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Transforming our understanding and treatment of mental health problems: The Birmingham Institute for Mental Health approach

Matthew Broome m.r.broome@bham.ac.uk

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BIRMINGHAM HEROES

Professor Paul Barrow Professor Lisa Bortolotti Professor Matthew Broome Dr Rachel Lightowler

75% OF MENTAL DISORDERS BEGIN BY THE AGE OF 24 TO HELP EVERYONE ACHIEVE THEIR POTENTIAL WE ARE STEPPING IN EARLIER TO IMPROVE YOUTH MENTAL HEALTH

www.birmingham.ac.uk/heroes

Age of Onset of Mental Health Disorders

- “Roughly half of all lifetime mental disorders in most studies start by the mid-teens and three quarters by the mid-20s” Kessler et al., *Current Opinion Psychiatry*, 2007.

Disorder	Age of onset (years)
Impulse-control disorders	5 - 15
Substance-use disorders	10 - 25
Anxiety disorders	5 - 20
Mood disorders	15 - 35
Schizophrenia	15 - 25

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Are youth mental health problems increasing?

- Evidence of increased referrals to child and adolescent mental health services & self-ascrption of mental disorder
- Epidemiological data of increased prevalence over last few decades
- Increased internalizing disorders in adolescent girls
- Suicide and self-harm in young women
- NHS digital survey 2022: 18% young people (7-16) have a diagnosable condition and rates of a probable mental disorder
- In 17-19 rates rose from 1 in 10 (10.1%) in 2017 to 1 in 6 (17.7%) in 2020 to 1 in 6 (17.4%) in 2021 to 1 in 4 (25.7%) in 2022

ANZJP

Are child and adolescent mental health problems increasing in the 21st century? A systematic review

William Bur¹, Angela J Dean¹, Jacob Najjar² and Nish Hyattakulak³

Annual Research Review: Secular trends in child and adolescent mental health

Stephan Collakauer

The global coverage of prevalence data for mental disorders in children and adolescents

H. E. Entable^{1,2*}, A. J. Bauer^{1,2}, G. Falmer^{1,2}, T. E. Mattar^{1,2}, Y. Pan^{1,2}, H. A. Whittaker^{1,2*} and J. C. Cooper^{1,2*}

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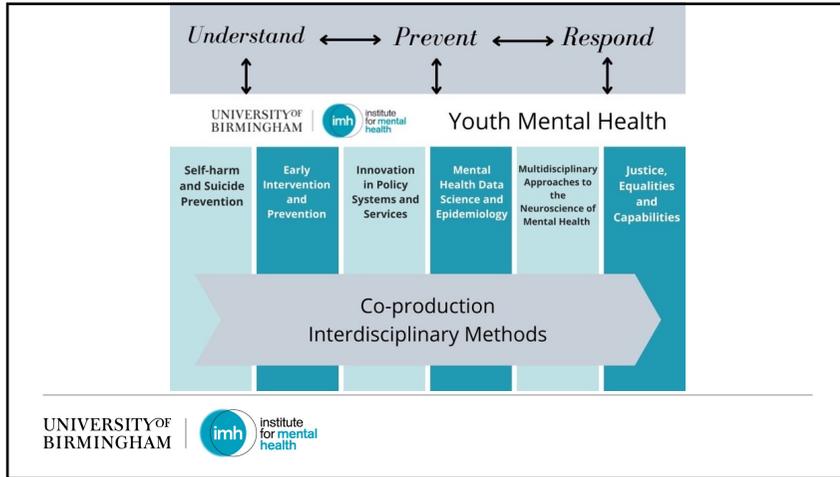
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Birmingham Context

- 40% of the population under 25
- 1:5 born overseas
- 40% population lives in poverty
- First 'majority minority' city in UK
- 'super diverse'

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Core activities and achievements

- Grant capture of £45M+ since 2018
- Funders include NIHR, UKRI, EU, NIH, government, philanthropy, industry, Wellcome, Wolfson
- Wolfson Research Unit in Youth Mental Health £1.5M
- Wellcome Trust-funded Midlands Mental Health & Neurosciences Doctoral Training Centre for Healthcare Professionals £7.2M
- 'Better than Well' Collegiate Recovery Programme
- Midlands Translational Centre of Excellence and NIHR Biomedical Research Centre (>£12M)
- 50 PIs across UoB colleges/schools; 55 PhD students
- MSc Mental Health into commence 5th year; seminar series – distance learning and Dubai too
- Youth advisory group – group of 16+ diverse young people with lived experience, facilitators.
- Mental Health Humanities Groups




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The Challenge

- Increasing prevalence
- Disciplinary siloes
- Lack of effective treatments
- Long waiting lists

Our Response

- Data science multi-level modeling
- Interdisciplinary research
- New treatments service delivery
- Prevention, family 'first responders'

Building on our Impact in Early Intervention for Psychosis and Youth Mental Health



When I went to tell my GP that I was pretty sure I had anxiety, it was overlooked because it's not a typical thing. It's easy for them to diagnose a broken leg, but not something going on inside your head

There's this whole thing about young people being 'lazy millennial snowflakes'. One thing that can be done to tackle that is to involve young people in the research.

