Sport and Exercise Psychiatry

2nd March 2018

Forthcoming events

- BASEM. 5th October 2018
- ETN Athlete Mental Health. Leeds, 18th October 2018
- RCPsych Birmingham. 24th June 2018

RC PSYCH
ROYAL COLLEGE OF PSYCHIATRISTS

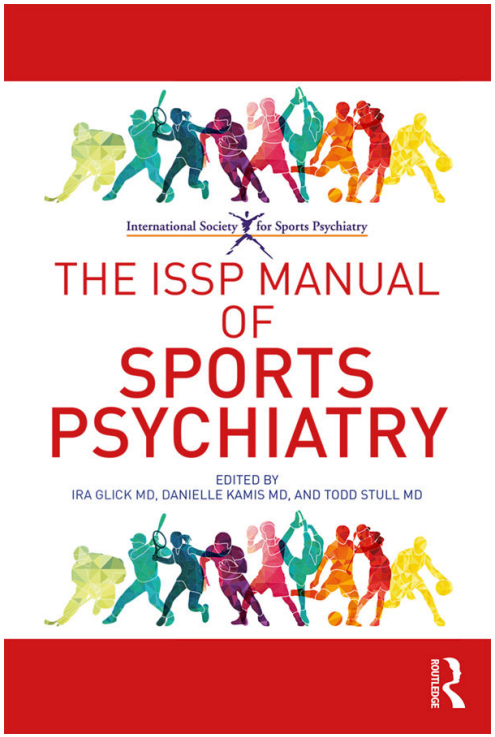
New developments

- Sports medicine liaison opportunities
  - Female Athlete Group, London
  - Female Athlete Clinic, Manchester
- Exercise professionals network

RC PSYCH
ROYAL COLLEGE OF PSYCHIATRISTS

New developments

- ISSP manual
- CPD modules
- EIS mental health survey
- Physical activity advice survey



RC PSYCH
ROYAL COLLEGE OF PSYCHIATRISTS

Faculty of Sport & Exercise Medicine

- Position statement
  - The role of physical activity and sport in mental health
- ‘moving medicine’ (Amit)

RC PSYCH
ROYAL COLLEGE OF PSYCHIATRISTS

Overview of the day

- Cricket and mental health
- Moving medicine
- Psychiatry and psychology interface
- Mental health and dance
- Physical activity in old age
- Business meeting

RC PSYCH
ROYAL COLLEGE OF PSYCHIATRISTS

Mental Health in Cricket

Lynsey Williams PCA & Dr Phil Hopley Cognacity

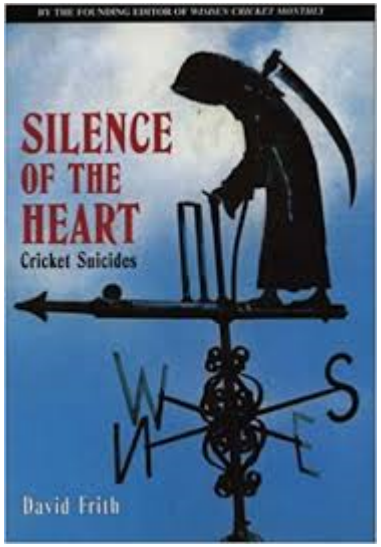
SEPSIG Meeting

Edgbaston - 2nd March 2018

Introduction

In 2005 the England cricket team won their first Ashes in 16 years.

"Facing up to Australia's fast bowlers was nothing compared to facing up to my depression."



Overview

The PCA

PCA Confidential Counselling Service

Case Studies

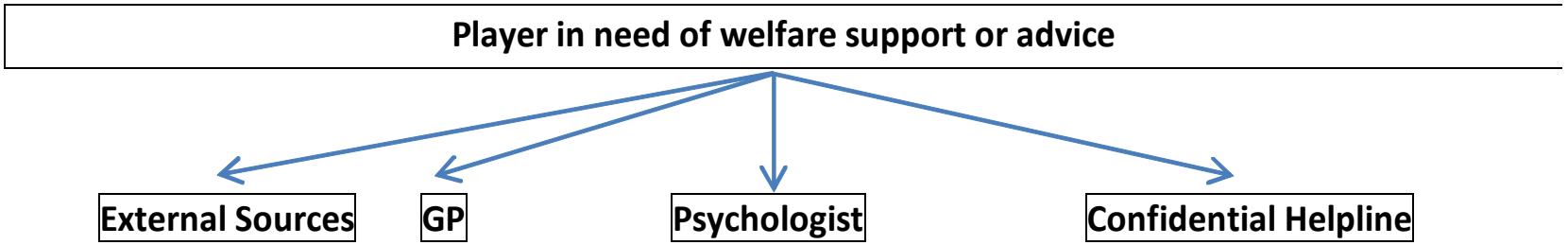
Discussion

Professional Cricketers Association

Lynsey Williams
Personal Development Manager
Nottinghamshire, Warwickshire & Worcestershire
PCA

https://vimeo.com/236608321

Player in Need of Welfare Support or Advice



Initial phone assessment

Player referred to appropriate qualified consultant in their region

Up to 4 face to face meetings or phone calls based on player need – GP referral where required

Option of on-going support as and when required.

PCA Welfare Support & Advice

On contacting the helpline:

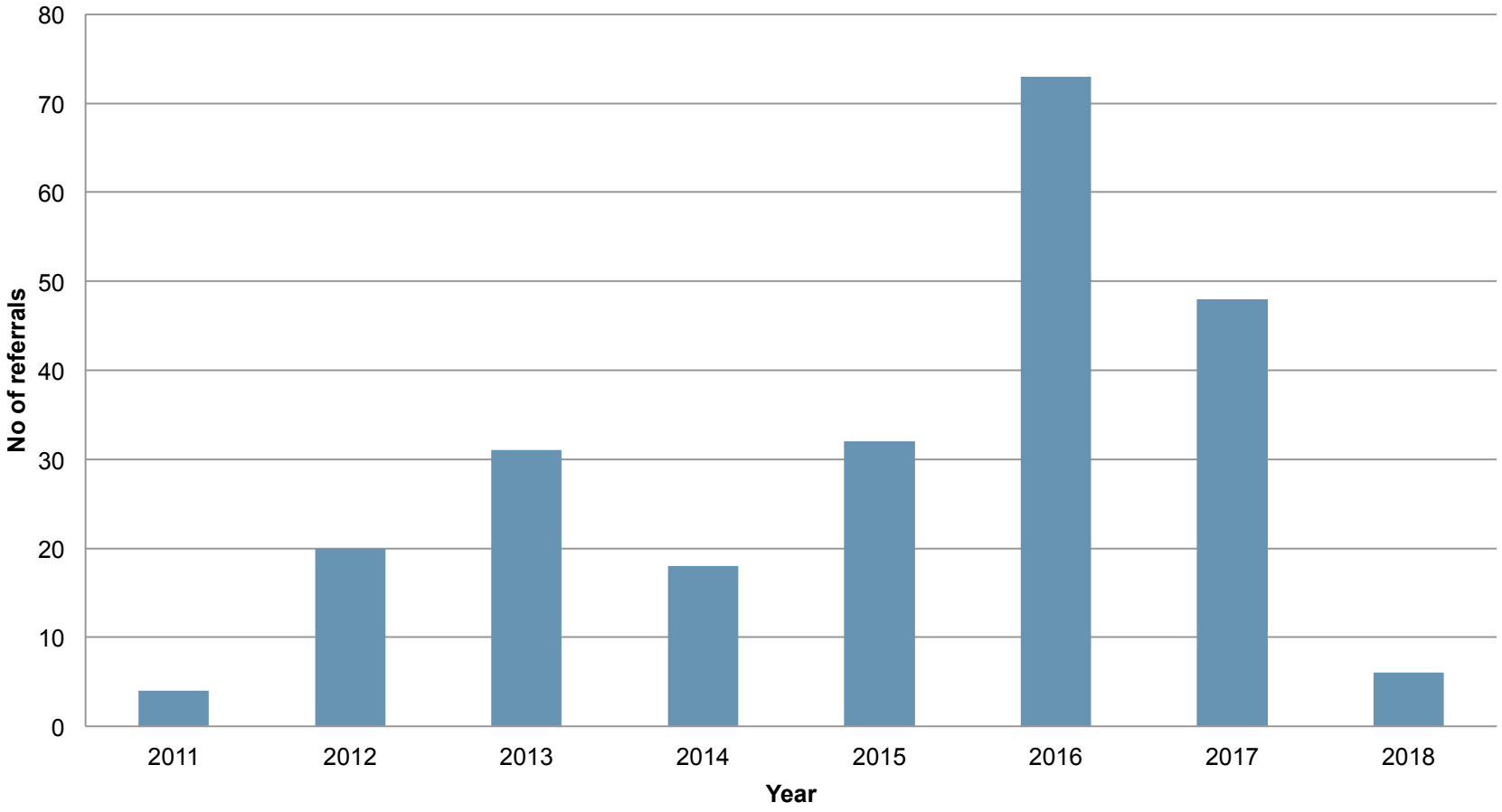
- Player undergoes an initial assessment over the phone
- Where needed, player is referred to appropriate consultant in their region
- Up to 4 face to face meetings or phone calls based on player need – GP referral where required
- Option of on-going support as required.

The PCA also have a series of education videos designed to inform players about mental health issues and the importance of seeking help: http://www.thepca.co.uk/mind-matters.html

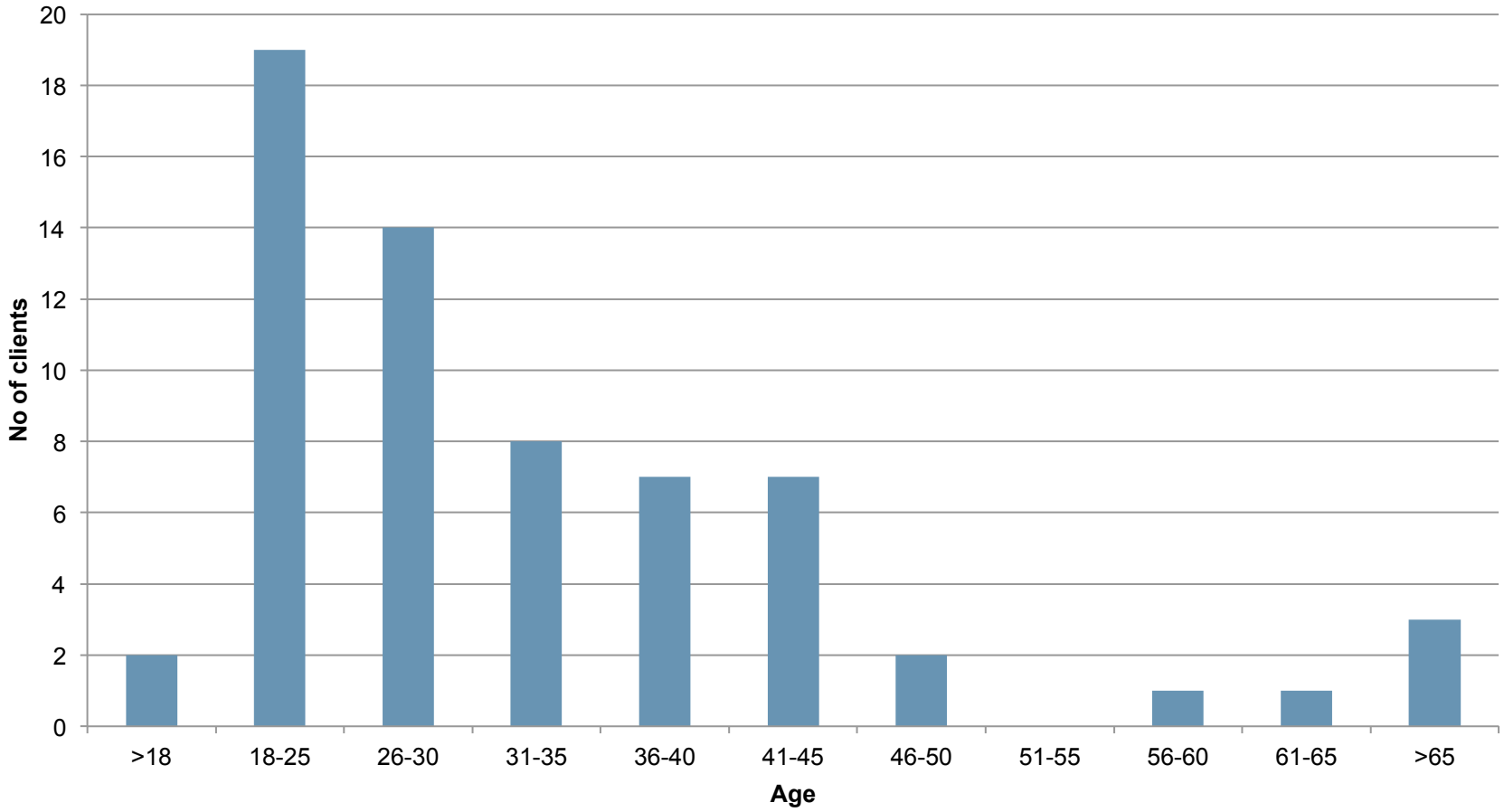
PCA Confidential Helpline

- 10 years
- Provided by Cognacity
- 24/7 Helpline funded by PCA Benevolence Trust
- Routes in as presented by Lynsey
- Overview of data from 2011 to date
- Detail breakdown for:
  - **All cases** referred in 2018 (as of 8/2/18)
  - **All cases** referred in 2017
  - **Ongoing active cases** referred in 2016

