

APE2022 Programme

KEYNOTE SPEAKERS:

Dr Pascal Vrtička:

“Are we on the same wavelength? Individual differences in interpersonal neural synchrony”

Department of Psychology, University of Essex, UK

Professor Clare Allely:

“How certain features of autism spectrum disorder can provide the context of vulnerability to engaging in online and offline sexual offending”

University of Salford Manchester, UK.

Professor Costas Karageorghis:

“When it hits, you feel no pain”: A Potpourri of Music-Related Applications

Department of Life Sciences, Brunel University London, UK

Professor Manasi Kumar:

“Theory of Change and design thinking embedded mental health promotion agenda setting for peripartum adolescents in Kenya to adapt WHO/UNICEF program on Helping pregnant and Parenting Adolescents Thrive “

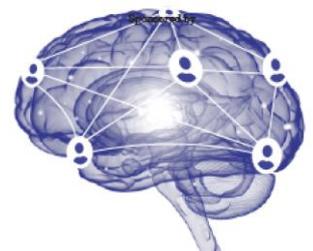
Brain and Mind Institute, Aga Khan University, Pakistan

APE 2022 MEETING | 3rd EDITION

**AFFECT, PERSONALITY AND
THE EMBODIED BRAIN**

22.09.2022 - 23.09.2022

ONLINE



APE2022 Day 1. (22.09.2022; UK times)

Please click on titles to follow links to the abstracts

<p>9:30 – 10:00</p>	<p>Committee Introduction & Opening session: Dr Francisco Mendes Palma, Director of Global Engagement, Universidade Católica Portuguesa, Portugal Dr Steve Atkins, Director of Psychology & Sport, University of Salford Manchester, UK</p>
<p>10:00 – 11:00</p>	<p>Keynote: Dr Pascal Vrtička: <i>“Are we on the same wavelength? Individual differences in interpersonal neural synchrony”</i> Department of Psychology, University of Essex, UK</p>
<p>11:00 – 11:30</p>	<p>Coffee Break</p>
<p>11:30 – 13:00</p>	<p>Presentation Session 1: Brain Connectivity & Oscillation (Alex Sumich) Conceptual Study of Role of Parietal Cortex in Retrieving and Detecting Episodic Memory (Dash, P.) The Symmetry Continuum: Convergence Between Functional Connectivity in Schizophrenia and Healthy Controls (Buchwald, K., Vignes, M., Siegert, R., Sandham., M., Narayanan, A.) EEG and ECG nonlinear and spectral multiband analysis to explore the effect of videogames against anxiety (Ferreira, Miguel., Oliveira Silva, P., Rodrigues Ribeiro, P., & Rodrigues, P. M.) Hormone Concentrations and Spontaneous Prefrontal Haemodynamics Correlate with Synchronised Cortical Oscillations (Zakeri, Z., Mansfield, N., Sunderland, C., & Omurtag, A.)</p>
<p>13:00 – 14:00</p>	<p>Lunch Break</p>
<p>14:00 – 15:00</p>	<p>Keynote: Professor Clare Allely: <i>“How certain features of autism spectrum disorder can provide the context of Vulnerability to engaging in online and offline sexual offending”</i> School of Health & Society, University of Salford Manchester, UK.</p>
<p>15:00 – 16:30</p>	<p>Presentation Session 2: Dark Traits (Alyson Blanchard) Being moved: Exploring the role of alexithymia in the association between affective, cognitive and kinesthetic empathy with autistic and psychopathic traits (Ayache, J., Patel, E., Stevenson, N., Dumas, G., Sumich, A., & Heym, N.) Examining the Moderating Effects of Hypersexuality on the Relationship Between Psychopathic Traits and Sexual Coercion (Thatcher, A.) Being Unwanted: An Early Precursor of Psychopathy (Bergstrøm, H., Zara, G., & Farrington, P. D.)</p>

	The Relationship Between Sex Addiction and Shame Moderated by Overt and Covert Narcissism (Cameron, C., & Fido, D.)
16:30 – 16:45	Coffee break
16:45 – 17:30	OSF workshop by Darren Rhodes & Julia Ayache NTU Psychology, Nottingham Trent University
17:30 – onward	Poster Presentations & Evening Programme Movement, Yoga and Havening sessions and Networking in Gather town

APE2022 Day 2. (23.09.2022; UK times)

Please click on titles to follow links to abstracts

9:30 – 10:30	Keynote: Professor Costas Karageorghis: <i>“When it hits, you feel no pain: A Potpourri of Music-Related Applications”</i> Department of Life Sciences, Brunel University London, UK
10:30 – 11:15	Early Career Researcher Award 2021 - Keynote: Dr Zohreh Doborjeh: <i>“Brain-inspired computational AI Modelling for Diagnosis and Prognosis in Mental Health”</i> School of Population Health, University of Auckland, New Zealand
11:15 – 11:30	Coffee break + join us for Mindful Movement Exercises with Lisa Clughen
11:30 - 13:00	Presentation Session 3: Health & Wellbeing (Pat Oliveira-Silva) Secure Past, Secure Future? An Attachment Security Perspective to Explore Individual Differences in General Episodic Future Thinking (Yang, F., Zhang, Z., Sawada, N., & Oshio, A.) Using Network Analysis to examine risk and protective factors associated with Suicide Risk amongst Pacific adolescents in New Zealand (Gossage, L.) Kombucha: legislation and health/wellbeing (Batista, P., Penas, M. R., Pintado, M., & Oliveira-Silva, P.) Exploring the Relationships Between Positive Psychology-Related Traits and Sleep (Tout, A.) Sedentary Behaviours, Movement, Mental Health, and Wellbeing – Part 1 + 2 (Clughen, L. & Magistro, D.)
13:00 - 14:00	Lunch Break + join us for Mindful Movement Exercises with Lisa Clughen

<p>14:00 - 15:30</p>	<p>Presentation Session 4: Applied Contexts (Emanuele Fino)</p> <p>Exploring some of the Features of Autism Spectrum Disorder that might Increase the Vulnerability to Engaging in the Online Incels Community (Ritchie, M.)</p> <p>Error! Reference source not found. (Hammond, C., & Fido, D.)</p> <p>Mental Health in Police Forces: The Portuguese Reality (Moreno, A. F., Jacinto, B., Vilalta, S. R., Karanicka-Murray, M., & Oliveira-Silva, P.)</p> <p>Associations between personality dimensions and emotions recognition among forensic male inpatients in High-Risk Security hospital (Tiberi, L. A., Saloppé, X., Leveugle, M., & Pham Hoang, T.)</p> <p>Neurodiverse profiles in vulnerable children using the Strengths and Difficulties Questionnaire (Stevenson, N., Gupta, S., Pandey, R., Kumari, V., Sumich, A., & Heym, N.)</p>
<p>15:30 – 16:30</p>	<p>Symposium: Virtual Reality (VR) interventions (Nadja Heym)</p> <p>A systematic review to establish whether VR-based treatment can be effectively implemented for treating social anxiety disorder in adulthood (Lloyd-Bithell, K., Premkumar, P., Nastase, E. S., & Heym, N.)</p> <p>The Efficacy of Self-Guided Virtual Reality Exposure Therapy (VRET2) with Biofeedback for Socially Anxious People (Premkumar, P., Heym, N., Formby, P., Myers, J., Sumich, A., Brown, D.)</p> <p>Enhancing the realism and multi-sensory biofeedback of Virtual-Reality Exposure Therapy (VRET3) for social anxiety – a Study Protocol(Kaleva, I., Heym, N., Premkumar, P., Sumich, A., Brown, D. et al.)</p>
<p>16:30 – 16.45</p>	<p>Coffee break</p>
<p>16:45 – 17:45</p>	<p>Keynote</p> <p>Professor Manasi Kumar: <i>“Theory of Change and design thinking embedded mental health promotion agenda setting for peripartum adolescents in Kenya to adapt WHO/UNICEF program on Helping Pregnant and Parenting Adolescents Thrive”</i></p> <p>Brain and Mind Institute, Aga Khan University, Pakistan</p>
<p>17:45 – 18.15</p>	<p>Closing Ceremony & Awards</p> <p>Prof Daragh McDermott Associate Dean for Psychology, Nottingham Trent University</p>
<p>18.15 - onwards</p>	<p>Poster presentation & Evening programme</p> <p>Movement, Yoga and Havening sessions and Networking in Gather town</p>

