



**IV INTERNATIONAL
CONGRESS CINEICC**

Book of Abstracts

Innovations in fundamental and
applied psychological science



Book of Abstracts

IV International Congress CINEICC

Innovations in fundamental and applied psychological science

**University of Coimbra, Faculty of Psychology and Educational Sciences
Coimbra, Mars-April 2023**

Scientific Committee

Allessio Fracasso¹, Ana Ganho Ávila^{2,3}, Carlos Carona^{2,3}, Cláudia Cavadas⁴, Chris Irons⁵, Christine Padesky⁶, Daniela Valério^{2,3}, David Gillanders⁷, Diana Ribeiro da Silva^{2,3}, James Kirby⁸, Jéssica Fish⁹, Joaquim Pires Valentim^{2,3}, Jorge Osma¹⁰, José Pinto-Gouveia^{2,3}, Luís Pires^{2,3}, Margarida Pedroso Lima^{2,3}, Maria do Céu Salvador^{2,3}, Óscar Gonçalves^{2,3}, Pieter du Toit¹¹, Sérgio Carvalho^{2,3}, Shailja Dixit¹², Sofia Major^{2,3}, Susan Wenze¹³, Thomas Parsons¹⁴, Todd Farchione¹⁵ & Zohar Tal^{2,3}.

Affiliation

¹Centre for Cognitive Neuroimaging, University of Glasgow, Scotland | ²CINEICC | ³FPCE-UC

⁴University of Coimbra | ⁵Balanced Minds, UK | ⁶The Center for Cognitive Therapy, California

⁷University of Edinburgh, UK | ⁸University of Queensland, Australia

⁹Institute of Health and Wellbeing, University of Glasgow, UK | ¹⁰University of Zaragoza, Spain

¹¹Brain Injury Rehabilitation Trust, UK | ¹²Curio Digital Therapeutics, USA

¹³Lafayette College, USA | ¹⁴Center for Affective Neurotechnologies, University of North Texas, USA

¹⁵Unified Protocol Institute, Center for Anxiety & Related Disorders, Boston University, USA

Organising Committee

Ana Fonseca, Ana Rita Silva, André Peres, Bianca Geraldo, Cláudia Ferreira, Cláudia Melo, Daniel Rijo, Diogo Carreiras, Helena Moreira, João Pedro Leitão, Jorge Almeida, Marcela Matos, Maria Cristina Canavarro, Mariana Coimbra, Marisa Lima e Pedro Palhares.

IV International Congress CINEICC

BEST SCIENTIFIC PAPER

Session Topic: Mental Health & Well-being

Corroborating Nurses' Self-reports of COVID-19-Related Post-Traumatic Growth by Significant Others

Authors: Catarina Alves Vitorino¹, Maria Cristina Canavarro¹, Maria Inês Caçador¹ & Carlos Carona¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

5 BEST ORAL PRESENTATIONS

Session Topic: Cognitive Neuroscience

Age-related impairments in decision-making under uncertainty are associated with deficits in arousal responses

Authors: Maria J. Ribeiro^{1,2}, Nádía Canário¹, Hugo Quental¹, Miguel Castelo-Branco^{1,2}, Joshua Calder-Travis³, Ruud L. van den Brink³ & Tobias H. Donner³

Affiliations:

¹CIBIT-ICNAS, University of Coimbra, Portugal

²Faculty of Medicine, University of Coimbra, Portugal

³Computational Cognitive Neuroscience Section, Department of Neurophysiology and Pathophysiology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Session Topic: Psychological Assessment

Validation and reliability of the Portuguese version of the Fear of Missing Out Scale (FoMOs-P)

Authors: Filipa Almeida^{1,2}, Luís Pires^{1,2,3}, Daniel R. Marques^{2,4} & Ana Allen Gomes^{1,2}

Affiliations:

¹University of Coimbra, Faculty of Psychology and Educational Sciences, Coimbra, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention, Coimbra, Portugal

³University of Beira Interior, Faculty of Human and Social Sciences, Department of Psychology and Education, Covilhã, Portugal

⁴Department of Education and Psychology, University of Aveiro, Aveiro, Portugal

Session Topic: Cognitive Neuroscience

Multivariate analysis of multimodal brain structure properties predicts individual differences in risky and intertemporal preferences

Authors: Fredrik Bergström^{1,2}, Guilherme Garcia^{3,4}, Caryn Lerman⁵ & Joseph W. Kable⁵

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Department of Psychology, University of Gothenburg, Sweden

³Idiap Research Institute, Martigny, Switzerland

⁴École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

⁵Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA 19104, USA.

Session Topic: Neuropsychology

Relationship Between Arsenic Levels in Hair and Cognitive Performance in Adults and Older Adults

Authors: Bianca Gerardo^{1,2,3}, Marina Cabral Pinto³, Joana Nogueira^{1,2}, Agostinho Almeida⁴, Mário R. Simões^{1,2} & Sandra Freitas^{1,2}

Affiliations:

¹ Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC) - Faculty of Psychology and Educational Sciences of the University of Coimbra, Portugal

²Psychological Assessment and Psychometrics Laboratory (PsyAssessmentLab) - Faculty of Psychology and Educational Sciences of the University of Coimbra, Portugal

³Geobiotec Research Centre - Department of Geosciences of the University of Aveiro, Portugal

⁴Laboratory of Applied Chemistry - Faculty of Pharmacy of the University of Porto, Portugal

Session Topic: Psychological Assessment

Validation and psychometric properties of the Montgomery- Asberg Depression Scale - Self-Report for European Portuguese

Authors: Ana Tomás¹, Ana Ganho-Ávila^{1,2}, Raquel Guiomar^{1,2}, Mariana Moura-Ramos^{1,2,3} & Paula Vagos^{1,2,4}

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

³Reproductive Medicine Unit, Coimbra Hospital and University Center, Praceta Prof. Mota Pinto, 3000-075, Coimbra, Portugal

⁴Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique, Porto, Portugal

5 BEST POSTER FORMAT PRESENTATIONS

Poster Presentation #30

REMINDER4Care: A protocol for a cluster randomized controlled trial of a dementia risk reduction program

Authors: Catarina Belo Baptista¹, Ana Rita Silva¹, Margarida Pedroso Lima¹ & Rosa Marina Afonso^{2, 3}

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

²Universidade da Beira Interior, Portugal

³CINTESIS, Faculty of Medicine, Porto, Portugal

Poster Presentation #88

Association between perinatal mental health during COVID-19 pandemic and Brazilian children subsequent development

Authors: Simone Ávila¹, Vera Lúcia Mateus^{2,3} & Ana Alexandra Osório¹

Affiliations:

¹Developmental Disorders Program and Mackenzie Center for Research in Childhood and Adolescence, Center for Biological and Health Sciences, Mackenzie Presbyterian University, São Paulo, Brazil

²Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique, Porto, Portugal

³ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Poster Presentation #70

Thinking Eyes - an EEG study on the link between eye movements and memory

Authors: Artur Pilacinski^{1,2}, Maria João Matos² & Gabriel Besson²

Affiliations:

¹Klaes Lab Ruhr-University Bochum

²PROACTION Lab, University of Coimbra

Poster Presentation # 14

Big Five personality aspects predict individual differences in utilitarian moral choice

Authors: Patrícia Fernandes¹, Sangil Lee², Inês Duarte¹, Ema Leitão¹, Salomé Mateus¹, Daniel Granja¹, Diego Prade¹, Sara Chacim¹, Joseph W. Kable³, Liad Mudrik^{4,5}, Uri Maoz^{6,7,8,9} & Fredrik Bergström^{1,10}

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Haas School of Business, University of California, Berkeley, CA 94720

³Department of Psychology, University of Pennsylvania, Philadelphia, USA

⁴School of Psychological Sciences, Tel Aviv University, Israel

⁵Sagol School of Neuroscience, Tel Aviv University, Israel

⁶Department of Psychology, Chapman University, Orange, CA 92866, USA

⁷Institute for Interdisciplinary Brain and Behavioral Sciences, Chapman University, Irvine, CA 92618, USA

⁸Anderson School of Management, University of California Los Angeles, Los Angeles, CA 90095, USA

⁹Division of Biology and Biological Engineering, California Institute of Technology, Pasadena, CA 91125, USA

¹⁰Department of Psychology, University of Gothenburg, Sweden.

Poster Presentation #69

Intuitive biomechanics: What people know about how their bodies can move

Authors: Artur Pilacinski^{1,2} & Maria Gabriella Andrietta²

Affiliations:

¹Klaes Lab, Ruhr-University Bochum, Bochum, Germany

²Proaction Lab, University of Coimbra, Coimbra, Portugal

Index

SYMPOSIA.....	20
Symposium #1.....	20
The many facets of cognitive decline in aging: a multimodal perspective.....	20
Symposium #2.....	22
Concerted studies on morningness-eveningness and sleep-wake patterns, cognition, and emotion, in children and adolescents	22
Symposium #3.....	24
Real minds in virtual worlds. Virtual reality as a tool in cognitive research	24
Symposium #4.....	26
Mapping multiple dimensions in the human neocortex	26
Symposium #5.....	28
The neural bases of object knowledge	28
Symposium #6.....	30
Foster Families and Residential Care Settings: from research to practice	30
Symposium #7.....	32
(Self)Compassion-based interventions in forensic settings of youth.....	32
Symposium #8.....	34
Understanding Intimate Partner Violence: New contexts and novel approaches.....	34
Symposium #9.....	36
Sexual violence among college students and adolescents: Prevalence, perpetrators' features, and prevention programs.....	36
Symposium #10	38
Challenges and Protective Factors in Biological and Adoptive Parenthood: From Exploring the Processes to the Intervening with Parents	38
Symposium #11	40
Grief, society and COVID-19 pandemic: adjustment processes.....	40
Symposium #12	42
Impact of the COVID-19 pandemic on women's perinatal experiences: findings of the Riseup-PPD-COVID-19 international study.....	42
Symposium #13	45
We need to talk about sexual distress: multiple methodological approaches to broaden its understanding.....	45
Symposium #14	47
Parenting and mental health in community and at-risk families.....	47
Symposium #15	49
Current Issues and Perspectives in Perinatal Mental Health Promotion.....	49
Symposium #16	52
Malinger in Clinical and Forensic Neuropsychological Assessment: Instruments with	

validation studies in Portugal.....	52
Symposium #17	54
The world is changing! The remote provision of (neuro)psychological services.....	54
Symposium #18	57
New developments in the adaptation and validation of psychological tests in Portugal	57
Symposium #19	59
Behavior Rating Inventory of Executive Function (BRIEF): Portuguese validation studies.....	59
Symposium #20	61
Assessment in mental health: Recent validations and novel contributions for CBT research and practice.....	61
Symposium #21	64
Neuropsychology and dementia risk reduction: study protocols and outcome measures.....	64
Symposium #22	66
Promoting adjustment and wellbeing in the pathways to parenthood: using ICT in the prevention and treatment of mental health problems.....	66
Symposium #23	69
The Unified Protocol for Transdiagnostic Treatment of Emotional Disorders in Children: Research and New Developments in Portugal and in the United States of America.....	69
Symposium #24	71
Ambivalence Toward Change and Resistance: The interplay between intra- and interpersonal tensions in psychotherapy.....	71
Symposium #25	73
Applications of the Unified Protocol using technology tools for the prevention and treatment of emotional disorders.....	73
Symposium #26	75
Cognitive-behavioral therapy for insomnia (CBT-I): Current and new approaches.....	75
Symposium #27	77
Innovations in contextual-behavioral approaches: structured interventions for different populations, in different settings and with different delivery formats.....	77
Symposium #28	80
Compassion and the promotion of psychological and physical wellbeing and health: outcomes in different settings and populations.....	80
Symposium #29	82
The Unified Protocol for the Transdiagnostic Treatment of Emotional Disorders in Europe: From acceptability to efficacy studies.....	82
ORAL PRESENTATIONS.....	85
Oral Presentation Session #1	85

Topic: Psychological Assessment.....	85
Talk 1 - Validation and reliability of the Portuguese version of the Fear of Missing Out Scale (FoMOs-P).....	85
Talk 2 - Forensic Professionals' Stress Inventory (FPSI): Development and psychometric properties.....	86
Talk 3 - A regression-based procedure for diurnal type estimation – Exemplifying with the Composite Scale of Morningness (CSM).....	87
Talk 4 - The development of the Battery for the Assessment of Cognitive Reserve (BARC) for the Portuguese population	89
Oral Presentation Session #2	90
Topic: Psychological Assessment.....	90
Talk 1 - Maladaptive Daydreaming Scale (MDS-16): A Portuguese cross-sectional validation study in university students	90
Talk 2 - Development and psychometric testing of the Optimism and Pessimism scales among older adults	91
Talk 3 - Validation and psychometric properties of the Montgomery- Asberg Depression Scale - Self-Report for European Portuguese	92
Talk 4 - Measuring delinquency: Methodological experiments on how to improve the accuracy of self-reports of offending	93
Oral Presentation Session #3	95
Topic: Psychological Interventions	95
Talk 1 - “#KindGirlsInACTion”: A School-based Programme for Adolescent Girls	95
Talk 2 - Compassion, acceptance, and mindfulness-based intervention for adolescents' test anxiety (AcAdeMiC): a non-randomized mixed-method feasibility study.....	96
Talk 3 - MEDITAGING-Luxembourg: A Study Protocol of a RCT verifying the MBSR Effects on Older Portuguese-speaking Migrants	97
Talk 4 - Stress-busting for Families - an adapted Mindfulness Course benefitting vulnerable parents living in deprived urban areas	98
Oral Presentation Session #4	100
Topic: Psychological Interventions	100
Talk 1 - CT@TeenSAD: Changes throughout treatment modules of remotely delivered cognitive therapy for adolescent SAD.....	100
Talk 2 - ACT@TeenSAD: Changes throughout treatment modules of remotely delivered ACT for adolescent SAD	101
Talk 3 - Implementation project to promote social and emotional skills in 5th grade students – pontes project.....	102
Talk 4 - An affirmative contextual therapies-based group intervention for sexual minorities (Free2Be): Development and preliminary feasibility results	103

Oral Presentation Session #5	105
Topic: Mental Health & Well-being	105
Talk 1 - Mindful Parenting Within the Association Between Preadoption Maltreatment and Adoptees' Emotional and Behavioral Difficulties	105
Talk 2 - Exploring gender differences on the association between adoptive parents' psychological resources and parenting stress.	106
Talk 3 - The role of depression and anxiety symptoms on cognition in motherhood: Systematic Review and Meta-Analysis	107
Oral Presentation Session #6	109
Topic: Mental Health & Well-being	109
Talk 1 - Physician-patient communication: Associations with patients' and physicians' adjustment outcomes – Preliminary findings from a systematic review	109
Talk 2 - Volunteering in mental health care in Portugal - a focus group study.....	110
Talk 3 - Sleep problems among Portuguese patients on renal replacement therapy	111
Talk 4 - Psychological Quality of Life in Neurodegenerative Conditions: The Influence of Clinical Factors, Experiential Avoidance, and Engaged Life	113
Oral Presentation Session #7	115
Topic: Mental Health & Well-being	115
Talk 1 - Effects of healthy lifestyles and social media usage on social anxiety in social media users.....	115
Talk 2 - Internet dependency and depressive symptoms during the COVID-19 pandemic: the moderating effect of mindfulness.....	116
Talk 3 - Relationship between mindful parenting and children's depressive symptoms: the mediating effect of children's self-compassion	117
Talk 4 - Corroborating Nurses' Self-reports of COVID-19-Related Post-Traumatic Growth by Significant Others	118
Talk 5 - Working by the body clock: Lessons from COVID-19	119
Oral Presentation Session #8	121
Topic: Mental Health & Well-being	121
Talk 1 - Infertility-related Stress and Adaptation to Infertility Context: The Role of Psychological Inflexibility.....	121
Talk 2 - Development of at-distance and online parental intervention program promoting parental involvement in elementary school parents	122
Talk 3 - The role of competitive mentality on insomnia	123
Oral Presentation Session #9	125
Topic: Child & Adolescent Psychology.....	125
Talk 1 - The association between family functioning and children's social emotional and behavioural problems: The role of co-parenting	125

Talk 2 - Inclusive education: social skills, behavioral problems, and academic competence of students with intellectual disabilities	126
Talk 3 - Development of Socio-Emotional Skills Through Play in Children From 7 to 12 Years Old.....	127
Talk 4 - Neonatal and social factors associated with language, memory and learning in children born very preterm.....	128
Oral Presentation Session #10	130
Topic: Child & Adolescent Psychology.....	130
Talk 1 - Self-concept among polyvictimized adolescents: a comparative study between residential care and community samples	130
Talk 2 - Portuguese version of the Self-Rating Scale for Pubertal Development (SSPD): Psychometric and normative data in a large sample of (pre)adolescents	131
Talk 3 - Children and adolescents mental health in primary health care	132
Talk 4 - Cognitive distortions mediate the relationship between adverse childhood experiences and juvenile delinquency	133
Oral Presentation Session #11	135
Topic: Neuropsychology.....	135
Talk 1 - Relationship Between Arsenic Levels in Hair and Cognitive Performance in Adults and Older Adults.....	135
Talk 2 - Preliminary results on the efficacy of an outpatient neuropsychological rehabilitation program following acquired brain injury.....	136
Talk 3 - Prevalence of Mild Cognitive Impairment and Dementia in a Clinical Sample.....	137
Talk 4 - The Mini-Linguistic State Examination (MLSE): development of the European-Portuguese version of a comprehensive language test.....	138
Oral Presentation Session #12	140
Topic: Forensic Psychology	140
Talk 1 - Emotion processing and psychopathy among female offenders: A Systematic Review.....	140
Talk 2 - Child Welfare and Protection Systems: Complexity is necessary!.....	141
Talk 3 - Forensic interview techniques in child sexual abuse cases: A scoping review.....	142
Talk 4 - AdapT – A Manualized Program for Remanded Prisoners.....	143
Oral Presentation Session #13	144
Topic: Educational Psychology.....	144
Talk 1 - Exploring the Mediating Role of Self-Compassion between Dispositional Mindfulness and Mindfulness in Teaching	144
Talk 2 - Relationship of educational psychologists knowledge, self-efficacy, and attitudes in inclusive education promotion: study protocol	145

Talk 3 - SoMovED Project: A new opportunity for higher education	146
Talk 4 - Relating Transcription, Executive Functions, and Text Quality in Grades 2-3: A Cross-Lagged Panel Analysis	147
Oral Presentation Session #14	149
Topic: Educational Psychology	149
Talk 1 - Hope: A mediator between school climate and teachers' readiness for inclusive-ness in higher education	149
Talk 2 - Development of a private tutoring program to promote self-regulation in students	150
Talk 3- Mental Health Ambassadors in Higher Education	151
Talk 4 - Validation of the Bedtime Routines Questionnaire: An Exploratory Study with Portuguese Preschoolers	152
Oral Presentation Session #15	154
Topic: Social & Political Psychology	154
Talk 1 - Change in continuity' or a new landscape? Values in Salazar's speeches and current Portuguese society	154
Talk 2 - Understanding housing social representations and practices in Portugal: A mixed methods approach	155
Talk 3- Social representations of suicide on the internet: an analysis based on comments from Twitter users	156
Talk 4 - Work Representations and Meaning of Work: A Study with Education Professionals in Mozambique	157
Oral Presentation Session #16	159
Topic: Social & Political Psychology	159
Talk 1 - Emotions and Populism: (im)Possibilities? in a growing research agenda	159
Talk 2 - Understanding populist polarisation through emotion theories	160
Talk 3- The work of journalists and commentators in the transmission of emotion narratives of political parties	161
Talk 4 - Representations of European integration in history textbooks: text, images and identification processes	162
Oral Presentation Session #17	163
Topic: Cognitive Neuroscience	163
Talk 1 - Multivariate analysis of multimodal brain structure properties predicts individual differences in risky and intertemporal preferences	163
Talk 2 - Age-related impairments in decision-making under uncertainty are associated with deficits in arousal responses	164
Talk 3- Alzheimer's disease classification using Deep Learning on 2D MRI images	165
Talk 4 - Multimodal Neurostimulation Program in older people, residents in nursing	

home, who have moderate cognitive impairment- Protocol	166
POSTER PRESENTATIONS	168
Poster Presentation #1	168
Psychometric properties of the Difficulties in Emotion Regulation Scale (DERS) in Spanish older adults. Preliminary results	168
Poster Presentation #2	169
Facilitators and barriers to adherence to medical recommendations among adolescents with cancer: A systematic review	169
Poster Presentation #3	170
The influence of synchrony/asynchrony effect on eyewitness memory performance... ..	170
Poster Presentation #4	171
The Unified Protocol for the Transdiagnostic Treatment of Emotional Disorders in Chil- dren: A Case Study	171
Poster Presentation #5	172
CovMIND - An online neurotherapeutic approach proposal for Generalized Anxiety Disorder in the COVID-19 context	172
Poster Presentation #6	174
Positive and adverse experiences in childhood and symptomatology in adulthood: Poly- victims and non-poly-victims.....	174
Poster Presentation #7	175
European Portuguese Version of the Stimulant Relapse Risk Scale (SRRS): Preliminary psychometric characterization.....	175
Poster Presentation #8	176
Relation between subjective and objective (working) memory in young and older adults	176
Poster Presentation #9	177
Integration of body and brain signals to decode neural responses to objects.....	177
Poster Presentation #11	178
use of the internet in the pandemic: impact on emotional regulation and school perfor- mance of adolescents.....	178
Poster Presentation #12	179
Neural correlates of joint attention in infants aged up to 24 months: a systematic review..	179
Poster Presentation #13	180
Efficacy of cognitive rehabilitation programs for cancer-related cognitive impairment: Systematic review of randomized controlled trials.....	180
Poster Presentation #14	181
Big Five personality aspects predict individual differences in utilitarian moral choice	181
Poster Presentation #15	183
Development and preliminary feasibility testing of a brain health education program for	

