the institute of mental health
Nottingham

IMH Research Day

Tuesday 17th May 2022

Time: 9.30 – 17.00

Venue: Institute of Mental Health, Triumph Road, Nottingham NG7 2TU

Chairs: Professor Peter Bartlett, Dr Elena Nixon and Bryony Waters

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Research Excellence **for Innovation**

Programme

9.30	Registration (foyer) & refreshments (A floor corridor)
10.00	**Introduction and welcome** Professor Peter Bartlett, Professor of Mental Health Law, University of Nottingham
10.35	Oral presentation – **"I'm in pain and I want help": An online survey investigating the experiences of tic-related pain and use of pain management techniques in people with tics and tic disorders** Bethan Davies, Senior Research Fellow, NIHR MindTech MedTech Cooperative
11.05	Oral presentation- **A national survey of Recovery Colleges to establish characteristics, fidelity, and funding: a Recovery College Characterisation and Testing (RECOLLECT) study** Merly McPhilbin, Research Assistant, University of Nottingham
11.35	Refreshments and viewing of posters (see poster presentation list below)
12.00	Oral presentation- **How is data completeness influenced by the design of experience sampling studies? A systematic review of ESM studies of people living with psychosis** Emilia Deakin, PhD Student, Nottinghamshire Healthcare NHS Foundation Trust
12:30	Oral presentation- **Dementia risk factors in the context of cardiovascular disease: a review** Jacob Brain, PhD Student, University of Nottingham/University of Adelaide
13:00	Oral presentation- **Doing PPI our way: Audit and research** Members of Advisory Group
13.30	Lunch and viewing of posters (see poster presentation list below)
14.30	Plenary speaker: **Alison Faulkner, survivor researcher and trainer in mental health** *"Being taken seriously: how do we reframe 'involvement' to ensure the voices of service users and survivors are heard and taken seriously?"*
15.30	Oral presentation- **A systematic review of the internalising and externalising behaviours following Traumatic Brain Injury (TBI) in adults** Amy Jayne Needham, Trainee Forensic Psychologist, University of Nottingham
16:00	Oral presentation- **An example of PPI/E in practice: The Alpha-Stim-D Trial** Priya Patel, Debbie Butler, Rebecca McNaughton, Fred Higton, Research Assistant and PPI/E, Institute of Mental Health
16.30	Oral presentation- **Medical students' perceptions of factors that are associated with their mental health and psychological wellbeing** Aisha Ali Hawsawi, PhD student in Clinical Psychology, University of Nottingham
17.00	Close of Day 1 Oral and poster prize winners announced for Day 1

List of poster presentations

Poster 1	**Work-related experiences of social care workers during the pandemic in England** Karen Mkhithika, PhD Research Student, University of Nottingham
Poster 2	**The future of RECOGNeyes as an intervention for training inhibitory control in attentional disorders** Alice Waitt, Researcher, Institute of Mental Health, School of Medicine, University of Nottingham and Sir Peter Mansfield
Poster 3	**Grand-friends: Feeding the souls through food** Juliana Mohamed, PhD Researcher, University of Nottingham
Poster 4	**Alternative splicing in Lewy body dementia brains** Thomas Goddard, PhD Student, University of Nottingham
Poster 5	**Forget Me Notts: A qualitative study of a sports and exercise group for people living with dementia- Carers' perspectives** Claire Chadwick, Medical Student, University of Nottingham
Poster 6	**Attitudes amongst men towards gay and bisexuality in the UK** Nathan Rollins, Trainee Forensic Psychologist; Student on the Top-up Doctorate in Forensic Psychology, University of Nottingham
Poster 7	**A qualitative study of the association between an exercise group and the wellbeing of people living with dementia** Aisha Hussain, Medical Student, University of Nottingham
Poster 8	**Considerations and research priorities for adults living with co-existing dementia and hearing loss** Eithne Heffernan, Senior Research Fellow, NIHR Nottingham Biomedical Research Centre
Poster 9	**How does Posttraumatic Growth occur in Experiences of Psychosis: A Systematic Review and Narrative Synthesis** Fiona Ng, Research Fellow, University of Nottingham

Welcome

We are delighted to welcome you back to the Institute of Mental Health as we host this year's Research Days.

This is the 9th IMH Research Day event, and we look forward to hearing about the aims and highlights of the work of the Institute's doctoral candidates, Managed Innovation Networks (MINs), and all our early-career researchers.

This event celebrates the breadth of ideas and research work currently taking place within the Institute of Mental Health, and more than ever I feel we need to celebrate the achievements and hard work that has been taking place, under unprecedented and challenging times.

The term "early career researchers" encompasses such a diverse group of people – from post-graduate researchers, research fellows and research-active clinicians, to our patient and public contributors, IMH advisory board members and service users. All are at the beginning, or early stages, of their research journeys, with knowledge, experience and academic rigour growing as they undertake more research activities – although, never let it be said that the learning ever stops, even the most senior researchers must still develop new skills.

Over the next two days we will see oral and poster presentations from many of our early-career researchers and for some this will be the first chance they have ever had to present their work in public. Creating a research-active and supportive environment is an important function the Institute can perform in nurturing up-and-coming research talent and I am delighted to see such a variety of research themes and ideas in this year's programme.