Poster Room

#POSTER-01

The Relationship between Dark triad traits and Home environment among Young adults (Ghosh, M., Mishra, A., & Upadhyay, A.)

#POSTER-02

The Prevalence of Personality Disorder Traits Within People Accessing Primary Care Therapy Services and the Impact of These on Therapy Outcomes (Parkin, L. & Heym, N.)

#POSTER-03

Not so cruel after all? Dark Tetrad and Emotional Intelligence as predictors of Punitive Attitudes (Bajcsi, N., & Fino, E.)

#POSTER-04

Young researchers on Bachelors degree: Personal Testimonies (Claro, R., & Nogueira, M.)

#POSTER-05

The intergenerational transfer of slow life history strategies via parental values: Surviving, thriving, and the Dark Triad traits (Burtaverde, V., & Ene, C.)

Abstracts are at the end of this document. Links to poster room will be made available during the conference.

ABSTRACTS

1. KEYNOTE SPEAKERS:

Dr Pascal Vrtička: *“Are we on the same wavelength? Individual differences in interpersonal neural synchrony.”* Lecturer in Psychology, Department of Psychology University of Essex, UK

Contact: p.vrticka@essex.ac.uk; <https://pvticka.com/> <https://twitter.com/PVrticka>

Abstract: Social neuroscience is currently undergoing an important transition from first- to second-person experimental paradigms. Whereas most earlier studies assessed brain activation in single individuals, recent technical advances nowadays allow for the simultaneous measurement of brain activity from (at least) two participants during live social interaction. In so doing, interpersonal neural synchrony (INS) can be derived as a new biomarker at the dyadic level, reflecting the temporal alignment of brain activation de- and increases over time.

In my talk, I will describe how INS can be measured by functional near-infrared spectroscopy (fNIRS) hyperscanning and how it relates to bio-behavioural synchrony during social interaction more generally. I will then show how INS, in combination with behavioural observations, semi-structured interviews and self-reports, can be used to assess individual differences in interaction and relationship quality. For the latter aspect, I will be mainly focussing on attachment and caregiving inspired by attachment theory.

Brief Biography: Dr Pascal Vrticka is a social neuroscientist with strong ties to developmental & social psychology. His research focuses on the psychological, behavioural, biological, and brain basis of human social interaction, attachment, and caregiving. One area of Dr Vrticka’s research is dedicated to measuring neurobiological responses to different kinds of social versus non-social information in individual participants. This 1st person social neuroscience approach relies on (functional) magnetic resonance imaging – (f)MRI – and electroencephalography – EEG. More recently, Dr Vrticka started to assess bio-behavioural synchrony in interacting dyads. The main question of this 2nd person social neuroscience approach is how romantic partners and parents with their children get “in sync” when they solve problems together or talk to each other. In his bio-behavioural synchrony research, Dr Vrticka is particularly interested in interpersonal neural synchrony. His method of choice to assess interpersonal neural synchrony is functional near-infrared spectroscopy (fNIRS) hyperscanning. Dr Vrticka combines fNIRS hyperscanning with behavioural observations, interviews, and self-reports (i.e., questionnaires). The principal theoretical framework underlying Dr Vrticka’s research is attachment theory, which describes how we initiate and maintain social relationships across the life span. By adding a systematic 1st and 2nd person social neuroscience perspective to attachment theory and research – also in the form of new functional neuro-anatomical models of organised and disorganised human attachment (NAMA and NAMDA). Dr Vrticka is promoting a new area of investigation: the social neuroscience of human attachment.

Professor Clare Allely: “How certain features of autism spectrum disorder can provide the context of Vulnerability to engaging in online and offline sexual offending”

Reader in Forensic Psychology, University of Salford Manchester, UK

Contact: c.s.allely@salford.ac.uk

Abstract: There is a real need for the identification and understanding of how the innate vulnerabilities which are associated with autism spectrum disorder (ASD) can provide the context of vulnerability to engaging in offline and online sexual offending to be recognised in criminal law. In this presentation we will explore how certain features of ASD can provide the context of vulnerability to engaging in sexual offending including hands on related sexual offending as well as the viewing of indecent child imagery (IIOC). It will also include a number of case studies and explore some of the features of ASD in the individuals which contributed or played a role in their sexual offending.

Brief Biography: Dr Clare Allely is a Reader in Forensic Psychology at the University of Salford in Manchester, England and is an affiliate member of the Gillberg Neuropsychiatry Centre at Gothenburg University, Sweden. Clare is also an Honorary Research Fellow in the College of Medical, Veterinary and Life Sciences affiliated to the Institute of Health and Wellbeing at the University of Glasgow, as well as an Associate of the Centre for Youth and Criminal Justice (CYCJ) at the University of Strathclyde. Clare acts as an expert witness in criminal cases and HCPC fitness to practice cases and contributes to the evidence base used in the courts on psychology and legal issues through her published work.

Clare's primary area of research expertise includes investigating how autism symptomology can contribute to different types of offending behaviour (e.g., sexual offending; child pornography or crimes related to indecent child images; homicide; fire-setting or arson; stalking; bestiality; violent offending; terroristic activities) and autism across the whole of the criminal justice system (police, court, prison, probation and secure psychiatric care). One of the primary aims of her research is to develop and share best practice with both academics and practitioners and provide evidence-based decision making to influence future policy as well as investigate how autism spectrum disorder (ASD) symptomology can contribute to different types of offending behaviour such as violent and/or sexual offending, child pornography, and arson.