individuals at risk of dementia – the GPS-C.....	183
Poster Presentation #16	184
Study Protocol for a Randomized Controlled Trial Assessing the Efficacy of a Cognitive- Emotional Intervention Program for Homebound Older Adults.....	184
Poster Presentation #17	185
STOP - Sooth, Transform, Organize, Produce: development and preliminary results of a procrastination intervention group.....	185
Poster Presentation #18	186
Heterosexism Experiences and Psychological Quality of Life in a Portuguese LGBTQ+ Population Sample: Effect of Mediating Variables	186
Poster Presentation #19	188
Development and acceptability test of a gender and dual-parent sensitive mindful pa- renting post-adoption intervention	188
Poster Presentation #20	189
Influence of community and family factors on substance consumption among Portu- guese youth	189
Poster Presentation #21	190
Psychometric properties of the Short-form of the Positive and Negative Affect Scale for Children (PANAS-C) in Portuguese children with and without emotional disorders	190
Poster Presentation #22	191
The first COVID-19 lockdown: Useful activities and emotion regulation processes.....	191
Poster Presentation #23	192
Towards an Artificial Intelligence model to automatically infer patient's mental states associated with engagement in psychological interventions	192
Poster Presentation #24	193
Development and evaluation of Programa Cuida: Positive educational practices program for social educators from residential care institutions in Brazil	193
Poster Presentation #25	194
Are subjective memory complaints (un)related to working memory performance? A study with Portuguese young- and older-adults.....	194
Poster Presentation #26	195
Is there a relationship between the Wisconsin Card Sorting Test and specific tests from BANC?	195
Poster Presentation #27	196
Validation of the Motivation for PhD Studies Scale: Preliminary psychometric properties among Portuguese doctoral students.....	196
Poster Presentation #28	198
Personality Styles and Attachment Patterns in Men with Premature Ejaculation	198
Poster Presentation #29	199
NIH Toolbox Cognition Battery in Aging:the European Portuguese App.....	199
Poster Presentation #30	200
REMINDER4Care: A protocol for a cluster randomized controlled trial of a dementia	

risk reduction program	200
Poster Presentation #31	201
Prevention in mental health: Development and acceptability of a brief transdiagnostic intervention (UP-PREVENT).....	201
Poster Presentation #32	202
Sexual Violence in Sports: A Systematic Review	202
Poster Presentation #33	203
Development and Efficacy Study of a CBT-ACT Enhanced Treatment for OCD: Study protocol	203
Poster Presentation #34	205
Faking a smile: The effect of masks in children s Duchenne smiles recognition	205
Poster Presentation #35	206
Where we all meet: ACT transdiagnostic approach to adolescents with different anxiety disorders	206
Poster Presentation #36	207
Chronotype and time-of-day effects on attention to facial features: Evidence from eye tracking	207
Poster Presentation #37	208
Semantic features of manipulable objects: a feature selection study	208
Poster Presentation #38	210
Positive psychology, well-being and meaning: Reflections on the promotion of mental health in educational contexts	210
Poster Presentation #39	211
Portuguese Judges' Perceptions regarding female-perpetrated rape against adult men: a qualitative study.....	211
Poster Presentation #40	212
COVID-19 and Intimate Relationships: Stress perception, Quality of Relationship, Fa- mily Functioning and Online Infidelity Behaviors	212
Poster Presentation #41	213
Visual adaptation and negative hysteresis in cone pathways dominates even in short memory and is abolished by perceptual binding	213
Poster Presentation #42	214
Low Self-Control Psychopathic Traits Scale: Development and validation study in a university student sample	214
Poster Presentation #43	215
Diurnal type (DT) distribution in a Portuguese sample – Influence of age and sex	215
Poster Presentation #44	216
Study protocol for the RCT of the Mind programme: An ACT intervention in breast cancer	216
Poster Presentation #45	218
O (des)ajustamento parental face à doença prolongada de um filho: O papel da auto- compaixão e do suporte social	218

Poster Presentation #47	219
Institutional Ageism Perception in Health and Social Contexts Scale (PIICS): Portuguese Validation Studies.....	219
Poster Presentation #48	220
On hemispheric specialization: a systematic review and meta-analysis of orbitofrontal activity during social games cooperation	220
Poster Presentation #49	221
Association between risk factors, protective factors and suicidal behaviors in patients with severe mental disorder.	221
Poster Presentation #50	222
Validation Study of the Reading the Mind in the Eyes Test and Ekman's Faces Test in a sample of patients with Multiple Sclerosis: preliminary results	222
Poster Presentation #51	223
The Role of Cognitive Reserve in Moderating the Cognitive Effects of Chemotherapy in Breast Cancer	223
Poster Presentation #52	224
Emerging adults' subjective experience of self-esteem: Interviews with a demographically diverse sample.....	224
Poster Presentation #53	225
Write 'n' Let Go 2.0: Improving university students' distress through an internet-based writing intervention.	225
Poster Presentation #54	226
Childhood adversities, family context and poly victimization in an adult Brazilian sample	226
Poster Presentation #55	227
Mentoring Support Educational Policy: What predicts its success?	227
Poster Presentation #56	228
The psychological impact, among Portuguese adults, of the COVID-19 pandemic during the first confinement	228
Poster Presentation #57	229
Age as a predictor of Working Memory Performance.....	229
Poster Presentation #58	230
Adaptation and validation of the Female Sexual Subjectivity Inventory (FSSI) in a Sample of the Portuguese Population.....	230
Poster Presentation #59	231
Sexual Attraction and Self-Efficacy in Women with Sexual Pain	231
Poster Presentation #60	232
Comparing Full-body Interaction with Tablet-based Cognitive Training: feasibility, acceptability and impact assessment in psychiatric inpatients.....	232
Poster Presentation #61	233
Firefighters through a Mental Health Perspective - from Prevention to Intervention..	233
Poster Presentation #62	235

School Engagement Conceptualizations, Definitions and Dimensions: A Systematic Map Review	235
Poster Presentation #63	236
The Clinical Interview for Bipolar Disorder (CIBD): Expert panel evaluation	236
Poster Presentation #64	237
Acceptability and preferences regarding cognitive rehabilitation programs for cancer-related cognitive impairment in breast cancer survivors	237
Poster Presentation #65	238
Depression and Life satisfaction: The mediating role of repetitive negative thinking, brooding and reflection	238
Poster Presentation #66	239
Mental health at university: Assessing needs, preferences, and adequacy of an internet-based Unified Protocol intervention	239
Poster Presentation #67	241
Health Professional Communication Skills Scale (HP-CSS): Psychometric properties of the European Portuguese version	241
Poster Presentation #68	242
Protocol of the validation of the FCR7 for Portuguese Adolescents and Young Adults with Cancer	242
Poster Presentation #69	243
Intuitive biomechanics: What people know about how their bodies can move	243
Poster Presentation #70	244
Thinking Eyes - an EEG study on the link between eye movements and memory	244
Poster Presentation #71	245
Body dysmorphia: Does the effect of cognitive fusion overpower body appreciation?	245
Poster Presentation #72	246
Fatigue phenotypes in cancer and noncancer Portuguese populations	246
Poster Presentation #73	247
The role of work-related interests and values in the construction of career identity in adolescence	247
Poster Presentation #74	248
A Validation Study of the Female Sexual Distress Scale Revised (FSDS-R) in the Portuguese Population	248
Poster Presentation #75	249
Confirmatory Factor Analysis of the Portuguese Version of the Mindfulness in Teaching Scale	249
Poster Presentation #76	251
Spatiotemporal neural dynamics of motor manipulation, function, and visual properties in visual tool processing	251
Poster Presentation #77	252
Impaired brain responses in hippocampus and memory systems in type 2 diabetes without cognitive impairment	252

Poster Presentation #78	253
KindMap – an e-mental health intervention for people facing infertility: A feasibility study protocol	253
Poster Presentation #79	254
Mental health in the university stage: A descriptive study on mental health in Spanish university students.....	254
Poster Presentation #81	255
The Brief Peer Conflict Scale: Psychometric characterization across Portuguese adolescents and young adults.....	255
Poster Presentation #82	256
The impact of sexual subjectivity and personality factors on women with sexual pain.....	256
Poster Presentation #83	257
Mental Health in Higher Education Students: from Prevention to Treatment.....	257
Poster Presentation #84	258
BRIEF-A: Características psicométricas numa amostra em contexto médico-lega	258
Poster Presentation #85	259
Dark Factor of Personality Scale (D): Validation studies in a Portuguese university students' sample	259
Poster Presentation #86	260
Assessing athletes' perception of coach-related critical attitudes: validation of the scale to adolescent athletes	260
Poster Presentation #87	262
The effect of physical activity on pupil-linked arousal modulation during visual motion discrimination tasks	262
Poster Presentation #88	263
Association between perinatal mental health during COVID-19 pandemic and Brazilian children subsequent development.....	263
Poster Presentation #89	264
The impact of education in the primacy and recency effects in cognitively healthy aging.....	264
Poster Presentation #90	265
The relationship between intelligence and executive functions in children	265
Poster Presentation #91	267
Medical support during pregnancy and mother-infant bonding: A serial multiple mediation model of satisfaction with childbirth and postpartum posttraumatic stress symptoms	267
Poster Presentation #92	268
Explaining anxiety symptoms in adoptive parents: Do coparenting and dyadic adjustment play a similar role?.....	268
Poster Presentation #93	269
A Validation Study of the Sexual Self-Efficacy Scale for Female Functioning in the Portuguese Population	269

Poster Presentation #94	270
Representations of approaches to health and wellbeing as an issue for public understanding of science	270
Poster Presentation #95	271
The longitudinal impact of psychological flexibility and compassion on mother-baby bonding: Care4mmies study protocol.....	271
Poster Presentation #96	273
Neural correlates of joint attention in infancy: an fNIRS study protocol	273
Poster Presentation #98	274
Representations on Vaccines and Children's Vaccination: A Psychological Study on Mother's Representations, Values and Decision-Making Styles.....	274
Poster Presentation #99	275
Mental health in veterinary professionals in Portugal.....	275
Poster Presentation #100	276
Cognitive functioning and Decision-making in Healthcare: Construction of the Capacity Assessment Instrument – Health (CAI-Health)	276

SYMPOSIA

Symposium #1

The many facets of cognitive decline in aging: a multimodal perspective

Chair: André Salles Cunha Peres

Authors: Ana Rita Silva¹, Carla Pais-Vieira², Joaquim Cerejeira³, Sara Ferreira^{4,5} & Jorge Almeida⁶

Affiliations:

¹Neuropsychological Assessment and Ageing Processes (NAAP), CINEICC-FPCE, University of Coimbra, Portugal.

²Center for Interdisciplinary Research in Health (CIIS), Institute of Health Sciences, Portuguese Catholic University (Porto), Portugal.

³Centre for Innovative Biomedicine and Biotechnology (CIBB), Faculty of Medicine of the University of Coimbra, Portugal.

⁴Neuroplasticity and Movement Control Research Group, Rehabilitation Research Institute (REVAL), University of Hasselt, Belgium.

⁵Movement Control and Neuroplasticity Research Group, Department of Movement Sciences, KU Leuven, Belgium

⁶Proaction Lab - Perception and Recognition of Objects and Actions Laboratory, CINEICC-FPCE, University of Coimbra, Portugal.

Abstract

Dementia is one of the leading causes of incapacitation in the elderly. Usually, it takes decades to manifest and goes through different stages, commonly, preclinical, Mild Cognitive Impairment (MCI), and finally, Dementia, where the individuals can't perform their daily tasks without help. Detecting the abnormal cognitive decline in early stages is crucial for prompting medical intervention that will directly impact the quality of life and well-being of all patients, families, and society. Physiologically, abnormal cognitive decline is associated with biochemical, structural, and functional changes in the brain, and this reflects in problems of memory, reasoning, attention, calculus, visuospatial abilities, ability to solve problems, and personality changes. Therefore, in-depth exploration of neuropsychological and neurobiological processes in cognitive aging and neurodegeneration can contribute to the early detection of cognitive impairment. In this symposium, we will discuss recent behavioral, biomolecular, anatomical, and functional findings that underlie normal and abnormal cognitive decline. This is a unique opportunity to bring together experts who approach cognitive decline from different perspectives to discuss the topic.

Keywords: Aging; Cognitive decline; Early detection; Neural correlates; Biomarkers

Ana Rita Silva in her talk “Dementia risk scores: feasibility, utility, and potential of application in dementia risk reduction studies” will discuss the main instruments for assessing the risk of dementia in the elderly population, their suitability in different health contexts, and will present preliminary validation results of the instrument “Lifestyle for BRAin Health” (LIBRA) for the Portuguese population.

In the talk “Blood-based biomarkers for early detection of cognitive decline and dementia” Carla Pais-Vieira will discuss the state of the art of blood biomarkers as an auxiliary tool in dementia diagnosis and its implications in the early detection of cognitive decline.

In the talk “Molecular markers of neuroinflammation in patients with cognitive impairment”, Joaquim Cerejeira will show his recent findings in Positron Emission Tomography studies in which elderly people with dementia have an altered neuroinflammatory response to acute systemic bacterial infection.

Sara Ferreira will present the talk “Neural mechanisms underlying processing speed in healthy older adults”, where she will discuss how anatomical and functional brain connectivity can influence processing speed in the aging population.

To close the session, in his talk “The cerebellum is causally involved in episodic memory under aging”, Jorge Almeida will show his recent findings in which the cerebellum plays an important role in episodic memory, and that through neurostimulation of this structure it is possible to improve memory performance of the elderly.

Talk 1 - Dementia risk scores: feasibility, utility, and potential of application in dementia risk reduction studies. Author: Ana Rita Silva

Talk 2 - Blood-based biomarkers for early detection of cognitive decline and dementia Author: Carla Pais-Vieira

Talk 3 - Molecular markers of neuroinflammation in patients with cognitive impairment. Author: Joaquim Cerejeira

Talk 4 - Neural mechanisms underlying processing speed in healthy older adults. Author: Sara Ferreira / Talk 5 - The cerebellum is causally involved in episodic memory under aging. Author: Jorge Almeida

Symposium #2

Concerted studies on morningness-eveningness and sleep-wake patterns, cognition, and emotion, in children and adolescents

Chair: Ana Allen Gomes

Authors: Inês dos Santos Marques¹, Sara Rosa Samarra¹, Ana Raquel Paixão Duarte¹, Luís Pires^{2,3}, Catarina Bettencourt², Filipa Almeida², Manuela Vilar^{1, 2}, José Augusto Leitão^{1, 2, 4}
& Ana Allen Gomes^{1, 2}

Affiliations:

¹ University of Coimbra, Faculty of Psychology and Educational Sciences, Portugal.

² University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal.

³ Faculty of Social Sciences and Humanities, Department of Psychology and Education, University of Beira Interior (FCSH, DPE, UBI), Portugal.

⁴ Memory, Language and Executive Functions Lab (LMLFE), Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

Abstract

The present symposium illustrates interconnected studies in children and adolescents under the same research project, focusing on sleep, chronotype, cognitive, behavioral, and emotional variables. It puts together contributions that do not easily fit on a unique but, instead, cross several topics of this Congress, mainly Neuropsychology, Child & Adolescent Psychology, Mental Health & Wellbeing. The first communication presents a research study in preprimary and primary school children ($n=605$, 50.8% boys), comparing morning, intermediate, and evening types concerning evening screen use, sleep-wake patterns (e.g., bedtime, sleep latency), and psychological symptoms. Interestingly, evening screen time did not differ statistically between the types, albeit it was significantly related to several sleep variables. The second and third communications present two further studies undertaken in the school milieu, respectively, in children and (pre)adolescents. An equivalent protocol was employed to measure sleep patterns, chronotype, psychopathological symptoms, and momentary emotional states; and domains of memory, language, and attention/executive functions, using tests from a neuropsychological battery. The study in children examined the associations between sleep, emotion, and cognitive test performance in 3rd-4th graders ($n=69$; 51.7% boys), focusing on the potential moderating role of sleep variables. Results suggest that, whereas sleep has a negative impact when insufficient, adequate sleep is a protective factor of cognitive functioning on some tasks when children's symptomatology prevail. The study in (pre)adolescents examined whether internalizing/externalizing symptomatology moderates the relationship between sleep and performance in cognitive

tasks in 8th-graders ($n=79$, 51.6% boys). Only hyperactivity/inattention symptoms revealed a significant interaction effect with time in bed (used as a proxy of sleep duration), predicting performance on a rapid alternating stimulus naming task. It was also found that sleep appears to affect cognition more evidently than psychopathological symptoms. The last communication builds upon an ongoing systematic review of the combined impact of morningness-eveningness (ME) \times time-of-day (ToD), on the cognitive tasks' performance of children and adolescents, to shed light on the so-called synchrony/asynchrony effects (meaning better performances in "optimal"/"non-optimal" ToD, respectively). Supposedly, the combined ME \times ToD effects will depend on the specific cognitive demands of each task.

Keywords: Morningness-eveningness; (As)synchrony effects; Moderation; Evening screen use; Sleep

Acknowledgments: To the Project True Times-PTDC/PSI-ESP/32581/2017, supported by the European Regional Development Fund (FEDER), through the Portugal-2020 (PT2020) and the Central Regional Operational Programmes (Centro 2020), and by the Portuguese Foundation for Science and Technology (FCT) - I.P./ MCTES through national funds (PIDDAC). Catarina Bettencourt was granted the FCT doctoral scholarship 2020.05728.BD.

Talk 1 - Evening screen use and the sleep-wake patterns of morning-, intermediate- and evening-type children. Author: Inês dos Santos Marques, Catarina Bettencourt, Filipa Almeida, Luís Pires, & Ana Allen Gomes

Talk 2 - Emotion and cognitive performance in primary school children: The moderating role of sleep. Author: Ana Raquel Paixão Duarte, Sara Samarra, Filipa Almeida, Catarina Bettencourt, José Leitão, Manuela Vilar, Luís Pires, & Ana Allen Gomes.

Talk 3 - Interaction effects between sleep and psychopathological symptoms on adolescents' cognitive performance. Author: Sara Rosa Samarra, Ana Raquel Paixão, Filipa Almeida, Catarina Bettencourt, José Leitão, Manuela Vilar, Luís Pires, & Ana Allen Gomes.

Talk 4 - Combined impact of morningness-eveningness and time of day in cognitive tasks, in children and adolescents: What do we know? Authors: Catarina Bettencourt, Luís Pires, Ana Allen Gomes, Manuela Vilar & José Leitão

Symposium #3

Real minds in virtual worlds. Virtual reality as a tool in cognitive research

Chair: Artur Pilacinski

Authors: Soraia X. Oliveira¹, Marita Metzler², José Carlos Rodrigues³, Luis Ferreira⁴ & Rita Costa⁴

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

²Ruhr University Bochum. Chair for Neurotechnology, Germany.

³LAETA-INEGI, Faculty of Engineering, University of Porto, Portugal.

⁴University of Madeira, Portugal.

Abstract

Virtual reality (VR) allows creation of virtual scenarios containing different objects, environments and laws of physics. Modern virtual reality scenarios allow for high-definition video and audio stimulation that warrants embodied and realistic experience in the virtual worlds. Virtual reality has been increasingly used as a research tool. The flexibility in creation of virtual scenarios and manipulation of these is incomparably higher than for physical research scenarios. For example, VR allows giving users different bodies and compare how these virtual body characteristics change user behavior. Creation of scenarios simulating danger allows studying human behavior that would be otherwise difficult to capture in the real world. VR permits interacting with objects that do not exist in reality or that would be difficult to employ in an experimental scenario for example inside a fMRI scanner. Modern VR devices allow also to collect data about human hand or eye movement with precision comparable to research-grade equipment. In other words, virtual reality's great power is to provide scenarios limited only by experimenter's imagination and their programming skills. The purpose of this symposium is to show the interdisciplinary spectrum of research questions and approaches that can be tackled by virtual reality, from neurorehabilitation to emotional support in unsuccessful motherhood. The speakers will present different approaches to neurorehabilitation, starting with the use of virtual robots to support rehabilitation, finishing on the simulated control of the upper arm exoskeleton supported through brain-machine interface. Another line of presented research will deal with the use of VR simulation for testing humans working with collaborative robots, a cutting-edge discipline in robotics nowadays. Then, in more cognitive science domain, the use of VR as a platform for cognitive stimulation using music will be demonstrated. The last talk will show the power of virtual reality simulations in supporting women in their emotional distress when losing pregnancy at its early stages.

In sum, the talks delivered by young researchers will show a plethora of research applications of virtual reality, from technologically advanced to emotionally delicate topics that humans face in the real world.

Keywords: Virtual reality; Cognitive neuroscience; Human-machine interaction; Cognition; Rehabilitation

Talk 1 - Using virtual reality to study user experience in collaborative robotics. Author: Soraia X. Oliveira

Talk 2 - Virtual reality control of human hand exoskeleton. Author: Marita Metzler

Talk 3 - From multi-sensorial stimulation to affective interaction - A study focused on an immersive robotic station for rehabilitation. Author: José Carlos Rodrigues

Talk 4 - Musiquence: a multi-modal customisable music and reminiscence cognitive stimulation platform using a VR-based environment. Author: Luis Ferreira

Talk 5 - Virtual Reality for coping with involuntary early pregnancy loss. Author: Rita Costa

Symposium #4

Mapping multiple dimensions in the human neocortex

Chair: Zohar Tal

Authors: Joana Sayal¹, Jorge Almeida¹ & Stephanie Kristensen¹

Affiliations:

¹Proaction Lab, CINEICC, Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

Abstract

Our ability to process the rich sensory information we encounter during our everyday lives relies on an effective organization of these inputs at different levels of processing hierarchy. Organizing information in multidimensional spaces is a rather widespread strategy within the brain, for example, in sensory cortices which show topographical mapping of neural preferences along particular sensory dimensions. Interestingly, recent works have revealed that the organization of more abstract information beyond sensory cortices also follows multidimensionality, as can be found for example in the superimposed mapping of different cognitive dimensions such as numerosity, object size and time duration. In this symposium, we will discuss the fundamental role of multidimensional mapping in the human brain, by presenting a variety of behavioural and neuronal studies focusing on different aspects of mapping multiple dimensions. Joana Sayal will discuss cross-modal mapping of visual information in the auditory cortex of deaf humans. In her work, Joana will show that topographic information is also represented in negative fMRI signals, implying that cross-modal visual information might be represented primarily through deactivation signals. Jorge Almeida will discuss the importance of multidimensionality in the organization of object knowledge at the behavioural and neuronal levels. In his talk Jorge will show that behaviourally extracted object-related dimensions are cognitively interpretable, relevant for object processing and provide good predictions for the neural signals elicited by the presentation of objects. Finally, Stephanie Kristensen will present results from the Contentotopic mapping project, revealing topographically organized mapping of different dimensions of object manipulation information in the brain. Altogether, the presented studies highlight multidimensionality mapping as a hallmark of the organization of information in the brain.