To me, it seems that it's not worth investing time in the research if it's not going to involve the people who the research is about.

Members of the Institute for Mental Health Youth Advisory Group.

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Birmingham-led Research & Innovation

- Interdisciplinary Youth Mental Health: International Reach
- Lived Experience in Research: IMH YAG
- Early Psychosis: EIP since 1994
- Depression & TRD services
- 0-25 Youth Mental Health Service: Forward Thinking Birmingham
- Trials and Experimental Medicine Studies:
 - Neuroimmunology: Neurostimulation
 - Mechanistic and pragmatic trials
- Applied Mental Health: Cognitive Neuroscience: Policy
- Centre for Human Brain Health (CHBH)
- Centre for Developmental Science (CDS)
- UHB Clinical Research Facilities
- Birmingham Clinical Trials Unit




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NIHR National Institute for Health and Care Research

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UN Sustainable Development Goals

In 2015, UN member states agreed to 17 global Sustainable Development Goals (SDGs) to end poverty, protect the planet and ensure prosperity for all. Our work contributes towards the following SDG(s):

Fingerprint

Dive into the research topics where The Institute for Mental Health is active. These topic labels come from the works of this organization's members. Together they form a unique fingerprint.

- Psychotic Disorders Medicine & Life Sciences
- Mental Health Medicine & Life Sciences
- Systematic Reviews Medicine & Life Sciences
- Schizophrenia Medicine & Life Sciences
- Depression Medicine & Life Sciences
- Conduct Disorder Medicine & Life Sciences
- Meta-Analysis Medicine & Life Sciences
- Sleep Medicine & Life Sciences

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IPPACT study

NIHR funded multi-site study running across the UK (NW England, NE England, & Midlands) with large team of clinicians, academics, service users and researchers.

Aims to:

- Develop set of measures and prognostic model for At Risk Mental States (ARMS).
- To assess the external validity of this set of measures and prognostic model for use in the NHS.
- To assess the health economic impact of implementing this approach in clinical practice.

RESEARCH [Open Access](#)

A review of economic evaluations of health care for people at risk of psychosis and for first-episode psychosis

Gemma L. Shields^{1,2}, Deborah Buck^{3,4}, Filippo Varese⁵, Alison H. Young^{6,7,8}, Andrew Thompson⁹, Nuzhat Husain¹⁰, Matthew R. Boone¹¹, Rachel Lippert¹², Rory Byrne¹³ and Linda M. Davies¹

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NIH National Institute of Mental Health

ACCELERATING MEDICINES PARTNERSHIP SCHIZOPHRENIA

Trajectories and Predictors in the Clinical High Risk for Psychosis Population: Prediction Scientific Global Consortium (PRESCIENT)

THE UNIVERSITY OF MELBOURNE

AMP SCZ Early Intervention

orggen

ACCELERATING MEDICINES PARTNERSHIP SCHIZOPHRENIA

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Early Intervention IN PSYCHIATRY

ORIGINAL ARTICLE [Open Access](#)

Development of the PSYCHS: Positive SYmptoms and Diagnostic Criteria for the CAARMS Harmonized with the SIPS

Aim

To harmonize two ascertainment and severity rating instruments commonly used for the clinical high risk syndrome for psychosis (CHR-P): the Structured Interview for Psychosis-risk Syndromes (SIPS) and the Comprehensive Assessment of At-Risk Mental States (CAARMS).

Methods

The initial workshop is described in the companion report from Addington et al. After the workshop, lead experts for each instrument continued harmonizing attenuated positive symptoms and criteria for psychosis and CHR-P through an intensive series of joint videoconferences.

Results

Full harmonization was achieved for attenuated positive symptom ratings and psychosis criteria, and modest harmonization for CHR-P criteria. The semi-structured interview, named Positive SYmptoms and Diagnostic Criteria for the CAARMS Harmonized with the SIPS (PSYCHS), generates CHR-P criteria and severity scores for both CAARMS and SIPS.

Conclusions

Using the PSYCHS for CHR-P ascertainment, conversion determination, and attenuated positive symptom severity rating will help in comparing findings across studies and in meta-analyses.