We were honoured to receive a donation earlier this year from the Dixon family who had experienced the sad loss of their son. With the family's permission, we will be using their donation to help fund our Research Day prizes over the next few years. Each year the **Craig Dixon memorial prize** will now be awarded to the best oral presentation given during the Research Day event – this year will be a great start as we will be awarding two oral and two poster prizes for each day of presentations.

My thanks to the organisers of this year's events: Prof Peter Bartlett, Dr Elena Nixon, Bryony Waters, Karen Sugars and Lou Rudkin. Without their hard work and efforts, none of this would be possible and in particular I wish to thank Prof Bartlett for his continued support and leadership of this event over many years.

I wish all our Research Day presenters the very best of luck and I hope all our attendees find this experience rewarding and enriching.

Professor Martin Orrell
Director, Institute of Mental Health

Housekeeping

Covid safety measures
As the Institute of Mental Health is classified as an NHS workplace, we continue to maintain Covid safety measures throughout our building. We would like to remind you that windows and doors should remain open when in any communal or meeting spaces within the Institute. Please use the hand sanitiser provided and **we must ask that face masks are worn when inside our building** (unless exempt or you are presenting at the front of the auditorium).

Refreshments
Refreshments will be provided throughout the day via serving points in our ground floor corridor - please follow the signs to move through the serving area.

Lunch will be provided as individual 'grab bags' from the serving areas in the corridor, but please feel free to take your lunch outside, use the table and chairs in our B floor mezzanine area or return to the main auditorium to eat.

If you have notified us of any specific dietary requirements then your lunch will be provided in a named bag.

Toilets
Please use the toilet facilities located in the ground floor reception area. Please speak to a member of our reception team if you have any additional needs that we can help with.

Tweet us!
We'll be tweeting from the Institute's Twitter account throughout both days – follow us **@institutemh** and use the **#IMHRD22** hashtag.

Photography
We've missed having colleagues in our building, so we'll be taking photos throughout both days to celebrate coming back together. If you'd prefer not to appear in any photos, then please let our Communications team know or mention it to anyone you see with a camera.

Feedback survey
All delegates who have attended will receive a link to complete an online feedback survey shortly after the events have finished. Certificates of attendance can be requested during completion of the survey.

Spring Social
Come and reconnect with colleagues from across the Institute of Mental Health at our **Spring Social event at the end of the first Research Day, Tuesday 17th May from 5-7pm.**

Join us at the Institute (and in the surrounding outside areas, weather permitting!) and enjoy some social time with colleagues you may have lost touch with over the past two years. We're going to provide some soft drinks and pizza, but please feel free to bring your own refreshments too.
This event is open to all our Research Day delegates, plus all our IMH colleagues.

Research Day prizes

At this year's events, we will be awarding prizes at the end of both days of presentations:

- **The Craig Dixon memorial prize for Best oral presentation**
- **Best poster presentation** – voted for by the event delegates.

Want to blog about today?

The Institute of Mental Health's blog is a diverse collection of essays, opinion pieces and heartfelt comment on a wide variety of subjects relating to mental health.

Founded in 2012 the blog has continued to go from strength to strength, we would really encourage anyone interested in writing a post, or helping run the blog, to get in touch. The blogs remit is very open and new content is always welcome.

What is the IMH blog?
Set up by postgraduates within the Institute of Mental Health in 2012, the blog is a multi-author, cross-disciplinary forum which encourages conversation about issues related to mental health, integrated healthcare, lived experience and wellbeing.

At present the blog is edited and managed by the Institute's Communications team, but it would be great to have a few more IMH researchers involved.

Please get in touch with Jo Higman, Communications Assistant for more information about submitting a blog or joining the editorial team: jo.higman@nottshc.nhs.uk

What is Public and Patient Involvement?

Meet Kate Horton, the Institute of Mental Health's Public Involvement Co-ordinator.

Patient and Public Involvement (PPI) is finding ways of incorporating real life experiences into research. This is heavily encouraged when the first ideas of the research project begin. Within any grant application or bid, PPI will be expected to be discussed and how you will involve people will be questioned. These early questions will include:

- What's the question investigated – can you explain this in lay language?
- What are the aims and objectives of the research and how do those with lived experience of this topic share your interest?
- Who are your "people" in PPI conversations?
- How will you communicate with this audience?

Good quality Patient and Public Involvement however, really means much more than that initial review of documents and helping with a Plain English Summary.

It is finding ways to involve lived experience, real voices all across the whole cycle of the research. It's about working with experience and lived knowledge to add value to the research. It's also about creating space and respectful, meaningful involvement for those public contributors you work with.

There is no one way to do "PPI" the right way. It's flexible. It fits with the people it involves, the direction of the research and it flourishes best where this additional value, respectful involvement exists.

Also it is always worth bearing in mind, for those bringing lived experience to research, being 'Involved' is not access to therapy, medical or clinical care. It does not, unfortunately, fast track anyone to answers or extra help for their own experiences. Many public contributors get involved in research not to improve their own experiences but to improve the experiences of those who come after them. To see improvements and developments in services and research long after their own interactions with that system. It's often an altruistic and awkward process to be part of, often shifting from one thing to another swiftly, without the same equipment, systems and knowledge of everyone else in the room – virtual or otherwise.