Twitter: @ClareAllely

Professor Costas Karageorghis: *“When it hits, you feel no pain: A Potpourri of Music-Related Applications”*. Professor of Sport & Exercise Psychology, Department of Life Sciences, Brunel University London, UK

Contact: Costas.Karageorghis@brunel.ac.uk

Abstract: From the dawn of human civilization, ancient cultures sought to combine sounds in a manner that influenced the human psyche. Given recent advances in digital technologies, music applications have come to be de rigueur in the realm of health, exercise and physical activity. The speaker will explore the structured and systematic use of music as a means by which to improve the exercise experience, while also touching on other domains from his body of work, that will include elite sport and simulated driving. A theoretical model (Karageorghis, 2016) will serve as the lodestar for a series of empirical studies and associated music-related applications. In terms of an underlying structure, music-related interventions can be applied in three key ways: pre-task, in-task and post-task. Music can be used pre-task as a tool with which to manipulate psychological state; most often as a mild stimulant. It can be used in-task, either synchronously or asynchronously, with the synchronous application holding particular benefits for endurance-type performance. The post-task application of music remains at a nascent stage in research terms; nonetheless, initial evidence shows how music can expedite exercise recovery. The music-related applications will be critically appraised to enable suggestions regarding for whom and under which circumstances they might be most appropriate. The lecture will be of particular interest to academics, practitioners, pracademics and postgraduate students working in the domain of exercise and health.

Brief Biography: Professor Costas Karageorghis’ expertise is in sport and exercise psychology. He is a Chartered Sport and Exercise Psychologist (British Psychological Society), Chartered Scientist (Science Council) and Fellow of the British Association of Sport and Exercise Sciences. His scientific output includes over 200 scholarly articles, 14 chapters in edited texts and the text *Inside Sport Psychology (Human Kinetics)*, which has been translated into Polish, Turkish and Farsi. He has recently published a second text, *Applying Music in Exercise and Sport (Human Kinetics)*, as well as an associated study guide. Costas’s research has been featured extensively in the national and international media over a 25-year period. He has been a keynote or invited speaker at venues throughout the world, including the delivery of a public lecture at the Library of Congress in Washington, D.C.

Social media: Twitter @SAVIBrunel

Instagram @brunel_music_and_driving

Spotify: Brunel SAVI Group

Professor Manasi Kumar: *“Theory of Change and design thinking embedded mental health promotion agenda setting for peripartum adolescents in Kenya to adapt WHO/UNICEF program on Helping Pregnant and Parenting Adolescents Thrive”*

Senior Implementation Scientist and Mental Health Consultant, Brain and Mind Institute
Aga Khan University, Pakistan

Contact: manasi.kumar@aku.edu

Background: The voices and perspectives of peripartum adolescent and young women have traditionally been neglected within health services design. User-centered design is a novel modality to explore their perspectives on mental health prevention and promotion opportunities that are available to them.

Methods: This study took place within the context of World Health Organization’s and UNICEF’s Helping Adolescents’ Thrive (HAT)- Kenya program and is also nested within the NIH funded ‘Implementing mental health interventions for pregnant adolescents in primary care LMIC settings’ (INSPIRE) study in Kenya. The study was conducted in two government owned urban based health care facility sites among perinatal adolescent participants (n=10), policymakers (n=8), providers (n=8), and civil society members (n=5). The study brought the participants through a series of 7 workshops which included role plays and diaries to examine the meaning of mental health promotion and prevention, drawing upon their perspectives and experiences.

Results: The paper describes a theory of change-led mapping exercise that examines the meaning of mental health promotion for peripartum adolescents in Kenya. This mapping was accompanied by a concomitant user-centered design process that focused on what ‘form’ and ‘specific shape’ the promotion agenda and activities could look like. While the Theory of Change brought together key peripartum adolescent and young women stakeholders, women, others representing policy, practice, and civil society members also joined the workshops.

Conclusions: The Theory of Change conceptual map described in this manuscript can guide the process of intervention and policy development in general and more specifically for the Helping Adolescents Thrive program.

Brief Biography: Manasi Kumar is working as a Senior Implementation Scientist at the Brain and Mind Institute, Aga Khan University. As an affiliate senior lecturer at the Department of Psychiatry, University of Nairobi, she is involved in NIH funded research on peripartum adolescents living with depression. She has wide experience mentoring lay, non-specialist and specialist health workers in WHO’s mhGAP as well as low intensity mental health evidence-based interventions. For last 10 years her focus has been on strengthening teaching of mental and behavioral sciences in undergraduate and postgraduate medical education programs in various East African and South Asian geographies. She works on disparities in health systems in lower- and middle-income countries with a focus on mental health systems strengthening and maternal, child and adolescent mental health research. She is an affiliate associate professor at Department of Global Health in University of Washington Seattle, US and University College London. She is supported by Fogarty International Centre, NIMH, UNICEF and UK’s NIHR research grant mechanisms.

ECR AWARD APE2021 KEYNOTE

Dr Zohreh Dobarjeh: *“Brain-inspired computational AI Modelling for Diagnosis and Prognosis in Mental Health.”* Postdoctoral Research Fellow and Lecturer, School of Population Health, University of Auckland, New Zealand

Contact: zohreh.dobarjeh@auckland.ac.nz

Abstract: Mental health is an issue of huge concern in New Zealand and worldwide, Unfortunately, we can't currently accurately predict which treatment will work for each patient and so many patients face trying multiple different treatments before arriving at what works best for them. Zohreh will talk about the scope of her interdisciplinary research in Neuroinformatics and how this can be applied to mental health conditions (depression, schizophrenia and tinnitus) for the purpose of early detection and prediction of response to treatment.

Brief Biography: Dr Zohreh Dobarjeh is a Postdoctoral Research Fellow and Lecturer in the School of Population Health at the University of Auckland, New Zealand. She received her B.S and M.S. with honours in Psychology and PhD in the area of Computational Cognitive Neuroscience at Auckland University of Technology in 2019. Her research interests span a variety of cross-disciplinary interactions, particularly with neuroscience and Neuroinformatics.

Her research includes early detection and prognosis of mental health conditions and response to treatment with respect to multimodal sets of data including behavioral, clinical, neuroimaging, and genetic. She is also interested in developing and validating new technologies for the analysis of the spatio temporal brain data (EEG, ERP, fMRI) using advanced computational and Brain-inspired Artificial Intelligence modelling techniques.

Her work has contributed to her being awarded the Global Young Scientist, 2021; Outstanding Doctoral Award, 2020; Dean's Award of Excellence, 2018; and three Best International Paper Awards 2017-2019.

2. SYMPOSIUM:

Virtual Reality Exposure Therapy (VRET) for Social and Public Speaking Anxiety

Overview: Virtual Reality (VR) interventions are expanding in scope and realism for a range of psychological difficulties, such as social anxiety. Specifically Virtual Reality Exposure Therapy (VRET) can address pertinent issues surrounding the treatment uptake and response in Social Anxiety Disorder (SAD), where the majority of sufferers do not seek help. Exposure to virtual social threat via self-guided VRET results in improvements in subjective and physiological arousal among individuals with Public Speaking Anxiety (PSA; Premkumar et al., 2021). This symposium will present a programme of studies we conducted to (i) investigate the use of VRET in SAD; and (ii) develop and test a novel self-guided VRET tool for PSA with integrated biofeedback.