Talk 1 - The neural organization of visual information in the auditory cortex of the congenitally deaf. Author: Joana Sayal

Talk 2 - Neural and behavioural signatures of the multidimensionality of object processing. Author: Jorge Almeida

Talk 3 - Contentotopic mapping: topographic organization of object manipulation information. Author: Stephanie Kristensen

Symposium #5

The neural bases of object knowledge

Chair: Jon Walbrin / **Co-Chair:** Daniela Valério

Authors: Miguel Baião^{1,2}, Lénia Amaral³, Jorge Almeida^{1,2}, Gabriel Besson^{1,2}, Filipa Dourado Sotero^{2,4,5}, Daniela Valério^{1,2}, Filipa Miranda^{4,5}, Isabel Pavão Martins^{4,5}, Pedro Alves^{4,5}, Eric Salmon⁸, Christine Bastin⁸, André Peres^{1,2}, Fredrik Bergström^{1,2,7}, Philipp Seidel⁶, Jon Walbrin^{1,2} & Paul E. Downing⁹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

²Proaction Laboratory, Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

³Department of Neuroscience, Georgetown University Medical Center. Washington, DC, USA.

⁴Serviço de Neurologia, Centro Hospitalar e Universitário Lisboa Norte, Portugal.

⁵Laboratório de Estudos de Linguagem, Faculdade de Medicina da Universidade de Lisboa, Portugal.

⁶University of Regensburg, Faculty of Medicine, Department of Psychiatry and Psychotherapy, Germany.

⁷Department of Psychology, University of Gothenburg, Sweden.

⁸GIGA-Cyclotron Research Center In-vivo Imaging, University of Liège, Belgium.

⁹School of Human and Behavioural Sciences, Bangor University, Bangor, Wales.

Abstract

Object recognition is a rapid, indispensable ability that depends upon complex knowledge about objects and their associated usage. For example, object knowledge is accessible via visual, material, and motor-related properties (e.g. shape, density, graspability, respectively), that contribute to real-world behaviour (e.g. identifying and effectively using tools for particular aims). Understanding how the brain efficiently represents and integrates information about objects is an important long-standing goal in cognitive neuroscience - both from cognitive and neuropsychological perspectives. This symposium will explore recent advances towards understanding the brain basis of object knowledge. Miguel Baião (University of Coimbra (UC)) will present a critical review of the existent electrophysiological work exploring the spatio-temporal processing of visual responses to hand-held tools. Much of the existing literature has been conducted without a strong theoretical framework, and so one important outcome of the present work is to provide a principled theoretical basis to guide future work on visual tool processing. Filipa Dourado Sotero (Centro Hospital e Universitário de Lisboa Norte; Faculdade de Medicina da Universidade de Lisboa) will present a neuropsychological study of a patient with a striking object knowledge impairment following ventro-temporal cortex lesioning. This case-study suggests a novel object knowledge dissociation: specifically, perturbed recogni-

tion of material properties of manipulable objects despite other well-preserved properties (e.g. shape, size, & color). Gabriel Besson (UC) will present recent work that addresses the electrophysiological underpinnings of visual object familiarity. Unlike most prior work that has measured object familiarity using repetitions of the exact same stimuli (artificially promoting the repetition of low-level visual information, hence potentially biasing the core mechanisms of object familiarity), here, a more ecological approach is adopted, and shows that view-point generalizable representations of individual objects emerge at a time-window that is consistent with prior reported familiarity responses (~230ms). Daniela Valério (UC) will present work demonstrating the influence of semantic object properties on visual object discrimination. This work uses a stimulus release from adaptation paradigm to show weaker behavioural and neural differentiation between highly similar objects, as determined by their degree of shared semantic features (e.g. is used for cutting; belongs in a kitchen). Jon Walbrin (UC) will present work demonstrating the relationship between wider brain connectivity and local-level object responses in the brain. For example, discriminability of manipulable tool information in 'tool-preferring' brain areas is strongly associated with connectivity to other tool network areas, suggesting an important role of category-specific information sharing across network areas.

Keywords: Object recognition; Vision; Cognitive neuroscience; EEG; fMRI

Talk 1 - Tools under the electroencephaloscope: towards a unified picture of the neural time course of visual tool processing. Authors: Miguel Baião, Lénia Amaral, Jorge Almeida, & Gabriel Besson

Talk 2 - Case study: The dissociation of material from shape, size, color, and weight. Authors: Filipa Dourado Sotero, Daniela Valério, Filipa Miranda, Isabel Pavão Martins, Pedro Alves, & Jorge Almeida

Talk 3 - Neural activity at 230 ms is associated with viewpoint-independent exemplar-level representation and familiarity performance. Authors: Gabriel Besson, Eric Salmon, & Christine Bastin

Talk 4 - The influence of semantic similarity on object recognition. Authors: Daniela Valério, André Peres, Fredrik Bergström, Philipp Seidel, & Jorge Almeida

Talk 5 - Characterizing the discriminability of visual categorical information in strongly connected voxels. Authors: Jon Walbrin, Paul E. Downing, Filipa Dourado Sotero & Jorge Almeida

Symposium #6

Foster Families and Residential Care Settings: from research to practice

Chair: Eunice Magalhães

Authors: Catarina Anjos¹, Eunice Magalhães², João Graça³, Vânia S. Pinto⁴, Joana Baptista², Sofia Ferreira², Micaela Pinheiro², Cláudia Camilo⁵, Emma Castro² & Jorge Del Valle⁶

Affiliations:

¹University Institute of Lisbon (ISCTE), Lisbon, Portugal.

²University Institute of Lisbon (ISCTE), CIS-ISCTE, Lisbon, Portugal.

³University of Groningen, Groningen, The Netherlands.

⁴Rees Centre, Department of Education, University of Oxford, UK.

⁵CICPSI, Faculty of Psychology, University of Lisbon, Lisbon, Portugal.

⁶University of Oviedo, Oviedo, Spain.

Abstract

When family intervention is not possible and family preservation fails, protecting maltreated children and youth could involve their placement in the out-of-home care system (i.e., foster care or residential care). Foster families aim to provide a safe and responsive context for maltreated young people (Delgado et al., 2019; Euillet, 2020). However, in Portugal, residential care remains predominant compared to foster care (2.8 % children in foster care; ISS, 2020). For this reason, to improve the recruitment of foster families, it is necessary to know more about the reasons for fostering. As such, this symposium will start with two communications focused on the reasons and enablers to become a foster family, based on qualitative studies and multiple informants: community sample (i.e., Communication 1), foster families and professionals (i.e., Communication 2). The evidence suggests that placing children in foster families is associated with better child outcomes (Li et al., 2019). However, residential care may be the most appropriate service to meet a pattern of complex mental health needs of some maltreated young people. As such, in this symposium we will also be focused on the placement of young people in residential care. These young people are at an increased risk for psychological and behavioral difficulties (more than those ones in foster care), but some of them exhibit adaptative outcomes, despite the adversity. As such, this symposium includes a meta-analysis which aims to identify the protective factors that produce the largest effect sizes in psychological health for adolescents in residential care (i.e., Communication 3) and a systematic review aimed to identify aspects of quality in therapeutic residential care that are perceived as most important to young people within four critical domains (setting, staffing, treatment approach, and safety) (i.e., Communication 4). In sum, we aim to provide a discussion focused on the national and international evidence

from the out-of-home care system, which allow us to identify implications for practice and policy.

Keywords: Foster care; Residential care; Forensic psychology

Talk 1 - Perceived barriers, drivers and enablers to becoming a foster family: a community-based study in Portugal. Authors: Catarina Anjos, Eunice Magalhães, João Graça, Vânia S. Pinto, Joana Baptista, & Micaela Pinheiro

Talk 2 - Reasons for fostering and recruitment strategies to promote foster care: a qualitative study based on professionals and foster families perspectives. Authors: Sofia Ferreira, Eunice Magalhães, & João Graça

Talk 3 - A meta-analysis focused on resilience in residential care. Authors: Micaela Pinheiro, Eunice Magalhães, Joana Baptista, & Cláudia Camilo

Talk 4 - Young people's experiences in therapeutic residential care: a systematic review. Authors: Emma Castro, Eunice Magalhães, & Jorge Del Valle

Symposium #7

(Self)Compassion-based interventions in forensic settings of youth

Chair: Diana Ribeiro da Silva

Authors: Rita Ramos Miguel¹, Daniel Rijo¹, Maria do Céu Salvador¹, Luiza Nobre Lima¹, Laura Santos¹, Maria do Rosário Pinheiro¹, Diana Ribeiro da Silva¹, Marlene Paulo¹, Nélcio Brazão¹, Paula Castilho¹, Paula Vagos^{1,2}, Paul Gilbert^{3,4}, Rúben Sousa¹ & Nicola Petrocchi⁵

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

²University of Aveiro, Aveiro, Portugal.

³Compassionate Mind Foundation, Derby, UK.

⁴University of Derby, Derby, UK.

⁵John Cabot University, Rome, Italy.

Abstract

This symposium presents five communications on the efficacy of (self)compassion-based interventions in forensic settings of youth. The first communication presents a study designed for adolescents placed in residential care. Although this is considered a vulnerable population, there are few empirically-based interventions for these youth. Compassion Focused Therapy (CFT) has been showing its efficacy for the treatment of youth with internalizing and externalizing problems. However, its efficacy in youth placed in residential care was not tested yet. This communication presents an individual intervention program (20-sessions), based on CFT, which was developed considering the vulnerabilities of these youth. The clinical trial design to test the efficacy of this program will also be presented. The second communication presents the results of a Cluster Randomized Trial aimed to test the effectiveness of the Compassionate Mind Training program (CMT-Care Homes) among professional caregivers of residential youth care (RYC). Caregivers ($N=127$) and youth ($N=154$) were assessed at baseline, posttreatment, and 6-month follow-up through self-report measures on compassion and affiliation. Results suggest that the CMT-Care Homes can promote an affiliative and safe environment for those working and living in RYC settings. The third and fourth communications present a clinical trial aimed to test the efficacy of the PSYCHOPATHY.COMP (an individual CFT-based intervention) among detained youth (Treatment group =58/Control Group=61). Both groups were assessed at baseline, posttreatment, and 6-month follow-up. The third communication details the mediating effect of compassion-related variables in the reduction of psychopathic traits. The fourth communication shows the efficacy of the PSYCHOPATHY.COMP program in improving emotion regulation during the activation of the soothing system (assessed through both self-report and physiological measures). Findings offer evidence for the

PSYCHOPATHY.COMP efficacy in reducing psychopathic traits, as well as in promoting emotion regulation and a compassionate mentality. Lastly, the fifth communication presents a preliminary study on the efficacy of an intervention program based on Self-Compassion and Mindfulness (MSC) adapted for professional caregivers of detained youth. The treatment group ($N=14$) received the MSC program while controls ($N=18$) are in a waiting-list group. Both groups were assessed at baseline and posttreatment. When compared with controls, treatment participants showed a significant decrease in their fears of giving compassion to others and increased levels of mindfulness. These findings suggest that interventions based on self-compassion are a promising approach for caregivers working in juvenile detention settings. Altogether, these findings suggest that (self) compassion-based interventions are a promising approach in forensic settings of youth.

Keywords: (Self)Compassion; Intervention programs; Forensic psychology; Juvenile justice system; Child protection system

Talk 1 - Compassion Focused Therapy for adolescents placed in residential care: Intervention program and study design. Authors: Rita Ramos Miguel, Daniel Rijo, Maria do Céu Salvador, & Luiza Nobre Lima

Talk 2 - Compassion in residential youth care settings: Results of a compassionate mind training intervention for professional caregivers. Authors: Laura Santos, Daniel Rijo, & Maria do Rosário Pinheiro

Talk 3 - The mediating effect of compassion through the delivery of the PSYCHOPATHY.COMP program: Results of a clinical trial with detained youth. Authors: Diana Ribeiro da Silva, Daniel Rijo, Marlene Paulo, Rita Ramos Miguel, Nélcio Brazão, Paula Castilho, Paula Vagos, & Paul Gilbert

Talk 4 - HRV and the Soothing system: Changes in young offenders' physiological patterns after delivering the PSYCHOPATHY.COMP. Authors: Rúben Sousa, Diana Ribeiro da Silva, Nicola Petrocchi, Paul Gilbert, & Daniel Rijo

Talk 5 - Self-Compassion and Mindfulness with professional caregivers of detained youth: Preliminary results of an intervention program. Authors: Marlene Paulo, Diana Ribeiro da Silva, Paula Castilho, Paula Vagos, & Daniel Rijo

Symposium #8

Understanding Intimate Partner Violence: New contexts and novel approaches

Chair: Nélío Jesus Brazão

Authors: Maria Vale¹, Marlene Matos¹, Ana Cunha¹, Mariana Gonçalves¹, Ana Rita Martins², Daniel Rijo², Maria Cristina Canavarro², Marta Capinha², Diana Ribeiro da Silva² & Marco Pereira²

Affiliations:

¹School of Psychology, University of Minho, Portugal.

²Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

Abstract

Intimate partner violence (IPV) is worldwide recognized as a violation of human rights and a public health problem. Defined by the World Health Organization (WHO, 2013) as “any behavior within an intimate relationship that causes physical, psychological or sexual harm to those in the relationship”, the IPV high prevalence rates and its adverse impact on victims’ health are broadly spread in literature. This confers a priority status on understanding the IPV phenomenon to better inform and improve assessment, prevention, and intervention programs.

Given the complexity of the IPV experience, research has advanced towards recognizing and investigating specific contexts of victimization of greater vulnerability (e.g., adolescence, covid-19 pandemic, perinatal period) and adopting more complex comprehensive models capable of understanding not only intrapersonal variables but also relational and dyadic processes. Thus, this symposium aims to explore and discuss novel approaches and opportunities for an evidence-informed understanding of IPV that can help improving health care and social policy in Portugal.

The first study, Technology-facilitated Abuse in Relationships: Adaptation and Psychometrics of the Victimization Scale in Portuguese Adolescents aimed (1) to analyse the psychometric properties of the Technology Facilitated Abuse in Relationships - Victimization Scale, which has been considered as a reliable multidimensional measure; and (2) to determine the prevalence of Cyber Dating Abuse victimization in a sample of adolescents, aged 12-18, from Portugal mainland’ schools.

The second study, Domestic Violence, COVID-19, and Mental Health: A Preliminary Retrospective Analysis in Portugal intended to explore the mental health and quality of life impact of domestic violence and abuse within the context of the global COVID-19 pandemic among Portuguese victims that were living in shelters.

The third study, the psychosocial adjustment of women victims of Intimate Partner Violence during pregnancy and postpartum period: The role of early memories of warmth and safeness, self-compassion and self-criticism aimed to characterize the psychosocial adjustment of women victims of IPV during pregnancy and postpartum and their explanatory psychological processes based on an evolutionary approach.

The last study, Matching vulnerabilities: The role of shame and early memories of warmth and safeness in dyadic profiles and their association with the perpetration and victimization of total, physical, and psychological violence within the couple aimed to explore the existence of dyadic profiles in a sample of couples from the community and forensic settings, and how they compare in victimization and perpetration.

Keywords: Intimate partner violence; Cyber dating abuse COVID-19; Pregnancy and postpartum period; Dyadic profiles

Talk 1 - Technology-facilitated Abuse in Relationships: Adaptation and Psychometrics of the Victimization Scale in Portuguese Adolescents.

Authors: Maria Vale & Marlene Matos

Talk 2 - Domestic Violence, COVID-19, and Mental Health: A Preliminary Retrospective Analysis in Portugal.

Authors: Ana Cunha, Mariana Gonçalves, & Marlene Matos

Talk 3 - The psychosocial adjustment of women victims of Intimate Partner Violence during pregnancy and postpartum period: The role of early memories of warmth and safeness, self-compassion and self-criticism.

Authors: Ana Rita Martins, Daniel Rijo, & Maria Cristina Canavarro

Talk 4 - Matching vulnerabilities: The role of shame and early memories of warmth and safeness in dyadic profiles and their association with the perpetration and victimization of total, physical, and psychological violence within the couple.

Authors: Marta Capinha, Diana Ribeiro da Silva, Marlene Matos, Marco Pereira, & Daniel Rijo

Symposium #9

Sexual violence among college students and adolescents: Prevalence, perpetrators' features, and prevention programs

Chair: Diana Ribeiro da Silva

Authors: Joana Carvalho^{1,2}, Ana Sá³, Nélío Brazão⁴, Diana Ribeiro da Silva⁴, Bárbara Moreira⁵
& Eunice Carmo⁵

Affiliations:

¹William James Center for Research, Department of Education and Psychology, University of Aveiro, Portugal.

²Center for Psychology at University of Porto, Faculty of Psychology and Educational Sciences, University of Porto, Portugal.

³Faculty of Psychology and Educational Sciences, University of Porto, Porto, Portugal.

⁴Center for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, University of Coimbra, Coimbra, Portugal.

⁵Center for Psychology, University of Porto, Porto, Portugal.

Abstract

Sexual violence (SV) against college students and adolescents is a significant public health problem worldwide. International surveys estimate that 25 to 50% of women and 5 to 38.5% of men experience some form of SV while they are in college and/or in high school. It is well documented that victims of SV may experience trauma symptoms, be more vulnerable to drug and alcohol abuse, and report poorer health and social outcomes. Accordingly, college campuses and schools have created educational programs to help prevent SV, which include information on gender socialization, safer dating behaviors, and discussions regarding rape myths and rape-supportive behaviors. Nevertheless, research on the efficacy of such interventions has yielded mixed results, which may be explained by methodological limitations of most studies, namely the lack of randomized controlled trials (RCT; or equivalent designs, such as cluster randomized trials).

In Portugal, data on SV perpetrated by college students and/or adolescents is lacking, and no SV evidence-based prevention programs have been delivered in college and/or school settings. Thus, this symposium aims to present the prevalence rates of SV as committed by college students, as well as to explore the perpetrators' features. In addition, it will be presented two new SV preventions programs, to be delivered with college students and adolescents.

The first study, Male college students using sexually aggressive behaviors: Interpersonal features, aimed (1) to assess the prevalence of SV as committed by male college students; and (2) to characterize the interpersonal features of men using sexually aggressive behaviors toward women.

The second study, Sexual violence perpetrated by female college students: Prevalence, profiles, and dynamic risk factors, aimed (1) to assess the prevalence of sexually aggressive behaviors among female college students; (2) to investigate different typologies of women using sexually aggressive behaviors; and (3) to test for differences on dynamic risk factors (e.g., difficulties in emotion regulation and intimacy) across those same typologies.

The third study, MOving ON against sex violence: A new sexual violence prevention program for college students, will introduce a new SV prevention program for college students (the MOON program). The feasibility/pilot trial and the randomized controlled trial protocols will be presented.

Finally, in the last study, preventing sexual violence among adolescents: The SUN (Stand Up Now against sex violence) program, a new SV prevention program for adolescents will be presented, as well as the feasibility/pilot trial and the cluster randomized trial protocols.

Keywords: Adolescents; College students; Dynamic risk factors; Prevention programs; Sexual violence

Talk 1 - Male college students using sexually aggressive behaviors: Interpersonal features.

Authors: Joana Carvalho & Ana Sá

Talk 2 - Sexual violence perpetrated by female college students: Prevalence, profiles, and dynamic risk factors.

Authors: Nélío Brazão, Diana Ribeiro da Silva, & Joana Carvalho

Talk 3 - MOving ON against sex violence: A new sexual violence prevention program for college students.

Authors: Bárbara Moreira, Joana Carvalho, & Nélío Brazão

Talk 4 - Preventing sexual violence among adolescents: The SUN (Stand Up Now against sex violence) program.

Authors: Eunice Carmo, Joana Carvalho, & Nélío Brazão

Symposium #10

Challenges and Protective Factors in Biological and Adoptive Parenthood: From Exploring the Processes to the Intervening with Parents

Chair: Helena Moreira

Authors: Tiago Miguel Pinto¹, Mark Ethan Feinberg², Bárbara Figueiredo³, Helena Moreira⁴, Daniela Fernandes⁴, Daniela Mourão⁴, Fabiana Monteiro⁴, Maria Cristina Canavarro⁴, Raquel Pires⁴, Bárbara Caetano⁴, Stephanie Alves¹, Ana Luz Chorão⁵ & Marta Capinha⁴

Affiliations:

¹Lusófona University/HEI-Lab: Digital Human-environment Interaction Labs, Portugal.

²Prevention Research Center, Pennsylvania State University, USA.

³School of Psychology, University of Minho, Portugal.

⁴University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

⁵Faculty of Psychology and Educational Sciences of the University of Coimbra, Coimbra, Portugal.

Abstract

This symposium presents the results of five studies aimed at better understanding the challenges that parents may face in their parenting role, both in the transition to parenthood and in raising an adoptive child, as well as some protective factors that can play an important role in these contexts.

The transition to parenthood is a major adjustment period within a family that may have a significant impact on parents' mental health, as well as on their parenting practices and coparenting functioning. The first oral communication analyzes the moderator role of positive and negative coparenting in the impact of mother's prenatal depressive symptoms on infant self-regulation at 3 months. This longitudinal study included 103 primiparous couples and supports a view of negative coparenting as a risk-promoting environment that can accentuate the adverse impact of mother's prenatal depressive symptoms on infant self-regulation problems.