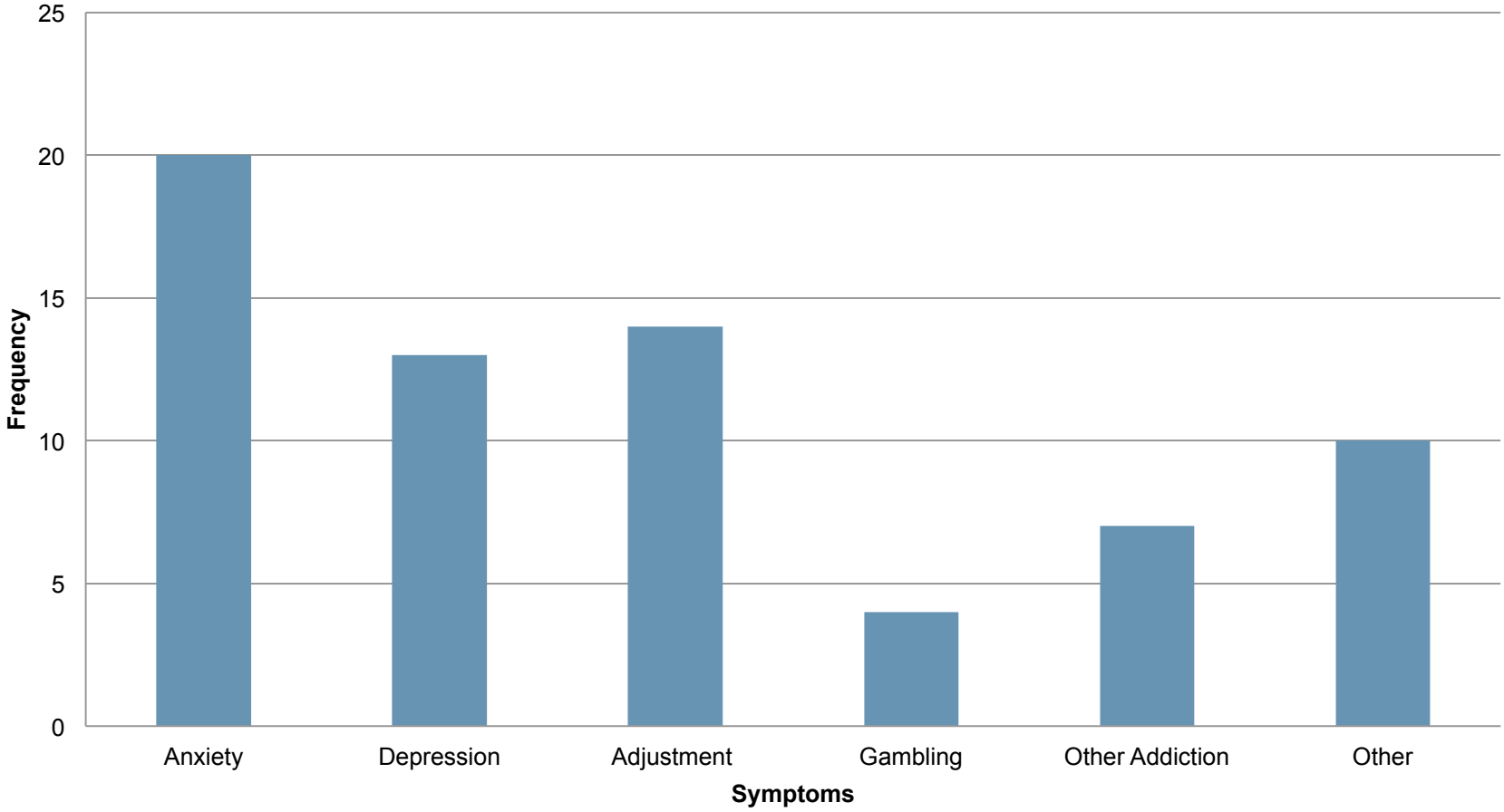
PCA Referrals 2011-2018



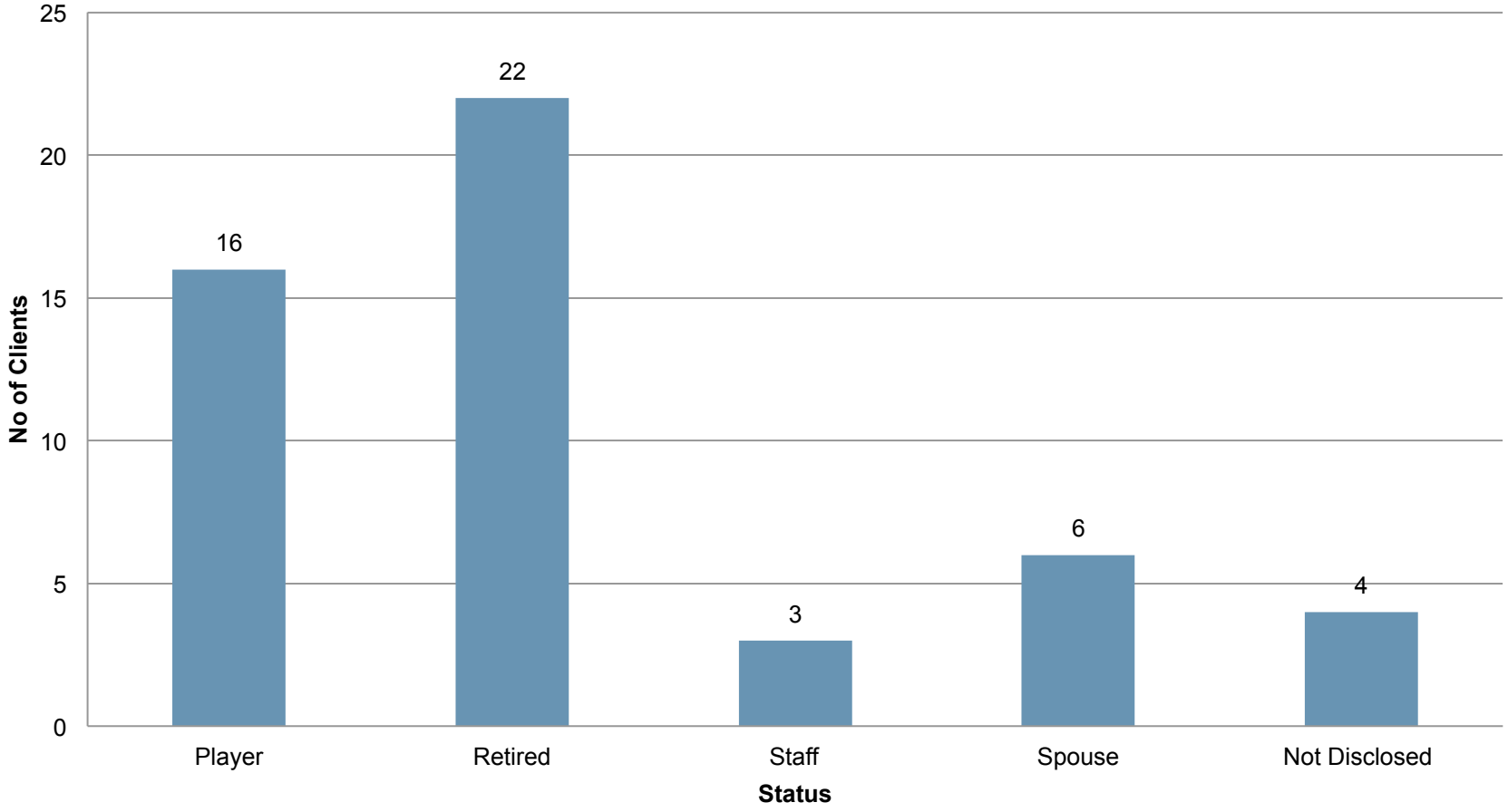
Age Range of PCA Clients 2016-2018



Prevalence of Symptoms PCA 2016-2018

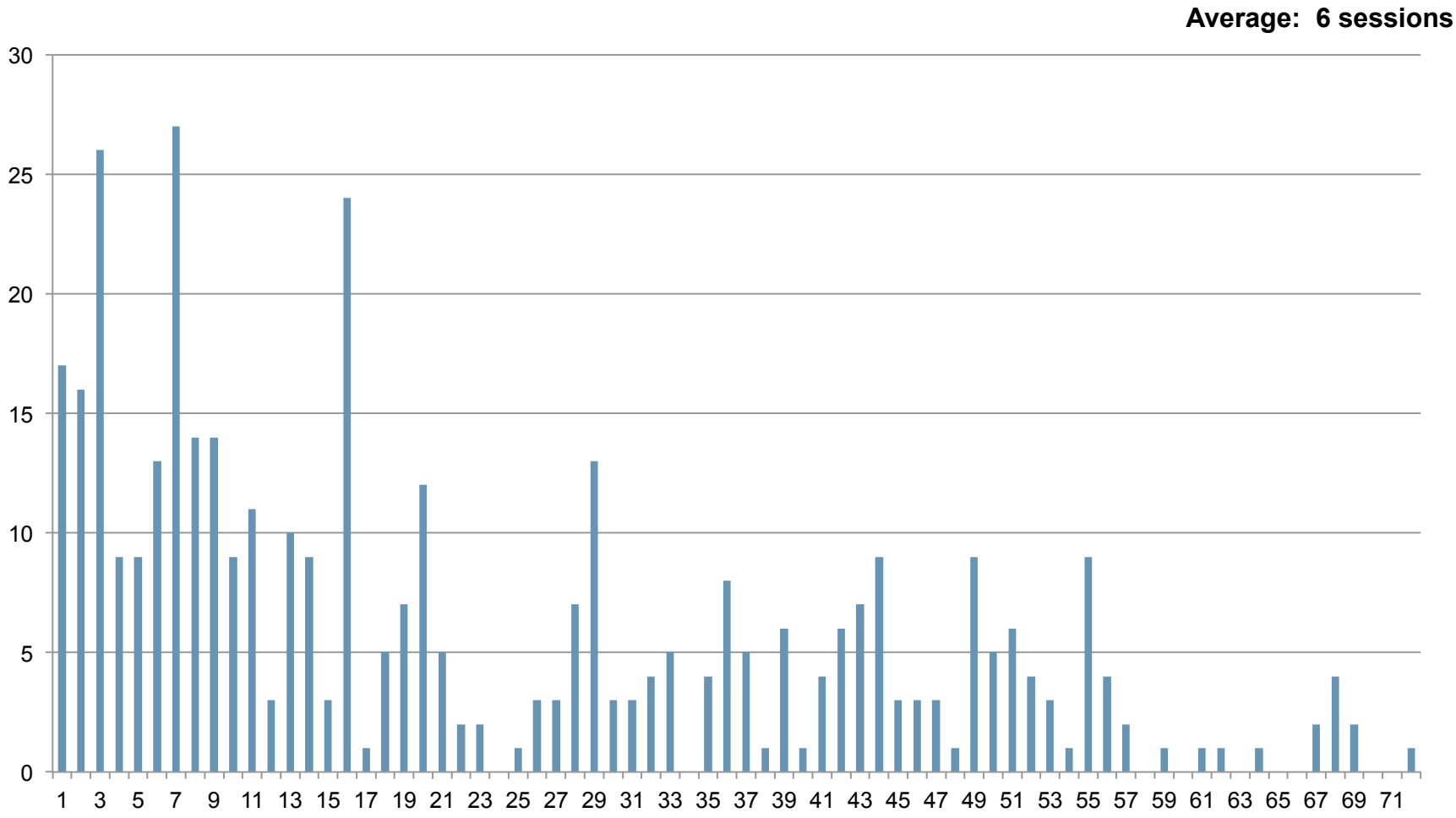


PCA Client Role Status 2016-2018



As of 8th Feb 2018

No of Sessions per Client
PCA 2016-2018



Case Studies

Player 1

- Retired, 30s, full time work
- Called helpline in crisis
- Assessment letter
- Reflection
- Therapy review
- Reflection

Player 2

- **Playing, late 20s**
- **County and International**
- **Referred by CCC**
- **Assessment letter**
- **Reflection**
- **Further assessment**
- **Reflection**

Thank you

Lynsey Williams, PCA
Phil Hopley, Cognacity
PCA Helpline - 01373 858 080

The Faculty of Sport and Exercise Medicine (UK)

SEPSIG Meet March 2018
Moving Medicine Depression

Amit Mistry & Catherine Lester

@FSEM_UK
@Cath_lester
@DrAmistryPsych

SPORT ENGLAND

LOTTERY FUNDED

RC PSYCH ROYAL COLLEGE OF PSYCHIATRISTS

Public Health England

Update

- What?
- Why?
- Who?