The Institute of Mental Health is committed to seeking positive involvement for patients, public, carers, service users and interested peers in our research and wider activities and we actively seek to support researchers to do this in the best way possible. To find out more visit **www.institutemh.org.uk/involvement**

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We are delighted to welcome the Library and Knowledge Services who will be having a stand at this year's IMH Research Day.

The Library and Knowledge Services provide quick and easy access to the most up to date, comprehensive resources and services to Trust and Institute of Mental Health staff and researchers. We can support you to identify evidence-based practice that can be implemented across all services ensuring the best patient safety and quality of care, health improvements, high-quality decision making, innovative research practices, and ongoing staff development.

Our evidence search service helps to find evidence-based information on a broad range of topic areas to support patient care, research, current guidelines, care pathways, and services. We can support everything from literature reviews to systematic reviews to providing summaries of evidence. We've had success with our support and have gone on to support publications, either being named as an author or the service has been acknowledged for the contribution to the work.

Need help in obtaining one or more specific journal articles? Our library staff have access to a large and wide-ranging suite of titles which can be sourced and email or posted to you. We can provide training over MS Teams on how to search the healthcare databases to locate high-quality evidence-based information and develop digital skills to enhance working practice.

Publish your work in the East Midlands Evidence Repository, a showcase of the research and innovation happening in the Trust to support patient care or service development.

Please email libraryservice@nottshc.nhs.uk or call 0115 9529486 if you have any queries. For information about joining the library or to see the vast range of services we provide please visit our Connect page https://connect/library-and-knowledge-services or https://www.nottinghamshirehealthcare.nhs.uk/library

Plenary speaker

Alison Faulkner is a survivor researcher and trainer in mental health with over 30 years' experience of working in mental health research and consultancy. She has a particular interest in survivor research as a result of her personal experiences of using mental health services, and the personal & political belief in the right of people with lived experience to contribute to the mental health research and service agenda. She has worked for most of the major mental health charities, including the Mental Health Foundation, the Centre for Mental Health, NSUN (the National Survivor User Network), Mind and Together for Mental Wellbeing. She has a PhD from City, University of London: Knowing Our Own Minds: the role and value of experiential knowledge in mental health research.

"Being taken seriously: how do we reframe 'involvement' to ensure the voices of service users and survivors are heard and taken seriously?"

"In this presentation, I will cover the theme across a number of arenas: not just mental health research, but service delivery and the implications for our equal citizenship and humanity. I have been interested in this for many years, not just involvement in research, but user-led or survivor research – because of the implicit (and explicit) subversion of service user voices through the framework of 'involvement'.

Equally, I have been involved in other work that seeks to foreground the views and experiences of service users against a background cacophony of dismissal and disbelief. Examples of this include hearing from people who have been subject to abuse and victimisation; and hearing from people who self-injure about their experiences of services. I have developed a degree of scepticism, even pessimism, about the value of this work with the passage of time. I want to try to turn this around, perhaps with your help today."

Time	**10.35**
Presenter	Bethan Davies
Job title and affiliation	Senior Research Fellow, NIHR MindTech MedTech Cooperative
Names and affiliations of co-authors	Evangeline Taylor (MSc Health Psychology student, University of Nottingham) and Dr Seonaid Anderson (NeuroDiverse, https://www.neuro-diverse.org/)
Title of talk	"I'm in pain and I want help": An online survey investigating the experiences of tic-related pain and use of pain management techniques in people with tics and tic disorders
Abstract	Tic disorders (TDs) are neurodevelopmental conditions characterised by involuntary, rapid and persistent vocalisations and motor movements ('tics'). Their physical nature means they tics can cause pain, which has been little explored in research. Understanding individual experiences and management of tic-related pain could help in exploring this under-researched area. The aim of this study was to investigate the experiences of pain and use of pain management techniques in people with tic disorders. An online survey consisting of multiple choice and open-ended questions exploring experiences of tic-related pain, help-seeking for tic-related pain, and use of pain relief techniques for tic-related pain, was circulated online and through international TD patient associations. Open-ended questions were analysed through thematic analysis. 181 participants (16-71 years; 58.0% female) reported several aspects of tics associated with pain, including the physical effort of motor tics (n=177, 97.8%), repetitive tics (n=141, 77.9%) and consequences of tics (e.g. injury; n=131, 72.4%). Nearly two-thirds (n=118, 64.6%) had sought professional help for their tic-related pain. Distraction techniques (n=126, 69.6%), over-the-counter pain relief medication (n=125, 69.1%) and attempts to alter the pain-causing tic (n=111, 61.3%) were commonly-reported methods used to relieve and cope with tic-related pain. Thematic analysis found an interrelated and complex relationship between respondents' tics, pain, and pain management techniques. Tic-related pain had a significant physical and psychological impact upon daily living in people with tic disorders. The findings add to limited research suggesting tic-related pain is a dominant issue for individuals with TDs, potentially further impacting upon their quality of life.