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STUDY PROTOCOL Open Access

The UK stand together trial: protocol for a multicentre cluster randomised controlled trial to evaluate the effectiveness and cost-effectiveness of KiVa to reduce bullying in primary schools

Suzy Clarkson¹, Lucy Bowes^{2,3,4}, Elinor Coulman⁵, Matthew R. Broome^{6,7}, Rebecca Cannings-John⁸, Joanna M. Charles⁹, Rhiannon Tudor Edwards¹⁰, Tamara Ford¹¹, Richard P. Hastings¹², Rachel Hayes¹³, Paul Patterson¹⁴, Jeremy Segrott¹⁵, Julia Townsend¹⁶, Richard Watkins¹⁷, Julia Badger¹⁸, Judy Hutchings¹⁹ and the Stand Together Team



I've just returned home, having attended the Ofsted feedback session at one of our Birmingham Schools. The Lead Inspector could not say enough about how wonderful the impact KiVa has had on the school. The staff and children were so complimentary about how it was making a difference to their lives both at school and out in the wider world. The inspector said the facilitators must be of an 'expert quality' to have drawn out such deep and sustained impact on the school community. Great job KiVa crew!

Paulette
Paulette Osborne
Assistant Director of School Improvement
T: 0121 285 0924 | E: paulette.osborne@bep.education

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Results (in press)

118 schools, 11,111 children (7-11 years of age) across 4 sites

Reduction in bullying in active arm of trial from 20.3% to 17.7% (21.6% to 20.7% in control arm)

Students in KiVa arm also had higher empathy and reduced peer problems

Small-to-moderate effect but given a universal public health preventative intervention may be important

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Agency, justice, and social identity in youth mental health: A collaborative research project involving young people and academics working in Philosophy, Ethics and Neuroscience

This study is funded through an Engagement Award through the UK Medical Research Council, Economic and Social Research Council, and Arts and Humanities Research Council. These awards support building cross-disciplinary communities around adolescence, mental health and the developing mind.

<https://AgencyInMentalHealth.co.uk>

UK Medical Research Council | UK Economic and Social Research Council | UK Arts and Humanities Research Council | CITY UNIVERSITY OF LONDON | UNIVERSITY OF BIRMINGHAM | Aston University | **MPin** Foundation | UNIVERSITY OF EXETER | NHS Devon Partnership

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Research Team



Rose
Communication
@RoseMcCabe2



Rachel
Youth Involvement
@RachelRed94



Lisa
Philosophy
@LisaBortolotti



Michael
Psychology
@IPAnalysis



Clara
Sociology
@ClaraBergen



Matthew
Psychiatry
@MatthewBroome



Young People's Advisory Group
@McPinFoundation

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Top Tips: Involving in Decisions

- Take time to explain what you recommend
- Ask about my concerns about treatment
- Don't ask me what type of treatment I need. I prefer to explore & discuss this together.
- Ask me how I heard about or had experience of the treatment option
- Don't make up your mind before asking for my perspective.
- Be transparent about potential problems

Top Tips: Validate my Experience

- Just saying "I can see you're struggling" can make all the difference.
- Don't downplay/contest what I am feeling
- I can tell if you're taking me seriously by your body position & tone of voice
- I still want you to acknowledge my distress, even if you can't offer me services
- Just because I look OK doesn't mean I am feeling OK

Top Tips: Affirming the capacity to contribute to change

- If I feel ashamed, I am less inclined to share information about how I acted the way I did
- It is important to acknowledge how far I have come!
- You don't want the message to be: "It is not relevant how you're feeling. Just imagine what this would do to everyone around you."

Top Tips: Avoid Objectification

- Acknowledge that I'm an individual and my story matters
- Explain that the label is just one part of a bigger picture
- Fully explore my concerns (e.g., family, school) before labelling me
- A well-founded diagnosis can be validating, but premature labels cause lasting damage

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Article

Theory & Psychology

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Communication in youth mental health clinical encounters: Introducing the agential stance

How to Give Young People Agency in Mental Health

McPin Foundation Podcast
Listen on SoundCloud

<https://treaty.org/how-to-give-young-people-agency-in-mental-health/>
<https://soundcloud.com/user-291927810/how-to-give-young-people-agency-in-mental-health>

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Details of the Project

International exchange award – joint between Universities of Birmingham and Florence, Broome and Stanghellini as co-leads

- Renew phenomenological psychopathology with recent contributions from philosophy, wider humanities, and service user research – fossilised
- Reinvigorate phenomenology for mental health research and practice as the science of subjectivity and first-person experience
- Recognition of term psychopathology as coming from medical/disorder perspective and not aiming to be hegemonic
- Develop international and lived experience scholars from across disciplines and career stages

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The sub awards

- 4 International Exchange Fellowships
- 4 Workshops and Knowledge Exchange Activities
- 2 Small Grants & 2 Writing Retreats
- 2 Translation Fund Awards
- 2 Interdisciplinary Expansion Sandpit Events

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EPIC

Epistemic Injustice in Healthcare

GENEROUSLY FUNDED BY WELLCOME. GRANT : [226603/2/22/2], 'EPIC: EPISTEMIC INJUSTICE IN HEALTH CARE'






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EPIC

What is project EPIC?