What?

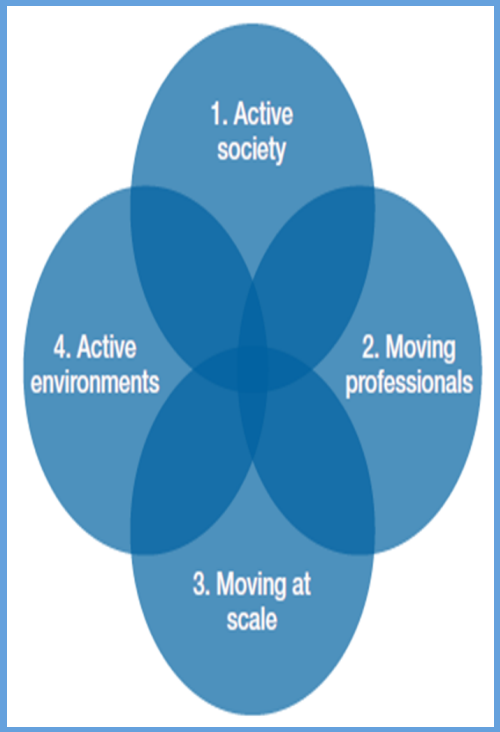
- Produce interactive digital infographics outlining the evidence base for PA in MDD & supporting brief intervention in clinical practice.

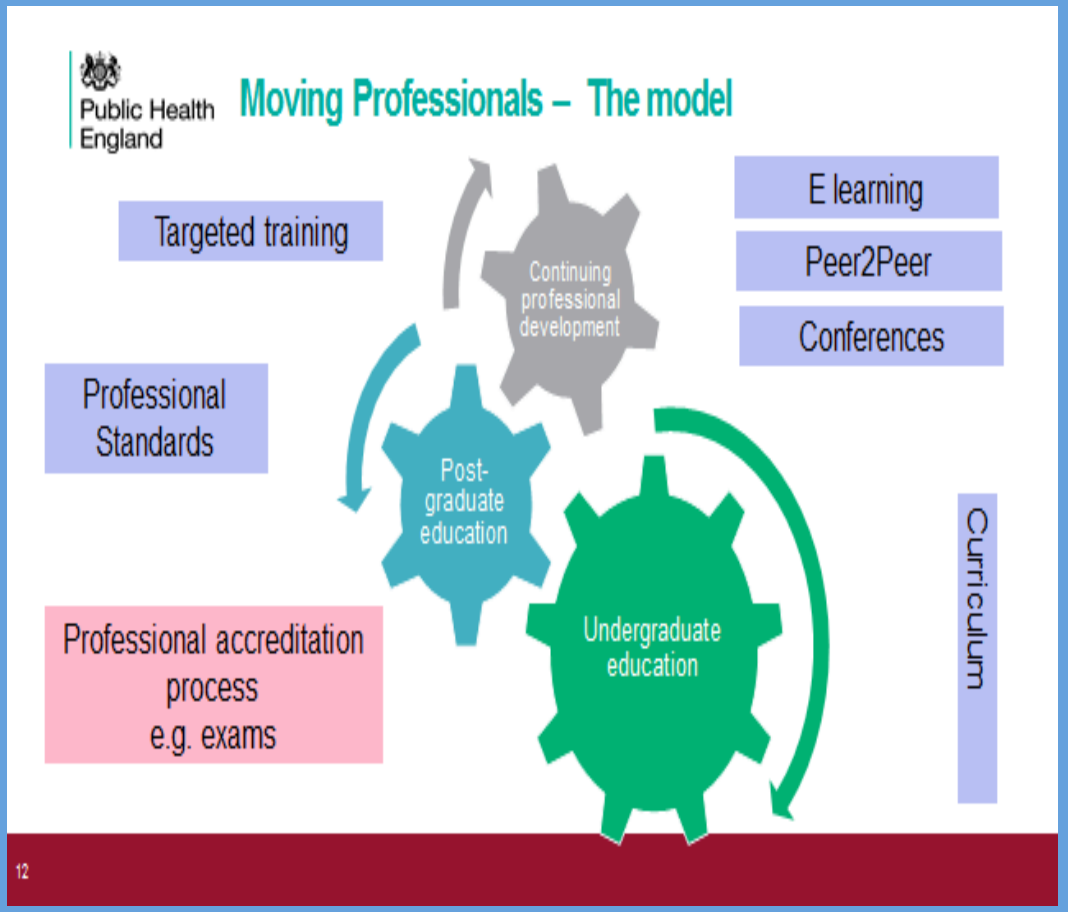
www.movingmedicine.org.uk

Why?

- Engage doctors in all specialties to understand role of PA for the conditions that they manage.
- Part of the Moving Professionals work stream from PHE's PA strategy "Everybody active, every day"

Context – National Framework domains





Who? The Expert Group

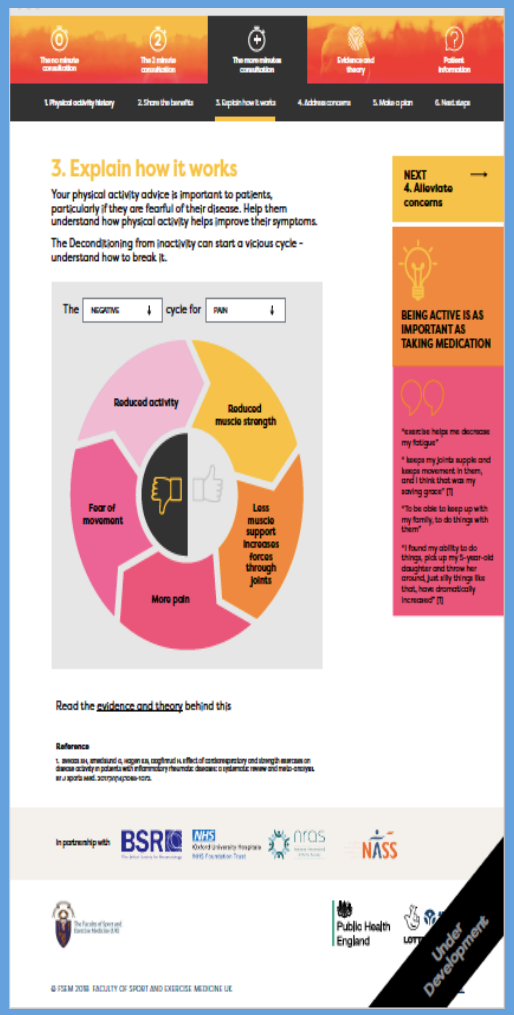
Development group supported by Central Moving Medicine Team and external validation group.

X3
Psychiatrists
CPN MH
OT &
Phy
EB

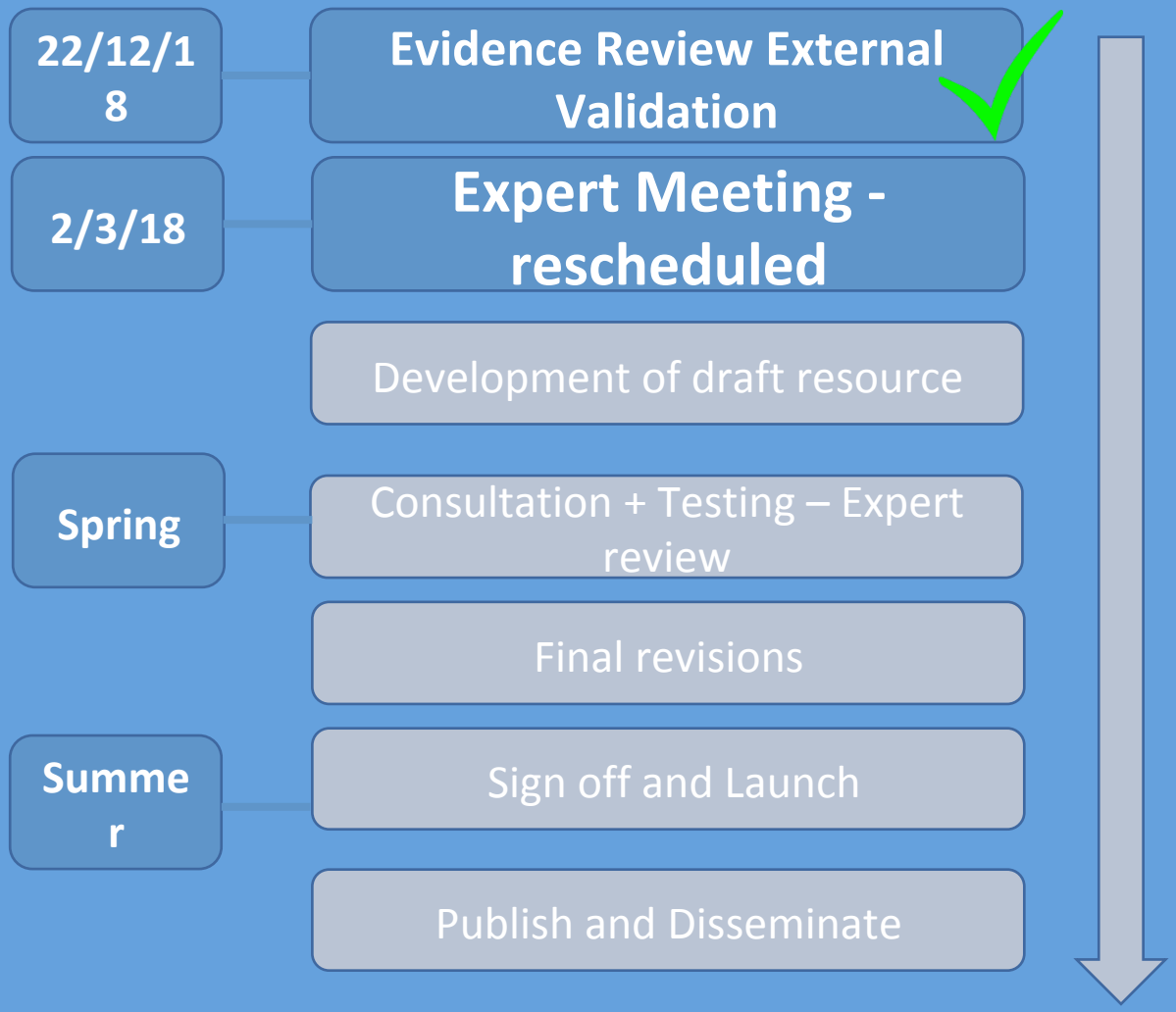
X2 SEM Doctors
Research fellow at C
X2 PA referral facilita
General practitioners
Peer tutor
Volunteer group lead