Time	**11.05**
Presenter	Merly McPhilbin
Job title and affiliation	Research Assistant, University of Nottingham
Names and affiliations of co-authors	Daniel Hayes, King's College London; Mike Slade, University of Nottingham; Claire Henderson, King's College London and South London and Maudsley NHS Foundation Trust; Katy Stepanian, King's College London; Amy Ronaldson, King's College London
Title of talk	A national survey of Recovery Colleges to establish characteristics, fidelity, and funding: a Recovery College Characterisation and Testing (RECOLLECT) study

Abstract	**Introduction**: Recovery Colleges are rapidly expanding across England but there is wide variation in their organisational characteristics (such as their size, funding, and workforce) and sparse information on costs per student or per course. Recovery Colleges' adherence to fidelity as measured by a previously created Fidelity Measure has not been investigated on a national scale. The aim of this study is to investigate the organisational characteristics of Recovery Colleges across England, establish their unit costs, and explore factors related to fidelity and funding. **Methods**: Recovery Colleges in England meeting criteria related to personal recovery orientation, co-production and adult learning were included. Recovery College managers at each eligible site were sent a personalised survey link and asked to complete screening questions and if eligible, the survey, which included organisational characteristics, the Recovery College fidelity measure, and running costs. **Results**: Results will be presented on Recovery College characteristics, a cluster analysis based typology of Recovery Colleges, and factors that predict fidelity and funding. **Conclusions**: An enhanced understanding of cluster characteristics and factors which predict the fidelity and funding of Recovery Colleges can help formulate hypotheses about which organisational characteristics are associated with student outcomes. Factors which predict fidelity and funding will inform future recommendations on Recovery College operation.

Time	**12.00**
Presenter	Emilia Deakin
Job title and affiliation	PhD student, Nottinghamshire Healthcare NHS Foundation Trust
Names and affiliations of co-authors	Fiona Ng School of Health Sciences University of Nottingham; Christopher Newby School of Health Sciences University of Nottingham; Emma Young Nottinghamshire Healthcare NHS Foundation Trust; Naomi Thorpe Nottinghamshire Healthcare NHS Foundation Trust; Carol Coupland School of Medicine and School of Health Sciences, University of Nottingham; Michael Craven Faculty of Engineering, University of Nottingham; Mike Slade School of Health Sciences University of Nottingham
Title of talk	How is data completeness influenced by the design of experience sampling studies? A systematic review of ESM studies of people living with psychosis
Abstract	**Introduction** The experience sampling method (ESM) is an intensive longitudinal research method. Participants complete questionnaires at multiple times about their current or very recent state. The design of ESM studies is complex. A lack of typology makes it is hard for researchers to decide how to collect data in a way that allows for methodological rigour, quality of reporting, and the ability to synthesise findings. People with psychosis have been shown to be less adherent to ESM study protocols than the general population. It is not known how to design studies that increase adherence to study protocols. This review identifies design decisions

	used in ESM studies and how they influence the level of data completeness. The aims of this systematic review were: 1. Characterise the design choices made in ESM studies monitoring the daily lives of people with psychosis. 2. Synthesise evidence relating the data completeness to different design choices. **Methods** A mixed methods systematic review was conducted of published literature on studies using ESM with people with psychosis. **Results** 38 studies were included. A typology of design choices used in ESM studies was developed. Design decisions that predicted data completeness were identified. **Conclusion** This review identified a range of design decisions in prior work on ESM in the context of psychosis and highlighted those that influence data completeness. This review will help the design of future studies. Results are presented with the focus on psychosis, but the findings can be applied across different mental health populations.

Time	**12.30**
Presenter	Jacob Brain
Job title and affiliation	PhD student, University of Nottingham/University of Adelaide
Names and affiliations of co-authors	Professor Blossom Stephan, University of Nottingham; Dr Mario Siervo, University of Nottingham; Professor Deborah Turnbull, University of Adelaide; Dr Phillip Tully, University of New England
Title of talk	Dementia risk factors in the context of cardiovascular disease: a review
Abstract	**Background** Dementia is a major public health priority. Although there is abundant evidence of an association between dementia and poor cardiovascular health, findings have been inconsistent and uncertain in identifying which factors increase dementia risk in those with cardiovascular disease. Indeed, multiple variables including sociodemographic, health, lifestyle and education may indicate who is at higher vs. lower dementia risk and could be used in prediction modelling. Therefore, the aim of this review is to synthesise evidence on the key risk factors for dementia in those with a history of cardiovascular disease. **Methods** Four electronic databases including MEDLINE, EMBASE, PsycINFO, and the Cochrane Database of Systematic Reviews will be searched. Studies will be included if they are systematic reviews and/or meta-analyses that have investigated the risk of incident dementia (all-cause and subtypes including Alzheimer's disease and vascular dementia) in people with a history of coronary heart disease, heart failure, atrial fibrillation, hypertension, hyperlipidaemia, and vascular stiffness. Study selection will be completed by two independent researchers according to the eligibility criteria, and conflicts resolved by a third reviewer. Methodological quality will be assessed using the AMSTAR-2 criteria and confidence of evidence will be assessed using the GRADE classification. **Discussion**

	We will create a comprehensive summary of the key risk factors linking cardiovascular diseases to risk of incident dementia. This knowledge is essential for informing risk predictive model development as well as the development of risk reduction and prevention strategies.