EPIC is a six-year project, funded by the Wellcome Trust's Discovery award

The project is primarily based at the Universities of Bristol, Birmingham and Nottingham, UK

There are also collaborations with Aston University, the University of Bologna, the University of Ferrara, City, University of London, and Swansea University

It is made up of an interdisciplinary team of researchers and collaborators in philosophy, psychology, law, and history

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EPIC

What is epistemic injustice?

"Epistemic injustice" is a term coined by philosopher Miranda Fricker in her 2007 book of the same title

It refers to wrongs done to someone in their capacity as a knower

There are two main types:

- 1. Testimonial injustice**, where an individual is harmed because their testimony is given less credibility due to some perceived aspect of their identity
- 2. Hermeneutic injustice**, where an individual is harmed due to a lack of conceptual tools, or inability to develop said tools, needed to understand their own experience

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EPIC

What is epistemic injustice?

This application to healthcare was originally initiated by Carel and Kidd (2014, 2016)

The concept of epistemic injustice in healthcare identifies epistemically unjust ways of conceiving of illness, treating ill persons, and allocating healthcare

A significant amount of literature has been written since (see, for example, Crichton, Carel and Kidd 2017; Kurs and Grinshpoon 2018; Bueter 2019; Byrne 2020)

However, much work remains to be done

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Project aims

The overarching goal of the project is to initiate a step-change in EI research by:

1. Filling long-standing gaps in epistemic injustice theory
2. Empirically testing the validity of the concept
3. Developing strategies of amelioration
4. Engaging academic and clinical communities on EI's theoretical and practical possibilities

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Current Project Status

As of September 2024, we are in year 2 of the project

Work has been done to start developing the empirical cases:

- Young people with psychosis
- EI and dementia
- Cancer and depression

The team has already produced numerous outputs (journal articles, videos, podcasts, public engagement and The Philosophy Garden)

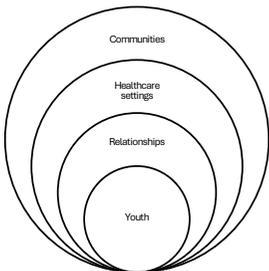
We also have a thriving blog, reading group, and seminar series

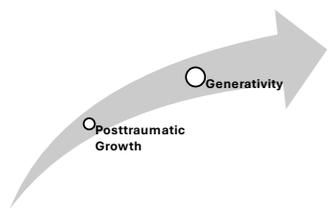
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Gerald Jordan, PhD
g.jordan@bham.ac.uk



Intergenerational Injustice





Posttraumatic Growth

Generativity

Posttraumatic Growth: "I realize that everything matters, like every word that comes out of my mouth, every thought that crosses my mind, like everything has an impact and everything makes a difference, and I didn't have that awareness before."

Generativity: "I used to be very isolated, and I used to reach out to nobody and I used to think that I didn't like people. But actually, when I started to volunteer, it was like things led to things. And with my clients or the people I worked along the years—I've noticed that as well. Like people can be completely transformed by being part of something bigger than themselves"

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Suicide & Homicide in Unpaid Carers

Led by Associate Professor Siobhan O'Dwyer

Co-produced with unpaid carers

International & interdisciplinary

Recent Findings:

- Over 40% of parents caring for a disabled child have contemplated suicide
- In the UK each year, 13 homicides & homicide-suicides involving an unpaid carer killing the person for whom they care
- System failures in health, social care, education & criminal justice contribute to thoughts of, and deaths by, suicide & homicide




Dr O'Dwyer (L) & carers with Bambos Charalambous MP
Invisible Carer by artist Leo Jamelli

Recent Impact:

- An event at the House of Commons to introduce MPs to the research & make recommendations for policy
- CPD delivered to more than 50 charities & local authority teams
- Carers named as a priority in local suicide prevention strategies
- Public art installations, shortlisted for the Derwent Art Prize
- ITV special feature

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Queer Futures 2 (NIHR HS&DR)

Professor Elizabeth McDermott, What works to support LGBTQ+ young people's mental health?

Study methods: Phase 1 – systematic review; Phase 2 – Service mapping; Phase 3 – Case study evaluation

LGBTQ+ young people involved throughout

Contact details:
E-mail: e.mcdermott.1@bham.ac.uk
Twitter: @ElizabethMcDer6

Evidence - risk factors

- Homo/bi/transphobic discrimination
- Being unable to share sexual or gender identity
- Cis-heteronormativity
- Identifying as LGBTQ+ at an early age
- Being gender diverse
- Social isolation
- Conflict with family or peers about sexual or gender identity

(Bochicchio et al. 2021; McDermott et al. 2016; Haas, 2010)

Evidence of prevalence: LGBTQ+ young people experience higher rates of depression, self-harm, suicide and poor mental health compared to cis/heterosexual young people

- E.g. analysis of 12 UK population surveys: LGB under 35 twice as likely poor mental health (Semiyan et al 2016)
- E.g. attempted suicide compared: Trans young people x 6 more likely
- Bisexual young people x 5 LG young people x 4 (Di Giacomo et al. 2018)

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Queer Futures 2: Findings

NHS Service recognition of need?

