ Movement quality

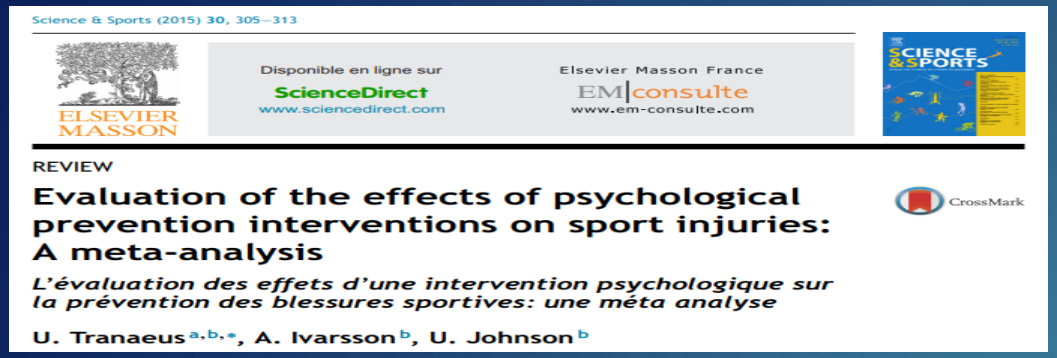
@gleds13 dr.adamgledhill

Image provided and owned by Emily Roberts

What does the existing injury prevention evidence suggest?

@gleds13 dr.adamgledhill

What does the evidence tell us?


Science & Sports (2015) 30, 305—313

Disponible en ligne sur ScienceDirect www.sciencedirect.com

Elsevier Masson France EM|consulte www.em-consulte.com

REVIEW

Evaluation of the effects of psychological prevention interventions on sport injuries: A meta-analysis

L'évaluation des effets d'une intervention psychologique sur la prévention des blessures sportives: une méta analyse

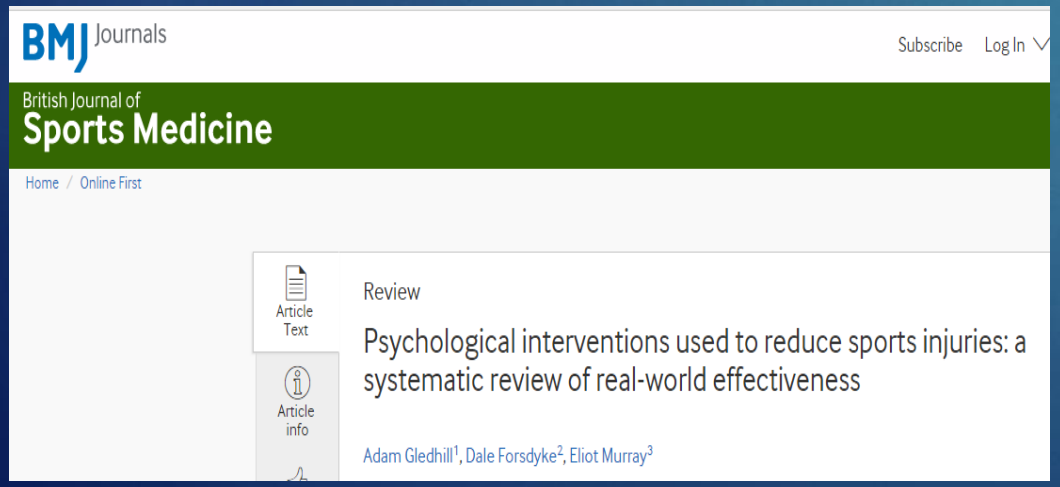
U. Tranaeus[a,b,*], A. Ivarsson[b], U. Johnson[b]


Sports Med
DOI 10.1007/s40279-016-0578-x

SYSTEMATIC REVIEW

Psychosocial Factors and Sport Injuries: Meta-analyses for Prediction and Prevention

Andreas Ivarsson[1] · Urban Johnson[1] · Mark B. Andersen[1] · Ulrika Tranaeus[2] · Andreas Stenling[3] · Magnus Lindwall[4,5]