Time	**13.00**
Presenter	Members of Group
Job title and affiliation	Members of Advisory Group, Institute of Mental Health
Title of talk	Doing PPI our way: Audit and research
Abstract	The IMH PPI Advisory Group was set up to support and develop public contributions to research across the whole of the Institute of Mental Health. Members of the Advisory Group are service users and carers who have experience and expertise in supporting inclusive high quality research and valuing what lived experience brings to the research process. One of the aims of the Advisory Group is to help IMH articulate how lived experience should be used across the research process and build on current national standards. In particular looking at how we can move beyond current orthodoxies, expressed as these national standards, towards our own vision of the integration of lived experience into knowledge development. We are exploring the use of Clinical Audit as a development tool. This presentation will discuss audit and research. We will present our plan and how this will include everyone within IMH. We will present the results of the first stages of our data gathering and propose next steps. We will discuss current national standards and expectations within the NIHR and suggest how our activities may support the IMH community to develop above and beyond these standards. To design, run and disseminate inclusive and cooperative research projects, encouraging researchers and the public into partnerships across the whole research process; from raising relevant clinical and service delivery questions to getting evidence into practice.

Time	**15.30**
Presenter	Amy Jayne Needham
Job title and affiliation	Forensic Psychologist in Training, University of Nottingham
Names and affiliations of co-authors	Shihning Chou and Katy A Jones, University of Nottingham
Title of talk	A systematic review of the internalising and externalising behaviours following Traumatic Brain Injury (TBI) in adults.
Abstract	**Background**: TBI results in myriad of difficulties for an individual after injury. TBI can influence a person's behaviour after injury, for example, increasing impulsivity/aggression, anxiety and depression. There is not a recent systematic review of this literature for adults with TBI. **Aims**:

	To summarise different internalising and externalising behaviours seen in adults with TBI (with different severity of injury) compared to controls without TBI. **Method**: An electronic search of seven databases will be completed to identify quantitative primary research studies, including those in grey literature. Reference lists of existing studies will be examined. After scanning the titles and abstracts all suitable full-text articles will be subjected to inclusion and exclusion criteria. To be included in the review, a study has to have included adults with history of TBI and a control group of adults with no TBI, with the main outcome(s) of interest being internalising or externalising behaviours. Those studies that included participants with internalising/externalising behaviours pre-TBI (cases) and at baseline (controls) or did not statistically control for the level of pre-TBI and baseline internalising/externalising behaviours will be excluded. Quality of studies will be assessed independently by two reviewers. **Results**: Data will be narratively synthesised focusing on mapping the internalising (anxiety, depression) and externalising (aggression, violence) behavioural outcomes of adults with TBI. If possible, outcomes will be examined by TBI severity. **Conclusions**: Clinical and research implications will be discussed. It is hoped that the findings will provide greater insight into different behavioural consequences of TBI, to help inform clinical practice.

Time	**16.00**
Presenters	Priya Patel, Debbie Butler, Rebecca McNaughton, Fred Higton
Job title and affiliation	Research Assistant and PPI/E, The Institute of Mental Health
Names and affiliations of co-authors	Professor Richard Morriss, Shireen Patel and Clem Boutry, University of Nottingham
Title of talk	An example of PPI/E in practice: The Alpha-Stim-D Trial
Abstract	**Presentation aims** This presentation will discuss the value of collaborating with Patient and Public Involvement and Engagement (PPI/E) representatives in research. The aim is to share knowledge and insight with researchers who incorporate PPI/E in their work. The intended outcome is for the audience to gain a deeper understanding of the role and importance of PPI/E in research. **Content** The presentation will demonstrate how PPI/E has been embedded in the Alpha-Stim-D Trial. Our PPI/E representatives/consultants for the study will also share their experiences of their involvement in the trial. The trial investigates the effectiveness of the Alpha-Stim AID device (a small device that people can use from their own homes) in treating depression. The device provides cranial electrotherapy stimulations which changes the electrical activity of the brain, from more stressful to more relaxing rhythms. We have successfully recruited 236 participants with mild to moderate depression from Primary Care services. We exceeded our recruitment target and did so ahead of schedule despite recruitment being delayed by six months due to the Covid-19 pandemic.

	Learning outcomes The audience will come away with key messages about the value of incorporating PPI/E in research to provide new, relevant and unique perspectives and ideas. Through practical examples, the audience will also gain applicable knowledge of how they can utilise PPI/E to strengthen their research, such as helping to optimise the relationship between researchers and participants.

Time	**16.30**
Presenter	Aisha Ali Hawsawi
Job title and affiliation	PhD student in Clinical Psychology, University of Nottingham
Title of talk	Medical students' perceptions of factors that are associated with their mental health and psychological wellbeing
Abstract	**Context**: In light of growing evidence suggesting that medical trainees are particularly susceptible to stress and ill-health, the need to enhance medical students' psychological wellbeing has been highlighted as a priority concern in medical education and policy. However, little research comprehensively addresses positive and negative contributors to medical students' psychological wellbeing. This study therefore intends to explore in more depth medical students' perspectives of factors associated with their wellbeing during training within Nottingham University medical school. **Method**: The current study is part of a mixed-methods PhD project and will present preliminary findings based on a thematic analysis of qualitative data acquired to date from interviews with 25 medical students. **Results**: Emerging themes suggest that medical students' psychological wellbeing is affected adversely by academic (e.g., high workload, high-stake assessment, time pressures) as well as organisational (e.g., school support, competitive environment) factors; and more recently by COVID-19 which has negatively impacted on students' academic, personal and social life. Positive contributors to wellbeing included academic (e.g., study-life balance, academic achievement) and notably psychosocial factors within and outside the medical education context (e.g., meaningful relationships with staff, peer socializing). Using social, emotional and spiritual support, practising physical/leisure activities and setting priorities were among commonly cited stress-coping techniques while there was an expressed need for improving wellbeing service/resource provision. **Conclusions**: Findings so far indicate the importance of various positive and negative factors as determinants of medical students' psychological wellbeing, which should both be taken into account in future wellbeing support implementation in medical education.