Limited NHS LGBTQ+ specific mental health support due to misunderstanding:

- the higher risk of poor mental health for LGBTQ+ young people
- the reasons for this higher risk
- the 'underuse' of mental health services by LGBTQ+ young people
- LGBTQ+ young people have poor experiences of support

Model for 'What works?' in mental health support for LGBTQ+ young people

Intersectional | Youth rights

Time | People | Agency | Possibility | Body | Accessibility | Space | Recognition | Emotion | Belonging | Safety

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For more info and **Interactive 'What works?' model** using the QR code. Access our **Guidance for NHS commissioners**, visit our website at www.queerfutures2.co.uk

Or follow us on Twitter for updates @queerfutures_2

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smart SCHOOLS

Smartphones, social Media and Adolescent mental wellbeing: the impact of school policies Restricting day Time use
April 2022- July 2025

PI's: Dr Victoria Goodyear, School of Sport, Exercise and Rehabilitation Sciences, Institute for Mental Health (IMH) and Professor Miranda Pallan, Department of Applied Health Research
Co-1 Team: SportExR, IMH, Psychology, Applied Health, Health Economics, Statistician

@SMART_SchStudy

FUNDED BY: NIHR | National Institute for Health and Care Research

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NIHR | National Institute for Health and Care Research

Figure 1: Logic model and theory of change for the influence of school policies that restrict daytime use of smartphones on mental wellbeing and health outcomes in adolescents

Context: Smartphone and Social Media use is prevalent during adolescence. Problematic (addictive) social media use (prevalence 12%, avg age 14). Increasing time on smartphones and social media may lead to decreasing levels of mental wellbeing and higher anxiety and depression.

Restrict Smartphone Use (Assessed through document/webpage analysis and surveys): School policies where smartphone use is not permitted during the school day.

Altered Phone/Social Media Use/Motives (intermediary outcomes) (Assessed through phone/app data and survey): Lower daily phone screen time, Lower social media time, Externally driven motives for use (e.g. social interaction).

Behavioural Outcomes (Assessed through accelerometers and surveys): Increased time in physical activity, Increased sleep quality, Less disruptive classroom behaviour, Higher attainment scores, Lower prevalence of problematic (addictive) use.

Mental Health/Wellbeing Outcomes (Assessed through surveys): Greater Mental Wellbeing, Lower Anxiety, Lower Depression.

Direct effect: Reduced time available for phone/social media access.

Indirect effect: Altered social norms and expectations.

Factors influencing relationships (Assessed through surveys, document/webpage analysis and case studies):

- School:** School aims and ethos, Policy implementation – key features, support for enactment, compliance, Teacher training, senior leadership support (policy/time) and curriculum activities.
- Individual/Adolescent:** Age, Gender, Ethnicity, Socioeconomic position.
- Family/Home:** School-parent communication on policy, Parent acceptance/support for school policy, Parent phone/media uses, Parent attitudes and knowledge of phone/media, Presence of technology in the home.

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Dr Emma Černis
Developing a translational psychological intervention for transdiagnostic dissociative experiences.
e.cernis@bham.ac.uk

Recent work:

Wellcome Trust Transdiagnostic Targets commission; delivered a scoping review of transdiagnostic depersonalisation-derealisation with significant lived experience input.

Machine learning exploration of risk factors for experiencing dissociation in UK 16- to 25-year-olds.

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Current research:

DisCS
Three single case experimental design studies piloting therapeutic techniques.

ABCD study
attitudes and beliefs concerning dissociation

Mixed methods survey of GCSE students', undergraduates', and NHS clinicians' beliefs about dissociation.

Coming up...

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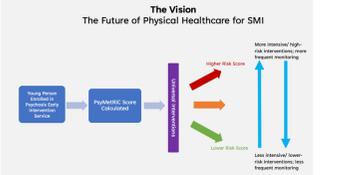
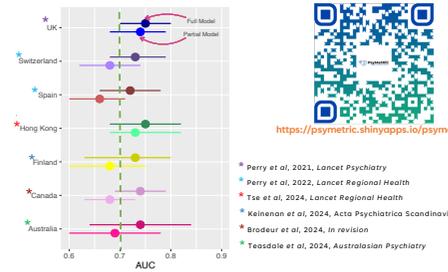
Application to NIHR Research for Patient Benefit scheme to fund a case series of a novel psychological intervention.