Also focusing on the first postpartum months, the second oral communication presents the results of a longitudinal study that included 361 mothers and that explored the moderator role of self-compassion on the impact of mothers' fatigue levels in the first 5 months postpartum on their ability to employ a mindful parenting approach 3 months later. The results suggest that higher levels of fatigue can significantly impair mother's mindful parenting abilities and that self-compassion can act as protective role, by buffering the negative impact of fatigue on mindful parenting.

The third oral communication presents the Mindful Moment program, a self-guided, web-based, mindful and compassionate parenting training for postpartum mothers who experience parenting stress. In a pilot randomized controlled trial that included 292 postpartum mothers, this program was found to be well accepted and effective in reducing parenting stress and changing other outcomes.

Preliminary studies on adoptive parenthood suggest that mindful parenting interventions can also be a promising approach to support parents in the post-adoption period. Therefore, the fourth oral communication investigates the adoptive parents' acceptability and preferences regarding mindful parenting interventions as well as the couple's agreement and gender specificities regarding a range of intervention's features.

Finally, the role of the coparenting relationship in the dyadic adjustment of 207 adoptive parents and the moderating role of attachment is explored in the fifth oral communication. This study shows that supportive coparenting may act as a protective resource against poorer dyadic adjustment during the post-adoption period, particularly for parents who endorse independence and self-reliance in their relationships to a less extent.

Keywords: Parenthood; Adoptive; Mindful parenting; Coparenting; Postpartum

Talk 1 - Negative coparenting moderates the impact of mother's prenatal depressive symptoms on infant self-regulation.

Authors: Tiago Miguel Pinto, Mark Ethan Feinberg, & Bárbara Figueiredo

Talk 2 - Mindful parenting among postpartum mothers: A longitudinal study on the role of self-compassion and fatigue.

Authors: Helena Moreira, Daniela Mourão, & Daniela Fernandes

Talk 3 - A web-based, mindful, and compassionate parenting training for mothers experiencing parenting stress: Results from a pilot randomized controlled trial of the Mindful Moment program

Authors: Daniela Fernandes, Fabiana Monteiro, Maria Cristina Canavarro, & Helena Moreira

Talk 4 - Adoptive parents' receptivity and preferences regarding mindful parenting interventions: An exploratory study on couples' agreement

Authors: Raquel Pires, Bárbara Caetano, Stephanie Alves, Ana Luz Chorão, Marta Capinha, & Maria Cristina Canavarro

Talk 5 - Relationships between coparenting and dyadic adjustment among adoptive parents: The moderating role of adult attachment

Authors: Stephanie Alves, Bárbara Caetano, Ana Luz Chorão, Maria Cristina Canavarro, & Raquel Pires

Symposium #11

Grief, society and COVID-19 pandemic: adjustment processes

Chair: Mayra Delalibera

Authors: Alexandra Coelho¹, João Batista², Mayra Delalibera³, João T. Oliveira², Sara Albuquerque⁴, Cátia Damião⁵, Susana Manquinho⁶ & Ágata Salvador⁷

Affiliations:

¹University Hospital Center of North Lisbon, Faculty of Medicine of the University of Lisbon, ISPA - University Institute of Psychological, Social and Life Sciences, Portugal.

²Psychology Research Center (CIPsi), School of Psychology, University of Minho, Portugal.

³University of Coimbra, Portugal.

⁴HEI-Lab, Lusófona University, University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal.

⁵University Hospital Center of North Lisbon, Portugal.

⁶Lusófona University, Portugal.

⁷HEI-Lab, Lusófona University, Portugal.

Abstract

The restrictive measures at the time of the pandemic constrained family members from social contacts, accompanying patients during end-of-life and death care, seeing the body and performing funeral ceremonies. These circumstances are expected to have an important impact on the mental health of bereaved individuals and on how they responded to the loss, potentially contributing to problematic grieving processes. Also, it is important to understand the potential mechanisms in the relationship between the impact of restrictions and psychological adjustment to the loss (e.g., grief response). In grief, meaning-making has proven to be a predictor of complicated grief and a mediator of various factors influencing the adaptation to loss. The same is true for behavioral and psychological flexibility, which in the context of restrictions of funeral rituals could be expressed through performing alternative forms of paying tribute.

The first two presentations focus in the impact of restrictions in end-of-life patient care, at the moment of death and in funeral ceremonies on psychological adjustment. We conducted a prospective and observational study with two moments of assessment after the loss during the pandemic ($N = 141$). The online questionnaires assessed the perception of restrictions, trauma, grief, anxiety, depression symptoms and meaning-making, social support and rumination. In the qualitative study, twenty interviews were conducted exploring themes such as the impact of restrictions, particularities of grief and loss during the pandemic, and coping processes involved.

The third and fourth presentations will focus on the mechanisms in the relationship between the psychological impact of restrictions and psychological adjustment. In the third

presentation's study, we aimed to test longitudinally (two assessment points, $N = 141$) if meaning-making mediates the impact of restrictive measures on grief and psychological symptoms. In the fourth presentation, we will present the results of a cross-sectional study exploring the moderating role of alternative forms of paying tribute (e.g. carrying out homage in social networks, lighting candles in memory of the deceased person, using objects of the deceased person) in the relationship between the perception of limitation in funeral ceremonies and grief response ($N = 227$ participants).

The results of our multi-method research project (quantitative and qualitative) will contribute to improving current knowledge on the experience, coping, and needs of individuals who lost a significant other during the pandemic. Contributions to inform and enhance awareness of clinicians, researchers, the general public, and policy makers are also noteworthy.

Keywords: COVID-19 pandemic; Restrictive measures; End-of-life; Grief

Talk 1 - Impact of restrictive measures imposed by COVID-19 pandemic on end-of-life, death and grief.

Authors: Alexandra Coelho, João Batista, Mayra Delalibera, João T. Oliveira, & Sara Albuquerque

Talk 2 - Living experiences of bereavement amid the pandemic: a qualitative study.

Authors: Cátia Damião, Mayra Delalibera, Alexandra Coelho, & Sara Albuquerque

Talk 3 - Does meaning-making mediate the impact of restrictive measures imposed by COVID-19 pandemic on prolonged grief and psychological symptoms?

Authors: João Batista, Alexandra Coelho, Mayra Delalibera, João T. Oliveira, & Sara Albuquerque

Talk 4 - Restrictive measure in funeral ceremonies and grief: the moderator role of alternative ways of paying tribute to the deceased.

Authors: Sara Albuquerque, Susana Manquinho, Alexandra Coelho, Mayra Delalibera, & Ágata Salvador

Symposium #12

Impact of the COVID-19 pandemic on women's perinatal experiences: findings of the Riseup-PPD-COVID-19 international study

Chair: Vera Lúcia Mateus

Authors: Ana Mesquita^{1,30}, Raquel Costa^{2,3,4}, Pelin Dikmen-Yildiz⁵, Susana Faria⁶, Gabriela Silvestrini¹, Ana Osório⁷, Yolanda Contreras-García⁸, Claire A Wilson⁹, Eleni Voursoura¹⁰, Ethel Felice¹¹, Andri Christoforou¹², Camellia Hancheva¹³, Erilda Ajaz¹⁴, Emma Motrico¹⁵, Isabel Soares¹, Susan Ayres¹⁶, Vera Mateus^{7,17,18}, Sara Domínguez-Salas¹⁵, Rena Bina¹⁹, Sandra Saldivia Borquez²⁰, María Fernanda González²¹, Tiago Miguel Pinto³, Francisca Pacheco¹⁸, Ana Ganho-Ávila¹⁸, Raquel Guiomar¹⁸, Mónica Sobral¹⁸, Rafael A. Caparros-Gonzalez^{22,23,24}, Carla Diaz-Louzao²⁵, Eleni Hadjigeorgiou²⁶, Rachel Buhagiar²⁷, Alejandro de la Torre-Luque²⁸, Paula Segamarchi⁷ & Safira Marostica²⁹

Affiliations:

¹School of Psychology, University of Minho, Braga, Portugal.

²EPIUnit - Instituto de Saúde Pública, Universidade do Porto, Portugal.

³Laboratório para a Investigação Integrativa e Translacional em Saúde Populacional (ITR), Universidade do Porto, Portugal.

⁴HEI-Lab: Digital Human-environment Interaction, Lusófona University, Lisbon, Portugal.

⁵Department of Psychology, Kırklareli University, Kırklareli, Turkey.

⁶University of Minho, Centre of Mathematics, Braga, Portugal.

⁷Graduate Program on Developmental Disorders and Mackenzie Center for Research in Childhood and Adolescence, Center for Biological and Health Sciences, Mackenzie Presbyterian University, São Paulo, Brazil.

⁸Departamento de Obstetricia y Puericultura, Facultad de Medicina, Universidad de Concepción, Chile.

⁹Section of Women's Mental Health, King's College London and South London and Maudsley NHS Foundation Trust, UK.

¹⁰Department of Psychology, National and Kapodistrian University of Athens, Greece.

¹¹Department of Psychiatry, University of Malta, Malta.

¹²Department of Social and Behavioral Sciences, European University Cyprus, Cyprus.

¹³Sofia University St Kliment Ochridski, Bulgaria.

¹⁴College University Beder, Tirana, Albania.

¹⁵Psychology Department, Universidad Loyola Andalucia, Sevilla, Spain.

¹⁶Centre for Maternal and Child Health Research, School of Health and Psychological Sciences, City, University of London, London, UK.

¹⁷Portugalense Institute for Human Development (INPP), Department of Psychology and Education, Universidade Portugalense, Porto, Portugal.

¹⁸Center for Research in Neuropsychology and Cognitive Behavioral Intervention, Faculty of Psychology and Educational Sciences, University of Coimbra, Coimbra, Portugal.

¹⁹School of Social Work, Bar Ilan University, Ramat Gan, Israel.

²⁰Department of Psychiatry and Mental Health. Faculty of Medicine, Universidad de Concepción, Concepción, Chile.

- ²¹Faculty of Health Sciences, National University of Entre Rios, Concepción del Uruguay, Entre Ríos, Argentina.
- ²²Department of Nursing, Faculty of Health Sciences, University of Granada, 18071 Granada, Spain.
- ²³Instituto de Investigación Biosanitaria ibs., Granada, Spain.
- ²⁴Mind, Brain, and Behavior Research Center (CIMCYC), University of Granada, 18011 Granada, Spain.
- ²⁵Research Methodology Group, University Clinical Hospital of Santiago (CHUS), Health Research Institute of Santiago de Compostela (IDIS), Santiago de Compostela, Spain.
- ²⁶Nursing Department, School of Health Science, Cyprus University of Technology, Cyprus
- ²⁷Department of Psychiatry, University of Malta, Malta.
- ²⁸Department of Legal Medicine, Psychiatry and Pathology, Universidad Complutense de Madrid. Centre for Biomedical Research in Mental Health (CIBERSAM), Madrid, Spain.
- ²⁹Mackenzie Presbyterian University, São Paulo, Brazil.
- ³⁰ProChild CoLAB, Guimarães, Portugal

Abstract

The COVID-19 pandemic had a significant impact on women's perinatal experiences and mental health, resulting in increased levels of depression and anxiety symptoms and disruptions in perinatal health care and birth plans. The Research Innovation and Sustainable Pan-European Network in Peripartum Depression Disorder (Riseup-PPD) network has conducted an international study, involving several European countries (Albania, Bulgaria, Cyprus, Greece, Israel, Malta, Portugal, Spain, Turkey, and the United Kingdom) and South American countries (Brazil and Chile) to study the impact of the COVID-19 pandemic on perinatal experiences and mental health of pregnant women and mothers up to six months postpartum. Findings from this research project showed that, in a sample of 7.265 perinatal women, clinically significant depressive symptoms were reported by 26.7% of pregnant women and 32.7% of postpartum women, whereas the prevalence of moderate to severe symptoms of generalised anxiety was 20% during pregnancy and 26.6% in postpartum women. Additionally, the prevalence of symptoms varied considerably across the participating countries, with participants from South America countries reporting the highest levels. This symposium aims to provide new findings from the Riseup-PPD-COVID-19 international study regarding changes in women's perinatal health care and experiences due to the pandemic, access to mental healthcare, pre-existing risk factors and pandemic-related stressors contributing to psychological difficulties. More specifically, the four presentations will address: 1) the impact of mismatch between women's birth plans and their birth experiences during the COVID-19 pandemic on perinatal mental health; 2) the unmet needs in perinatal mental healthcare among women with clinically significant symptoms during the COVID-19 pandemic; 3) the impact of COVID-19 pandemic on breastfeeding rates, and 4) the risk factors explaining the high levels of depression and anxiety symptoms in the perinatal period during the COVID-19 pandemic in Brazil, which was one of the countries most affected by the pandemic. Results will be discussed in light of their implications for perinatal mental health policies including the development of protocols for screening and intervention programs to be implemented in future similar scenarios.

Keywords: Perinatal mental health; COVID-19 pandemic; Risk factors; Perinatal experiences; Riseup-PPD

Talk 1 - The perinatal mental health impact of a mismatch between women's birth plans and their birth experiences during COVID-19.

Authors: Ana Mesquita, Raquel Costa, Pelin Dikmen-Yildiz, Susana Faria, Gabriela Silvestrini, Ana Osório, Yolanda Contreras-García, Claire A Wilson, Eleni Vousoura, Ethel Felice, Andri Christoforou, Camellia Hancheva, Erilda Ajaz, Emma Motrico, Isabel Soares, & Susan Ayres

Talk 2 - Unmet needs in perinatal mental healthcare among women with clinically significant symptoms of depression and/or anxiety during the COVID-19 pandemic.

Authors: Raquel Costa, Ana Mesquita, Emma Motrico, Pelin Dikmen-Yildiz, Vera Mateus, Sara Domínguez-Salas, Eleni Vousoura, Rena Bina, Claire A Wilson, Sandra Saldivia Borquez, María Fernanda González, Andri Christoforou, Ethel Felice, Camellia Hancheva, & Tiago Miguel Pinto

Talk 3 - The Impact of COVID-19 on Breastfeeding Rates: an international cross-sectional study.

Authors: Francisca Pacheco, Ana Ganho-Ávila, Raquel Guiomar, Mónica Sobral, Rafael A. Caparros-Gonzalez, Carla Diaz-Louzao, Emma Motrico, Sara Domínguez-Salas, Ana Mesquita, Raquel Costa, Eleni Vousoura, Eleni Hadjigeorgiou, Rena Bina, Rachel Buha-giar, Vera Mateus, Yolanda Contreras-García, Claire A. Wilson, Erilda Ajaz, Camellia Hancheva, Pelin Dikmen-Yildiz, & Alejandro de la Torre-Luque

Talk 4 - Risk factors for perinatal mental health problems during the COVID-19 pandemic: the Brazilian case.

Authors: Vera Mateus, Paula Segamarchi, Safira Marostica, & Ana Osório

Symposium #13

We need to talk about sexual distress: multiple methodological approaches to broaden its understanding

Chair: Patrícia M. Pascoal

Authors: Patrícia M. Pascoal^{1,2}, Catarina Raposo², Andreia Manão¹, Pedro Nobre², Catarina Moura², Edna Martins¹ & Pedro Joel Rosa^{1,3}

Affiliations:

¹HEI-Lab: Digital Human-Environment Interaction Lab, Lusófona University, Portugal.

²CPUP, Center for Psychology at University of Porto, Faculty of Psychology and Education Sciences of the University of Porto, Porto, Portugal.

³Instituto Superior Manuel Teixeira Gomes, Portimão, Portugal.

Abstract

Sexual distress is a construct usually used to refer to the experience of negative emotions related to sexual activity. Diagnostic manuals (e.g., DSM) approach sexual dysfunction and establish sexual distress as a cross-diagnostic feature of these clinical conditions. Moreover, sexual distress is a necessary experience for diagnosing sexual dysfunction. The experience of emotional distress with sexual function is positively and strongly related to depression and anxiety, which partially explains why these are common comorbidities found with sexual dysfunctions. Despite its clinical relevance, the study of sexual distress has been neglected as most clinical intervention research generally takes a mechanical approach to sexual problems and has focused on restoring function, not paying attention to sexual distress, namely outside the context of sexual dysfunctions. This situation has generally led to a lack of a comprehensive approach to sexual distress, namely the following problems can be highlighted:

- The concept has been scarcely defined (both conceptually and operationally);
- There are no explanatory models of sexual distress;
- Clinical interventions, for example, Randomized Clinical Trials, are aimed at restoring dysfunction and are rarely concerned with minimizing distress;
- The individual, interpersonal and social predictors/correlates of sexual distress are scarcely known as there is no consistent research addressing this emotional experience;
- Primarily, studies have taken a single informant approach, ignoring the interpersonal and dependent nature of sexual distress;
- Only a few studies have been developed within a theoretical framework that is adequate to account for comorbidity.

With this symposium, we aim to approach sexual distress using different methodological approaches and contribute to expanding knowledge in the field. We will, therefore: use a qualitative approach to gather the representations and meanings that sexologists ascribe to sexual distress, contributing to the conceptual clarity regarding sexual distress; we will propose a psychosocial model of sexual distress based on a systematic review of the literature; we will try to approach sexual distress as experienced by heterosexual couples looking at the role of cognitive processes and relationship satisfaction, using an APIM approach to the data analysis; finally, based on previous findings we will propose a protocol to gather clinical data framed in a transdiagnostic approach to distress that may open new possibilities for designing clinical interventions anchored in both theory and empirical findings.

Keywords: Sexual distress; Qualitative research; Heterosexual couples; APIM approach

Talk 1 - How do sexologists define sexual distress?

Authors: Patrícia M. Pascoal, Catarina Raposo, Andreia Manão, & Pedro Nobre

Talk 2 - Using a systematic review of the literature to inform a psychosocial model of sexual distress.

Authors: Catarina Raposo, Patrícia M. Pascoal, Catarina Moura, & Pedro Nobre

Talk 3 - Is it worry or relationship satisfaction? Using APIM to look at couple's experiences of sexual distress.

Authors: Edna Martins, Patrícia M. Pascoal, & Pedro Joel Rosa

Talk 4 - A project for the study of transdiagnostic factors associated with sexual distress among a clinical sample of people with sexual dysfunction.

Authors: Andreia Manão & Patrícia M. Pascoal

Symposium #14

Parenting and mental health in community and at-risk families

Chair: Inês Jongenelen

Authors: Raquel Costa^{1,2,3,4}, Tiago Miguel Pinto^{3,4}, Ana Conde⁶, Ana Mesquita⁵, Emma Motrico⁷, Bárbara Figueiredo⁵, Ana Morais^{3,4}, Tiago Castro⁴, Tiago Pinto^{3,4}, Raquel Costa^{1,2,3,4}, Inês Jongenelen^{3,4,8}, Diogo Lamela^{3,4}, Stephanie Alves^{3,8}, Ágata Salvado^{3,8}, Ana Beato^{3,8}, Sara Albuquerque^{3,8} & Ana Morais^{3,4}

Affiliations:

¹EPIUnit, Instituto de Saúde Pública, University of Porto, Porto, Portugal.

²Laboratory for Integrative and Translational Research in Population Health, Porto, Portugal.

³Hei-Lab: Digital Human-Environment Interaction Lab, Portugal.

⁴Faculty of Psychology, Education and Sports, Lusofona University, Porto, Portugal.

⁵School of Psychology, University of Minho, Braga, Portugal.

⁶INPP – Portucalense Institute for Human Development, Portucalense University, Porto, Portugal.

⁷Psychology Department, Universidad Loyola Andalucía, Sevilla, Spain.

⁸School of Psychology and Life Sciences, Lusofona University, Lisbon, Portugal.

Abstract

The symposium addresses: 1) perinatal maternal depression before and during COVID-19 pandemic; 2) results of a systematic review on the longitudinal associations between the comorbidity of perinatal depression and anxiety symptoms and maternal behavior; 3) the impact of coparenting on mother's depressive symptoms; 4) mother's perceptions of partner's symptomatology on mother-infant bonding; 5) mother-child discrepancies in child maltreatment in a IPV sample.

Keywords: Parenting; Depressive symptoms; Anxiety symptoms

Talk 1 - Symptoms of depression in the perinatal period: Before versus during the COVID-19.

Authors: Raquel Costa, Tiago Miguel Pinto, Ana Conde, Ana Mesquita, Emma Motrico, & Bárbara Figueiredo

Talk 2 - Comorbidity of depression-anxiety symptoms and maternal behavior during the transition to parenthood: Findings from a systematic review.

Authors: Ana Morais, Tiago Castro, Tiago Pinto, Raquel Costa, Inês Jongenelen, & Diogo Lamela

Talk 3 - Coparenting and depressive symptoms in mothers during the transition to parenthood.

Authors: Tiago Pinto, Raquel Costa, Diogo Lamela, Inês Jongenelen, & Bárbara Figueiredo

Talk 4 - Do mothers' perceptions of their partners' pre- and post-natal emotional distress matter for mother-infant bonding?

Authors: Stephanie Alves, Ágata Salvador, Ana Beato, & Sara Albuquerque

Talk 5 - Mother-child discrepancies in child maltreatment: Clinical correlates with maternal mental health

Authors: Diogo Lamela, Tiago Pinto, Raquel Costa, Ana Morais, & Inês Jongenelen

Symposium #15

Current Issues and Perspectives in Perinatal Mental Health Promotion

Chair: Ana Fonseca / **Co-Chair:** Carlos Carona

Authors: Carlos Carona¹, Marco Pereira¹, Anabela Araújo-Pedrosa^{1,2}, Fabiana Monteiro¹, Maria Cristina Canavarró¹, Ana Fonseca¹, Ana Ganho-Ávila¹, Ana Tomás¹, Pedro Bastos³, Catarina Azevedo³, Nina Szczygiel^{3,4,5}, Andreia Cruz³, Mariana Moura-Ramos^{1,2}, Susan J. Wenze⁶, Cynthia L. Battle^{7,8,9}, Edward D. Huntley¹⁰, Trent L. Gaugler¹¹, Danielle Kats⁶, Catarina Cardoso¹ & Mariana Branquinho¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

²Coimbra Hospital and University Centre, Portugal.

³Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

⁴Research Unit on Governance, Competitiveness and Public Policies, Portugal.

⁵Department of Economics, Management, Industrial Engineering and Tourism, University of Aveiro, Portugal.

⁶Department of Psychology, Lafayette College, Easton, PA, USA.

⁷Department of Psychiatry and Human Behavior, Warren Alpert Medical School of Brown University, Providence, RI, USA.

⁸Butler Hospital, Providence, RI, USA.

⁹Women and Infants' Hospital of Rhode Island, Providence, RI, USA.

¹⁰Survey Research Centre, Institute for Social Research, University of Michigan, Ann Arbor, MI, USA.

¹¹Department of Mathematics, Lafayette College, Easton, PA, USA.

Abstract

The first oral communication will present a randomized controlled trial (RCT) that sought to examine the mid-term efficacy (from baseline to 4-months post-intervention) and the clinical and sociodemographic moderators of treatment response to “Be a Mom”, an internet-based cognitive-behavior therapy (iCBT) intervention to prevent PPD and promote maternal mental health, from baseline to post-intervention, in women at high risk for PPD.

Bearing in mind that psychological distress and positive mental health are related but distinct constructs, and that successful interventions at reducing psychopathology are not necessarily effective in improving positive mental health, the second oral communication will focus on the relevance of promoting flourishing mental health in the postpartum period. Based on a secondary analysis of data from a RCT that examined the efficacy of “Be a Mom”, it will present results on differences in the proportion of patterns of change in positive mental health as a function of group (intervention vs. control).

As regards other recent therapeutic approaches, Transcranial Direct Current Stimulation (tDCS) is a promising treatment in Peripartum Depression (PPD). However, tDCS efficacy shows high heterogeneity as a stand-alone treatment. Therefore, to increase its therapeutic potential, researchers and manufacturers have been exploring the efficacy of combining tDCS with psychological interventions, namely CBT. The third oral communication will present a treatment protocol for PPD combining home-based tDCS with computerized behavior therapy without in-person feedback and discuss the results from focus groups conducted with perinatal health professionals to explore its adequacy and feasibility.

Notably, prior research on maternal mental health after multiple gestation births is limited by a reliance on single-administration, self-report measures. Further, few studies have assessed postpartum sleep in mothers of multiples, yet sleep loss is closely tied with poor mental health. To address this research gap, the fourth oral communication presents a multi-method study that extends the literature by using ecological momentary assessment (EMA), in addition to self-report instruments, to measure in vivo mood, stress, and sleep in new mothers of multiples vs. singletons.

Finally, given that perinatal women report attitudinal, knowledge, and structural barriers as the most common obstacles to professional help-seeking for PPD symptoms, the fifth oral communication will present the “Women Choose Health (WCH)” project, developed within a partnership between Portugal and Norway, and planned to understand perinatal women’s decision-making process for treatment uptake. Specifically, results on Portuguese women’s treatment options and characteristics associated with treatment uptake during the perinatal period will be discussed.

Talk 1 - “Be a Mom”, a web-based tool to prevent postpartum depression: Examining its mid-term efficacy and moderators of change.

Authors: Carlos Carona, Marco Pereira, Anabela Araújo-Pedrosa, Fabiana Monteiro, Maria Cristina Canavarro, & Ana Fonseca

Talk 2 - Effects of a web-based CBT intervention in improving flourishing mental health levels among women with low and high risk for postpartum depression [online participation].

Authors: Fabiana Monteiro, Marco Pereira, Maria Cristina Canavarro, & Ana Fonseca

Talk 3 - The combination of Transcranial Direct Current Stimulation (tDCS) with virtual cognitive-behavioral therapy to manage peripartum depression: End-users’ experiences in the development of health interventions.

Authors: Ana Ganho-Ávila, Ana Tomás, Pedro Bastos, Catarina Azevedo, Nina Szczygiel, Andreia Cruz, & Mariana Moura-Ramos

Talk 4 - Ecological momentary assessment of postpartum mental health and sleep in mothers of multiples.

Authors: Susan J. Wenzel, Cynthia L. Battle, Edward D. Huntley, Trent L. Gaugler, & Danielle Kats

Talk 5 - Exploring Portuguese women's treatment uptake for mental health problems during the perinatal period.

Authors: Catarina Cardoso, Mariana Branquinho, Fabiana Monteiro, Anabela Araújo-Pedrosa, & Ana Fonseca

Symposium #16

Malingering in Clinical and Forensic Neuropsychological Assessment: Instruments with validation studies in Portugal

Chair: Mário R. Simões

Authors: Sandra Fernandes¹, Inês Ferreira², Luís Querido^{2,3}, Fernando Barbosa⁴, Emanuel Silva⁵, Cláudia Venâncio⁵, Débora Pinheiro⁵, Auni K. Dwarkadas⁵, Margarida Domingues⁵, Pedro Almiro⁵, Isabel Alberto⁵, Mário R. Simões⁵, Manuela Vilar⁵, Liliana B. Sousa⁵, Joana Paiva⁵, Mónica Fonseca⁶ & Julia Daugherty⁷

Affiliations:

¹Faculty of Psychology, University of Lisbon, CICPSI, Portugal.

²Faculty of Psychology, University of Lisbon, Portugal.

³Multidisciplinary Research Center of Egas Moniz (CiiEM), Instituto Universitário Egas Moniz (IUEM), Portugal.

⁴Laboratory of Neuropsychophysiology, Faculty of Psychology and Educational Sciences, University of Porto, Portugal.

⁵CINEICC. PsyAssessmentLab. Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

⁶CINEICC. PsyAssessmentLab. CPSC. Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

⁷Université Clermont-Auvergne (UMR) and Social and Cognitive Psychology Laboratory (UMR6024)

Abstract

Neuropsychological test interpretation rests upon the assumption that the examinee has exerted full effort on their performance on neurocognitive tests and truthfully/sincerely answer about their symptoms on self-report measures (interviews, psychopathological symptom inventories, personality questionnaires).

The assessment of response validity is now considered a necessary component of neuropsychological evaluations.

In this context, and as a way of controlling threats to the validity of performances and responses to assessment techniques and instruments, the Performance Validity Tests (PVT) and the Symptom Validity Tests (SVT) are becoming standards of the evaluation of malingering, suboptimal effort, symptom overreporting styles during clinical and forensic neuropsychological evaluations.

PVT measures the degree of effort (suspected effort, suboptimal performance, malingering) applied to testing to achieve optimal performance are necessary when assessing cognitive abilities.

SVT measures the accuracy or truthfulness of the examinee's behavioral presentation and self-reported symptoms on interview, psychopathology and personality measures and includes the detection of symptom overreporting, faking bad and malingering.

The symposium presents empirical evidence from recent Portuguese research of well-known measures – Test of Memory Malingering (TOMM), Rey-15- Item Memory Test (Rey-15-IMT), Coin in Hand - Extended Version (CIH-EV), Inventory of Problems-29 (IOP-29) and Self-Report Symptom Inventory (SRSI), as well the understanding potentialities and limitations of these measures and their results.

Keywords: Neuropsychological assessment; Malingering; Suboptimal performance; Symptom overreporting; Performance validity tests; Symptom validity tests

Talk 1 - Portuguese validation of the Coin in Hand - Extended Version (CIH-EV) and the need to adjust the Cutoff Points of the Performance Validity Tests in Portuguese elderly adults with and without dementia.

Authors: Sandra Fernandes, Inês Ferreira, Luís Querido, & Julia Daugherty

Talk 2 - Studies with the Portuguese Versions of the Inventory of Problems - 29 (IOP-29) and Inventory of Problems - Memory (IOP-M)

Author: Fernando Barbosa

Talk 3 - Self-Report Symptom Inventory (SRSI): Validation studies in the Portuguese prison context.

Authors: Emanuel Silva, Cláudia Venâncio, Débora Pinheiro, Auni K. Dwarkadas, Margarida Domingues, Pedro Almiro, Isabel Alberto, & Mário R. Simões

Talk 4 - Rey-15 Item Memory Test (Rey-15 IMT): Clinical and forensic validation studies.

Authors: Manuela Vilar, Liliana B. Sousa, Joana Paiva, & Mário R. Simões

Talk 5 - Test of Memory Malingering (TOMM): Clinical and forensic validation studies.

Authors: Liliana B. Sousa, Manuela Vilar, Mónica Fonseca, & Mário R. Simões

Symposium #17

The world is changing! The remote provision of (neuro)psychological services

Chair: Andreia Geraldo

Authors: Andreia Geraldo^{1,2}, Artemisa Rocha Dore^{1,2}, Cristina Mendes-Santos³, Fernando Barbosa¹, Joana Câmara^{4,5,6}, Teresa Paulino^{5,6}, Yuri Almeida^{5,6}, Diogo Branco^{5,6}, Mónica Cameirão^{5,6}, Érica Cunha⁷, Ana Lúcia Faria^{5,6}, Luís Ferreira^{5,6}, André Moreira^{5,6}, Ana Rita Silva⁴, Mónica Spínola^{4,6}, Fernando Teixeira^{5,6}, Manuela Vilar⁴, Mário Simões⁴, Sergi Bermúdez i Badia^{5,6}, Eduardo Fermé^{5,6}, Ana Filipa Oliveira⁸, Ana Torres⁹, Linda M. Ercoli¹⁰, Isabel M. Santos¹¹, Soraia Silva Monteiro^{1,11}, Joana Pinto^{1,2,12}, Nick Defilippis¹³, Fernando Ferreira-Santos¹, Ricardo Araújo³ & Ana Vasconcelos³

Affiliations:

¹Laboratory of Neuropsychophysiology, Faculty of Psychology and Education Sciences, University of Porto, Porto, Portugal.

²School of Health, Polytechnic Institute of Porto, Porto, Portugal.

³Fraunhofer Portugal AICOS.

⁴University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

⁵NOVA Laboratory for Computer Sciences and Informatics (NOVA LINCS), University of Madeira, Madeira, Portugal.

⁶Regional Agency for the Development of Research, Technology and Innovation, Madeira, Portugal.

⁷University of Madeira, Madeira, Portugal.

⁸Center for Health Technology and Services Research of the Health Research Network (CINTESIS@RISE), Department of Education and Psychology, University of Aveiro, Aveiro, Portugal.

⁹Center for Health Technology and Services Research of the Health Research Network (CINTESIS@RISE), Department of Psychology and Education, Faculty of Human and Social Sciences, University of Beira Interior, Covilhã, Portugal.

¹⁰Department of Psychiatry and Biobehavioral Sciences, Jane Terry Semel Institute for Neuroscience & Human Behavior, David Geffen School of Medicine at the University of California, Los Angeles, USA.

¹¹William James Center for Research (WJCR), Department of Education and Psychology, University of Aveiro, Aveiro, Portugal.

¹²CESPU, University Institute of Health Sciences.

¹³Atlanta Psychological Associates, Atlanta, USA.

Abstract

Albeit new digital technologies are being used for some decades to provide remote psychological services (PsyS) in certain countries, the transition for providing PsyS at-distance has been mostly slow and accompanied by resistance from professionals and clients. This transition was boosted by COVID-19, demanding rapid adjustments from both parties, but mainly from psychologists who had to develop new practical, ethical,

and technological skills. This symposium focuses on delivering an overview of specificities of remote-delivered PsyS. The first communication will present an overview of guidelines developed to support Psychologists in the remote provision of their services. This communication is organized in nine categories presenting: administrative, technical, and multicultural competencies of Psychologists; ethics and legislations inherent to remote-delivered PsyS; specificities of remote (neuro)psychological assessment, psychotherapy, and supervision; and aspects related to risk assessment and management, and to research and assessment of the efficacy of remote-delivered PsyS. Thus, although it is established that cognitive rehabilitation (CR) has the potential to mitigate post-stroke cognitive deficits and improve patients' emotional status, quality of life, and functionality, transitioning from in-hospital care to the patients' homes can be challenging. Therefore, implementing hybrid CR programs may facilitate the continuity of CR and decrease attrition rates. The second communication will present the results (feasibility, acceptability, and preliminary efficacy) of a 5-week hybrid CR program in four chronic stroke survivors. Cognitive impairment is also associated with non-central nervous system cancers, with a negative impact in the daily functioning of cancer survivors. The third communication will present the CanCOG® program, a web-based CR program to decrease cognitive difficulties reported by Portuguese cancer survivors. The program is composed by 5 modules and comprises psychoeducation, cognitive training, and goal setting. Remote (neuro)psychological assessment itself poses specific and significant difficulties, mainly associated with the scarcity of validated instruments and the reliability and validity of test scores. Therefore, the fourth communication will present an overview on information available about neuropsychological testing by videoconference, reassess the effect on test results, identify factors contributing to variable outcomes on tests, and provide guidelines. Additionally, performing remote neuropsychological assessments with senior citizens can be challenging due to technological, contextual, or person-related factors. The fifth communication will focus on the lessons learned through remote assessments conducted with 41 seniors. It will highlight the greatest challenges faced during remote sessions, and strategies that can be employed by psychologists to overcome difficulties in communicating with seniors using ICT technology.

Keywords: e-Mental Health; Guidelines; Neuropsychological assessment; Neuropsychological rehabilitation; New digital technologies

Talk 1 - Is Psychology the same? An integrative review of the guidelines for the remote provision of psychological services.

Authors: Andreia Geraldo, Artemisa Rocha Dore, Cristina Mendes-Santos, & Fernando Barbosa

Talk 2 - Preliminary efficacy of a hybrid cognitive rehabilitation program following stroke: a series of single-case studies.

Authors: Joana Câmara, Teresa Paulino, Yuri Almeida, Diogo Branco, Mónica Camedrão, Érica Cunha, Ana Lúcia Faria, Luís Ferreira, André Moreira, Ana Rita Silva, Mónica

Spínola, Fernando Teixeira, Manuela Vilar, Mário Simões, Sergi Bermúdez i Badia, & Eduardo Fermé

Talk 3 - CanCOG® – A web-based cognitive rehabilitation program to improve cognitive functioning of cancer survivors.

Authors: Ana Filipa Oliveira, Ana Torres, Linda M. Ercoli, & Isabel M. Santos

Talk 4 - Current evidence about neuropsychological assessment by videoconference in adults.

Authors: Soraia Silva Monteiro, Andreia Geraldo, Joana Pinto, Isabel Santos, Nick Defilippis, & Fernando Ferreira-Santos

Talk 5 - Performing neuropsychological remote assessments with seniors: challenges and strategies.

Authors: Ricardo Araújo, Cristina Mendes-Santos, & Ana Vasconcelos

Symposium #18

New developments in the adaptation and validation of psychological tests in Portugal

Chair: Inês Saraiva Ferreira

Authors: Mário R. Simões¹, Emanuel Silva¹, Pedro Almiro², Maria João Seabra Santos¹, Leandro Almeida³, Maria João Afonso⁴, Rosa Novo⁴, Bárbara Gonzalez⁵, Mauro Paulino^{6,7}, Mariana Moniz⁷, Octávio Moura⁶, Daniel Rijo⁶, Mário R. Simões⁶, Carla Ferreira⁸ & Magda Machado⁸

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

²Autonomous University of Lisbon, Portugal.

³School of Psychology, University of Minho, Portugal.

⁴Faculty of Psychology, University of Lisbon, Portugal.

⁵Lusófona University of Humanities and Technologies, Portugal.

⁶CINEICC - Center for Research in Neuropsychology and Cognitive Behavioral Intervention; PsyAssessmentLab - Psychological Assessment and Psychometrics Laboratory.

⁷Mind – Psicologia Clínica e Forense, Portugal.

⁸Hogrefe, Lisboa.

Abstract

As defined in the Deontological Code of the Portuguese Psychologists Association, the psychological assessment requires the use of comprehensive, diverse, and valid assessment protocols. Specifically, the instruments included in the evaluation protocols must be representative and subject to scientific research that includes studies of a psychometric nature (validity, reliability, elaboration of norms) based on diversified samples.

Therefore, to respect the Deontological Code, it is mandatory the Portuguese psychology research invest in the validation of instruments, in several domains. This symposium pretends to share a huge step, current in the national psychology, with the validation and norming of the two personality inventories most representative and widely used in the world, namely the Minnesota Multiphasic Personality Inventory-2 Restructured Form (MMPI-2-RF) ($n = 2403$) and Personality Assessment Inventory ($n=900$), alongside with other current and new validation projects.

The MMPI-2-RF is one of the most important instruments used in personality and psychopathology assessment, with adults. It gathers the contribution of years of research and provides a variety of information on personality variables and psychological disorders. This updated version of the MMPI-2 presents a substantial reduction in the number of items and introduces a new set of scales (i.e., 9 validity scales, 3 high-order scales, 9 restructured clinical scales, 25 specific problems scales, and 5 personality psychopatho-

logy scales), based upon a profound empirical data analysis and systematic review of the previous form.

Since its publication (1991), the PAI has been considered an important innovation in the field of clinical evaluation. Allowing for a comprehensive assessment of psychopathology in adults through 22 scales (i.e., 4 validity scales; 11 clinical scales; 5 scales of considerations for treatment; 2 scales of interpersonal relationships).

Beyond the normative sample, samples were collected in forensic context, namely inmate offenders and female victims of domestic violence. In these cases, both inventories were used because of the convergent and discriminant validity studies, like those published in international papers.

In addition to these (re)known personality assessment inventories, this symposium also features communications centered on the current Portuguese reality regarding the use of psychological tests in Portugal. One of these communications uses data from a survey answered by Portuguese psychologists about the most used tests in Portugal, makes comparisons with international research and draws implications for practice and teaching of the psychological assessment. The role of psychologists in test validation work in Portugal is also analyzed from a historical and prospective perspective, in another presentation.

Talk 1 - Survey on the most used psychological tests in Portugal: International comparisons and implications for professional practice, teaching, and research.

Authors: Mário R. Simões, Emanuel Silva, Pedro Almiro, Maria João Seabra Santos, & Leandro Almeida.

Talk 2 - Validating the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF) for Portugal: From Test Adaptation to Measures' Interpretation.

Authors: Maria João Afonso, Rosa Novo, & Bárbara Gonzalez

Talk 3 - Personality Assessment Inventory (PAI): validation studies with normative and forensic Portuguese samples.

Authors: Mauro Paulino, Mariana Moniz, Octávio Moura, Daniel Rijo, & Mário R. Simões

Talk 4 - The psychologists and the validation of psychological tests in Portugal: Past, present, and future.

Authors: Carla Ferreira & Magda Machado

Symposium #19

Behavior Rating Inventory of Executive Function (BRIEF): Portuguese validation studies

Chair: Cristina Petrucci Albuquerque

Authors: Alexandra Gaudêncio¹, Octávio Moura¹, Maria João Seabra-Santos¹, Cristina P. Albuquerque¹, Marcelino Pereira¹, Sofia Major², Ana Filipa Lopes¹, Manuela Vilar¹ & Mário R. Simões¹

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

²University of the Azores, Portugal.

Abstract

This symposium describes several studies regarding the most well-known rating scale of executive functions, the Behavior Rating Inventory of Executive Function (BRIEF). This rating scale has been developed between 2000 and 2015 (Gioia et al., 2003, 2015; Roth et al., 2003), and has the following versions: a version for pre-school aged children (BRIEF-P, for parents and Kindergarten teachers of children with ages comprised between 3 and 6 years); a version for children and adolescents from 6 to 18 years of age (BRIEF2, that comprises a form for parents, a form for teachers and a self-report form answered by children and adolescents aged 10 to 18 years); and a version for adults with ages equal or higher than 18 years (BRIEF-A, with self-report and informant report forms).

The BRIEF Portuguese studies have as their main aim to contribute to the validation of the rating scales BRIEF-P, BRIEF2 and BRIEF-A to the Portuguese population.

The first communication investigated the psychometric properties of the BRIEF-P (reliability, EFA, and CFA) in a sample of 700 Portuguese preschoolers (3 to 6 years-old). The five scales showed adequate reliability. The expected results of EFA and CFA will show that the original three-factor model of the BRIEF-P was the most parsimonious factor solution.

The second communication covers BRIEF2 reliability studies, namely test-retest ($N = 69$) and interrater agreement ($N = 187$ parents- adolescents; $N = 71$ parents-teachers-adolescents). It also synthesizes data concerning the discriminant validity of the BRIEF2 in developmental dyslexia ($N = 43$) and high abilities ($N = 65$), as well as the associations between BRIEF2 and performance executive functions tests ($N = 58$). The results obtained confirm that the BRIEF2 is a valid and reliable instrument.

The third and fourth communications address the internal consistency and factorial structure of the BRIEF2 Parent Form and of the BRIEF-A self-report and informant report forms. Both studies had large samples ($N = 700$ in BRIEF2; $N = 608, 304$ in each

of the BRIEF-A forms) and confirmed that index scores had very good values of internal consistency. Regarding the factorial structure, the studies tested several models, but differed in what concerns the results obtained: a three-factor model revealed the best fit in the BRIEF2 Parent Form, while a two-factor model showed a better fit in the BRIEF-A.

In short, all the communications stress the psychometric adequacy of the different BRIEF versions.

Keywords: BRIEF-P; BRIEF2; BRIEF-A; Executive functions; Validity

Talk 1 - Psychometric properties of the Behavior Rating Inventory of Executive Function-Preschool Version (BRIEF-P).

Authors: Alexandra Gaudêncio, Octávio Moura, Maria João Seabra-Santos, Cristina P. Albuquerque, Marcelino Pereira, Sofia Major, Ana Filipa Lopes, Manuela Vilar, & Mário R. Simões

Talk 2 - BRIEF 2: Overview of reliability and validity studies.

Authors: Marcelino Pereira, Cristina P. Albuquerque, Octávio Moura, Sofia Major, Ana Filipa Lopes, Manuela Vilar, Maria João Seabra-Santos, Alexandra Gaudêncio, & Mário R. Simões

Talk 3 - Psychometric properties of the BRIEF2 Parent Form.