LOTTERY FUNDED

Interactive digital resources



Process and Timeline



Contact

www.movingmedicine.org.uk

@FSEM_UK

@Cath_lester

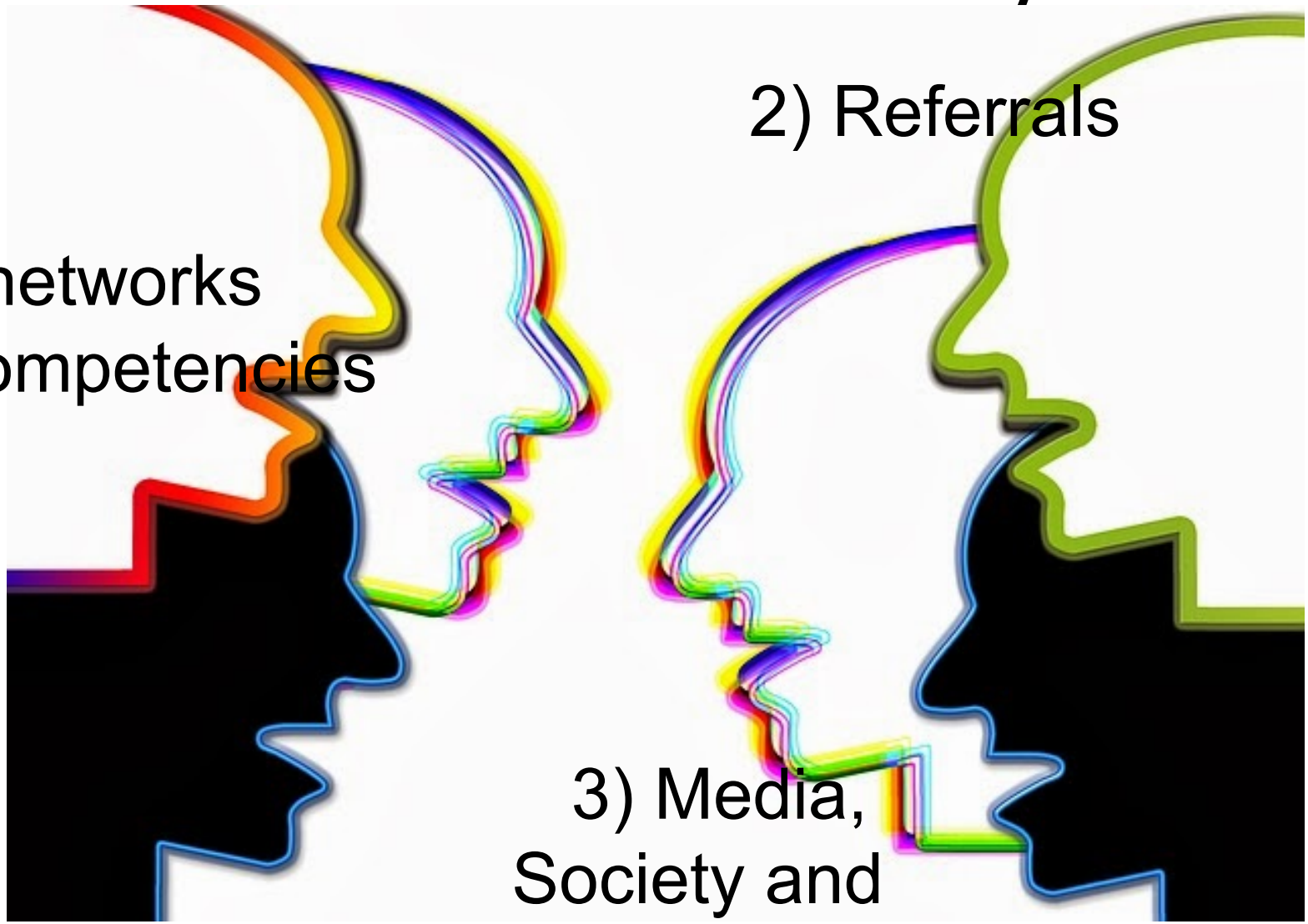
@DrAMistryPsych

Psychology and Psychiatry: The Interface in Sport

Dr Stewart Cotterill @DrStewC
Dr Tim Rogers @DrTimRogers

The British Psychological Society
Division of Sport & Exercise Psychology

What we will cover today



and networks
1) Competencies

2) Referrals

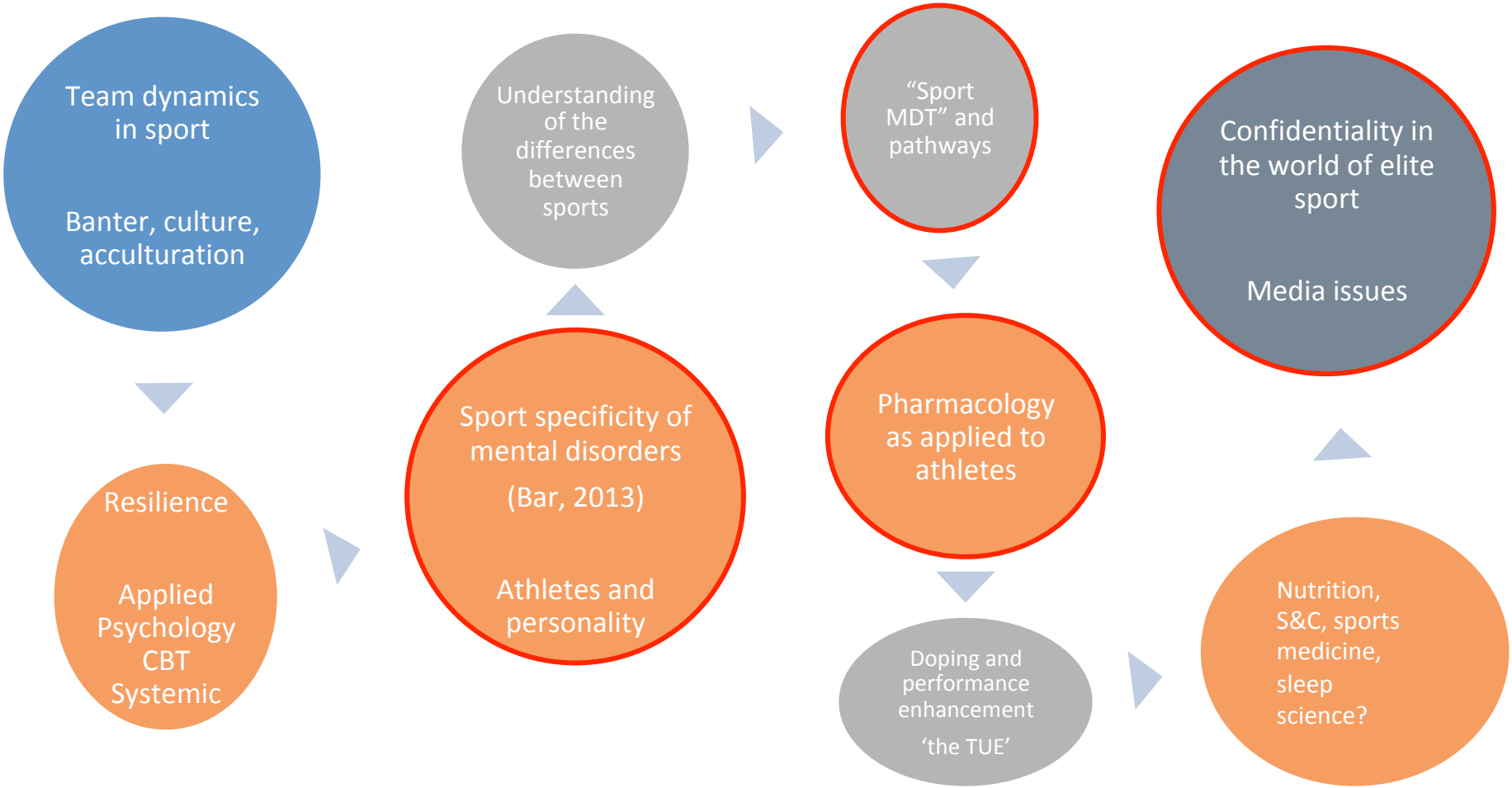
3) Media, Society and Stigma

Competencies and skill sets

Dr Stewart Cotterill
Dr Tim Rogers

The British Psychological Society
Division of Sport & Exercise Psychology

Competencies of a sport psychiatrist?



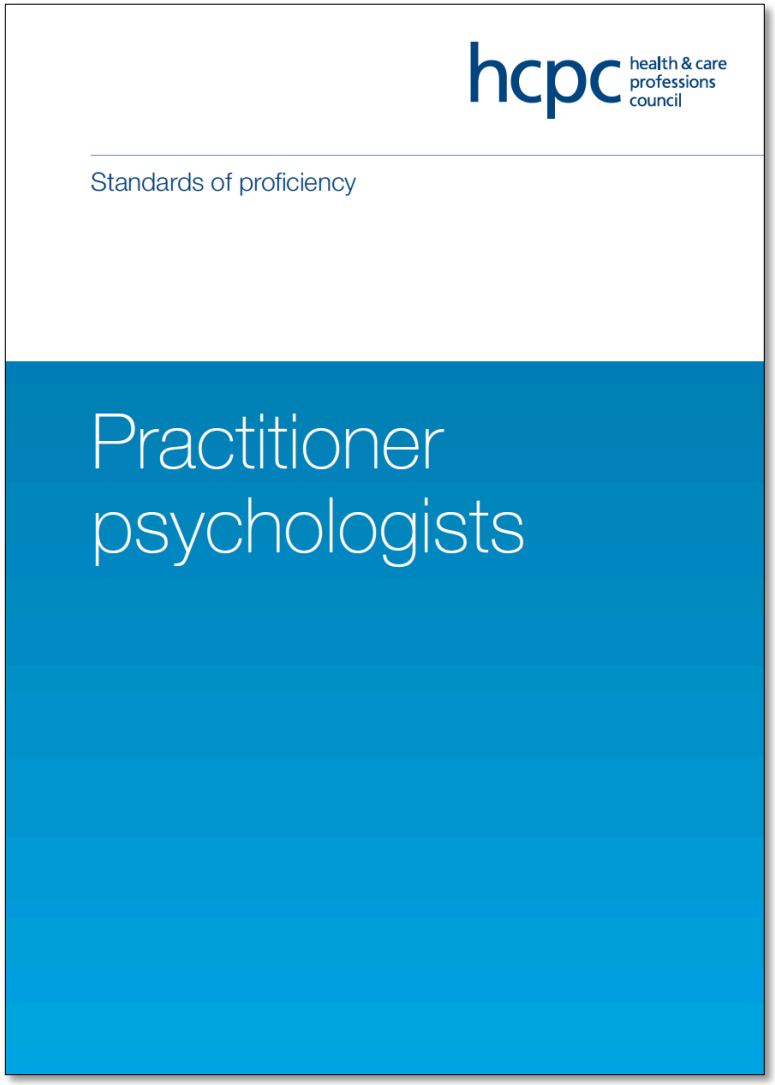
Scope of Sport and Exercise Psychology

- Sport Psychology:
- Services to athletes, teams and others engaged in competitive sport, be it at recreational or elite level. Support coaches, parents or officials.
- Services are generally targeted at performance enhancement, but may include lifestyle issues.
- Learning and performance of motor skills.
- Optimisation of performance.
- Variables affecting sport behaviour, whether this be of participants, officials, supporters or other relevant individuals.
- Work with a clear theoretical paradigm of behaviour change.

Scope of Sport and Exercise Psychology

- Exercise Psychology:
- Major focus on the understanding of exercise for the individual .
- Promotion of lifelong participation for life enhancing and health benefits.
- Practitioners work with individuals or organisations to optimise the value of exercise .
- Not usually involved in competitive sport.
- Settings include fitness clubs, local authorities, GP referral schemes or with individuals.
- Evidence based interventions to promote and enhance exercise participation and adherence.

HCPC Psychologist Competencies



hcpc health & care professions council

The British Psychological Society

HCPC Psychologist Competencies

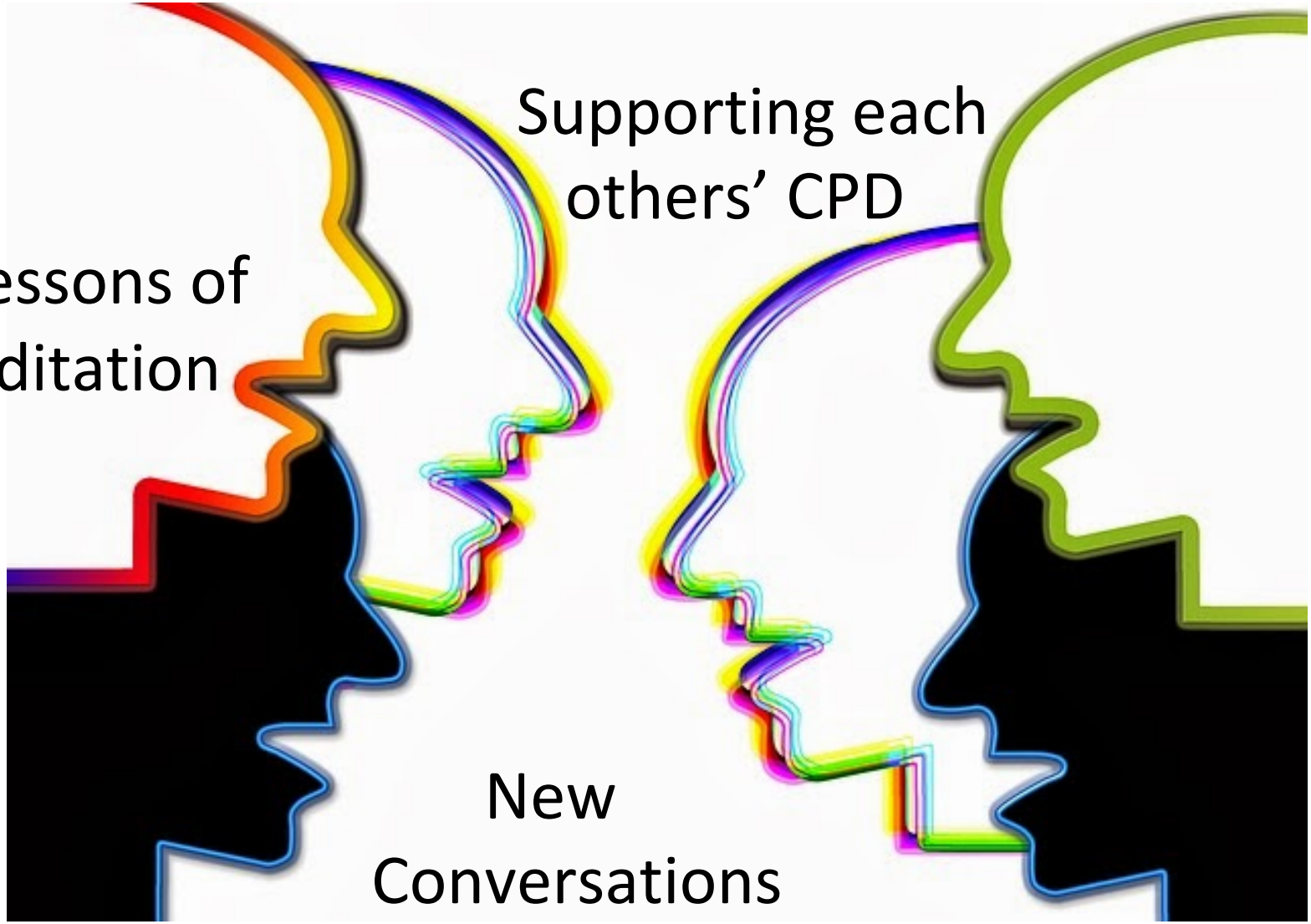
- Be able to practise safely and effectively within their scope of practice
- Be able to practise within legal and ethical frameworks
- Be able to maintain fitness to practise
- Be able to practise as an autonomous professional, exercising their own professional judgment
- Be aware of the impact of culture, equality and diversity on practice
- Be able to practice in a non-discriminatory manner
- Understand the importance of and be able to maintain confidentiality
- Be able to communicate effectively