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The Psychosis Metabolic Risk Calculator (PsyMetRiC)

- Developed and externally validated in n=1,161 patients from three UK EIP services (Cambridgeshire, Birmingham, South London)
- Predicts up-to 6 year risk of metabolic syndrome from FEP
- Designed to be clinically useful and acceptable to patients
- Validated in seven international settings
- On track for regulatory approval in UK

The Vision
The Future of Physical Healthcare for SMI

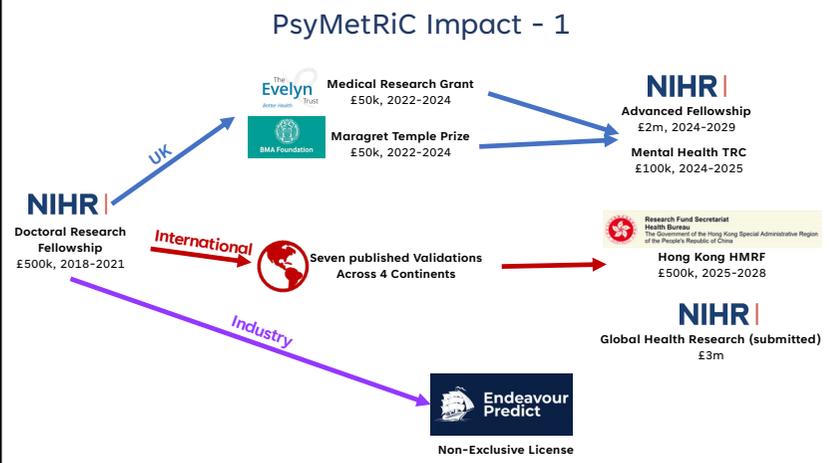



<https://psymetric.shinyapps.io/psymetric/>

- Perry et al., 2021, *Lancet Psychiatry*
- Perry et al., 2022, *Lancet Regional Health*
- Tse et al., 2024, *Lancet Regional Health*
- Keinonen et al., 2024, *Acta Psychiatrica Scandinavica*
- Brodeur et al., 2024, *In revision*
- Teasdale et al., 2024, *Australasian Psychiatry*

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PsyMetRiC Impact - 1



NIHR | Doctoral Research Fellowship £500k, 2018-2021

UK:

- The Evelyn Trust** Medical Research Grant £50k, 2022-2024
- BMA Foundation** Maragret Temple Prize £50k, 2022-2024

NIHR | Advanced Fellowship £2m, 2024-2029

Mental Health TRC £100k, 2024-2025

International: Seven published Validations Across 4 Continents

Research Fund Secretariat Health Bureau The Government of the Hong Kong Special Administrative Region of the People's Republic of China

Hong Kong HMRF £500k, 2025-2028

NIHR | Global Health Research (submitted) £3m

Industry: Endeavour Predict Non-Exclusive License

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PsyMetRiC Impact - 2

Active users* by Country

COUNTRY	ACTIVE USERS
United Kingdom	851
Switzerland	82
Finland	75
India	62
United States	51
France	49
Canada	47



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Sleep and mental health in young people using cohort data

Isabel Morales Muñoz
Assistant Professor
School of Psychology, University of Birmingham

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> JAMA Psychiatry. 2020 Dec 1;77(12):1256-1265. doi: 10.1001/jamapsychiatry.2020.1875.

Association of Parent-Reported Sleep Problems in Early Childhood With Psychotic and Borderline Personality Disorder Symptoms in Adolescence

Isabel Morales-Muñoz^{1,2}, Matthew R Broome², Steven Manwaha^{2,3}

Main objectives

- To examine the **prospective associations** between several parent-reported sleep problems in early childhood and psychotic and BPD symptoms at 11 to 13 years of age
- To investigate the **potential mediation** of the associations by **depression at 10 years of age**

Main findings

Some **specificity** between particular early sleep difficulties and later differing psychopathologic symptoms (BPD vs Psychosis)

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> J Child Psychol Psychiatry. 2023 Jun;64(6):930-940. doi: 10.1111/jcpp.13755. Epub 2023 Jan 3.

The role of inflammation in the prospective associations between early childhood sleep problems and ADHD at 10 years: findings from a UK birth cohort study

Isabel Morales-Muñoz¹, Rachel Upthegrove^{1,2}, Kate Lawrence³, Rasiyah Thayakaran⁴, Sandra Kooij⁵, Alice M Gregory⁷, Steven Manwaha^{1,8,*}

Objectives

To investigate (a) the association between **sleep variables in early childhood** and **probable ADHD diagnosis** in childhood and (b) whether circulating **markers of inflammation** (i.e., CRP and IL-6) in childhood **mediate** the associations between sleep variables and later probable ADHD diagnosis

Main findings

Shorter nighttime sleep duration, higher night awakening and more irregular sleep routines at 3.5 years were associated with ADHD at 10 years.