Authors: Octávio Moura, Cristina P. Albuquerque, Marcelino Pereira, Sofia Major, Ana Filipa Lopes, Manuela Vilar, Maria João Seabra-Santos, Alexandra Gaudêncio, & Mário R. Simões

Talk 4 - BRIEF-A: Construct Validity.

Authors: Cristina P. Albuquerque, Manuela Vilar, Octávio Moura, Mário R. Simões, Marcelino Pereira, Sofia Major, Ana Filipa Lopes, Maria João Seabra-Santos, & Alexandra Gaudêncio

Symposium #20

Assessment in mental health: Recent validations and novel contributions for CBT research and practice

Chair: Marco Pereira

Authors: Marco Pereira^{1,2}, Rita Vaz¹, Matilde Azenha¹, Cláudia Melo^{2,3}, Ana Fonseca^{1,2}, Maria Cristina Canavarro^{1,2,3}, Alba Quilez-Orden^{4,5,6}, Óscar Peris-Baquero^{4,5}, Vanesa Ferreres-Galán^{4,5,7}, Laura Martinez-Garcia^{4,5}, Jorge Osma^{4,5}, Marta Capinha^{1,2}, Marlene Matos⁸, Daniel Rijo^{1,2}, Joana Marta-Simões², Sara Oliveira^{1,2}, Cláudia Ferreira^{1,2}, Mariana Agrela¹, Ana Margarida Pinto^{1,2}, José António Pereira da Silva^{9,10}, Rinnie Geenen^{11,12} & Paula Castilho^{1,2}

Affiliations:

¹University of Coimbra, Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

³University of Coimbra, Unit of Cognitive-Behavioral Clinical Psychology (UpC³), Coimbra, Portugal.

⁴University of Zaragoza, Department of Psychology and Sociology, Teruel, Spain.

⁵Institute for Health Research Aragón (IIS Aragón), Zaragoza, Spain.

⁶Mental Health Unit of Tarazona, Spain.

⁷Mental Health Unit of the Regional Hospital of Vinaròs, Castelló, Spain.

⁸University of Minho, School of Psychology, Braga, Portugal.

⁹Rheumatology Department, Coimbra Hospital and University Centre, Coimbra, Portugal.

¹⁰University of Coimbra, Coimbra Institute for Clinical and Biomedical Research (i.CBR), Faculty of Medicine, Coimbra, Portugal.

¹¹Department of Psychology, Utrecht University, Utrecht, The Netherlands.

¹²Altrecht Psychosomatic Medicine Eikenboom, Zeist, The Netherlands.

Abstract

A fundamental constituent in research and clinical practice in cognitive-behavioral therapy (CBT) as well as in psychological interventions broadly considered, pertains to mental health assessment and the choice of appropriate instruments for measuring psychopathological symptoms, psychological processes, and other clinical-relevant outcomes. By doing so, clinicians increase their likelihood of suitable psychological assessments, case formulations and interventions, and researchers improve the external validity of their findings. With this rationale in mind, the aim of this symposium is to present a set of recent country-specific validations and the development of new measures for using in CBT research and practice.

Assuming the importance of brief and effective tools for mental health, the first communication will present the preliminary evidence of reliability and validity of the European Portuguese versions of the Overall Anxiety Severity and Impairment Scale (OASIS) and

the Overall Depression Severity and Impairment Scale (ODSIS), two five-item screening scales for measuring anxiety and depression.

In the second presentation, data from the Spanish validation of the Multidimensional Emotional Disorders Inventory (MEDI) will be presented. This study validation involved two samples, a non-clinical sample involving 455 university students, and a clinical sample consisting of 280 patients of the Spanish public mental health system, with a main diagnosis of Emotional Disorder.

The third presentation, in a sample comprising 605 adults from the community, will examine the reliability, measurement model, and sex invariance of the Portuguese version of the Compass of Shame Scale (CoSS-5), as well as its association with measures of self-criticism, self-reassuring, and psychopathological symptoms.

The validation of the Functionality Appreciation Scale (FAS) among Portuguese adults will be the focus of the fourth communication. The structure and adequacy of the Portuguese version of the FAS was supported. The FAS convergent validity and its relation to external variables (body appreciation, self-compassion and psychological quality of life) were examined and corroborated.

Based on Gilbert's "three-circle" model of affect regulation systems (threat, drive and soothing), which encompass different evolutionary functions and neurobiological underpinnings, the fifth presentation will introduce the development and preliminary acceptability of a novel self-report instrument, the Three Circle Model-Response Inventory (TCM-RI), which estimates the activation of the three affect regulation systems based on affective states and response styles reported in response to emotion-eliciting vignettes. The content validity was evaluated by a panel composed of 24 experts in the three-circle model and its acceptability was tested with a group of 36 participants from the community.

Keywords: Mental health; Psychological assessment; Psychometric studies

Talk 1 - European Portuguese versions of the overall anxiety and depression severity and impairment scales (OASIS/ODSIS): Preliminary evidence of reliability and validity.

Authors: Marco Pereira, Rita Vaz, Matilde Azenha, Cláudia Melo, Ana Fonseca, & Maria Cristina Canavarro

Talk 2 - Multidimensional Assessment of Emotional Disorders through the MEDI: Results and psychometric properties in non-clinical and clinical population in Spain.

Authors: Alba Quilez-Orden, Óscar Peris-Baquero, Vanesa Ferreres-Galán, Laura Martinez-García, & Jorge Osma

Talk 3 - Measurement of shame-coping styles (CoSS-5) and their association with self-criticism, self-reassuring, and psychopathological symptoms.

Authors: Marta Capinha, Marlene Matos, Daniel Rijo, & Marco Pereira

Talk 4 - The Portuguese validation of the Functionality Appreciation Scale.

Authors: Joana Marta-Simões, Sara Oliveira, & Cláudia Ferreira

Talk 5 - Using emotion-eliciting vignettes to explore the three-circle model: Development of a new measure.

Authors: Mariana Agrela, Ana Margarida Pinto, José António Pereira da Silva, Rinnie Geenen, & Paula Castilho

Symposium #21

Neuropsychology and dementia risk reduction: study protocols and outcome measures

Chair: Margarida Pedroso de Lima

Authors: Isabel Manica¹, Maria Vânia Nunes¹, Ana Rita Silva² & Andreia Jesus²

Affiliations:

¹Portuguese Catholic University (UCP), Portugal.

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

Abstract

Dementia is amongst the leading causes of disability in older adults across the world. The number of persons with dementia globally is around 50 million but expected to triplicate by 2050. Disease modifying treatments are not yet available, and growing evidence of modifiable risk factors responsible of around 40% of the cases of dementia makes dementia prevention and risk reduction effective approaches an urgent need. The importance to understand how societal impactful events like COVID-19 pandemic affected older adults' behaviors and adopted lifestyles is a preliminary priority, as well as to create engaging and accessible tools that promote healthier lifestyles, increase cognitive reserve, and reduce the threat regarding psychosocial risk factors for dementia (e.g., depression, social isolation, etc.). Two Portuguese teams recently became members of the Worldwide FINGERS network (an international network that joints researchers enrolled in dementia risk reduction studies, with the purpose to make progress in the primary and secondary prevention of cognitive decline/dementia, with cross-cultural concerns). Fostered by these research collaborations, original research is being conducted in this field.

In the present symposium, we will share several (neuro)psychological interventions that are being tested as solutions for dementia prevention in the Portuguese context. First, a survey regarding change in lifestyle habits during COVID-19 pandemic (Work-Wide-Fingers-Sars-Cov-2 Initiative) will be presented as a background for the needs assessment of older adults at risk, which is considered pivotal when building dementia risk reduction programs. Secondly, we will present DEMENPREV, a multidisciplinary dementia prevention program based in the known FINGER trial, that is currently being tested for its application in residential and day care facilities. Additionally, a neuropsychological dementia risk reduction program - REMINDER - will be presented, a manualized program based in a person-centered approach and in tackling psychosocial risk factors for dementia in community dwelling samples. Finally, a (neuro)psychological intervention - the HEPPI program - a home-based intervention to improve well-being and cognitive

reserve in socially isolated older adults, will be presented as an example of home delivered approaches to tackle modifiable risk factors for dementia.

With this symposium, we aim to discuss aged populations needs in terms of dementia risk reduction and prevention, and exchange current research of manualized interventions, understanding their added value in terms of effectiveness, accessibility, and sustainability.

Talk 1 - World-Wide-Fingers-Sars-Cov-2-Initiative: Survey Portugal.

Author: Isabel Manica

Talk 2 - DemenPrev: a study of a multidomain intervention in dementia prevention in Portuguese context.

Author: Maria Vânia Nunes

Talk 3 - REMINDER: a neuropsychological manualized program to prevent dementia in at-risk individuals.

Author: Ana Rita Silva

Talk 4 - The HEPPI Program – Homebound Elderly People Psychotherapeutic Intervention: relevance for reducing dementia risk.

Author: Andreia Jesus

Symposium #22

Promoting adjustment and wellbeing in the pathways to parenthood: using ICT in the prevention and treatment of mental health problems

Chair: Anabela Pedrosa

Authors: Verónica Martínez-Borba¹, Jorge Osma¹, Elena Crespo-Delgado², Laura Andreu-Pejó², Carlos Suso-Ribera², Anabela Araújo Pedrosa^{3,4}, Cláudia Melo⁴, Mariana Branquinho⁴, Ana Luz Chorão⁴, Raquel Pires⁴, Helena Moreira⁴, Mariana Branquinho⁴, Maria Cristina Canavarro⁴, Ana Fonseca⁴, Maria Barbosa-Ducharne^{5,6}, Joana Soares⁶, Beatriz Henrique⁶, Lisandra Fonseca⁶, Filipa Miranda⁶, Sara Barroso⁶, Bethan Rowbottom⁷, Ana Galhardo^{4,8}, Eloise Donovan & Sofia Gameiro⁷

Affiliations:

¹University of Zaragoza and Health Research Institute of Aragón, Zaragoza, Spain.

²University Jaume I, Castellón, Spain.

³Clinical Psychology Unit, Centro Hospitalar e Universitário de Coimbra, Portugal.

⁴ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

⁵Centre for Psychology at the University of Porto. Faculty of Psychology and Education Sciences, University of Porto, Portugal.

⁶Group for Research and Intervention in Out-of-Home Care and Adoption. Faculty of Psychology and Education Sciences, University of Porto, Portugal.

⁷School of Psychology, Cardiff University, Wales, UK.

⁸Instituto Superior Miguel Torga, Coimbra, Portugal.

Abstract

The pathways to parenthood, in different phases of the reproductive cycle, are challenging to the adjustment and wellbeing of women and men. Evidence is solid regarding the risks posed by the physiological, emotional, and psychological changes that occur during normative pregnancy and postpartum periods to women's and couples' mental health, and their enduring consequences. Those risks and challenges are also very significant when facing additional obstacles, such as infertility problems, coming to term with involuntary childlessness or adoption. These are populations with increased needs for psychological intervention; the use of information and communication technologies (ICT) offers an alternative method to conduct screening and intervention programs that help to overcome the limitations of traditional models of care. The development of e-mental health tools to prevent emotional disorders associated with the different periods and pathways to parenthood may be an effective way to improve people's access and utilization of mental

healthcare and its outcomes. This symposium aims to present several e-health tools recently developed and applied, and its results so far.

The first oral communication will explore how ICT have been used during the last decades to screen for perinatal depressive symptoms, and additionally will describe the HappyMom project as an example of technology development for the assessment and prevention of depressive symptoms during the perinatal period.

The second oral communication will present data of the project Mind the Mom – a psychological online intervention to promote perinatal mental health during the pandemic. Results of the use and evaluation of the Mind the Mom app and of baseline assessment of symptomatology and sociodemographic variables are presented in order to identify pregnant women whose adherence and perception of utility of this program are higher.

The third oral communication will present the program Be a Mom Coping with Depression; this is a blended cognitive-behavioral intervention for the treatment of postpartum depression, integrating sessions with a psychologist and a web-based program. This innovative intervention has been developed for the Portuguese population and is being tested in a randomized controlled trial.

The fourth oral communication will present results from the program MyJourney, an online self-help, interactive program grounded on Contextual Cognitive-Behavioural Therapies which aims to promote psychological adjustment to people whose wish to have children was not fulfilled.

The fifth oral communication will present results from the online platform AdoPt, a program which aims to support adopting families in the post-adoption period and promote adoption stability.

Keywords: ehealth; Perinatal mental health; Transition to parenthood; Adjustment to childlessness; Adoption

Talk 1 - eHealth during the perinatal period: Current practices and new developments in perinatal depression screening.

Authors: Verónica Martínez-Borba, Jorge Osma, Elena Crespo-Delgado, Laura Andreu-Pejó, & Carlos Suso-Ribera

Talk 2 - Mind the Mom – sociodemographic, obstetric and psychological characteristics associated with adherence and satisfaction with the online preventive intervention.

Authors: Anabela Araújo Pedrosa, Cláudia Melo, Mariana Branquinho, Ana Luz Chorão, Raquel Pires, & Helena Moreira

Talk 3 - Be a Mom Coping with Depression, a blended intervention for the treatment of postpartum depression.

Authors: Mariana Branquinho, Maria Cristina Canavarro, & Ana Fonseca

Talk 4 - AdoPt project – Monitoring postadoption needs and supporting adoptive families.

Authors: Maria Barbosa-Ducharne, Joana Soares, Beatriz Henrique, Lisandra Fonseca, Filipa Miranda, & Sara Barroso

Talk 5 - MyJourney: Ten steps in the path of accepting the unfulfilled desire for children.

Authors: Bethan Rowbottom, Ana Galhardo, Eloise Donovan, & Sofia Gameiro

Symposium #23

The Unified Protocol for Transdiagnostic Treatment of Emotional Disorders in Children: Research and New Developments in Portugal and in the United States of America

Chair: Helena Moreira

Authors: Jill Ehrenreich-May¹, Brígida Caiado², Maria Cristina Canavarro², Helena Moreira², Ana Maria Pereira^{3,4}, Diana Gouveia⁴, Ana Isabel Pereira^{3,4}, Ana Carolina Góis², Bárbara Pereira² & Diana Santos²

Affiliations:

¹University of Miami, USA

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

³CICPSI, Faculty of Psychology, University of Lisbon, Portugal.

⁴Faculty of Psychology, University of Lisbon, Portugal.

Abstract

Early efficacy trials of the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders in Children (UP-C; Ehrenreich-May et al., 2017) suggest that this approach to cognitive behavior therapy for youth under age 13 is efficacious across controlled prevention and clinical intervention settings. However, relatively little data is known about predictors, mediators, and moderators of such effects. Using a sample of >300 youth that have completed a course of UP-C in group or individual therapy in a research clinic environment in the southeastern part of the United States, the first oral communication will focus on unique predictors (e.g., parent distress tolerance, youth symptom severity, baseline social anxiety), latent profiles (e.g., related to emotion regulation) and Top Problem Assessment categories that may be associated with enhanced UP-C response. Differential outcomes assessed for those receiving UP-C via telehealth vs. in-person will also be discussed. Future directions for UP-C research will also be reviewed.

The second oral communication will present the efficacy results of the UP-C in decreasing children's anxiety and depression levels and the interference of the symptomatology in children's and parents' life. An RCT, with an active control group (psychoeducational program), that included 153 Portuguese children with at least one emotional disorder as a primary diagnose and their parents was conducted. The results indicate that UP-C is an effective intervention to treat children's emotional disorders.

The third oral communication will present the results of a qualitative study that explored the experience of 17 Portuguese parents of children who participated in a pilot study of

the UP-C/C, an adapted, child-centered version of the UP-C. The aim of the study was to understand the changes motivated by the intervention, its potential facilitators, and barriers. Overall, the results suggest changes in the child, parents, and family.

The fourth oral communication will present the results of a pilot study aimed at exploring the feasibility and acceptability of a stepped care version of the UP-C in the Portuguese population. Participants were 18 children with a primary emotional disorder diagnosis and their parents, assessed before and after the intervention through self-report measures.

The fifth oral communication will present the results of a study that explored the acceptability of blended psychological interventions (i.e., interventions that combine online and face-to-face sessions) for children with emotional disorders by Portuguese mental health professionals and parents. In this communication, the development of a Portuguese blended version of the UP-C will be also presented.

Keywords: Unified protocol; Children; Transdiagnostic; Emotional disorders

Talk 1 - Examining “Why” and “for Whom” the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders Works for Children.

Author: Jill Ehrenreich-May

Talk 2 - The Efficacy of the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders in Children: Results from a Randomized Controlled Trial in the Portuguese Population.

Authors: Brígida Caiado, Maria Cristina Canavarro, Jill Ehrenreich-May, & Helena Moreira

Talk 3 - Parental Perceptions of Therapeutic Changes Following their Participation in a Child-Centered Version of the UP-C.

Authors: Ana Maria Pereira, Diana Gouveia, & Ana Isabel Pereira

Talk 4 - A Stepped-Care version (UP-C-SC) of the Unified Protocol for Transdiagnostic Treatment of Emotional Disorders in Children: Feasibility Study Results in the Portuguese Population.

Authors: Ana Carolina Góis, Maria Cristina Canavarro, Jill Ehrenreich-May, & Helena Moreira

Talk 5 - From the Acceptability of Blended Psychological Interventions for Children with Emotional Disorders to the Development of a Blended Version of the UP-C.

Authors: Helena Moreira, Bárbara Pereira, Diana Santos, Ana Carolina Góis, Ana Maria Pereira, Brígida Caiado, Jill Ehrenreich-May, & Ana Isabel Pereira

Symposium #24

Ambivalence Toward Change and Resistance: The interplay between intra- and interpersonal tensions in psychotherapy

Chair: João Tiago Oliveira

Authors: Divo Faustino¹, João Tiago Oliveira¹, Maria João Faria¹, Kevin Pereira¹, Rui Braga¹, Juan Martin Gómez Penedo², Helena Ferreira¹, Janine Marinai¹, Cátia Braga¹, Miguel M. Gonçalves¹, Carina Magalhães¹, Robert A. Neimeyer³ & Andreia Milhazes¹

Affiliations:

¹CIPsi - Psychology Research Center, Psychotherapy and Psychopathology Research Unit, School of Psychology, University of Minho, Portugal.

²Department of Psychology, University of Buenos Aires & CONICET, Buenos Aires, Argentina.

³Department of Psychology, University of Memphis, Memphis, TN, USA.

Abstract

Research shows that both patients' engagement with treatment and resistance/reactance to change are crucial dimensions for treatment success. In fact, both constructs are strictly associated with the assumption that the patient is an active self-healing agent in therapy. On one hand, engagement with therapy reflects on the patient's motivation for change, readiness to change, feelings of belonging to the therapeutic process and therapist, the acknowledgment of the benefits of changing, as well as some objective indicators intimately related to success in psychotherapy such as homework compliance. On the other hand, resistance to change consists of interpersonal tensions that emerge from the dyadic interaction between the patient and the therapist, leading to poor outcomes and early dropout from therapy when it is not overcome. Although the importance of patient involvement and resistance to the therapeutic process is widely recognized, both constructs need further study. Therefore, this panel presents a line of research on the mechanisms associated with the intra- and interpersonal tensions that emerge in psychotherapy and the role played by the therapists. In the first paper, the authors present data about the effect of ambivalence on treatment success and failure. In the second paper, the authors explore the interplay between ambivalence and therapist-patient interpersonal complementarity. The third paper presents a study where the ambivalence levels experienced by patients are studied in terms of ambivalence markers during the session. The fourth paper presents a scoping review of how therapists deal with resistance in psychotherapy. Finally, in the fifth paper, the authors present the relationship between clients' resources (assessed and enhanced by the Feedback Initiated Narrative Development Protocol) and ambivalence toward change at the beginning of the treatment and throughout the process. Implications will be discussed both at a research and clinical level. Specifically, we will highlight the potential impact on the psychotherapeutic process and outcomes of the

empirical identification of (1) clients' movements towards change, (2) clients' movements away from change, and (3) how therapists could deal with those cyclical movements.

Keywords: Psychotherapy; Ambivalence; Resistance; Reactance; Emotional disorders

Talk 1 - Ambivalence toward change and its associations with treatment success.

Authors: Divo Faustino & João Tiago Oliveira

Talk 2 - The challenge of measuring ambivalence toward change in psychotherapy: Self-report vs. Observable Empirical Markers.

Authors: Maria João Ferreira, Divo Faustino, Kevin Pereira, & João Tiago Oliveira

Talk 3 - The interplay between Patient-Therapist Interpersonal Complementarity and Ambivalence toward change in psychotherapy.

Authors: Rui Braga, Juan Martin Gómez Penedo, & João Tiago Oliveira

Talk 4 - How therapists deal with resistance in psychotherapy - A scoping review.

Authors: Helena Ferreira, Janine Marinai, Maria João Faria, Cátia Braga, Miguel M. Gonçalves, & João Tiago Oliveira

Talk 5 - Starting Psychotherapy addressing functional aspects of the client's life: Feedback Initiate Narrative Development Protocol.

Authors: Carina Magalhães, Robert A. Neimeyer, Andreia Milhazes, Rui Braga, João Tiago Oliveira, Cátia Braga, & Miguel M. Gonçalves

Symposium #25

Applications of the Unified Protocol using technology tools for the prevention and treatment of emotional disorders

Chair: Jorge Osma

Authors: Todd J. Farchione¹, Danni Spencer-Laitt¹, Audrey Hey¹, Lauren Woodard¹, Verónica Martínez-Borba^{2,3}, Elena Crespo-Delgado^{3,4}, Laura Andreu-Pejó^{3,4}, Alba Monferrer-Serrano⁵, Jorge Osma^{2,3}, Laura Martínez-García^{2,3}, Javier Prado-Abril^{3,6}, Óscar Peris-Baquero^{2,3}, Alba Fadrique-Jiménez², Alberto González-Pérez⁴, Jordi Socías Soler^{2,3}, Trinidad Peláez^{2,7}, Raquel López-Carrillero⁷, Judit Subirana-Mirete⁷, Marta Ferrer-Quintero^{7,8} & Susana Ochoa⁷

Affiliations:

¹Center for Anxiety & Related Disorders, Boston University.