HCPC Psychologist Competencies

- Be able to work with others, maintain records
- Be able to reflect on and review practice
- Be able to assure the quality of their practice
- Understand the key concepts of the knowledge base relevant to their profession
- Be able to draw on appropriate knowledge and skills to inform practice
- Understand the need to establish and maintain a safe practice environment

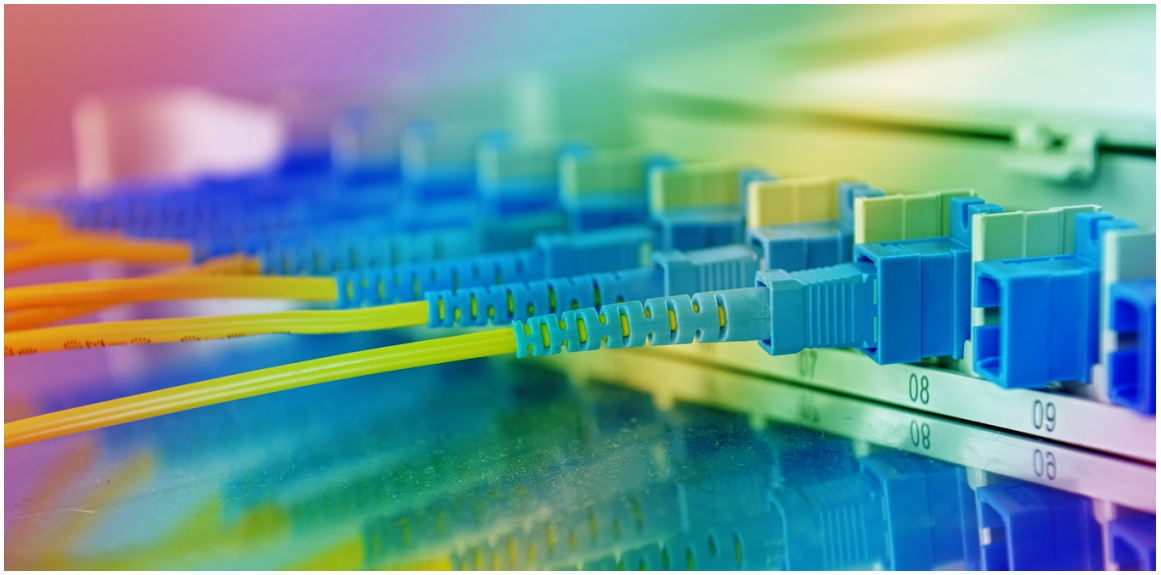
- Sport and exercise psychologists tend not to work in both areas

Break out discussion



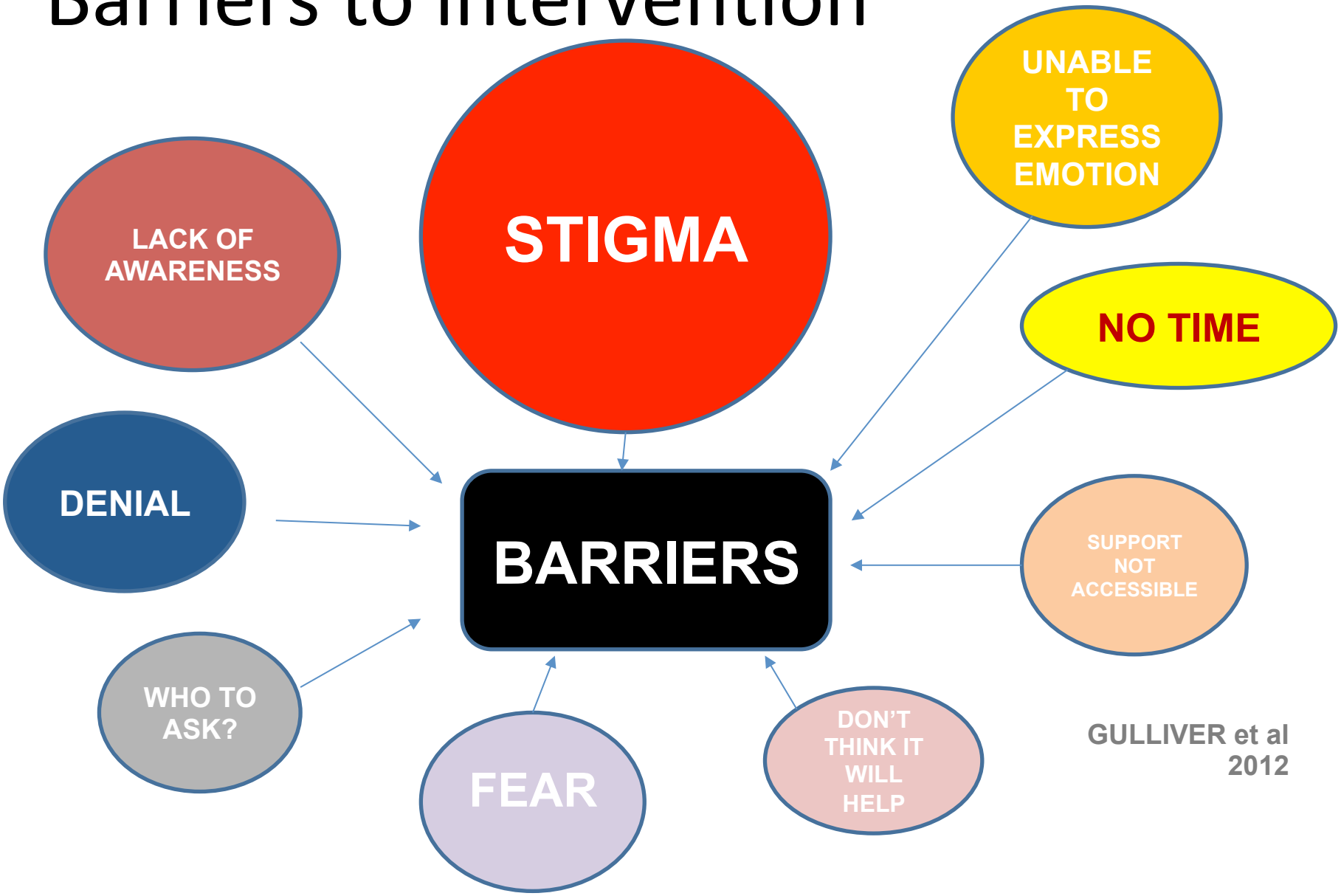
Referrals and networks

Dr Stewart Cotterill
Dr Tim Rogers



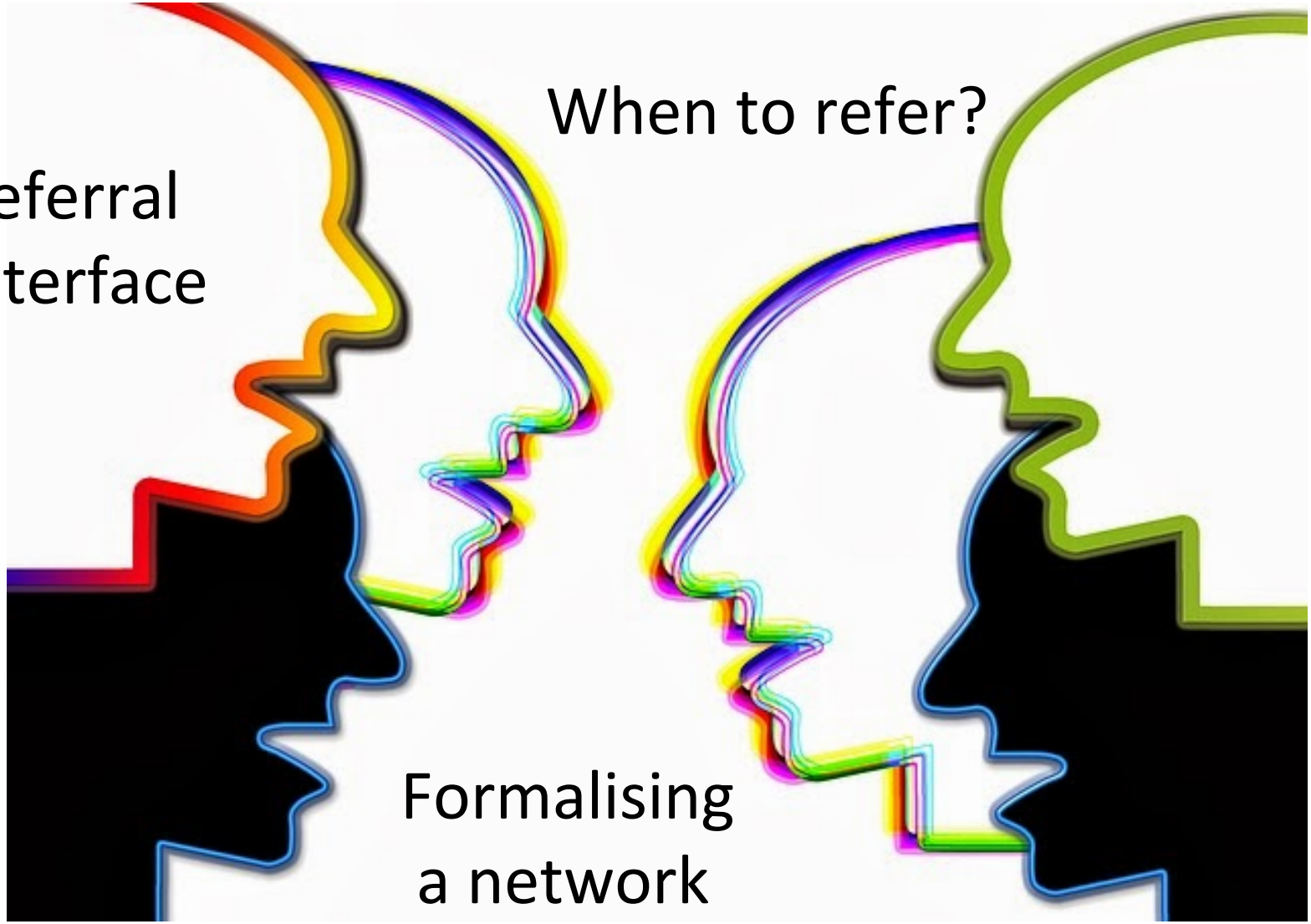
The British Psychological Society
Division of Sport & Exercise Psychology