IL-6 at 9 years, but not CRP mediated the associations between early sleep problems and ADHD.

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> J Child Psychol Psychiatry. 2024 Nov;65(11):1513-1525. doi: 10.1111/jcpp.14004. Epub 2024 May 6.

Shorter night-time sleep duration and later sleep timing from infancy to adolescence

Ifigenia Manitsa^{1,2}, Alice M Gregory³, Matthew R Broome^{1,2,4,5}, Andrew P Bagshaw^{2,4}, Steven Manwaha^{1,2,6}, Isabel Morales-Muñoz^{1,2}

Objectives: To (a) examine the trajectories of night-time sleep duration, bedtime and midpoint of night-time sleep (MPS) from infancy to adolescence, and (b) explore perinatal risk factors for persistent poor sleep health.

Main findings: We detected trajectories of persistent poor sleep health (i.e. shorter sleep duration, later bedtime and later MPS) from infancy to adolescence, and specific perinatal risk factors (higher family adversity index during pregnancy and lower maternal socio-economic status) linked to persistent poor sleep health domains.

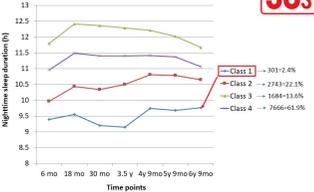
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> JAMA Psychiatry. 2024 Aug 1;81(8):825-833. doi: 10.1001/jamapsychiatry.2024.0796

Role of Inflammation in Short Sleep Duration Across Childhood and Psychosis in Young Adulthood

Isabel Morales-Muñoz¹, Steven Marwaha^{1, 2, 3}, Rachel Upthegrove^{1, 4}, Vanessa Cropley⁵

Affiliations + expand
PMID: 38717746 PMCID: PMC11079792 DOI: 10.1001/jamapsychiatry.2024.0796

Objectives: To examine the association between persistent shorter nighttime sleep duration throughout childhood with psychotic experiences (PEs) and/or psychotic disorder (PD) at age 24 years and whether inflammatory markers (C-reactive protein [CRP] and interleukin 6 [IL-6]) potentially mediate any association.

Main findings: We found that persistent shorter sleep duration across childhood was associated with an increased risk of psychosis in young adulthood. Further, we found that these associations can be partially mediated by specific inflammatory levels (ie, increased levels of IL-6 at 9 years).

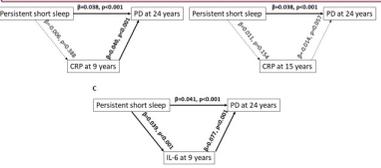


Fig 1. Direct paths between persistent shorter sleep across childhood, psychotic disorder (PD) at 24 years, and inflammatory markers

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What is the IMH YAG & how are they involved?

- A diverse group of young people committed to supporting the design and delivery of youth mental health research.
- Aged 18-25 with either lived experience of mental health difficulties or experience of supporting someone with mental health difficulties.
- Number of YAG Members: 2018 (8), 2019 (18), 2024 (22).

Involved through:

- Monthly research-focused meetings (up to 4 per month)
- Since March 2020, vast majority of meetings online but looking to re-introduce in-person meetings



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What value does the YAG have on the IMH?

The IMH YAG have consistently supported the design and delivery of research conducted by the IMH since 2018. Working with the YAG has allowed for the development of a means through which experiential knowledge of young experts by experience that can be incorporated into our work at the IMH.

Working with the YAG:

- Provides the opportunity to hear perspectives that are often under-heard.
- Increases the quality and relevance of our work.
- Addresses issues around equity and power-sharing.

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What impact does the IMH YAG have?

The YAG's recognition as an exemplar of youth involvement in research is evidenced by:

- The use of the IMH YAG as a case study in the University of Birmingham's successful application for a Gold Engage Watermark Award from the National Co-ordinating Centre for Public Engagement (2022)
- Receiving of an honorary mention within the award of the EU Prize for Citizen Science (2024)
- Frequent involvement in research-focussed initiatives led by well-recognised funders such as the Wellcome Trust and UKRI

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Mental Health (Youth/Interdisciplinary) MSc UNIVERSITY OF BIRMINGHAM | imh institute for mental health

Interdisciplinary approach to mental health- research, policy, and theory

- Brings together range of disciplines including psychology, sociology and social policy, medicine, philosophy, and education

Unique focus on Youth mental health

- aligned with IMH research and informed by lived experience from Youth Advisory Group

MSc- Taught On Campus programme

- 1 Year Full Time, 2 Years Part Time
- Flexible 'blended learning' approach combining online and on campus learning
 - (on campus typically 2 hours per module per week during term times)
- Graduate with Youth or Interdisciplinary specialism
- PGCert, PGDip qualifications also available



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Mental Health (Youth/Interdisciplinary) MSc UNIVERSITY OF BIRMINGHAM | imh institute for mental health

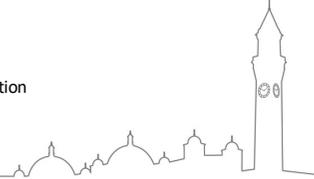
Indicative modules on campus- core modules

- Principles of Mental Health and Disorder
- Youth Mental Health
- Research Methods in Mental Health
- Research Dissertation in Mental Health

Optional modules offered from a range of mental health topics and disciplines (e.g., neuroscience, philosophy, etc.)