²University of Zaragoza, Department of Psychology and Sociology, Faculty of Social and Human Sciences, Teruel, Spain.

³Health Research Institute of Aragon, Zaragoza, Spain.

⁴Jaume I University, Castellón, Spain.

⁵General University Hospital from Castellón, Castellón, Spain.

⁶Miguel Servet University Hospital, Zaragoza, Spain.

⁷Sant Joan de Déu Health Park, Barcelona, Spain, & Mental Health Networking Biomedical Research Centre (CIBERSAM) The Institute of Health Carlos III, Madrid, Spain.

⁸Gregorio Marañón Health Research Institute, Madrid, Spain.

Abstract

Emotional disorders (EDs) have become the most prevalent psychological disorders in the general population, which has increased the economic and health care burden associated with their management. Finding solutions to provide cost-effective treatments for EDs has become a key goal of today's clinical psychology. The use of Information and Communication Technologies (ICTs) in psychological interventions has become increasingly popular in recent years and would address the barriers to psychological care to Eds. Some of its advantages are: it is more anonymous and can reduce the stigma related to mental health consultations, is more accessible, can be adapted to patients' needs and breaks down geographic barriers, allowing access to treatment at the place and time of the user's choice. This symposium aims to present several studies in which The Unified Protocol for Transdiagnostic Treatment of Emotional Disorders (UP) has been applied using ICTs for the prevention and treatment of EDs and a communication about the development of an UP-based smartphone application and its preliminary usability and acceptability outcomes. The first oral communication will present data from an ongoing, randomized clinical trial evaluating the effectiveness of the digital Unified Protocol (UP), an evidence-based, transdiagnostic CBT for EDs, compared to the digital Unified Pro-

TOCOL+, an adapted version of the intervention containing additional content designed to directly target positive affect. The second will present results from a pilot study in which an online prevention UP-based program was conducted in a Fertility Unit with the aim to improve emotional dysregulation for the prevention of anxiety and depressive symptoms in women undergoing fertility treatments. The third will present the development process of REGULEM APP, an UP-based smartphone application following a User Centered Design. Two focus group were conducted (with patients and clinicians) before and after the App development. Data of these focus group will be presented with preliminary usability and quality results of REGULEM. The fourth will present results from the preliminary feasibility and effectiveness data obtained from a brief UP-based program applied in online group format in university students for the prevention of emotional disorders. The fifth will present results from a RCT in which UP in group online format has been applied to reduce comorbid emotional symptoms in patients with ultra high risk of developing psychosis. Patients were assigned to one of these two conditions: UP + treatment as usual (TAU) or Waiting list (only receiving TAU).

Keywords: Unified protocol; Transdiagnostic; Emotional disorders; Technology; M-health

Talk 1 - Efficacy of an Online Version of the Unified Protocol that Targets Positive Affect Regulation: Preliminary Examination of Symptom Outcomes.

Authors: Todd J. Farchione, Danni Spencer-Laitt, Audrey Hey, & Lauren Woodard

Talk 2 - Prevention of Emotional Disorders and Symptoms Under Health Conditions: A Pilot Study using the Unified Protocol in a Fertility Unit.

Authors: Verónica Martínez-Borba, Elena Crespo-Delgado, Laura Andreu-Pejó, Alba Monferrer-Serrano, & Jorge Osma

Talk 3 - REGULEM – a smartphone App based on the Unified Protocol for the transdiagnostic treatment of emotional disorders: A qualitative analysis of users and professionals' perspectives before and after its development and preliminary usability and quality results.

Authors: Laura Martínez-García, Jorge Osma, Javier Prado-Abril, Oscar Peris-Baquero, Alba Fadrique-Jiménez, & Alberto González-Pérez

Talk 4 - Preliminary results of a brief online group application of the unified protocol for the prevention of emotional disorders in university students: a multiple baseline experimental design.

Authors: Jordi Socías Soler, Laura Martínez-García, Oscar Peris-Baquero, & Jorge Osma

Talk 5 - Application of the unified protocol for the transdiagnostic treatment of comorbid emotional disorders in patients with ultra-high risk of developing psychosis: A randomized trial study.

Authors: Trinidad Peláez, Raquel López-Carrillero, Judit Subirana-Mirete, Marta Ferrer-Quintero, Susana Ochoa, & Jorge Osma

Symposium #26

Cognitive-behavioral therapy for insomnia (CBT-I): Current and new approaches

Chair: Ana Allen Gomes

Authors: Vanda Clemente^{1,2}, Mariana Miller Mendes², Inês Clara², Daniel Ruivo Marques^{2,4}, Paula Castilho^{2,3}, Maria Cristina Canavarro^{2,3} & Ana Allen Gomes^{2,3}

Affiliations:

¹ Sleep Medicine Center, University and Hospital Center of Coimbra (CHUC), Portugal.

² University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal.

³ University of Coimbra, Faculty of Psychology and Educational Sciences, Portugal.

⁴ University of Aveiro, Department of Education and Psychology, Portugal.

Abstract

Insomnia disorder is the most prevalent sleep disorder and one of the most prevalent mental disorders. Cognitive-Behavioral Therapy (CBT) is recommended as the first-choice treatment for this condition. The present symposium focuses on the cognitive-behavioral approaches to insomnia problems by systematizing the state-of-the-art and highlining some of the main innovations and new directions regarding insomnia assessment and intervention, bringing together the contribution of several researchers from CINEICC coming from three different institutions.

Thus, the first communication presents an overview of the three generations of cognitive behavioral therapy for insomnia (CBT-I). Following the chronology of the development of successive models of insomnia, the contributions of the first and second generations of CBT, which allowed the development of the so-called CBT-I, and led to the best evidence-based treatment outcomes for chronic insomnia, will be mentioned. Then, new approaches to insomnia, brought by third-wave therapies, will be presented.

On the continuity of the first presentation, the second communication builds up around a new set of approaches that have emerged in the last decades that have the potential to benefit insomnia treatment. An original intervention developed in the multicomponent tradition of CBT-I will be presented, combining Acceptance and Commitment Therapy with Self-compassion and the evidence-based behavioral strategies vital to effective insomnia treatment. The conceptual models and rationale supposedly underlying both this new intervention and insomnia improvement, will be discussed.

The third communication focuses on the promise of digital technologies to overcome challenges to the under-provision of CBT-I. In fact, despite being the guideline treatment of the first choice for insomnia, limited knowledge of and access to CBT-I prevent its

widespread use. Delivery methods, the effects of digital CBT-I, and the benefits and challenges of digital offerings, will be discussed. A digital therapeutic delivering clinical guideline care for insomnia in cancer survivors will also be briefly described.

Finally, the fourth and last communication addresses the state-of-the-art regarding the European and international guidelines for insomnia assessment and intervention. In addition to the current published guidelines developed by scientific societies such as the European Sleep Research Society, this communication will also shed light on new directions and potential innovations, given that the current guidelines are now in revision.

Acknowledgments: The second and third authors were granted FCT doctoral scholarships (SFRH/BD/147556/2019; 2020.05728.BD). The second author and respective supervisors are grateful to the patients, professionals, and the Director of the Sleep Medicine Center - CHUC.

Keywords: Insomnia; CBT-I; New treatments; Treatment delivery; Clinical guideline

Talk 1 - A trip into the three generations of cognitive-behavioral therapies for insomnia.

Author: Vanda Clemente

Talk 2 - Fostering Acceptance and Self-compassion: a new approach to insomnia treatment.

Authors: Mariana Miller Mendes, Inês Clara, Paula Castilho, & Ana Allen Gomes

Talk 3 - Digital insomnia therapeutics: a promising clinical approach for cancer survivors.

Authors: Maria Inês Clara, Maria Cristina Canavarro, & Ana Allen Gomes

Talk 4 - Clinical guidelines for diagnosing and treating insomnia: where are we and where are we going?

Author: Daniel Ruivo Marques

Symposium #27

Innovations in contextual-behavioral approaches: structured interventions for different populations, in different settings and with different delivery formats

Chair: Daniel Rijo

Authors: Cláudia Ferreira¹, Joana Pereira¹, Sara Oliveira¹, David Skvarc², Ana Galhardo^{1,3}, Nuno B. Ferreira⁴, Paola Lucena-Santos¹, Sérgio A. Carvalho¹, Inês Matos-Pina¹, Bárbara S. Rocha⁵, Francisco Portela⁶, Inês A. Trindade^{1,7}, Marina Cunha^{1,3}, António Rosado⁸, Diogo Carreiras¹, Paula Boaventura^{9,10}, Paula Castilho¹, Óscar Lourenço¹¹, Teresa C. Martins^{1,5,12}, Marcela Matos¹, Lara Palmeira^{1,13}, Bruno de Sousa¹, Ricardo J. Teixeira^{1,14}, Nicholas J. Hubert-Williams¹⁵, Helena Moreira¹, Rafael Melo¹, Raquel Guiomar¹, Teresa Lapa^{16,17}, Joana Duarte¹, Bruno Patrão¹⁸, Paulo Menezes^{18,19}, José Pinto-Gouveia¹, Cristiana Duarte^{1,20}, Hugo Senra¹ & eBEfree research team

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

²Deakin University, School of Psychology, Geelong, Australia.

³Instituto Superior Miguel Torga, Coimbra, Portugal.

⁴University of Nicosia, School of Social Sciences, Cyprus.

⁵University of Coimbra, Center for Neuroscience and Cell Biology, Faculty of Pharmacy, Coimbra, Portugal.

⁶Coimbra University Hospital (CHUC), Gastroenterology Service, Coimbra, Portugal.

⁷University of Gothenburg, Department of Molecular and Clinical Medicine, Institute of Medicine, Sahlgrenska Academy, Sweden.

⁸University of Lisbon, Faculty of Human Movement, Department of Education, Social Sciences and Humanities, Lisbon, Portugal.

⁹University of Porto, Institute of Molecular Pathology and Immunology (IPATIMUP), Porto, Portugal.

¹⁰University of Porto, Institute for Research and Innovation in Health, Porto, Portugal.

¹¹University of Coimbra, CeBER, Faculty of Economics, Coimbra, Portugal.

¹²Radiobiology, Department of Medical Physics, Portuguese Institute for Oncology at Coimbra Francisco Gentil, EPE, Coimbra, Portugal.

¹³Portugalense Infante D. Henrique University, Portugalense Institute for Human Development (INPP), Porto, Portugal.

¹⁴Mental Health Clinic, Porto, Portugal.

¹⁵Edge Hill University, Department of Psychology, Lancashire, UK.

¹⁶Pain Unit, Coimbra Hospital and University Centre, Coimbra, Portugal.

¹⁷Faculty of Health Sciences, University of Beira Interior, Covilhã, Portugal.

¹⁸University of Coimbra, Institute of Systems and Robotics, Coimbra, Portugal.

¹⁹University of Coimbra, Dept. Electrical and Computer Engineering, Coimbra, Portugal.

²⁰School of Education, Language and Psychology, York St John University.

Abstract

Growing empirical evidence shows that either ACT and compassion-based interventions are effective in promoting psychological health and wellbeing in different populations and when delivered in different settings. Furthermore, available empirical data support the integration of different approaches including mindfulness, ACT and compassion-based components in psychological interventions. These approaches can be framed as theoretically coherent and complementary and may have potential benefits in decreasing psychological distress and psychopathological symptoms, while improving quality of life and mental and physical health positive outcomes.

This symposium covers different empirically tested contextual-behavioral approaches, developed for different clinical versus non-clinical populations, delivered in different settings and with different delivery formats (traditional face-to-face interventions versus eHealth interventions). This symposium will include: i) LIFEwithIBD: A mindfulness, acceptance and compassion-based intervention in inflammatory bowel disease - From face-to-face to online format delivery; ii) PLAYwithHEART: A Programme based on mindfulness, acceptance and compassion-based for adolescent athletes; iii) Study protocol for the Randomized Controlled Trial of the Mind programme: An Acceptance and Commitment Therapy and compassion-based intervention for women with breast cancer; iv) iACT with Pain: preliminary data about the usability, acceptance and clinical change of an ACT-based online platform for chronic; v) Development and efficacy study of the eBEfree: A mindfulness, compassion, and values-based programme.

Talk 1 - LIFEwithIBD: A mindfulness, acceptance and compassion-based intervention for people with inflammatory bowel disease - From face-to-face to online delivery.

Authors: Cláudia Ferreira, Joana Pereira, Sara Oliveira, David Skvarc, Ana Galhardo, Nuno B. Ferreira, Paola Lucena-Santos, Sérgio A. Carvalho, Inês Matos-Pina, Bárbara S. Rocha, Francisco Portela, & Inês A. Trindade

Talk 2 - PLAYwithHEART: A mindfulness, acceptance and compassion-based programme for adolescent athletes.

Authors: Sara Oliveira, Marina Cunha, António Rosado, & Cláudia Ferreira

Talk 3 - Study protocol for the Randomized Controlled Trial of the Mind programme: An Acceptance and Commitment Therapy and compassion-based intervention for women with breast cancer.

Authors: Inês A. Trindade, Joana Pereira, Diogo Carreiras, Ana Galhardo, Bruno de Sousa, Lara Palmeira, Marcela Matos, Paula Boaventura, Nuno Ferreira, Óscar Lourenço, Paula Castilho, Ricardo João Teixeira, Sérgio A. Carvalho, Teresa C. Martins, Nicholas J. Hubert-Williams, & Helena Moreira

Talk 4 - iACT with Pain: preliminary data about the usability, acceptance and clinical change of an ACT-based online platform for chronic pain.

Authors: Sérgio A. Carvalho, Rafael Melo, Raquel Guiomar, Teresa Lapa, Joana Duarte, Bruno Patrão, Paulo Menezes, José Pinto-Gouveia, & Paula Castilho

Talk 5 - Development and efficacy study of the eBEfree: A mindfulness, compassion, and values-based programme.

Authors: Cristiana Duarte, Jose Pinto-Gouveia, Hugo Senra, & eBEfree research team

Symposium #28

Compassion and the promotion of psychological and physical wellbeing and health: outcomes in different settings and populations

Chair: Marcela Matos

Authors: Marcela Matos¹, The Compassion in COVID19 Consortium, Kirsten McEwan², David Giles³, Fiona J. Clarke⁴, Yasu Kotera⁵, Gary Evans⁶, Olga Terebenina⁶, Lina Minou¹, Claire Teeling⁷, Wendy Wood¹, Ana Galhardo^{1,8}, Marina Cunha^{1,8}, Isabel Albuquerque¹, Margarida Pedrosa Lima¹, Lara Palmeira^{1,9}, Nicola Petrocchi¹⁰, Kirsten McEwan², Frances A. Maratos², Paul Gilbert² & Cristiana Duarte^{1,11}

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

²University of Derby, College of Health, Psychology & Social Care, Derby, UK.

³Lattice Coaching and Training, Chesterfield, UK.

⁴School of Sport, Exercise and Rehabilitation Sciences, University of Birmingham, Birmingham, UK.

⁵Human Sciences Research Centre, University of Derby, Derby, UK.

⁶The Forest Bathing Institute, London, UK.

⁷Grow Outside CIC, Cambridge, UK.

⁸Instituto Superior Miguel Torga, Coimbra, Portugal.

⁹Universidade Portucalense, Infante D. Henrique, Porto, Portugal.

¹⁰John Cabot University, Rome, Italy.

¹¹York St John University, York, UK.

Abstract

There is a burgeoning research interest into the nature, process and effects of treating oneself and others with compassion. Although there are some controversies over the definition of compassion, according to Buddhist traditions and evolutionary focused models, compassion is conceptualized as a prosocial motivation and can be defined by “the sensitivity to suffering in self and others, with a commitment to try to alleviate and prevent it” (Gilbert, 2014, p. 19). Compassion involves the motivation to care, capacity for sympathy, tolerate unpleasant emotions, empathic understanding and non-judging; and can be directed at the self, at others, or received from them. Emerging research is suggestive of the benefits of compassion for mental health and emotion regulation, physiological health, and interpersonal and social relationships. In addition to compassion offering wellbeing benefits, compassion can also be cultivated and enhanced through interventions, which have collected mounting empirical support for their beneficial effects on mental and physiological health and wellbeing, emotional and behavioral regulation, and prosocial behaviour.

This symposium sets out to explore the healing and protective impact of compassion and compassion focused interventions on psychological and physical wellbeing and health in different settings and populations. This symposium explores: i) the buffering effects of compassion and the magnifying effects of fears of compassion on the impact of the Covid-19 pandemic on symptoms of depression, anxiety and stress, and on experiences of social safeness and connectedness in a multinational sample across 21 countries; ii) the impacts of Forest bathing combined with CMT, compared with CMT alone or Forest bathing alone, on anxiety and heart rate variability; iii) the feasibility and efficacy of a Compassionate Mind Training program for Teachers on indicators of psychological and physiological wellbeing; iv) an overview of the importance of compassion in the context of weight management, and examples of compassion components integrated in behavioural weight management interventions.

Talk 1 - The role of compassion and fears of compassion during the COVID-19 pandemic: A multinational study across 21 countries.

Authors: Marcela Matos & The Compassion in COVID19 Consortium

Talk 2 - A controlled trial combining Forest Bathing with Compassionate Mind Training: Impacts on anxiety and heart rate variability.

Authors: Kirsten McEwan, David Giles, Fiona J. Clarke, Yasu Kotera, Gary Evans, Olga Terebenina, Lina Minou, Claire Teeling, & Wendy Wood

Talk 3 - Nurturing compassion in schools: Feasibility and effectiveness of a Compassionate Mind Training program for Teachers on promoting psychological and physiological wellbeing.

Authors: Marcela Matos, Ana Galhardo, Marina Cunha, Isabel Albuquerque, Margarida Pedroso Lima, Lara Palmeira, Nicola Petrocchi, Kirsten McEwan, Frances A. Maratos, & Paul Gilbert

Talk 4 - Compassion and weight management: correlates and intervention implications.

Author: Cristiana Duarte

Symposium #29

The Unified Protocol for the Transdiagnostic Treatment of Emotional Disorders in Europe: From acceptability to efficacy studies

Chair: Jorge Osma / Co-Chair: Maria Cristina Canavarro

Authors: Liliana Pedro¹, Marco Pereira¹, Ana Fonseca¹, Maria Cristina Canavarro¹, Nina Reinholdt², Morten Hvenegaard³, Anne Bryde Christensen⁴, Anita Eskildsen⁵, Carsten Hjørthøj^{6,7}, Stig Poulsen⁸, Mikkel Berg Arendt⁵, Nicole Kristjansen Rosenberg⁷, Jasmin Rejaye Gryesten², Ruth Nielsen Aharoni⁷, Anja Johnsen Alrø⁵, Clas Winding Christensen⁷, Sidse Marie Arnfred², Óscar Peris-Baquero^{9,10}, Laura Martínez-García^{9,10}, Vanesa Ferreres-Galán^{9,10,11}, Alba Quílez-Orden^{9,10,12}, Marta Gil-LaCruz⁹, Jorge Osma^{9,10}, José David-Moreno¹³, Carmen Schaeuffele¹⁴, Christine Knaevelsrud¹⁴, Babette Renneberg¹⁴ & Johanna Boettcher¹⁵

Affiliations:

¹University of Coimbra, Center for Research in Neuropsychology and Cognitive-Behavioral Intervention, Faculty of Psychology and Educational Sciences, Coimbra, Portugal

²Psychiatric Research Unit, Mental Health Service West, Copenhagen University, Hospital, Psychiatry Region Zealand, Slagelse, Denmark

³Competency and Rehabilitation Center, Mental Health, Center Ballerup, Ballerup, Denmark

⁴Research Center for Eating Disorders, Mental Health, Center Ballerup, Ballerup, Denmark

⁵Department of Affective Disorders, Aarhus University Hospital, Aarhus, Denmark

⁶Copenhagen Research Center for Mental Health, CORE, Copenhagen, Denmark

⁷Mental Health Center Copenhagen, Copenhagen University Hospital, Copenhagen, Denmark

⁸Department of Psychology, University of Copenhagen, Copenhagen, Denmark

⁹University of Zaragoza, Department of Psychology and Sociology, Zaragoza, Spain

¹⁰Health Research Institute of Aragon, Zaragoza, Spain

¹¹Mental Health Unit of Vinaròs Regional Hospital, Vinaròs, Spain

¹²Mental Health Unit of Moncayo, Tarazona, Spain

¹³Autonomous University of Madrid, Madrid, Spain

¹⁴Freie Universität Berlin, Berlin, Germany

¹⁵Psychologische Hochschule Berlin, Berlin, Germany

Abstract

The Unified Protocol for the Transdiagnostic Treatment of Emotional Disorders (UP) is a CBT-based intervention that emphasizes the role of emotion regulation as a transdiagnostic factor in understanding and treating emotional disorders. In recent years, there has been an increasing number of clinical trials focusing on UP, which provided solid empirical support of its efficacy, across multiple samples and formats. The countries in which the UP is being implemented is also diverse and it is widening. This symposium present different stages of the UP implementation in some European countries. The first

oral communication will focus on the preliminary results of an exploratory, cross-sectional web-based study, which aimed to explore and characterize the prospective acceptability and preferences of transdiagnostic intervention programs delivered in group format in the Portuguese general adult population. These results will help us to delineate strategies to promote the successful implementation of the UP among adults in Portugal. The second oral communication will discuss the development of a UP group intervention for use in the Danish mental health service and the research and implementation efforts done in this setting. The third oral communication will present results of the acceptability of the UP by the mental healthcare professionals who have applied it in group format in the Spanish Public Mental Health System. Finally, data on satisfaction and usefulness of the UP by users of the Public Health System who have received it will be presented. These results will provide detailed information on the opinion of the treatment from the perspective of the agents involved. The fourth oral communication will present results from the cost-effectiveness data obtained from the UP applied in group format in the Spanish public mental health system, compared with the treatment usually used (TAU). Results after 15 months of follow-up, including changes in the study variables, the number of treatment sessions received, and the economic cost associated with the treatment, will be presented with the aim of analyzing whether the UP applied in a group setting is a cost-effective intervention for the Spanish public mental health system. Finally, the fifth presentation will present findings on an Internet-based Intervention based on the UP that has been applied in Germany. The presentation will shed light on the efficacy, negative effects, and satisfaction with treatment when applying the UP as an Internet-based intervention.