Barriers to intervention



GULLIVER et al 2012

Break out discussion



The media, society and stigma

The British Psychological Society
Division of Sport & Exercise Psychology

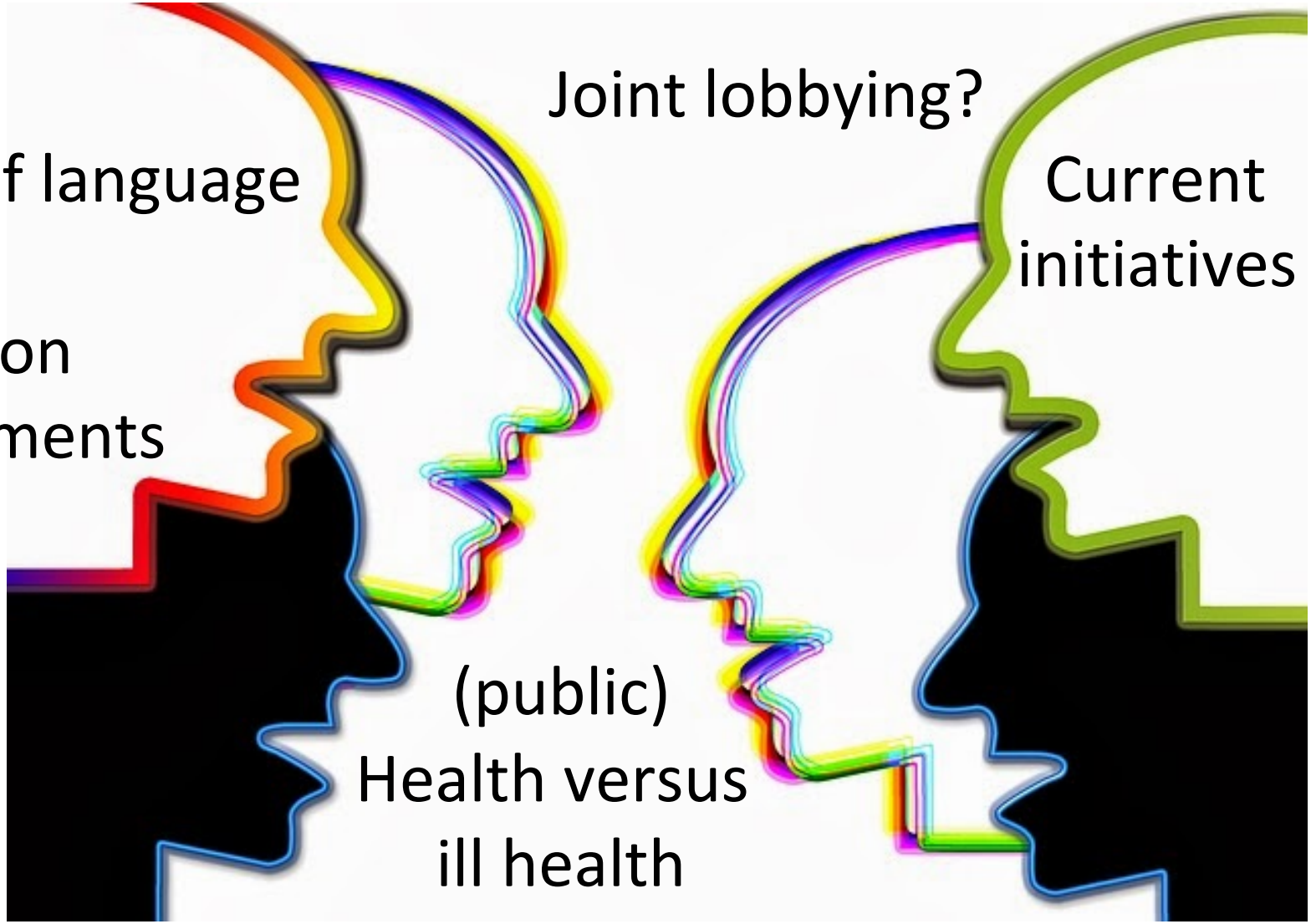
BPS and Government lobbying

- Workforce planning
- Child protection (safeguarding)
- Dementia
- Obesity
- Diversity
- Refugees and asylum seekers
- Quality and governance
- Mental health (e.g., learning disabilities, dementia)
- Psychological best practice with . . .

RCPsych and Government lobbying

- College Public Affairs Team
  - Westminster Parliamentary Liaison Committee.
  - co-chairs Dr Juli Crocombe and Dr Jon Goldin.
- All Party Parliamentary Group (APPG) on Mental Health
  - Cross party group of MPs and Peers interested in mental health.
- Five Steps to Fairness
- Supported and valued? A trainee-led review into morale and training
- Women and Mental Health: “Women in Mind Series”
- Independent review of the Mental Health Act

Break out discussion



Thank you

Dr Stewart Cotterill @DrStewC
Dr Tim Rogers @DrTimRogers

The British Psychological Society
Division of Sport & Exercise Psychology

Dancers' Mental Health: a Review of the Evidence

Dr Nicoletta P. Lekka
Sport and Exercise Psychiatry Special Interest Group
Royal College of Psychiatrists
Birmingham, March 2, 2018

OUTLINE

- Athletes or Artists?
- Dance and Sports
- Dancers' Mental Health
- Personality Characteristics: Perfectionism
- Psychological Risk Factors and Injury
- Occupational Stress
- Interventions
- Research Questions

Athletes or Artists?

- Physical, intellectual and psychological demands of dancing comparable to those of most strenuous sports.
- Central issue: the mental and physical state of the individual, determining his or her readiness to perform at a high level.
- Athletic attributes: muscular strength and endurance, anaerobic and aerobic energy utilisation, speed, agility, coordination, motor control, sustained effort, and psychological readiness - all essential for dance performance.

Athletes or Artists?

- Years of dedication, perseverance and intense practice
- Keeping in shape, undertaking repetitive practices before a performance.
- Heavy physical workloads, great deal of mental stress.

- Athletes: daily practice sessions usually of comparatively short duration. Dancers: daily technique classes, rehearsals, performances.
- Dancers: prone to “dance through” pain, even when doing so may be detrimental. Pain coping skills not as developed as in many types of sports participants.

Dance and Sports

- All sports (team work, motivation).
- Sports with early specialised training (early burnout).
- Aesthetic sports (body image, disordered eating).

- Sports are widely played, followed by a wide fan base.
- Most dancers, dance teachers, choreographers, and dance funding patrons describe feeling a lack of appreciation and respect for their extraordinarily physical and aesthetic craft

Dancers' Mental Health

- Mental health problems described in dancers include stress, anxiety, depression, eating disorders, substance misuse and specific personality characteristics .

- Dance training: demands obedience, perseverance and total dedication to achieve the best.

- Only a minority can eventually fulfil their career aspirations and become professional dancers.

Dancers' Mental Health

- Long hours of intensive physical training, often combined with tight rehearsal and performance schedules, can lead to persistent fatigue, psychological distress, performance decrements, and injury.

- Serious injuries or anticipated retirement in professional dancers related to depression, substance abuse and suicidal ideation.

Eating Disorders

- Aesthetic requirement of dance: Slim figure.
- Classical ballet dancer “ideal”: long legs, short trunk, long neck.
- Professional ballet dancers often weigh 12–15% below their ideal body weight for height.

- High prevalence of poor eating habits, e.g. binge eating, bulimia. In study on adult female ballet dancers, mean caloric intake was 1358 cal.
- Clinical anorexia nervosa is rare among professional dancers as they need to maintain physical performance.

Eating Disorders

- In one study 15% of adolescent dancers demonstrated clinical eating disorders.
- These dancers were significantly more depressed, isolated, impulsive, emotionally disturbed and alienated from dance upon psychological testing.
- They also had less optimal physique and missed more classes due to injuries when compared with those without eating disorders.

Perfectionism

- Perfectionism: pervasive and particularly problematic in dance.

- Dancers concerned about making mistakes. Ruminating, experiencing self-doubt, being highly critical of themselves and others.

- Experiencing persistent anxiety about their own performances, the performances of colleagues, and the reactions of observers.

Perfectionism

- Quest for perfection requires a substantial allocation of time, energy, and resources.
- Can result in financial uncertainties, relationship difficulties, restricted social support, and feelings of isolation and loneliness.
- Dancers in environments where every “move” they make is subjected to scrutiny
- Surrounded by others who may also be perfectionists.

Psychological Risk Factors and Injury

- 70 to 90% of dancers injured.
- Mental stress involved in coping with injuries has not been accurately measured.
- Many dancers tend to continue to dance or return to full performance before adequate recovery and rehabilitation, perpetuating the problem.
- Problems are often not brought to medical attention for fear of the need to suspend dancing.

Psychological Risk Factors and Injury

- Psychological variables can affect both the incidence and outcome of dance injury among dancers.

- Psychological factors associated with both risk and outcome of dance injury included stress, psychological distress, disordered eating, and coping.

- Factors associated only with risk of injury were sleep, personality, and social support.

Psychological Risk Factors and Injury

- Secondary problems of deteriorated performance, temporary suspension, unemployment or even termination of a career place heavy psychological stress on dancers, which can, in turn, lead to other medical problems.

- Doctors must be sympathetic to dancers' desire to return to dancing as early as possible, and understand their tendency to perform beyond their capabilities.

Types of Stressors in Dance

- Ambient stressors - Environmental conditions: Poor facilities and equipment, crowded working conditions, extreme temperatures.

- Daily hassles: Financial concerns, unexpected obligations, misunderstandings, and interruptions during work.

- Role stressors: Perceived lack of autonomy and control, inadequate or inconsistent direction, intra-group rivalry, poor social support, and role conflict.

- Major life events: Death of a loved one, relationship dissolution, relocation, serious injury, or career transition.

Occupational Stress

- Psychosocial stress is also generated by the competitive environment surrounding evaluation and selection, combined with the subjective nature of these judgements, the tendency for them to be accompanied by minimal feedback, and their potential to impact the performer's career.

- When prolonged stress causes biochemical imbalances, immune system weakness, and illness, dancers can experience a higher turnover rate, increased sick days or absenteeism, negative job performance, eating disorders, injuries, and addictive behaviour .

Occupational Stress

- The pressures in the dance profession to stay thin and perform perfectly often lead to compulsive, workaholic tendencies and result in eating disorders and other health problems.

- Workaholic and perfectionist tendencies: diminished sense of humour, skipping rest and meals, increased overtime or no vacation, physical complaints, social withdrawal, a decline in job performance, self-medication, and internal changes.

Occupational Stress

- Training distress: perceived stress, mood disturbance and fatigue, somatic symptoms, sleep difficulties, motivational changes (a shift toward higher levels of extrinsic motivation, and a shift toward lower levels of self-determined motivation)

- Burnout is uniquely characterised by feelings of reduced accomplishment as well as devaluation and resentment of a previously enjoyable activity.

- When burnout occurs, it is likely to follow the development of symptoms related to staleness and the overtraining syndrome. Burnout can significantly reduce dancers' career duration.

Dancers' feedback

- When dancers approach health care professionals, the response they receive is often unconstructive or, even, discouraging. Health care providers gave unhelpful advice.

- Most dancers will report at least one – and often several – instances of being told by a practitioner to "stop dancing" as a method to manage their injuries.

- Ideally: Health professionals observing different varieties of dance and interacting with dancers about their art form.

Psychological Interventions

- Positive stress-management strategies include developing resilience, improving time management, modifying behaviours, setting goals, using relaxation techniques, employing problem focused coping skills.

- Positive self-talk, e.g. removing irrational beliefs and thoughts about the stressful situation.

- Dancers can employ imagery to build confidence, explore potential abilities, and maintain positive feelings about learning advanced techniques and performing. Might be useful for dancers who have had embarrassing experiences during practices and performances, such as falling down or dropping props.

Social Support

- Social support as a buffer to stress.

- Occupational burnout can be combated by creating a support system, identifying the meaning or value of the job, participation in psychological self-care programs, healthy eating, coping or eliminating stressors, and taking time out daily.

- Supportive social relationships both within and outside of the dance environment can benefit recovery by providing a mechanism for expressing concerns, obtaining feedback, gaining perspective, and maintaining balance.

Research Questions

- Using non-clinical diagnoses based on self-report may lead to an inaccurate representation of the number of dancers suffering from a particular set of symptoms.

- Structured clinical diagnoses and criteria, however, may lead to underestimation of the prevalence of psychological disorders.

- Information would be useful in identifying not just the problems but also the need for interventions.

Research Questions

- The relationship between stress and dancers has not been studied sufficiently.
- Psychological factors that influence injuries in dance are far from clear.
- Epidemiological estimates of prevalence rates of disorders such as depression and anxiety among dancers.
- Intervention programs need to be developed and tested.