Keywords: Virtual Reality Exposure Therapy, Social Anxiety, Intervention, Technology

Convenor: Dr Nadja Heym, nadja.hey@ntu.ac.uk

Title 1: A systematic review to establish whether VR-based treatment can be effectively implemented for treating social anxiety disorder in adulthood

Authors: Lloyd-Bithell, K.¹, Premkumar, P.², Nastase, E. S.³, & Heym, N.¹

Affiliations: ¹ NTU Psychology, Nottingham Trent University, UK; ² Division of Psychology, London South Bank University, UK; ³ Independent Clinical Psychologist, Romania

Corresponding author: Nadja Heym, nadja.hey@ntu.ac.uk

Abstract: The aim of this systematic review was to establish whether VRET is an effective treatment for SAD in adults. The review included 26 papers (N=1500+ participants over the age 18) and was separated into: (i) n=25 studies comparing VRET to either healthy control, waitlist, and/or standard treatments including Cognitive Behavioural Therapy (CBT; in vivo) and Exposure Group Therapy (EGT); and (ii) n=8 studies focusing on the practicalities and effectiveness of VRET. Findings support VRET as an effective intervention for reducing social anxiety symptoms, especially compared to healthy control and waitlist groups. VRET trials were equally as effective for treating SAD than standard treatments. VRET has some advantages compared to CBT such as improving willingness from SAD sufferers to undergo therapy and resulting in lower attrition rates. Future research needs to further assess the key aspects of efficacy of VRET in clinical practice.

Title 2: The Efficacy of Self-Guided Virtual Reality Exposure Therapy (VRET2) with Biofeedback for Socially Anxious People

Authors: Premkumar, P.,¹ Heym, N.,² Formby, P.,² Myers, J.,³ Sumich, A.,² Brown, D.⁴

Affiliations: 1. Division of Psychology, London South Bank University; 2. NTU Psychology, Nottingham Trent University; 3. Department of Psychology, Sheffield University; 4. Department of Computer Science, Nottingham Trent University

Corresponding author: Preethi Premkumar, premkump@lsbu.ac.uk

Abstract: This study aimed to understand the impact of displaying biofeedback in VRET on regulating physiological arousal during the intervention. Seventy-two individuals with social anxiety were randomly allocated to either VRET+biofeedback (n=38/25 completers) and VRET-alone (n=35/25 completers). Completers attended 3 hour-long VRET sessions over 2 consecutive weeks, giving 20-minute public speech in a virtual classroom whilst gradually adjusting anxiety inducing parameters. In the +biofeedback condition participants saw their heart rate and brain electrical activity (alpha asymmetry) on bars in the virtual environment. Psychometric assessments on social anxiety and PSA were completed after each session and after one month. Participants across both conditions showed reductions in PSA and social anxiety from baseline to end-of-treatment and at one-month follow-up. The improvement in PSA from baseline to follow-up was greater for VRET-alone than VRET+biofeedback, whereas improvement in physiological arousal (heartrate; sessions 1-3) was greater in the VRET+biofeedback. Discordant results suggest a delay between receiving biofeedback and trying to mindfully lower the physiological arousal. Individuals engaging in VRET with biofeedback need guidance about how to modulate physiological anxiety levels.

Title 3: Enhancing the realism and multi-sensory biofeedback of Virtual-Reality Exposure Therapy (VRET3) for social anxiety – a Study Protocol

Authors: Kaleva, I.¹, Heym, N.¹, Premkumar, P.², Sumich, A.¹, Brown, D.³ et al.

Affiliations: ¹ NTU Psychology, Nottingham Trent University; ² Division of Psychology, London South Bank University; ³ Department of Computer Science, Nottingham Trent University

Corresponding author: Nadja Heym, nadja.hey@ntu.ac.uk

Abstract: This feasibility study (ongoing) aims to improve our intervention further by adding relaxation training modules (RTM) to VRET3 allowing participants to learn how to modulate their physiological responses and manage their anxiety symptoms. Data are collected from multiple sensors and machine learning is used to produce more accurate biofeedback on PSA and improve the efficacy of VRET. Offering multisensory biofeedback derived from machine learning will accurately infer state of anxiety and provide better guidance about using relaxation techniques. Although the method of combining VR with biofeedback for anxiety disorders has demonstrated promising findings, no studies have examined this hybrid therapeutic approach with participants experiencing SA or PSA. Participants with high self-reported SA are randomly allocated to VRET with or without RTMs. Initially, we use raw biofeedback until machine learning algorithms are established. We anticipate VRET+RTM and integrated machine learning biofeedback to show stronger improvements in SA and arousal states. Interviews (N=10) are conducted to receive more detailed accounts of participants experiences of the RTMs and VRET to facilitate further refinement of the product.

3. PRESENTATIONS

#PRES-01

Title: Conceptual Study of Role of Parietal Cortex in Retrieving and Detecting Episodic Memory

Authors: Dash, P.

Affiliation: Department of Human Development and Childhood Studies, Institute of Home Economics, University of Delhi

Corresponding author: Perna Dash, Prernadash13@gmail.com

Abstract: Episodic memory has played a crucial role in memory research and continues to do so. The focus of research has shifted from a focus on the content of personal experiences to tasks that evaluate the context and awareness related to memory retrieval. Episodic memory is still used to refer to specific types of tasks in a heuristic sense, but the more significant use of the term is hypothetical, where episodic memory pertains to a category of memory system. Current neuroimaging research has linked the posterior parietal cortex in episodic memory retrieval, but its precise role is unknown. Superior parietal lobe (SPL) regions along the intraparietal sulcus are involved in the voluntary realigning of attention to noteworthy aspects of the environment, whilst the inferior parietal lobe (IPL) regions at the temporo-parietal junction facilitate the automatic redistribution of attention to task-relevant information, according to attentional research. This is a conceptual study that has been combined with a literature review of various fMRI and lesion studies to explore the role of parietal cortex in episodic retrieval.

Regions of the brain that showed more activity for hits than for correct rejections included a left DPC (Dorsal Parietal cortex) cluster centered on the precuneus and extending to the intraparietal region, as well as a left VPC (Ventral Parietal cortex) cluster centered in the supramarginal gyrus. Stimulation in the left inferior parietal cortex, left precuneus, and posterior cingulate cortex, together with the left middle frontal gyrus, including both dorsolateral and orbitofrontal regions, and the left para-hippocampal gyrus, was associated to retrieval success.

#PRES-02

Title: The Symmetry Continuum: Convergence Between Functional Connectivity in Schizophrenia and Healthy Controls

Authors: Buchwald, K.¹, Vignes, M.¹, Siegert, R.², Sandham, M.², & Narayanan, A.³.