Poster presentations:

Poster number	**1**
Presenter	Karen Mkhithika
Job title and affiliation	PhD Research student, University of Nottingham
Title of talk	Work-related experiences of social care workers during the pandemic in England
Abstract	This qualitative study, informed by the job demands-resources (JD-R) framework, sought to explore the work-related experiences of adult social care workers in England during the COVID-19 pandemic in terms of psychosocial hazards, challenging work environment, job and personal resources available to them and how this impacted their psychological wellbeing. Semi-structured interviews were conducted for 5 months with 15 adult social care workers in England who were employed during the pandemic (2020 – 2021) and had not taken any mental health leave of absence within those last three months of being interviewed. The interviews were done remotely through telephone services for safety and convenience due to the ongoing pandemic. This study has highlighted these emerging psychosocial hazards, fear, isolation, social media and media influence, anxiety, and work-related stress. Emotional intelligence emerged as a personal resource and a coping strategy during the pandemic. Social support from a management and colleague perspective and lack of it was highlighted in different scenarios. Personal protective equipment (PPE) was more prevalent as a job demand than a job resource. An emerging theme that was not as common as the already stated but possibly worth further exploration from social care leaders was 'lack of trust in leaders'. This can be further explored in future research. Coping strategies were identified as being personal resources for future preparedness of such climates. This new and additional knowledge and findings contribute to the JD-R framework, to extreme situations as well as to the social and environmental factors in the social care workplace.
Poster number	**2**
Presenter	Alice Waitt
Job title and affiliation	Researcher (Transition post), The Institute of Mental Health, School of Medicine, University of Nottingham and Sir Peter Mansfield Imaging Centre, School of Physics and Astronomy, University of Nottingham
Names and affiliations of co-authors	Jyothika Kumar (1,3), Lauren Gascoyne (2), Peter Collins (1), Peter Liddle (1), Elizabeth Liddle (1). (1) The Institute of Mental Health, School of Medicine, University of Nottingham. (2) Sir Peter Mansfield Imaging Centre, School of Physics and Astronomy, University of Nottingham. (3) Cambridgeshire Community Services NHS Trust, Cambridge.
Title of talk	The future of RECOGNeyes as an intervention for training inhibitory control in attentional disorders
Abstract	Issues in attention and inhibitory control processes are common in Attention-Deficit/Hyperactivity Disorder (ADHD) and specific learning difficulties (SpLDs) such as dyslexia. These diagnoses are associated with poorer academic performance and negative impacts on social relationships and wellbeing. RECOGNeyes is a gaze-control training computer program, involving a series of mini-games completed via eye-tracked responses, developed to target improvements in visual attention processes. Our team investigated RECOGNeyes training in 35 young adults with ADHD/SpLDs. Before and after RECOGNeyes training, participants completed an

	eye-tracked reading assessment followed by a pro/antisaccade task, where you must either look towards or actively away from a visual target, respectively. Physiological measures were also assessed during the pro/antisaccade task, including autonomic measures of pupillometry and heartrate, and brain activity measured via magnetoencephalography. After training, pro/antisaccade task reaction time (RT) and accuracy improved. Greater rates of both pupil dilation and cardiac deceleration were correlated together trial-wise with faster RT. This suggests that optimising autonomic arousal enhances attentional performance, as reflected by better RT. Furthermore, reading indices improved, suggesting RECOGNeyes training benefits could translate into real-life skills. There are plans underway for a future iteration of RECOGNeyes to incorporate biofeedback via a musical soundtrack that varies depending on heartrate and pupil size measurements. This will inform the player about their autonomic arousal levels so these can be regulated for optimising performance. The ease and portability of RECOGNeyes means it could benefit children at home or school, whereby game features could also be modified for different ages, abilities, and co-occurring diagnoses.

Poster number	**3**
Presenter	Juliana Mohamed
Job title and affiliation	PhD researcher, University of Nottingham
Names and affiliations of co-authors	None given
Title of talk	Grand-friends: Feeding the souls through food
Abstract	Food is inevitable in life because it carries enormous social and cultural significance. Older people could face problems with it, e.g. through loss of appetite, but also becoming separated from food preparation. Food preparation is hypothetically a suitable intergenerational activity, but it has not been much researched. This is a pilot project involving older persons residing at care home and toddlers at nursery using the 'multi-purpose kitchen appliance' in cooking program since healthy eating is very important for both generations. Based on Erik Erikson's 1950 Life Span Theory and the Davis 1989 Technology Acceptance Model Theory, this pilot project would examine how we can leverage the new technology and the latest gadgets to improve the quality of life of the participants (older people and toddlers). The aim of the study encompasses, enhance, and restructure social networks and affect individual behaviours and manners that impact involvement of community; allay stereotyping; improve mutual understanding and trust; encourage social inclusion and assimilation of values; and nurture positive spirits of reception and respect and help combating loneliness amongst the older adults. Toddlers would also benefit in terms of the process of engaging with the older persons and at the same time cultivating creative thinking and motor skills. Data through a structured observation of this activity will be recorded. Apart from that, a series of interviews would also be conducted at the beginning and end of the activity to record the level of satisfactions of the participants of the activity.