Mental Health MSc (Distance Learning)

- Fully online distance learning Masters programme
- 2.5 years Full Time, 3x opportunities to join per year, Part Time option
- PGCert, PGDip, and modular micro-credential options
- Launch Summer 2024



Further information: <https://www.birmingham.ac.uk/postgraduate/courses/taught/psych/mental-health.aspx>

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Midlands Mental Health & Neurosciences PhD Programme for Healthcare Professionals

Children, Young People, & Perinatal MH	Prof Kapil Sayal & Prof Helen Szuby
Common MH	Prof Richard Morriss & Prof Steven Marwaha
Severe MH	Prof Rachel Upthegrove & Dr Vivek Furtado
Physical Health comorbidity with MH	Prof Elizabeta Mukaetova-Litinska & Dr Suzanna Niaz
Dementia	Prof Kavita Vedhara & Prof Holly Blake



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UNIVERSITY OF BIRMINGHAM | BETTER THAN WELL

ARE YOU IN RECOVERY FROM ADDICTION?

Did you once have a problem with alcohol, drugs or a behavioural addiction (food, sex, gambling, gaming, compulsive shopping, exercise or internet use) but no longer do? Are you in recovery from addiction? Are you moving towards or interested in recovery from addiction?

SCAN QR CODE TO VIEW OUR WEBSITE & MATERIAL!

We are a community programme at recovering students on campus at UoB who support each other reshaping and maintaining an abstinence based life through peer support, mutual aid, social activities and recovery focused groups. **Join us at BTW!**



www.birmingham.ac.uk/betterthanwell

Better Than Well:
A Collegiate Recovery Program

- Founded in September 2021
- Weekly 'Celebration of Recovery' meeting
- Daily drop-in on campus
- SMART Recovery & 12-Step meetings
- WhatsApp support group
- Sober social events
- Recovery-focused accommodation
- www.birmingham.ac.uk/betterthanwell
- @BTW_UoB

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Flourishing & Wellbeing
Investigating how non-clinical environments might be utilised to enhance public health and mental health
Will develop flourishing and evidence-based interventions by understanding the mechanism(s) of action. It will use non-clinical approaches to engage with marginalized populations and groups under-represented in research, support the enthusiasm for "social prescribing" and demonstrate how community resources such as outdoor spaces, public institutions and workplaces could be used to deliver preventative initiatives and mental health interventions.

Mental Health in Development
Delivering accessible, effective interventions for children, young people, and families
Focusing on how understanding the biological, social, and psychological mechanisms underlying common mental health problems in children and young people can be translated into more targeted, effective and accessible prevention and treatment.

Molecular Targets
Using the latest advances in "-omics" and biomarkers to identify and validate psychiatric targets
To identify, and test, new therapeutic targets for psychiatric disorders using genomics and other discovery neuroscience.

NIHR | Oxford Health Biomedical Research Centre

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Themes from our strategy day

- Welcome new starters
- 7 years of growth and success
- Follow-up from research event in 2022
- Worked on culture, co-production, integration of PhD students/ECRs, capacity
- School/College posts, 125th Anniversary, NIHR clinical academics
- Wish from colleagues to think about large research grants we can cohere around – more proactive than reactive
- Mapping interest and identify 2-3 ideas/calls we want to take forward
- Also, opportunities on horizon - NIHR ARC, NIHR MHRG, NIHR BRC, MRC CoRE, Wellcome



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My reflections

- Midlands vs Golden Triangle
- Interdisciplinarity and University structures
- Advocating/cheerleading internally and externally
- Lived experience and co-production
- IMH and the Medical School
- Relationships with senior leaders and autonomy in decision making
- Awareness of fragility and contingent on revenue
- NHS partnerships
- Developing early, mid, and senior colleagues
- Leadership planning, capacity/workload, exit strategy
- Institutional awards vs. personal research strategy



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Thank you!

- Impetus to improve the treatment of schizophrenia in the 1990s powerful driver to other mental health advances and field of youth mental health
- Importance of co-production, first-person perspectives and democratizing knowledge
- Complexity and lack of progress: interdisciplinarity
- Demand and capacity: structures of services, workforce
- Challenges for young people: economics, climate, pandemic, discrimination, migration and trauma.





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