Affiliations: ¹ School of Mathematical and Computational Sciences, Massey University; ² School of Clinical Sciences, Auckland University of Technology; ³ Engineering, Computer, and Mathematical Sciences, Auckland University of Technology, New Zealand

Corresponding author: Khan Buchwald, khan.buchwald-mackintosh@aut.ac.nz

Abstract: Weinberger, Friston, and Frith advanced the disconnection hypothesis of schizophrenia to explain its symptomology from a neurophysiological perspective. Network

statistical methods have been used to assess the disconnection hypothesis, but not with respect to network complexity. Our work leverages network statistical complexity analysis to assess the disconnection hypothesis in schizophrenia. This study obtained fMRI data from the University of California Los Angeles Consortium for Neuropsychiatric Phenomics LA5c Study for people diagnosed with schizophrenia (PDS) and healthy case-controls (HC). We used one hundred bootstrap samples of 45 PDS and 45 HC, for both encoding and retrieval trials, and we fitted a dynamic Bayesian Network to each sample. The network properties were assessed at various significance thresholds, and an optimal significance threshold for an edge's inclusion was obtained. Network sparsity was observed at lower thresholds, which were more complex network. When the theoretical model is complex there are lower proportions of edges that were present in both PDS and HC. The optimal significance threshold was found to be .5, indicating a simpler model is preferred. We found support for the disconnection hypothesis at lower thresholds due to the difference in network sparsity. In simpler networks, the same fundamental neurophysiological connections in HC are present in PDS. Hence, the functional model must be elaborate before evidence of the disconnection hypothesis emerges in PDS.

#PRES-03

Title: EEG and ECG nonlinear and spectral multiband analysis to explore the effect of videogames against anxiety

Authors: Ferreira, Miguel.¹, Oliveira Silva, P.¹, Rodrigues Ribeiro, P.¹, & Rodrigues, P. M.^{1,2}

Affiliations: ¹Human Neurobehavioral Laboratory, Faculty of Education and Psychology, Portuguese Catholic University; ²Centro de Biomédica e Química Fina, Portuguese Catholic University

Corresponding author: Pedro Rodrigues Ribeiro, p.ribeiro.engenheiro@gmail.com

Abstract: With the growing popularity associated with the usage of Commercial Off-The-Shelf Video Games (COFSGs) as a mechanism for stress reduction, differences in their affective effects have started being encountered and analyzed. COFSGs like Bejeweled 2 and Tetris, both often found in mobile game form, have been seen in literature to affect the user in vastly different way. With this growing use and increased presence in literature, a hypothesis can be formulated that the effects of different COFSGs in the user can be discriminated by analyzing biosignals, namely electrocardiogram and electroencephalogram signals, collected from the user during interaction. To test this hypothesis, a protocol was prepared in which a subject was subjected to a dosed and controlled level of stress, via use of the Trier Social Stress Test method, before playing each of three selected COFSGs, Energy, by Infinity Games, Bejeweled, by Electronic Arts, and a custom modified version of Tetris made by members of the research group. After collection, the signals were resampled to 500 Hz and filtered with a low pass Butterworth filter. After filtering, the signals were decomposed via wavelet transformation, and, from each of the six levels selected, several nonlinear and spectral metrics were collected, such as the Lyapunov exponent, Correlation Dimension, Hurst Exponent, Detrended Fluctuation analysis, fractal dimension, signal Energy, and entropy. The classification of the signals was done through Artificial Intelligence techniques, with the features used being selected by the F-score technique. 100% accuracy in discrimination was achieved for all subsets, Energy vs Bejeweled, Energy vs Tetris, Bejeweled vs Tetris, using the K Nearest Neighbor classifier.

#PRES-04

Title: Hormone Concentrations and Spontaneous Prefrontal Haemodynamics Correlate with Synchronised Cortical Oscillations

Authors: Zakeri, Z.¹, Mansfield, N.¹, Sunderland, C.², & Omurtag, A.¹

Affiliations: ¹Engineering Department, Nottingham Trent University, UK; ²Department of Sport Science, Nottingham Trent University, UK.

Corresponding author: Ahmet Omurtag, ahmet.omurtag@ntu.ac.uk

Introduction: We report on the associations between hormonal concentration and cerebral oxygenation and electrical activity. The results show a pattern of Cortisol and BDNF correlations with frequency band power (FBP) of EEG over a range of frequencies. Resting state concurrent EEG and fNIRS indicate significant correlations between oxyhaemoglobin concentration changes and alpha & low-beta oscillations, particularly in the left lateral prefrontal cortex.

Methods. We used a database from a study with 31 participants performing laparoscopy training (Zakeri et al., 2020).

Results. The low-beta FBP during the 2ndary Task performance was positively correlated with post-task Cortisol. The delta and alpha powers were positively correlated while beta was negatively correlated with BDNF. The subjects' reaction times were correlated only with high-beta FBP. During the resting state, the session standard deviation of oxy-haemoglobin changes correlated negatively with the session average of alpha power and positively with that of low-beta power.

Discussion. The links between plasticity and stress may be reconsidered through our results. Both BDNF and Cortisol are associated with aspects of motor learning (Arora et al., 2010; Brigadski and Lessmann, 2014; Crewther et al., 2016). The pattern of correlations of FBP with BDNF may in turn explain the underlying mechanisms of Theta/Beta neurofeedback training (Doppelmayr and Weber, 2011). Characterising the associations between neural and hemodynamic activity through non-invasive, practical instruments may allow us to better understand neurovascular coupling, and its role in cognitive load (Keles et al., 2016; Mandrick et al., 2016; Niessing et al., 2005).

#PRES-05

Title: Being moved: Exploring the role of alexithymia in the association between affective, cognitive and kinesthetic empathy with autistic and psychopathic traits

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Abstract: Introduction: Difficulties understanding others' mental states (i.e., cognitive empathy) are implicated in autism, while deficits in sharing affective states (i.e., affective empathy) are a hallmark of psychopathy. Moreover, the spontaneous tendency to mimic others (i.e., kinaesthetic/motor empathy) has been linked to the experiences of self-other overlap in autism (i.e., imitation-facilitation), but with self-other distinction (i.e., imitation-inhibition) in psychopathy. However, their associations with self-reported spontaneous kinaesthetic/motor empathy are unknown. Alexithymia, characterized by difficulties identifying and describing one's own emotional states, might be a potential mechanism affecting self-other boundaries in those traits, yet a coherent model has not been established. Methods: 212 participants completed questionnaires assessing cognitive, affective and kinaesthetic empathy, psychopathy and autistic traits. A subsample (N=139) also completed a goal-oriented motor coordination task using the Human Dynamic Clamp, inducing experiences of self-other overlap or self-other distinction. Results: Autistic and psychopathic traits were positively associated with spontaneous kinaesthetic empathy, but this association was mediated by alexithymia, except for secondary psychopathy. Furthermore, autistic and psychopathic traits were both associated with motor coordination impairment. However, only primary psychopathy displayed greater experience of self-other overlap, independently of motor coordination and without being mediated by alexithymia for autistic and secondary psychopathic traits. Altogether, these results suggest different pathways for the role of alexithymia in spontaneous and goal-oriented motor empathy in autistic, primary and secondary psychopathic traits.

#PRES-06

Title: Examining the Moderating Effects of Hypersexuality on the Relationship Between Psychopathic Traits and Sexual Coercion

Authors: Thatcher, A.