References

1. Grove JR, Main LC, Sharp L. Stressors, recovery processes, and manifestations of training distress in dance. *Journal of Dance Medicine & Science*, 2013: 17(2), pp. 70-78
2. Hernandez BM. Addressing occupational stress in dancers. *Journal of Physical Education, Recreation & Dance*, 2012:83(6), pp. 3-50
3. Mainwaring LM, Finney C. Psychological risk factors and outcomes of dance injury: a systematic review*. Journal of Dance Medicine & Science*, 2017: 21(3), pp. 87-96
4. Noh YE, Morris T, Andersen MB. Psychosocial stress and injury in dance. *Journal of Physical Education, Recreation & Dance*, 2003, pp. 36-40
5. Russell JA. Preventing dance injuries: current perspectives. *Open Access Journal of Sports Medicine*, 2013; 4: pp. 199–210.
6. Wan Nar Wong M, Wing Kee To W, Chan K. Dance Medicine. In Mafulli, N., Chan, K., Malina, R. and Parker, T., eds. (2000) *Sports Medicine for specific ages and abilities*, Elsevier, pp.161-168

Bibliography

1. Buckroyd, Julia. *The student dancer: emotional aspects of the teaching and learning of dance.* London: Dance Books, 2000
2. Hamilton, Linda H. *The Person Behind the Mask: Guide to Performing Arts Psychology*. Publications in Creativity Research, Ablex Publishing Corporation, 1997
3. Hamilton, Linda H and New York City Ballet. *The dancer's way: the New York City Ballet guide to mind, body, and nutrition.* 1st ed. New York: St. Martin's Griffin, 2008

Royal College of Psychiatrists Special Interest Group
2nd March 2018

Healthier Dancer Programme / NIDMS

Head of Industry and Artist Support / NIDMS

Helen Laws

Healthier Dancer Programme Manager

Erin

National Institute of Dance Medicine and Science Managers

Claire Farmer

Stephanie De'Ath

NIDMS Partners

One Dance UK
The UK Body for Dance

nidms
national institute of dance medicine and science

TRINITY LABAN CONSERVATOIRE OF MUSIC & DANCE

BIRMINGHAM ROYAL BALLET
Director David Bintley CBE

ROYAL BALLET

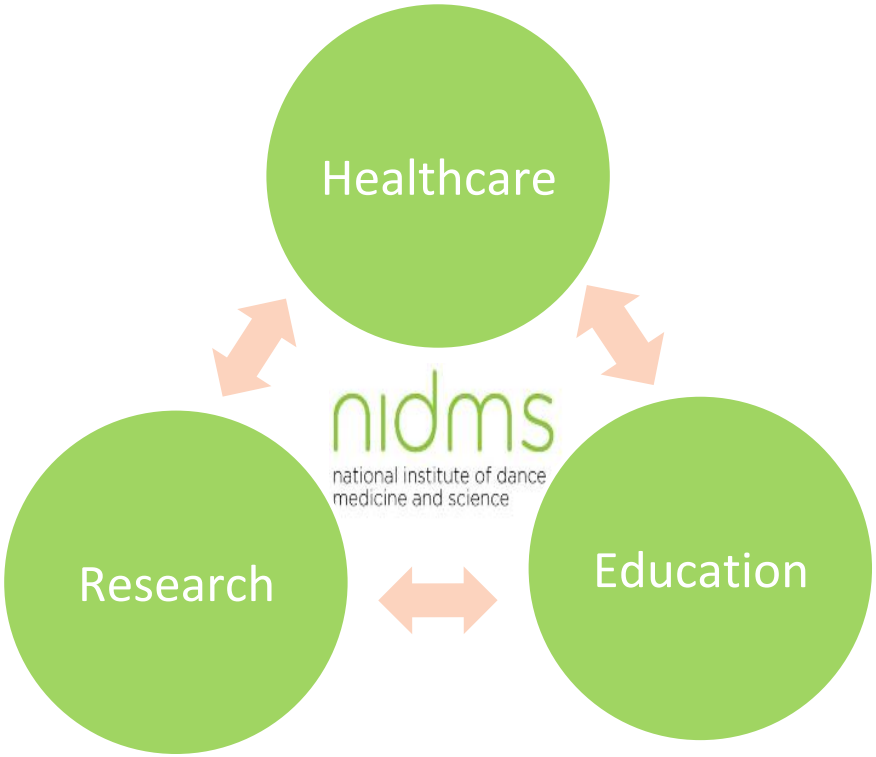
One Dance UK

UNIVERSITY OF WOLVERHAMPTON
KNOWLEDGE • INNOVATION • ENTERPRISE

UNIVERSITY OF BIRMINGHAM

Royal National Orthopaedic Hospital NHS
NHS Trust

One Dance UK
The UK Body for Dance



Mission

Through shared expertise and a network of multidisciplinary partners, NIDMS works to provide the dance sector with access **to high quality, affordable, dance specific health care and dance science support services in private practice and the NHS.**

These services are **underpinned by dance medicine and science research**, including that developed and implemented by NIDMS partners.

Evidence-based best practice, information and resources are **disseminated to the wider dance and health community through educational workshops, conferences and publications**.

Healthcare: NHS dance injury clinics

Multidisciplinary team led by a Consultant in Sports and Exercise Medicine (SEM) or Orthopaedics/Rheumatology

London
Dr Roger Wilmut
Caroline Jubb - Physiotherapist

Birmingham
Dr Kim Gregory
Emma Batchelor - Physiotherapist

Bath
Dr Julian Eddowson
Nick Cleverton -

Podiatrists, nutritionists, psychologists, specialist surgeons

UNDER DEVELOPMENT

North England

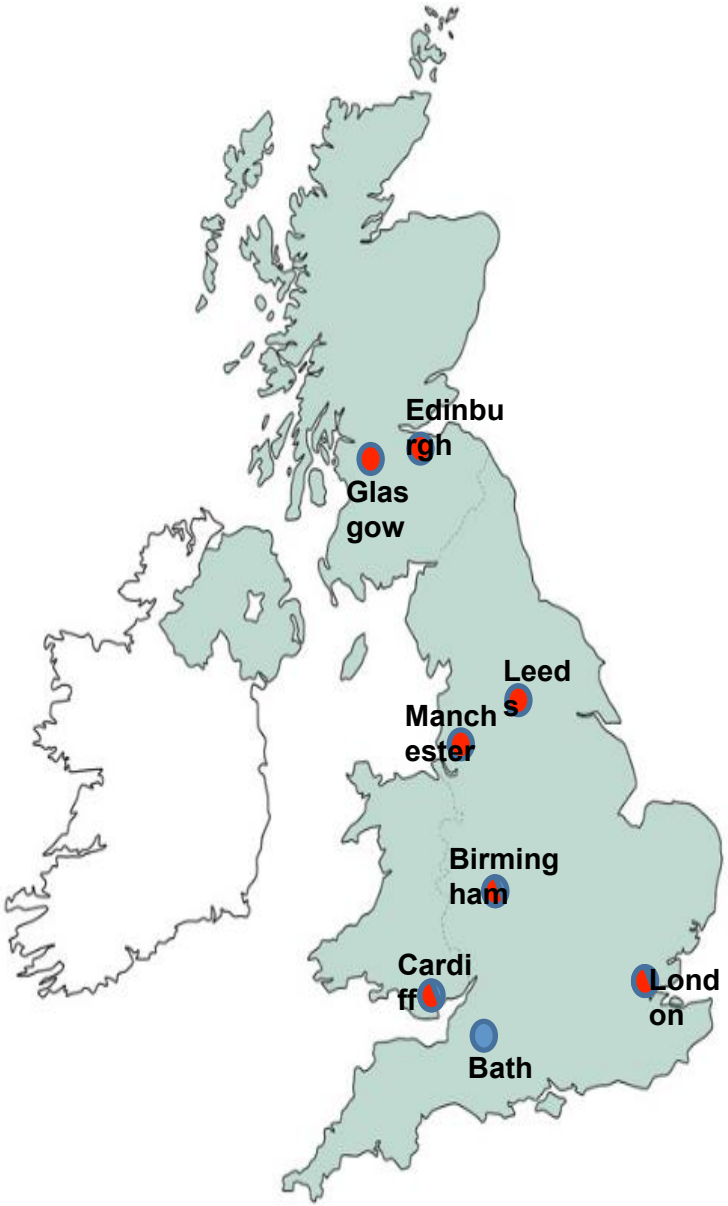
Wales

Scotland

Podiatrists, nutritionists, psychologists, specialist surgeons

One Dance UK
The UK Body for Dance

nidms
national institute of dance medicine and science



- NHS Dance injury clinics
- Dance hubs

Healthcare: Performance Optimisation Package

- BHSF Cash Plan, Musculoskeletal and Fitness screenings, and Counselling Helpline – but no cover for psychologist, psychiatrist or counsellor appointments
- Purchased as an add on to One Dance UK membership
- **To assist in injury prevention, not just for use when injured!**

Research

NIDMS partners have produced 300+ medical/scientific conference presentations, 150+ peer-reviewed medical/ scientific articles, 20+ professional articles, 4 dance medicine/ science books, 5 book chapters

Psychology

Social environmental factors and motivational processes linked to well-being, optimal functioning, and development in vocational dancers

Mental skills training/ psychological (non-clinical) support services to vocational dancers

Enhancing learning through imagery

Performance anxiety

Medicine

Injury occurrence within dance companies and vocational schools

Reducing chronic injuries through prehab

Vitamin D, muscle function and injury occurrence

Injury, healing and anthropometry

Hypermobility

Talent ID

Characteristics of talented dancers in the UK Centres for Advanced Training programme

Cultural background variables in dance talent identification

Physiology/Biomechanics

Development of dance specific fitness tests

Understanding the link between dance artistry and physical fitness

Anthropometric determinants of dance performance across genres

Physiological demands and fitness of recreational, vocational and professional dancers

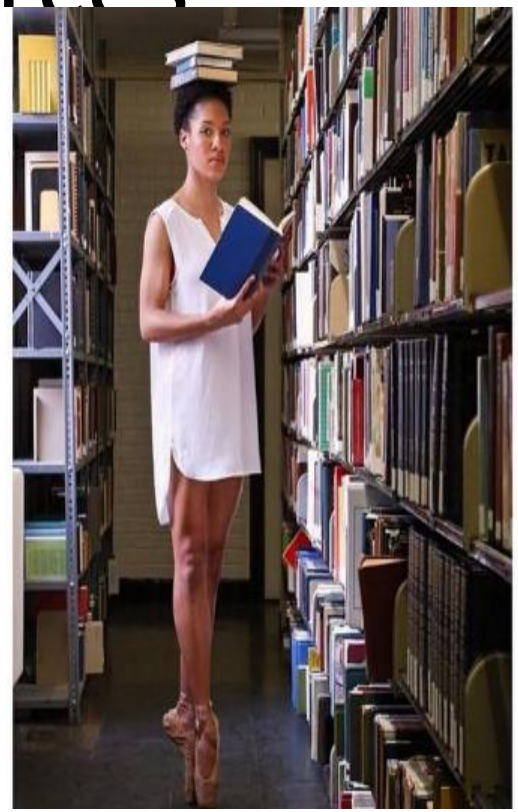
Dance shoe characteristics and landing stability

Education: One Dance UK's Healthier Dancer Programme (HDP)

- Healthier Dancer Talks
  - 533 workshops to 7600 participants since 2012
- HDP Annual Conferences
  - 7 conferences to 1408 participants since 2012
  - conference videos viewed 3000+ times
- Advice, Information, and Resources
- Dance Medicine and Science Expert Panel
- Membership and Healthcare Practitioners Directory

Educational Resources

- Industry Standards and advocacy materials
- Information Sheets, books, posters and recipes
- Research updates
- Reading list
- E-networks
- Website: Health FAQ's, resources, including signposts to mental health support and guidance
- Videos (conference presentations, etc)



Dance Medicine and Science Expert Panel

Dr Nick Allen, Dr James Calder, Jasmine Challis, Prof Joan Duda, Dr Huw Goodwin, Dr Amal Hassan, Kim Hutt

Moira McCormack, Dr Emma Redding, Greg Retter, Tommi Sliiden, Britt Tajet-Foxell, Dr Roger Wolman, Prof Matthew Wyon

Representing: academia, company healthcare management, nutrition and dietetics, orthopaedic surgery, osteopathy, psychology, physiology, physiotherapy, rheumatology, sports and exercise medicine, and sports therapy

Healthcare Practitioners and Dance Scientists Membersl

- For researchers, healthcare professionals, and educators in dance medicine and science
- Benefits:
  - HDP speakers list
  - Calls for research participants
  - Discounts for events and conferences
  - Specialised e-bulletins
  - Networking opportunities
  - CPD opportunities
  - **Healthcare Practitioners Directory**

Healthcare Practitioners Directory

Searchable listing of dance-specific multidisciplinary HCPs across the UK

Criteria:

- References from three dancers treated
- Governing body accreditation (Acupuncture, Physiotherapy, Chiropractic, Osteopathy, GP/Physician/Surgeon)
- Valid, full membership to a listed professional body which has:
  - a joining fee, an online searchable database of practitioners, a complaints procedure, a practicing ethics policy/code of conduct, membership criteria including minimum qualifications and CPD requirements
- Up-to-date and comprehensive professional liability/indemnity

HDP/NIDMS mental health work

- Healthcare
  - January 2014 – How to offer eating disorder assessment and treatment to dancers nationally and freely/affordably via the NHS: Loughborough University and Leicester Hospital, NIDMS, Dance UK, Beat, RNOH
  - October 2013 at English National Ballet - representatives from, Royal Ballet, London Studio Centre, London Contemporary Dance School, BAPAM

HDP/NIDMS mental health work

Research

- Fit to Dance and Fit to Dance 2
  - 92% of dancers have at least one psychological concern, 85% more than one (Laws, 2005, p. 28)
    - 'Tension with people', 'constant tiredness', 'low self confidence', 'general anxiety' >50% (Laws, 2005, p. 29)
  - Drug/alcohol overuse = muscle injury more likely 66% vs 47% $p<0.0005$ (Laws, 2005, p. 31)
  - Eating problems = 16% in 2005, down from 21% in '96 (Brinson & Dick, 1996, p. 55) & (Laws, 2005, p. 28)
  - students = more psychological concerns than professional dancers
    - eating problems 19% vs 7% $p<0.0005$
    - low self-confidence 58% vs 40% $p<0.0005$
    - constant tiredness 60% vs 43% $p<0.0005$(Laws, 2005, p. 28)
  - Ballet professionals reported increased alcohol/drug overuse, difficulty concentrating, external stress, performance anxiety in 2005