Poster number	4
Presenter	Thomas Goddard
Job title and affiliation	PhD Student, University of Nottingham
Title of talk	Alternative splicing in Lewy body dementia brains
Abstract	**Introduction**: Lewy body dementia (LBD) is the second most common type of neurodegenerative dementia. The molecular mechanisms underlying LBD pathology are poorly understood. Previous analyses have identified differentially expressed genes, and alternatively spliced isoforms in the SNCA gene, that may contribute to LBD pathology. This study aimed to conduct transcriptome-wide alternative splicing and transcript expression analysis, to further the understanding of LBD molecular pathology and facilitate the identification of therapeutic targets and diagnostic biomarkers. **Materials and Methods**: Post-mortem brain samples were obtained from the Brains for Dementia cohort. The anterior cingulate and dorsolateral prefrontal cortices were extracted from 14 LBD and seven control samples. RNA-sequencing was conducted on the tissue samples, and transcript expression was quantified with Salmon. Alternative splicing and differential transcript expression were analysed with DRIMSeq and edgeR respectively. **Results**: We detected 226 alternatively spliced genes in LBD brains after appropriate multiple testing corrections. Five genes expressed significant alternative splicing in both brain regions (LOC105374338, MIAT, MYL6, CTTN, ING3). Other alternatively spliced genes included SGSH, NAV2, TMEM18 and GOLGA2. Moreover, we detected 63 upregulated and 111 downregulated differentially expressed transcripts in LBD brains. **Conclusions**: Our findings revealed significant alternative splicing and differential transcript expression in LBD. Isoform-specific functional enrichment analyses are ongoing. The identified genes and transcripts provide insight into the molecular pathology of LBD. Further research is warranted for clarifying the diagnostic and therapeutic potential of identified differentially expressed transcripts and alternatively spliced genes.

Poster number	5
Presenter	Claire Chadwick
Job title and affiliation	Medical Student, University of Nottingham
Title of talk	Forget Me Notts: A qualitative study of a sports and exercise group for people living with dementia- Carers' perspectives
Abstract	**Background**: Previous research suggested psychosocial interventions have holistic benefits which impact the physical and psychological wellbeing of people with dementia (PWD) and carers. Examples include the management of BPSD, reducing carer burden and social isolation.

	Aims: • To look at the impact that the dementia friendly sport and exercise group has for PWD and carers, focusing specifically on carers' experiences. • To determine the factors which contribute to the success of Forget Me Notts. **Methods**: Semi-structured interviews of PWD (n=2), carers (n=5) and staff (n=5) were conducted to gain perceptions of the Forget Me Notts sessions and establish its benefits. Thematic analysis was used for data analysis. Observational data of participants' interactions provided context for themes. **Results**: Three main themes and six sub-themes were identified. Caring for a PWD presents challenges and Forget me Notts enables respite for carers. The sessions provide an environment for PWD and carers to socialise and receive support from people with similar experiences. PWD and carers enjoyed engaging in activities and it enabled identity to be re-established. The sessions were adapted to meet individuals' needs and factors affecting attendance were identified. **Conclusion**: Forget Me Notts is a valuable psychosocial intervention for PWD and carers with physical and psychosocial benefits, positively impacting quality of life and wellbeing. Accessibility is an important practicality to consider for a dementia friendly session to be successful. Further research is required to explore if these benefits exist in different locations and an evaluation of continued support for carers once PWD have died is required.

Poster number	**6**
Presenter	Nathan Rollins
Job title and affiliation	Trainee Forensic Psychologist; Student on the Top-up Doctorate in Forensic Psychology, University of Nottingham
Names and affiliations of co-authors	Dr Shihning Chou & Prof Tom Dening; University of Nottingham
Title of talk	Attitudes amongst men towards gay and bisexuality in the UK
Abstract	**Objective**: This study aims to expand on the existing literature on gendered attitudes towards LGBTQ+ communities. The primary study objective is to explore the variables which contribute to participants' prejudicial attitudes towards gay and bisexual men. The study will also explore the following objectives: 1. To explore the impact of regional location and if rural or urban location affects the participants' prejudicial attitudes. 2. To explore the influence of age on participant's prejudicial attitudes. 3. To explore the influence that the ability to mentalize has on participants' prejudicial attitudes. **Design**: This study will implement a quantitative approach and will collect data across a seven-month period. A between group design will be chosen for this study. **Method**: A minimum of 92 male participants (n=92) aged 18 years or above who reside in the United Kingdom will be recruited to participate in this study. They will be recruited online through a social media poster. This study will consist of five

	questionnaires which will collect demographic data and explore the participants attitudes towards gay, bisexual males, their ability to mentalise and identify if socially desirable responses are present. **Results**: This study is currently in progress. No results are available to report. **Conclusions**: The findings will provide insight into the factors which influence the current level of discriminatory attitudes in the UK amongst men towards gay and bisexual males.