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Abstract: Psychopathic traits are historically associated with coercion and manipulation in intimate partner relationships. More recently, empirical evidence has presented an association between psychopathic traits and the perpetration of sexual coercion. Following recent legislative developments to criminalise coercive control under the Domestic Abuse Act, the present study offers a timely investigation into the mechanisms of sexual coercion, which spans across two forms of domestic abuse: sexual abuse and coercive control. We used moderation analysis to investigate whether factor one psychopathy predicted sexual coercion, and whether this relationship would be moderated by facets of hypersexuality. A general community sample (n = 389) reported on factor one psychopathic traits, sadomasochism, sex drive, and sexual coercion. Bivariate correlations indicated a significant and positive association between factor one psychopathy and sexual coercion. Moderation analyses found that sadism and sadomasochism significantly moderated this association in males but not females, and masochism and sex drive had no such moderating effect. The results are discussed in terms of the interaction between factor one psychopathy and facets of hypersexuality predicting sexual coercion, as well as the negative implications of sadism and masochism being grouped together as sadomasochism in previous literature. We also discussed the significance of these findings

in relation to informing future empirical investigation into identifying risk factors of sexual offending.

#PRES-07

Title: Being Unwanted: An Early Precursor of Psychopathy

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Abstract: From a developmental and life-course perspective it can be argued that psychopathy should be understood in light of early experiences with primary attachment figures (e.g. being a wanted child) and how the person relates to other people. The aim of this study is to explore very early childhood experiences in those individuals who later in adulthood (age 48) were assessed as having high psychopathic traits. The current investigation analyses data from the Cambridge Study in Delinquent Development (CSDD), a 60 year long prospective longitudinal study of 411 males (Generation 2; G2) from childhood to old age. The main variables of interest in childhood were obstetrical problems, background in pregnancy, early issues in infancy, family conditions, and early emotional reactions. The main results were that most of the obstetrical variables were not significantly related to later psychopathic traits, which will be discussed in relation to earlier literature (e.g., Lalumiere et al., 2001). Being born because of an unwanted pregnancy and being “illegitimate” were however significant predictors of being high on psychopathic traits in adulthood, and so were poor reactions to criticism in early adolescence. Implications for the understanding of how early attachment influences the development of psychopathy will be discussed.

#PRES-08

Title: The Relationship Between Sex Addiction and Shame Moderated by Overt and Covert Narcissism

Authors: Cameron, C., & Fido, D.

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Abstract: Research into sex addiction has traction within the addiction literature, with previous studies showing the importance of excessive sexual behaviour, through the role of shame, narcissism, self-compassion, and self-esteem. However, the emerging literature on sex addiction requires replication and elaboration, such as exploring specific divisions of narcissism. Previous studies have shown a relationship between sex addiction and shame, but unsure of what variables moderate this relationship. Therefore, this study aimed to examine the moderating effect of overt and covert narcissism on the relationship between sex addiction and

shame, whilst controlling for self-compassion and self-esteem in a cross-sectional sample of 376 (49.2% males, 50.8% females) participants. Supporting our primary hypothesis, we confirmed significant and positive relationships between sex addiction and shame, however surprisingly, neither overt nor covert narcissism significantly moderated this relationship, in either males or females. To explore this finding, mediation analyses were conducted to examine whether covert narcissism was suppressing the relationship between sex addiction and shame due to the statistical significance of the relationship changing for the covert narcissism moderation models. These results indicated that covert narcissism explains the relationship between sex addiction and shame. Owing to the relationship significance between sex addiction and shame, which has the potential to lead to offending such as sexual offences and domestic abuse. These findings indicate the importance of an effective intervention targeting covert narcissism tendencies, to help reduce the experiences of shame in sex addiction. Strengths, limitations, and future research are discussed.

#PRES-09

Title: Secure Past, Secure Future? An Attachment Security Perspective to Explore Individual Differences in General Episodic Future Thinking

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Abstract: Though attachment security impacts variables related to information processing, little research shed light on the relationship between attachment security and future-related information processing. The present study preliminarily explored the possibility that attachment security could account for individual differences in general episodic future thinking (EFT), indicated by its contents, quality, and process. Specifically, contents were indicated by (1) relevance to interpersonal relationships, (2) emotional valence, (3) emotional intensity, and (4) temporal distance. Quality was indicated by (1) details, (2) clarity, and (3) vividness. The difficulty in imagining was an indicator of the process of EFT. One hundred and nine Chinese participants were recruited online and validly completed the questionnaire of five EFT tasks and attachment security measured by ECR-RS. Results showed attachment avoidance was associated with fewer interpersonal relationships in EFT ($r = -.302$, $p < .01$), while attachment anxiety had a positive but not significant correlation with interpersonal relationships in EFT. When controlled for the variable relevance to interpersonal relationships, attachment avoidance had negative partial correlations with emotional intensity ($r = -.252$, $p < .01$) and positive partial correlation with difficulty in imagining ($r = .260$, $p < .01$). Attachment anxiety had negative partial correlations with vividness ($r = -.242$, $p < .05$), details ($r = -.280$, $p < .01$), emotional valence ($r = -.441$, $p < .001$), and emotional intensity ($r = -.312$, $p < .001$). Put together, the present study provides initial evidence that when being asked to think about their future freely, attachment security may impact EFT, even if the contents are not relevant to interpersonal relationships.

#PRES-10

Title: Using Network Analysis to examine risk and protective factors associated with Suicide Risk amongst Pacific adolescents in New Zealand

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Abstract: Introduction: New Zealand (NZ) has the highest youth (15-24) suicide rate in the OECD. Pacific youth in NZ are more than three times as likely as NZ Europeans to attempt suicide and also report higher rates of suicide ideation and plans. Understanding more about suicidal thoughts and behaviours needs to be part of any prevention strategy. Suicide risk (defined in this study as endorsing suicidal thoughts and behaviours) results from a complex and dynamic interplay of factors across many life domains. Network analysis is a highly visual and versatile tool, which is very well-suited for displaying and investigating complex interactions amongst groups of variables that operate like systems. Objectives: This study used network analysis to discover the risk and protective factors associated with Suicide risk, in particular the role of self-harm and depression, amongst Pacific adolescents in New Zealand. Depression was measured both as a single latent variable and in terms of individual symptoms. Other objectives included identifying the most influential symptoms in the networks, which symptoms were contributing most to Suicide risk, and comparing the network characteristics of those participants with and without Suicide risk.

Methods: Mixed graphical models and moderated network models, both with regularization, were fitted to data from a community sample of New Zealand born Pacific adolescents, (n=550; 51% male; Mean age (SD) = 17 (0.35)). Pairwise associations and three-way interactions involving Suicide risk were identified. Centrality indices and predictability statistics were used to identify the most influential nodes. The stability of the edges and overall network structure were also tested. Results: Self harm, depression severity, and the depression symptom Not work out (believing that nothing was going to work out well, akin to pessimism) were the strongest and most reliable predictors of Suicide risk. The odds of endorsing Suicide risk increased as incidences of self-harm increased. Suicide risk was also associated with higher mean levels for all depression symptoms. Limitations: The data were analysed cross-sectionally, so causal inferences about the directions of relationships could not be inferred and most of the data were self-reported. The stability of some networks was low. Conclusions: The results suggest a possible Suicide risk pathway associated with worsening depression, a more pessimistic outlook, and increasing instances of self-harm. The strong association with the depression symptom Not work out also suggests a possible target for interventions and prevention strategies.