HDP/NIDMS mental health work

Research

- NIDMS collaborative research: more than 50 peer-reviewed articles in the areas of basic needs satisfaction, motivational climate, perfectionism, body image, performance anxiety, predictors and interventions for psychological wellbeing, somatics, and wellbeing.
- Large scale projects such as Musical Impact and CAT Talent Development research
- Research in eating disorders
  - Goodwin, H., Arcelus, J., Marshall, S., Wicks, S., and Meyer, C. (2014). Critical comments concerning shape and weight: associations with eating psychopathology among full-time dance students. Eat Weight Disord 19: 115.
  - Goodwin H, Arcelus J, Geach N, Meyer C. (2014) Perfectionism and eating psychopathology among dancers: the role of high standards and self-criticism. Eur Eat Disord Rev. Sep;22(5):346-51.
  - Arcelus, J, Witcomb, G., Mitchell, A. (2014) Prevalence of Eating

HDP/NIDMS mental health work

Resources

- Your Body Your Risk – aimed at young dancers
- Information sheets: Burnout in Dance, How to have Healthy Bones, Nutrition for Dancers, Adolescent Dancer: Psychological challenges
- Practical guidance for schools and companies on eating disorders – information sheet and educational workshop

Talks and Conferences

- HDP Talks: Confidence and Anxiety, Preparation for Performance (Goal setting, imagery, self regulation), Psychology of Injury
- Conferences
  - April 2012: Nutrition and Disordered Eating in Dance: Artistry, athleticism and the role of the multidisciplinary support team
  - November 2013: Beyond the Body: Psychological tools for performance enhancement and wellbeing in dance; Birmingham
  - November 2017: Biopsychosocial impact of injury and mental health for dancers; London

HDP/NIDMS mental health work

Advocacy

- Equity: Stress in the Entertainment Industry, addressing suicide, depression, and stress
- #DancersNeedRest campaign
- Stuart Waters: Rock bottom – safeguarding techniques for artists coping with the psychological demands of artistic work focussed on psychologically disturbing subject matter
- Dance Psychology Network – international network of psychologists, psychiatrists, complimentary therapists, researchers, educators, professional dancers

Areas of interest

- Easy, early access to psychological care
- Prevention rather than cure
- Clinical teams at the dance injury clinics can ID psychological support needs early
- Main areas arising in clinics presently = eating disorders and pain
- Needed: Regular eating disorders clinic (ideally with dance specialist knowledge)
- Liaison psychiatrists with interest in dancers and eating disorders and somatisation
- RED-S co-morbidity?

Areas of interest

- Where are specialists in eating disorders, psychology and psychiatry located in relation to NIDMS/dance hubs?
- Performance enhancement as well as addressing psychological disorders
- Cross-cultural concerns
- how exercise may be used as mood regulator among dancers or whether dance activity could be compulsive in dancers struggling with weight and shape concerns; relationship between compulsive exercise and mood regulation

Next steps?

- Nick Allen (Clinical Director, Birmingham Royal Ballet) and Dr Kim Gregory (Birmingham NHS dance injury clinic) have set up a local working group to discuss local referral pathways and would appreciate a meeting with any local psychiatrists who are interested.
- Where are specialists in eating disorders, psychology and psychiatry located in relation to NIDMS/dance hubs?
- Any SEPSIG members interested in joining the Healthcare Practitioners Directory, attend CPD in dance, or work as an advisor, or with experience in dance invited to contact manager@nidms.co.uk

One Dance UK
The UK Body for Dance

nidms
national institute of dance medicine and science

JERWOOD CHARITABLE FOUNDATION

HARLEQUIN
THE WORLD DANCES ON HARLEQUIN FLOORS

gave the first £130,000 towards the National Institute

and individuals via the Big Give Christmas Challenge 2010 and 2013 gave a further £16,000 and…

phf Paul Hamlyn Foundation

sowerby FOUNDATION

Dance Again Foundation

NIDMS work

How is physical activity relevant in Old Age Psychiatry?

SEPSIG Spring Meeting
2nd March 2018

Reshad Malik
ST6 Old Age Psychiatry
North Central London

Overview

- Burden of dementia
- Physical activity and cognition
- Types of physical activity
- Mechanisms
- Clinical applications

Burden of Dementia

- **47.5 million** people living with dementia
- **7.7 million** new diagnoses made every year
- **Double** by 2030
- **Triple** by 2050
- No new treatment options in many years

Mild Cognitive Impairment and Dementia

- MCI
- Alzheimer's Disease (50-75%)
- Vascular Dementia (20%)
- LBD
- FTD

Risk Factors: Non Modifiable

- Advanced age
- Genetics (APOe4)
  - More susceptible to lifestyle factors

- Smoking - 5%
- Failing to seek early treatment for depression - 4%
- Physical inactivity - 3%
- Social isolation - 2%
- High blood pressure - 2%
- Obesity - 1%
- Type 2 diabetes - 1%

Physical Activity (PA)

- Beneficial for both **physical fitness** and **mental health** in older adults
- Inactivity accounts for **3% overall risk** for dementia
- PA could prevent **300,000 cases** of dementia every year

Effect of PA on Healthy OAs

- LONG TERM
  - Lifelong PA vs sedentary behaviours
  - Impact on depression
  - Social impact
- SHORT TERM
  - Measurable benefits to memory after 1 session PA
  - Attenuation of cognitive decline
  - Reduction in brain atrophy

Risk of developing MCI/dementia

- Decreased risk of **MCI**
  - Dependent on intensity of PA
  - Moderate > intense/light
- Decreased risk of **AD and VaD**
  - >4 PA/week halved risk of developing dementia
  - Unless ApoE4 − then no risk reduction

Types of PA

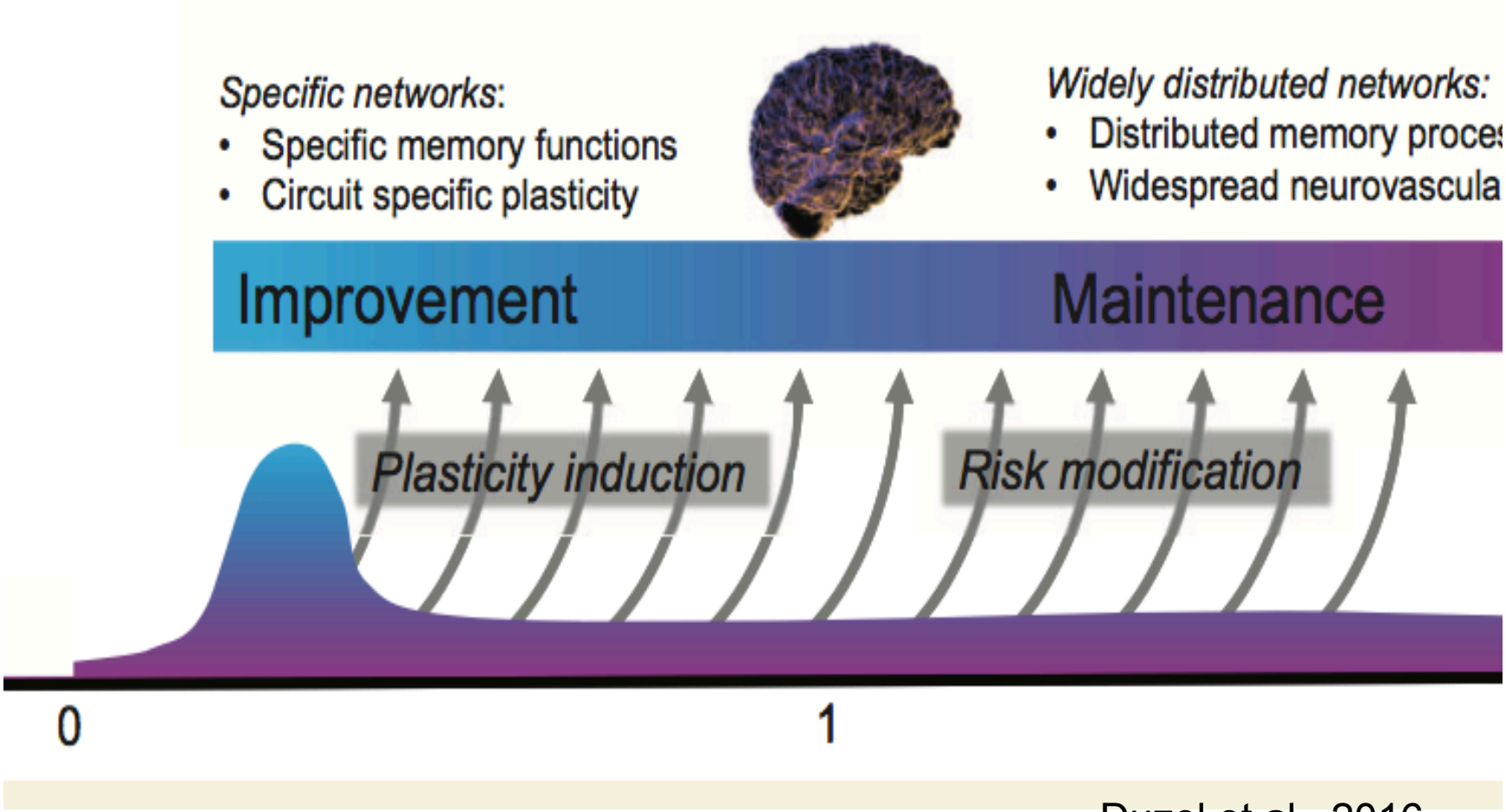
- **Aerobic** vs **Resistance**
- **Improving** vs **Maintaining cognitive function**

Types of PA

- Aerobic PA attenuates cognitive decline
- Effects of aerobic PA may decline with age
- Resistance training (weights/strength training)
  - Improve cognition
  - Prevent cortical white matter volume loss
  - Mechanisms unclear
    - Intensity?
    - Frequency?
- Aerobic + resistance is more effective than either alone

ercise regime
ld-to-moderate intensity, 50–70% of max. cardiac outpu
30–40-min sessions (Erickson *et al.*, 2011)
oderate-to-high >75% of max. cardiac output, ⩾3 × w
essions with high intensity intervals of 4 × 5 min (Maa
ng-term mild-to-moderate intensity training with brief
nstance 1 week every 4 weeks) of moderate-to-high ir

Duzel et al., 2016



Duzel et al., 2016

Mechanisms

- **Direct** vs **indirect**
- **Neuronal plasticity** vs **vascular and metabolic modifiers**
- **BDNF –** hippocampal volume
- Improving **cerebral blood flow**
  - Angiogenesis
  - Removal of metabolic waste/amyloid β aggregates
- **Insulin** sensitivity
- Impact on **depression**

Clinical applications

- WHO 2012
  - ‘Vigorous exercise’
  - 75 mins/week
  - More recent data shows these levels are not sufficient

Clinical applications

- PA + CST
- A physiotherapy led exercise programme
- Manageable for older adults
  - Low intensity PA (30 mins, 3-6x/week for 9 mos)
  - Managing **CV health**
- Exercise mimetics?
  - BDNF activation

References

- Karantzoulis S et al (2011) Distinguishing Alzheimer's disease from other major forms of dementia
- KivipeLto M (2008) Apolipoprotein E epsilon 4 magnifies lifestyle risks for dementia, J Cell Mol Med
- Byers A.L., Yaffe K. Depression and risk of developing dementia. Nat. Rev. Neurol. 2011;7:323–331. doi: 10.1038/nrneurol.2011.60.
- Panza F et al (2006) Cogniitve Frailty − Predementia syndrome and vascular risk factors. Neurobiol. Aging.
- Sallis JF et al (2016) Progress in physical activity over the Olympic Quadrennium, Lancet Physical Activity Series 2 Executive Committee
- Livingston G et al., **Dementia prevention, intervention, and care**, The Lancet , Volume 0 , Issue 0
- Öhman H., Savikko N., Strandberg T.E., Pitkälä K.H. Effect of physical exercise on cognitive performance in older adults with mild cognitive impairment or dementia: A systematic review. Dement. Geriatr. Cogn. Disord. 2014;38:347–365. doi: 10.1159/000365388
- World Health Organisation http://www.who.int/mediacentre/factsheets/fs362/en
- Groot C., Hooghiemstra A.M., Raijmakers P.G., van Berckel B.N., Scheltens P., Scherder E.J., van der Flier W.M., Ossenkoppele R. The effect of physical activity on cognitive function in patients with dementia: A meta-analysis of randomized control trials. Ageing Res. Rev. 2016;25:13–23. doi: 10.1016/j.arr.2015.11.005


Posted at FAADOOINDIA.COM