BMJ Journals

Subscribe Log In

British Journal of Sports Medicine

Home / Online First

Article Text

Article info

Review

Psychological interventions used to reduce sports injuries: a systematic review of real-world effectiveness

Adam Gledhill[1], Dale Forsdyke[2], Eliot Murray[3]

Three systematic reviews/meta analyses collectively support both the efficacy and the real-world effectiveness of psychological interventions

Almost* every study investigating the role of psychological interventions in injury prevention ever published shows a smaller number of injuries and/or shorter time-loss in treatment groups than control groups (Gledhill et al., 2018; Ivarsson et al., 2017; Tranaeus et al. 2015)

Mean effect of the difference between injuries in intervention and control groups in included studies (N=7) = -0.67 (Ivarsson et al., 2017); effect sizes in included studies (N=14) ranged from -0.2 to -1.21 (Gledhill et al., 2018).

@gleds13 dr.adamgledhill

What does the evidence tell us?

Best evidence synthesis (Gledhill et al., 2018) suggests that interventions with a stress management and/or relaxation focus (e.g. Stress Inoculation Training) are likely to be effective

Low-frequency and short-duration interventions, with a low risk of bias, reduce injury rates (Gledhill et al., 2018).

Athletes at higher injury risk due to higher stress response or higher negative life-event stress are likely to see more injury reduction/time-loss reduction benefits from stress management interventions (Ivarsson et al., 2017)

Mindfulness-based intervention (Ivarsson et al., 2015) returned medium effect size. Replication research using the same Mindfulness-Acceptance-Commitment approach (Gardner & Moore, 2007) is warranted

Video-based awareness training has shown promising results in reducing match-related injuries in football (soccer), but results with training injuries are less promising (Arnason et al., 2005)

@gleds13 dr.adamgledhill

Future directions…

Where are we now? (Gledhill et al., 2018)

Almost all psychological intervention studies show a clinically meaningful difference between treatment and control groups

Very heavy emphasis towards interventions with a stress management/relaxation component

Underrepresentation of female athletes

Where could we go from here? (Gledhill et al., 2018)

Multidisciplinary collaboration

Studies aiming to replicate stress reduction (and other) intervention findings

Intervention types:

- Motivational/behaviour change studies for prevention of overuse injuries
- Intervention studies aimed at eliciting neuromuscular/movement quality benefits

@gleds13 dr.adamgledhill

Where can I go for support?

Examples of professional sports psychology associations (Forsdyke, Gledhill & Ardern, 2016)

American Psychological Association (APA): http://www.apa.org/

Association for Applied Sport Psychology (AASP): http://www.appliedsportpsych.org/

Australian Psychological Society (APS): http://www.psychology.org.au/

British Psychological Society (BPS): http://www.bps.org.uk/

British Association of Sport and Exercise Sciences (BASES): http://www.bases.org.uk/

North American Society for the Psychology of Sport and Physical Activity (NASPSPA): https://naspspa.com/

Any Questions?

Please submit any questions using the box in the bottom right hand corner of your screen.

We'll try fit in as many as possible in the time remaining.

@gleds13 dr.adamgledhill

BASES

The British Association of Sport and Exercise Sciences

JOIN BASES NOW

Receive exclusive member benefits

BECOME A MEMBER OF THE UK'S LARGEST PROFESSIONAL SPORT AND EXERCISE SCIENCES NETWORK

WWW.BASES.ORG.UK/HOW-TO-JOIN

@BASESUK /BASESUK

BASES_UK BASESUK

What's coming up?

We have some great webinars coming up:

- **Sleep & Performance: Time to wake up!** By Ian Dunican
  Date: Wednesday 18th April 2018
  Time: 15.00 GMT

Registration for these webinars are open so please join us.

Further details on: www.humankinetics.me

@HumanKineticsEU

Thanks from us!

Thank you to everyone for joining us today.

Please take a few moments when your webinar window closes to complete a short survey on today's presentation – we appreciate your feedback as it helps us continually improve our webinars.

Earn your BASES credits with our endorsed CE courses.

We will email everyone a link to the recording of today's presentation, so you can view it yourself or pass it along to friends or colleagues.

Thank you again for your participation, enjoy the rest of your day.