#PRES-11

Title: Sedentary Behaviours, Movement, Mental Health, and Wellbeing

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Abstract: Widespread evidence supports the negative impact of sedentariness and, conversely, the benefits of movement on mental health and wellbeing. In 2018, the World Health Organisation published its Global Action Plan On Physical Activity 2018–2030: More Active People For A Healthier World which set the target of reducing physical inactivity by 15% by 2030. The plan specifically links sedentariness to poor mental health outcomes and recommends movement as a way of improving mental health, quality of life and well-being. Drawing on recent research, this two-part presentation proposes an overarching argument that movement is critical to psychological health and wellbeing throughout the lifespan.

Part 1: Daniele Magistro will consider the relationship between sedentariness, movement and mental health and wellbeing and will present data on sedentariness and the use of movement in a variety of contexts from childhood, older age and student life.

Part 2: Lisa Clughen will discuss the relevance and practical applications of research in sedentariness and movement to Higher Education (HE), including her recent research on mindful and other types of movement in HE, with suggestions on how movement can be applied in HE teaching and learning environments.

#PRES-12

Title: Kombucha: legislation and health/wellbeing

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Abstract: Background: Kombucha is an increasingly consumed product, that has been developed to improve or promote physical and mental health. Legislative efforts about these products remain confusing and without global harmonization, and it needs regulatory guidelines to control the production and guarantee the product's efficacy and safety.

Aim: The study intends to draw attention to the need for regulatory guidelines and the potential of this product in the market and peoples' health.

Key findings and conclusions: The lack of regulation and the low level of literacy about this product can limit its development, marketing, and impact on health. So, it is essential to highlight the potential value of this product and inform the population, as well as invest in its development and commercialization, according to regulatory guidelines that guarantee its safety and efficacy.

#PRES-13

Title: Exploring the Relationships Between Positive Psychology-Related Traits and Sleep

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Abstract: Sleep is essential to the maintenance of good health and wellbeing, but surprisingly little is known about the positive antecedents of this health-related behaviour. By adopting a positive psychological approach, I will demonstrate the importance of positive personality traits to understanding and explaining variation in sleep outcomes. Additionally, I will explore emotion regulation as a means to understand observed associations between positive personality traits and sleep, and further suggest that it may help unify previously separate sleep and positive psychology literatures into a broader, theoretical framework. In order to do this, I will discuss the findings from a series of research studies that have explored the collective and relative contributions of gratitude, optimism, self-compassion and mindfulness towards overall sleep quality and quantity, both cross-sectionally and longitudinally. Based on the results of this research, I will lastly examine the utility of an optimism-based intervention as a means to improve sleep in the student population. Taken together, my research findings not only highlight the importance of positive traits when it comes to explaining variation in sleep outcomes, but also provide interesting implications for theory and an answer to the call for new and integrative approaches to sleep medicine.

#PRES-14

Title: Exploring some of the Features of Autism Spectrum Disorder that might Increase the Vulnerability to Engaging in the Online Incels Community

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Abstract: Incels (involuntarily celibates) are an online culture of extreme misogyny with potential for real-world violent actions. The current research focuses on the impact of mental health on incels. The influence of autism spectrum disorder (ASD) is mentioned in passing despite the repeated acknowledgment of apparent prevalence in incel-dom. Autism spectrum disorder has several features that can provide context of vulnerability for some subset of individuals to engage in incel behavior. I will explore some of these features. For instance, how online communication can erode social-emotion reciprocal (SER) communication of those with ASD, who are already at risk for issues with the SER cycle. The traits of an increased sense of rejection and social justice can prime someone with ASD to be drawn into incel-dom; an ideology that thrives on feelings of rejection and hostility. Understanding potential vulnerabilities for incel-dom allows for timely support of individuals for intervention or prevention.

#PRES-16

Title: Mental Health in Police Forces: The Portuguese Reality

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Abstract: Police forces have been framed as a high-risk occupation, involving both physically and emotionally challenging. Several risk factors specific to police work (e.g., organizational and occupational stress, years of service, and frequent exposure to stressful and potentially traumatic events) increase police officers' vulnerability to develop numerous mental health issues. Subsequently, there has been a growing interest in Police's mental health, qualified training, and policies, despite the lack of resources and difficulties in operationalizing related initiatives. Thus, Mental Health NeuroForce is a project focused on promoting socioemotional skills among Portuguese police officers. Long-term, we aim to promote stress awareness, broaden adaptive coping strategies facing conflict, and prevent escalating and unnecessary conflict. Firstly, we collected information on perceived stress, risk factors, and main stressful police work scenarios. Afterward, we aim to implement a structured programme, resorting to neurofeedback in a virtual reality setting depicting in-duty stressful events.

#PRES-17

Title: Associations between personality dimensions and emotions recognition among forensic male inpatients in High-Risk Security hospital

Authors: Tiberi, L. A.¹, Saloppé, X.², Leveugle, M.¹, & Pham Hoang, T.^{1,2}

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Abstract: Personality assessment in forensic settings is fundamental for therapy (Jones & Willmot, 2017). Assessment mainly relies on categorical framework, criticized for its lack of validity (Kotov et al., 2017) and the pathologizing view on patients. Consensus emerges on the Five-Factor Model dimensional conceptualization of personality (McCrae & Costa, 2003): Openness (O), Conscientiousness (C), Extraversion (E), Agreeableness (A), and Neuroticism (N). Socio-cognitive approach suggests that personality dimensions do not directly influence emotions but rather the emotional appraisal made of an event (Sander & Scherer, 2014). Such an assessment seems crucial in emotions recognition (ER), which in turns, plays a pivotal role in prosocial behaviours (Marshall & Marshall, 2011). Little research has investigated

associations between personality dimensions and ER among forensic inpatients. The sample is composed of 37 male forensic inpatients (M_Age= 44.36; SD_Age= 12.85). They have a low-level of education (M_(Years of education)= 5.35; SD_(Years of education)= 5.00). Non-violent non-sexual offenses are the main represented (48.60%), followed by sexual offenses (45.90%). Personality dimensions are assessed using the Big-Five Inventory French Version (Plaisant et al., 2010). ER competence is assessed using four computerized tasks, related to the three communication channels: face, voice (prosody and semantic), and body posture. Linear regressions highlight four main results. E and N dimensions respectively and negatively predict disgust recognition ($R^2 = .09-.14$) and fear perception easiness ($R^2 = .09$). C and O dimensions positively predict reaction time to negative emotions ($R^2 = .33-.42$) and fear recognition ($R^2 = .50$). Results will be discussed considering international literature.

#PRES-18

Title: Neurodiverse profiles in vulnerable children using the Strengths and Difficulties Questionnaire

Authors: Stevenson, N.¹, Gupta, S.², Pandey, R.², Kumari, V.³, Sumich, A.¹, & Heym, N.¹

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Abstract: Pre-existing algorithms and cluster analysis-derived profiles were explored in two Strengths and Difficulties Questionnaire (SDQ) datasets to establish neurodivergent-trait proportions: 1) SDQ-P-parent-rated children (n=121, 3-17 years) UK domestic violence and abuse backgrounds, and 2) SDQ-self-reports from child-workers (n=183, 12-18 years) in India. Profiles were evaluated in relation to i) cross-cohort replicability ii) inter-relational aggression/dysregulated behaviour iii) risks for DVA, wellbeing difficulties and interventional outcomes, and iv) characterisation against psychiatric categories. A dysregulation algorithm effectively delineated children exhibiting poor interventional progress. Clustered SDQ-subscale data revealed five significantly different groups resembling autism /ADHD, callous-unemotional-externalising/internalising groups. These were similar across datasets. MANOVA unveiled significant differences between clusters and t-test/ chi-square yielded significant differences between clusters on DVA risk indices, aggression, wellbeing and interventional outcomes (cohort 1) and in percentage of diagnostic categories within profiles (cohort 2). Recommendations for the algorithms and wider implications of the cluster-derived groups for service provision are discussed.