Poster number	**7**
Presenter	Aisha Hussain
Job title and affiliation	Medical student, University of Nottingham
Title of talk	A qualitative study of the association between an exercise group and the wellbeing of people living with dementia
Abstract	**Background**: Dementia is a prevalent syndrome affecting cognitive functioning with no current disease-modifying treatment. Non-pharmacological interventions have shown some benefits but any effects on wellbeing require further research. **Objectives**: To establish how the implications of dementia affect individuals' wellbeing and investigate whether an exercise and social group has any significant impact on the wellbeing of participants with dementia. **Methods**: Purposive and opportunistic sampling was used to recruit participants from the group which included people with dementia, carers, and organisers. Researchers attended sessions six weeks before data collection to conduct pilot work, which involved familiarising themselves with the group and find the optimum observational technique. After ethical approval was granted, participant information sheets and consent forms were distributed. Data collection involved making field notes and conducting semi-structured interviews. Interviews were transcribed and anonymised and thematic analysis was used on the data. **Results**: The analysis was based on six individual interviews, a focus group of five organisers and observations of 15 participants. Four themes and 12 subthemes were identified from the data. One theme addressed how the consequences of dementia impacted the participants' wellbeing and the other three explored how the group benefited the participants with dementia. **Conclusions**: An exercise and social group has shown promising effects on the wellbeing of participants with dementia, whose lifestyle and relationships were negatively affected by the inevitable changes of the syndrome. Future developments of similar initiatives could be beneficial and further research into the effects of these groups on people with dementia is necessary.

Poster number	8
Presenter	Eithne Heffernan
Job title and affiliation	Senior Research Fellow, NIHR Nottingham Biomedical Research Centre, University of Nottingham
Names and affiliations of co-authors	Emma Broome (Co-presenter - NIHR Nottingham Biomedical Research Centre, University of Nottingham), Jean Straus (Patient Research Partner), Tom Dening (Centre for Dementia, Institute of Mental Health, University of Nottingham), Helen Henshaw (NIHR Nottingham Biomedical Research Centre, University of Nottingham)
Title of talk	Considerations and research priorities for adults living with co-existing dementia and hearing loss
Abstract	Hearing loss has been identified as the largest potentially modifiable risk factor for the development of dementia from midlife onwards. However, the specific mechanisms of this association, as well as optimal support for adults who experience both of these long-term conditions, remain unclear. Research in this area would benefit from being guided by an inclusive and strategic agenda developed in consultation with key stakeholders (e.g. patients, carers, clinicians). Funded by the National Institute for Health and Care Research (NIHR) via its Clinical Research Network, Research for Patient Benefit programme, and Nottingham Biomedical Research Centre, this research programme aims to benefit adults living with co-existing dementia and hearing loss through: 1) Identifying, understanding, and addressing barriers to participation in dementia and hearing loss research, specifically for members of under-served groups and communities. 2) Co-developing strategic directions and priorities for future research in this area in partnership with key stakeholders. 3) Examining existing clinical service provision within audiology for adults living with both dementia and hearing loss. This programme entails the use of several research methods, including focus groups with key stakeholders, a survey of audiology service leads, and a scoping review. The research team are joined by a Patient Research Partner for this programme. These activities will provide important insights on inclusive practices for research recruitment, engagement, and delivery; a strategic agenda to direct future research in this field; and up-to-date knowledge of clinical service provision in this area. Ultimately, this will help to optimise research and practice for dementia and hearing loss.

Poster number	9
Presenter	Fiona Ng
Job title and affiliation	Research Fellow, University of Nottingham
Names and affiliations of co-authors	Nashwa Ibrahim (Mansoura University), Donna Franklin (NEON LEAP), Gerald Jordan (McGill University), Felix Lewandowski (University of Nottingham), Stefan Rennick-Egglestone (University of Nottingham), Christopher Newby (University of

	Nottingham), Joy Llewellyn-Beardsley (University of Nottingham), Mike Slade (University of Nottingham)
Title of talk	How does Posttraumatic Growth occur in Experiences of Psychosis: A Systematic Review and Narrative Synthesis
Abstract	**Background**: People with experience of psychosis are likely to report traumatic experiences in their lifetime. This can arise through childhood trauma, symptoms, or negative healthcare experiences. Some people report positive changes or posttraumatic growth (PTG) arising from traumatic experiences. To date, there has been limited focus on PTG within the psychosis field. This systematic review aims to identify significant correlates and mediators of PTG in psychosis and develop a conceptual framework synthesising facilitators of PTG in psychosis. **Method**: A systematic review was conducted in seven languages. Quantitative studies were included examining correlates, mediators, or the temporal relationship between PTG and one or more variables. Qualitative studies were included if describing PTG arising from experiences of psychosis. Quantitative studies were grouped by analysis type and descriptively reported upon. A narrative synthesis was conducted on included qualitative studies. **Results**: Thirty-seven papers were included. Significant mediators of PTG included meaning in life, coping self-efficacy, core beliefs, and self-reported recovery. The narrative synthesis identified seven facilitators of PTG in psychosis: Personal identity and strength, Receiving Support, Opportunities and possibilities, Strategies for coping, Perspective shift, Emotional experience and Relationships, giving the acronym PROSPER. **Conclusion**: People with psychosis can positively change and grow from traumatic experiences. The findings provide researchers with an evidence-based theoretical framework for understanding PTG, which can be used to inform the development of new clinical interventions. Future work is needed to validate the framework using longitudinal cohort studies.

If you have any queries about the event please email karen.sugars@nottshc.nhs.uk