4. POSTERS

#POSTER-01

Title: The Relationship between Dark triad traits and Home environment among Young adults

Authors: Ghosh, M.¹, Mishra, A.², & Upadhyay, A.³

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Abstract: Dark Triad is considered to be psychological theory, which is also taken into consideration as personality traits, was first published by Delroy L. Paulhus and Kelvin M. Williams in the year 2002. These traits might be conceptually different but research states that these are overlapping. Following are the traits of Dark Triad: Narcissism is conceptualized as lack of empathy, pride, egotism and grandiosity. Machiavellianism can be defined as immorality, unemotionality, high level of self-interest and manipulation. Psychopathy can be considered as antisocial behavioural, impulsively, selfishness and remorselessness. Home environment can be conceptualized as emotional warmth displayed by parents to children stimulating learning experiences in home, such as safety of play, area of cleanliness. The aim of the present study is to investigate whether there is any relationship between Dark Triad traits and Home Environment among young adults.

#POSTER-02

Title: The Prevalence of Personality Disorder Traits Within People Accessing Primary Care Therapy Services and the Impact of These on Therapy Outcomes

Authors: Parkin, L.& Heym, N.

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Abstract: This study aimed to investigate the personality attributes that could be linked with emotional well-being present in people accessing talking therapy via one service commissioned under the Improving Access to Psychological Therapies (IAPT) programme and the impact of these attributes on treatment outcomes. Methods: IAPT clients (N=123) were recruited and asked to complete the PID-5-FBF and SAPAS personality difficulty screeners prior to treatment, in addition to the IAPT standard assessments (PHQ-9, GAD-7, WSAS) collected at referral and completion of treatment. Analyses (linear regression models, t-tests) were conducted to explore associations between SAPAS and PID-5-FBF domains, and the personality difficulties and symptoms severity. Findings: There was a high prevalence of personality difficulties within the IAPT sample and personality trait domains were correlated with SAPAS scores above clinical cut off. Significant associations were found between SAPAS and both PID-5 negative affect and disinhibition domains, along with associations of PHQ-9 with detachment, GAD-7 with negative affect, and WSAS with detachment and disinhibition. Conclusions: There is a high prevalence of personality difficulties within IAPT services, and these difficulties may impact on therapy outcomes, with some personality domains (negative affect and disinhibition) having more of an impact than others. Further research is required to identify effective screeners to use within IAPT services, whilst also being mindful of the current lack of specialist intervention for personality difficulties.

#POSTER-03

Title: Not so cruel after all? Dark Tetrad and Emotional Intelligence as predictors of Punitive Attitudes

Authors: Bajcsi, N., & Fino, E.

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Abstract: Punishment and reintegration are key in democratic systems. Decision-making and attitudes towards harsh punishment and social constructive approaches (e.g., reintegration, restoration) can be influenced by several factors, including societal and individual characteristics. Specifically, previous research has shown individual differences in punitive attitudes to be associated with 'broadband' personality traits, with the relationship being mediated by Authoritarianism and Social Dominance Orientation. In the present exploratory study (N = 66), we tested a model including 'dark' traits (Narcissism, Machiavellianism, Psychopathy, Sadism), Trait Emotional Intelligence, Social Dominance, and Authoritarianism as predictors of punitive attitudes. We hypothesised that Dark Tetrad would be positively associated with endorsement of harsh punishment and negatively with endorsement of constructive approaches, whilst Emotional Intelligence would negatively be associated with endorsement of harsh punishment and positively with endorsement of constructive approaches. We also hypothesised that Social Dominance and Authoritarianism would mediate such paths, in line with findings from previous research. We found that Psychopathy correlated positively with endorsement of reintegration, and negatively with harsh punishment, whereas Trait Emotional Intelligence correlated negatively with endorsement of reintegration. Finally, no significant mediation was found. In conclusion, 'dark' personality traits and Trait Emotional Intelligence may play a significant role in punitive attitudes. Implications of the results for research and practice will be discussed.

#POSTER-04

Title: Young researchers on Bachelors degree: Personal Testimonies

Authors: Claro, R., & Nogueira, M.

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Abstract: Since the number of researchers in Portugal increased by 28% in the last 10 years, the importance of initiatives that promote entrance into the scientific world also for Bachelor students, such as CIEL, is growing. The first part of academic life - the Bachelor's, is crucial to develop technical knowledge, form significant bonds with peers and professors, be inspired by others, and inspire others. The opportunity to conduct research and to enter the scientific world and its communication this early requires some skills that are not only developed in lectures but other extracurricular activities, like scientific events. For instance, know how to work in multicultural groups, problem resolution, and be scientifically updated. To gain this kind of knowledge are required more scientific events designed and organised specifically by and for undergraduate students that promote students' engagement in the scientific world, empowerment and capacity building. With this presentation, we aim to raise awareness about the importance of events like CIEL for the younger and the less "skilled" students to be able to participate and organise.

#POSTER-05

Title: The intergenerational transfer of slow life history strategies via parental values: Surviving, thriving, and the Dark Triad traits

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Different families, have different value systems which may encourage people to engage in different life history strategies. We examined (N = 271; Mage = 20.36, SD = 4.20, 82.3% women) the correlations between the values promoted during one's childhood (retrospectively reported), the Dark Triad traits, and life history strategies. Surviving and thriving values promoted during childhood were correlated with slow life history strategies. Those high in narcissism reported exposure to surviving and thriving values during their childhood; the opposite was the case for those high in psychopathy. The link between thriving values promoted in childhood and slow life history strategies was mediated by narcissism, such that individuals that were exposed to thriving values in their childhood are high in narcissism and are characterized by slow life history strategies. These findings should help us acknowledge the ingredients that dictate how people adapt to their environment and live their life.

5. Workshop

Title: OSF workshop by Darren Rhodes & Julia Ayache

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NTU Psychology, Nottingham Trent University

The Open Science movement is nowadays crucial to improve research practices. Beyond addressing the replicability crisis, Open Science is a political stance to make science open and transparent to everyone. This workshop aims to introduce Early Career Researchers (ECR) to Open Science practices through sharing their own experiences and practices.

CONTACT LIST

Human Neurobehavioural Laboratory

<http://www.fep.porto.ucp.pt/en/HNL>

International Affect, Personality and Embodied Brain (APE) research network

<https://apenetwork.wordpress.com/>

NTU APE research group

<https://www.ntu.ac.uk/research/groups-and-centres/groups/affect,-personality-and-the-embodied-brain-ape>