Keywords: Emotional disorders; Unified protocol; Transdiagnostic

Talk 1 - Prospective acceptability and preferences of group transdiagnostic treatments in Portuguese general population: An exploratory study.

Authors: Liliana Pedro, Marco Pereira, Ana Fonseca, & Maria Cristina Canavarro

Talk 2 - Application of the Unified Protocol in group format in Danish Mental Health Services.

Authors: Nina Reinholdt, Morten Hvenegaard, Anne Bryde Christensen, Anita Eskildsen, Carsten Hjorthøj, Stig Poulsen, Mikkel Berg Arendt, Nicole Kristjansen Rosenberg, Jasmin Rejaye Gryesten, Ruth Nielsen Aharoni, Anja Johnsen Alrø, Clas Winding Christensen, & Sidse Marie Arnfred

Talk 3 - Acceptability and satisfaction of group-based UP from the perspective of the-rapists and users.

Authors: Óscar Peris-Baquero, Laura Martínez-García, Vanesa Ferreres-Galán, Alba Quílez-Orden, Marta Gil-LaCruz, & Jorge Osma

Talk 4 - Is it cost-effective for the public health systems to apply the Unified Protocol in group format? Results of an RCT in Spain.

Authors: Óscar Peris-Baquero, José David-Moreno, Vanesa Ferreres-Galán, Laura Martínez-García, Alba Quílez-Orden, & Jorge Osma

Talk 5 – Adapting the Unified Protocol as an Internet-based Intervention in Germany: Randomized Controlled Trial

Authors: Carmen Schaeuffele, Christine Knaevelsrud, Babette Renneberg & Johanna Boettcher

ORAL PRESENTATIONS

Oral Presentation Session #1

Topic: Psychological Assessment

Chair: Luís Pires

Talk 1 - Validation and reliability of the Portuguese version of the Fear of Missing Out Scale (FoMOs-P)

Authors: Filipa Almeida^{1,2}, Luís Pires^{1,2,3}, Daniel R. Marques^{2,4} & Ana Allen Gomes^{1,2}

Affiliations:

¹University of Coimbra, Faculty of Psychology and Educational Sciences, Coimbra, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention, Coimbra, Portugal

³University of Beira Interior, Faculty of Human and Social Sciences, Department of Psychology and Education, Covilhã, Portugal

⁴Department of Education and Psychology, University of Aveiro, Aveiro, Portugal

Abstract

Introduction/Objectives: This study aimed to adapt the European Portuguese version of the Fear of Missing Out scale (FoMOs-P), assess its validity and reliability and establish an optimal cutoff score that differentiates students with high social media engagement.

Methods: FoMOs-P along with measures of sleep quality, rumination and social media use were administered to a sample of 500 Portuguese higher education students, between the ages of 18 and 64 ($M=22.37$, $SD=5.68$). Following previously reported conflicting results regarding FoMOs' dimensionality, confirmatory factor analysis (CFA) was conducted to compare competing models. Convergent and discriminant validity were tested by examining Pearson's correlations between intensity of social media use, rumination, sleep quality and Fear of Missing Out (FoMO). Internal consistency for the total scale and both factors was examined using McDonald's omega (ω). Receiver Operating Characteristic (ROC) analysis was used to assess the scale's accuracy and ascertain an optimal cutoff point.

Results: The mean score of FoMO was 22.06 ($SD=7.52$). When comparing one- and two-factor models through CFA, the two-related-factor model fit best based on the chi-square difference test ($\Delta\chi^2(1) = 495.01$, $p < .001$) and the Comparative Fit Index (CFI) difference test ($\Delta CFI = .21$). This model demonstrated good fit ($\chi^2/df = 2.96$; CFI = .98; RMSEA [90 CI] = .063 [.049;.077]). Adequate reliability was found for the two factors

and total scale ($\omega > .8$). Convergent validity was supported by moderate associations between FoMO, social media use, and rumination ($r \geq .3$, $p < .001$) and discriminant validity by a non-significant correlation between FoMO and sleep quality. ROC analysis yielded the following results: AUC = .742 ($p < .001$); optimal cutoff point was set at >20 (i.e., sensitivity was 70.1%; specificity was 68.4%).

Conclusions: These findings show that FoMOs-P is a valid and reliable instrument, supporting its use among higher education students. Despite FoMOs being previously validated both as a one- and two-dimensional scale, FoMOs-P appears to be composed of two factors (i.e., internalizing and externalizing FoMO). Additionally, FoMOs-P can be used with moderate accuracy to screen students with disruptive social media usage. The nature of the sample restricts the generalizability of the results. More studies are needed to further examine the psychometric properties of the scale (e.g., test-retest reliability), support its use in the general population and establish new cutoff points.

Keywords: FoMO, higher education students, Factorial structure, validity, reliability

Acknowledgements: Filipa Almeida was granted a FCT doctoral studentship (2022.13382.BD).

Talk 2 - Forensic Professionals' Stress Inventory (FPSI): Development and psychometric properties

Authors: Mariana Moniz¹, Mauro Paulino^{1,2}, Octávio Moura² & Mário Rodrigues Simões^{2,3}

Affiliations:

¹Mind - Instituto de Psicologia Clínica e Forense, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention, Coimbra, Portugal

³PsyAssessmentLab, Portugal; Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra

Abstract

Professionals in the justice system are particularly susceptible to occupational stress and burnout due to factors intrinsic to their profession, such as work overload, deadlines, social isolation, lack of privacy, lack of information and resources for legal decision-making, and the participation in controversial judicial cases, crimes against children, sexual crimes, and other violent crimes. The need to maintain confidentiality, worries about personal safety and the participation in unpredictable, long, and frequently interrupted trials may also facilitate the development of stress and psychological distress in judges, attorneys, lawyers and other types of forensic professionals.

The Forensic Professionals' Stress Inventory (FPSI) was developed to identify signs of psychological strain and stress in people working for the justice system. It is a self-report tool that assesses the most common sources of stress in these occupations (e.g., autonomy,

social support, workload), and potential harmful coping strategies adopted by forensic workers to manage perceived stress.

The development of the FPSI followed several stages, namely (i) a literature review concerning the study of occupational stress and burnout in legal professions; (ii) a review of existing stress, judicial stress scales, and solely judicial scales (e.g., Inventory of Stressful Sources in the Professional Activity of the Labor Judge (Lipp & Tanganelli, 2002); Questionário de Vulnerabilidade ao Stress [Stress Vulnerability Questionnaire] (Vaz Serra, 2000); (iii) the development of the 41 items of the FPSI for the assessment of the most common sources of stress in forensic occupations; (iv) an analysis of the feedback provided by a focus group comprised of some forensic professionals and other experts (i.e., forensic psychiatrists, lawyers, attorneys, and judges) about the preliminary version of the FPSI.

The preliminary 41-item scale was administered to a sample of 690 forensic professionals (i.e., judges, lawyers, and attorneys). Exploratory factor analysis, exploratory structural equation modeling, and confirmatory factor analysis were conducted to find the most interpretable and parsimonious factor solution for FPSI. A 25-item bifactor model (with four first-order factors) demonstrated the most adequate fit to the data (e.g., $\chi^2/df = 3.02$; CFI = .92; RMSEA = .05; SRMR = .07). The resulting four first-order factors were named Vulnerability to Professional Stress (VS), Coping Strategies (CS), Overwork (OW), and Social Support/Autonomy (SSA).

Overall, FPSI revealed adequate psychometric properties (e.g., convergent and divergent validity, reliability), and it would be a useful instrument to assess psychological strain and stress in forensic professionals.

Keywords: occupational stress, burnout, forensic professionals, exploratory structural equation modelling, confirmatory factor analysis

Talk 3 - A regression-based procedure for diurnal type estimation – Exemplifying with the Composite Scale of Morningness (CSM)

Authors: Imke Buekenhout^{1,2}, Ana Allen Gomes^{1,2} & José Leitão^{1,2}

Affiliations:

¹Faculty of Psychology and Educational Sciences

²Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC), Portugal

Abstract

Introduction/Aims: Diurnal type (DT) refers to individual differences in sleep-wake patterns and preferred time of activity, has a genetic basis and is a stable trait. Concurrently, it undergoes marked developmental changes throughout the lifespan. Different patterns

of age-dependent DT shifts characterize childhood, adolescence and adulthood. Despite these trends, an individual is likely to retain his/her DT throughout the lifespan, in relation to others of the same age. DT is frequently estimated through self-assessment scales, such as the CSM. Traditional norms might confound the stable trait that individuals retain throughout life with the expression of age-related developmental changes. Conversely, regression-based norms (RBN) are continuous norms that control for age (and other attributes), and allow to disentangle the trait and developmental information that underlie DT, providing a score that purely reflects DT's trait component. We aimed to establish RBN for the European Portuguese version of the CSM, and to develop an online calculator that, besides the RBN output, provides a score expressing the developmental component, and a DT estimation that combines both trait and developmental information.

Method: The overall sample (12 – 95 years old (yo)) was divided into two subsamples, corresponding to distinct developmental stages (adolescence and adulthood, respectively): 12 – 24 yo ($M = 19.01$, $SD = 3.57$), 1052 participants (51.8% F); and 25 – 95 yo ($M = 49.95$, $SD = 17.99$), 1658 participants (57.2% F). Multiple regression analyses were conducted in each of the subsamples to determine if, besides age, its quadratic component and sex were relevant to the norming procedure.

Results: In both subsamples, linear and quadratic age terms influenced CSM scores, and sex did not. We obtained RBN for each subsample and developed a calculator that provides a score reflecting DT as a stable trait (RBN output), a score expressing the developmental component (standardized regression equation score), and an estimation that combines both trait and developmental information (standardized raw CSM score), taking as reference the adequate age subsample.

Conclusions: We obtained RBN for the European Portuguese version of the CSM. The online calculator untangles the trait and developmental components of chronotype. The resulting combined score, accompanied by the segregated developmental and trait information, can be interpreted unambiguously.

Keywords: diurnal type, regression-based norms, Composite Scale of Morningness

Talk 4 - The development of the Battery for the Assessment of Cognitive Reserve (BARC) for the Portuguese population

Authors: Joana Nogueira^{1,2,3}, Bianca Gerardo^{1,2,3}, Isabel Santana⁴, Mário R. Simões^{1,2,3} & Sandra Freitas^{1,2,3,5}

Affiliations:

¹Faculty of Psychology and Educational Sciences (FPCEUC), Univ Coimbra, 3000-115;

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

³Psychological Assessment and Psychometrics Laboratory (PsyAssessmentLab), Portugal;

⁴University of Coimbra, 3000-370, Faculty of Medicine, University of Coimbra, Portugal, 5Serviço de Neurologia, Centro Hospitalar e Universitário de Coimbra, Portugal.

Abstract

Introduction: The Cognitive Reserve (CR) is widely accepted as the active ability to cope with brain damage. The lack of a quantitative method for the assessment of CR including all the proxies commonly used for this purpose, highlight the need for a development of an assessment battery.

Objectives: The present study aims to present the final scores of the Battery for the Assessment of Cognitive Reserve (BARC).

Methodology: The BARC includes: (i) the Questionnaire of Literacy (QL), (ii) the Questionnaire for the Assessment of Cognitive Demand Level of Professional Activities (QANECAP), (iii) the Cognitive Reserve Questionnaire (CRQ), (iv) the Irregular Word Reading Test (TeLPI), and (v) the Wechsler Adult Intelligence Scale - Vocabulary test (WAIS-III). This new approach combined new questionnaires specifically developed by our team with other tests already validated for the Portuguese population, which also targeted the CR proxies. The BARC was administered to 260 elderly participants (healthy controls: 200; dementia spectrum: 60). We also applied to respective available close informants.

Results: The last preliminary psychometric results of the new questionnaires evidenced the reliable and valid use in the Portuguese population. The validation of the QL and QANECAP allow the pursuit of analysis to establish the final score of the BARC, considering the individual weighting of each test/questionnaire.

Conclusions: We developed a new battery to assess quantitatively the CR, which combined the several CR proxies in one single score. The BARC can be used in both clinical and research contexts.

Keywords: Cognitive Reserve, Ageing, Neuropsychological Assessment

Oral Presentation Session #2

Topic: Psychological Assessment

Chair: Pedro Palhares

Talk 1 - Maladaptive Daydreaming Scale (MDS-16): A Portuguese cross-sectional validation study in university students

Authors: Shivani Atul Mansuklal¹, Patrícia Magda Pascoal^{1,2} & Gerhard Andersson³

Affiliations:

¹School of Psychology and Life Sciences - Lusófona University, Portugal

²HEI-Lab: Digital Human Environment Interaction Lab - Lusófona University, Portugal

³Department of Behavioural Sciences and Learning - Linköping University, Sweden

Abstract

Introduction/Aims: Maladaptive Daydreaming (MD), characterised by excessive fantasising, is known to cause psychological distress due to its' addictive uncontrollable nature. Similar constructs like mind wandering and fantasy proneness are differentiated from MD in terms of quantity and quality of daydreams relating to the complex fantasy-based content. Despite its presence in clinical conditions such as ADHD and OCD, some researchers argue that MD may be a distinct clinical issue with high comorbidity that raises concerns that make MD eligible for psychological intervention.

We observe increased awareness of MD in international cross-sectional studies using a validated instrument to evaluate MD prevalence, distribution, and associated features. These studies pointed to higher MD prevalence in academic settings associated with a negative impact on academic performance. The absence of this validated instrument in European Portuguese is a significant limitation to developing MD research in Portugal. Considering its relevance in university contexts, we advance the first steps to validate the Maladaptive Daydreaming Scale (MDS-16) with university students and answer the question: What are the correlates of high levels of MD among a Portuguese sample of university students? We will assess MD distribution through a cross-sectional online survey using a validated measure of MD (MDS-16-PT; validation ongoing).

Methods: The calculated sample size on G-Power is at least 210 university students. Participants must reside in Portugal, have internet access, be 18 years or older, and be fluent in Portuguese. An online survey on the Iterapi platform will be disseminated through faculty administration and student organizations in Portuguese universities. The survey contains a sociodemographic questionnaire, Portuguese-validated instruments such as

GAD-7, PHQ-9, RRQ, MWI, and the MDS-16-PT. After consenting, participants will take approximately 20 minutes to participate.

Expected Results: Despite the study's exploratory nature, we expect to get knowledge about the distribution of MD in a Portuguese sample of university students and find significant correlations between scores on emotional disorder scales, better understand the associations of MD with other relevant cognitive processes (e.g., Rumination) and be able to trace MD correlates in academic settings (i.e., academic performance, level, course, etc).

Keywords: Maladaptive Daydreaming, Iterapi, MDS-16-PT, university students

Talk 2 - Development and psychometric testing of the Optimism and Pessimism scales among older adults

Authors: Lisete S. Mónico¹ & Clara F. Margaça²

Affiliations:

¹University of Coimbra, Portugal

²University of Salamanca, Spain

Abstract

Introduction: Many studies have shown that, in general, people have expectations of positive results for their own lives. Widely known for optimism, this phenomenon was found in a variety of situations, ages, and cultures. However, research concerning pessimism contests the omnipresence of an optimistic trait. Undesirable occurrences in life and the lack of desirable ones encourage pessimism, which leads us to ask how optimism among elderly people is. Given the question of the finiteness of life most frequent among elderly people, developing measures that can measure optimism and pessimism at these ages is relevant, contributing to answering the question if optimism is a phenomenon as robust and widespread as the literature seems to show. The aim of this study is to psychometric validate the Optimism scale and the Pessimism scale among Portuguese older adults.

Method: An initial item list of items concerning optimism and pessimism was adapted from the literature and written in Portuguese. An empirical study was conducted with 473 Portuguese elders aged from 65 to 94 years-old, who answered to a Questionnaire composed of an Optimism scale (21 items; 5-point Likert scale), a Pessimism scale (9 items; 5-point Likert scale), and a sociodemographic questionnaire. Principal component analysis with Direct Oblimin rotation method and reliability analysis was performed. All ethical assumptions were complied with throughout this study.

Results: Three dimensions emerged for the Optimism scale: F1 - Intrinsic optimism, F2 - Openness to experience, and F3 - Positive expectations. The Pessimism construct was bi-dimensional: F1 - Intrinsic pessimism; F2 - Negative rumination and distress. Both

scales showed acceptable reliability. The associations between Optimism and Pessimism dimensions varied from non-significant to negative moderate correlations. The results showed elderly people more optimistic than pessimistic.

Conclusion: Optimism scale and Pessimism scale evidence good validity and reliability indicators among elderly people.

Keywords: Optimism scale, Pessimism scale, Older adults, Elders, Psychometric properties

Talk 3 - Validation and psychometric properties of the Montgomery-Asberg Depression Scale - Self-Report for European Portuguese

Authors: Ana Tomás¹, Ana Ganho-Ávila^{1,2}, Raquel Guiomar^{1,2},
Mariana Moura-Ramos^{1,2,3} & Paula Vagos^{1,2,4}

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

³Reproductive Medicine Unit, Coimbra Hospital and University Center, Coimbra, Portugal

⁴Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense, Porto, Portugal.

Abstract

Introduction/Objectives. Depressive disorders contribute substantially to the global burden of disease, with Major Depressive Disorder (MDD) reaching a lifetime prevalence of 11.32% in Europe. So, it seems relevant to be able to adequately and early on assess depressive symptoms. The main goal of this study was to examine the validity and reliability of the self-report version of the Montgomery-Asberg Depression Rating Scale (MADRS-S) for the European Portuguese-speaking population. Specifically, we examined the factorial structure and test-retest reliability of the MADRS-S.

Methods. A sample of 204 participants (84.8% women) with a mean age of 31.07 years ($SD = 12.81$) completed an online protocol that included the European Portuguese versions of the MADRS-S, State-Trait Anxiety Inventory (STAI-Y), and Beck Depression Inventory-II (BDI-II). A subset of 30 participants answered the same online protocol with a 1-month interval.

Results. The unidimensionality of the model was confirmed by confirmatory factor analysis (CFA). The one-factor model showed good internal consistency (.88) and excellent temporal stability (ICC = of .95). A ROC analysis indicated that a cut-off score of 11 showed a sensitivity of 86% and specificity of 86.5% (area under the curve [AUC] = .94).

Conclusions. The European Portuguese version of the MADRS-S shows a unidimensional structure and satisfactory psychometric properties. MADRS-S can be a useful measure

of self-reported depressive symptoms to be applied in clinical and research settings in combination with the assessment by mental health care professionals.

Keywords: depression, MADRS-S, confirmatory factor analysis, validity, reliability

Acknowledgments: We thank the participants for their contribution to this work.

Talk 4 - Measuring delinquency: Methodological experiments on how to improve the accuracy of self-reports of offending

Authors: Hugo S. Gomes¹

Affiliations:

¹University of Porto, Portugal

Abstract

Introduction/Objectives: Self-reports of delinquent behavior play a key role in the development of knowledge about criminal behavior. Current knowledge about risk and protective factors for offending is almost exclusively reliant on the self-report methodology. However, despite the common concerns about the self-report methodology, only a few experimental studies have attempted to improve the measurement accuracy of self-reports of offending. In this presentation, I will discuss the findings from several methodological experiments carried out by our research team addressing multiple types of potential self-report biases in an attempt to inform researchers and practitioners on how to improve delinquency assessment.

Methods: Throughout our experiments, we have assessed delinquent behavior, as well as self-reported victimization, using the International Self-Report Delinquency 3 questionnaire (ISRD3). In these experiments, participants were randomly assigned to different methodological conditions in order to explore their impact on participants' willingness to report offending and victimization. We have carried out a series of experiments among students from multiple High schools and Universities, both in Portugal and the USA. The final study analyzed data from the Z-Proso study. The Z-Proso is a longitudinal study that follows the development of 1,675 youths from Zurich since the age of 7, with a particular focus on the development of aggressive and delinquent behavior. Through propensity score matching, we were able to test panel conditioning effects by developing a quasi-experiment to compare two groups of respondents participating in a different number of waves of data collection.

Results: First, I will present the findings from an experiment that explored the impact of modes of administration (face-to-face interviews vs. self-administered surveys) on self-reports of delinquent behavior; second, I will present the results of the same manipulation on self-reports of victimization experiences; third, I will discuss the findings from a methodological experiment where we have manipulated the questionnaire format,

(open-ended vs. closed-ended response formats); fourth, I intend to discuss the findings from an experiment where we have explored the biasing effect of the number of follow-up questions; fifth, I will discuss our findings where we have randomly compared the position of the delinquency questions within the questionnaire (at the beginning vs. at the end); finally, I will discuss the findings from our quasi-experiment using data from the Z-Proso study.

Conclusions: In this presentation, I will explore how these different factors may bias the respondents' willingness to self-disclose delinquent behavior and discuss the best ways to improve criminological assessment.

Keywords: Assessment, Methodological experiments, Delinquent behavior, Self-report, Measurement Error

Oral Presentation Session #3

Topic: Psychological Interventions

Chair: Maria do Céu Salvador

Talk 1 - “#KindGirlsInACTion”: A School-based Programme for Adolescent Girls

Authors: Joana Marta-Simões¹, Ana Laura Mendes¹ & Cláudia Ferreira¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Introduction: The #KindGirlsInACTion is psychological intervention programme that was designed to promote the overall well-being of adolescent girls, and specifically improve their body image and affiliative peer relationships and prevent disordered eating behaviors. The programme intends to do so by cultivating compassion, self-compassion, psychological flexibility and practicing mindfulness. Being grounded both in Compassion Focused Therapy and Acceptance and Commitment Therapy, the #KindGirlsInACTion appears as an innovative approach due to its school-based format, and the combined use of two different but complementary third-wave psychotherapies.

Method: The Programme comprises 9 sessions (1 per week) of 45 minutes each. It is a group psychological intervention to be delivered to adolescent girls, aged between 12 and 18 in the school context. The #KindGirlsInACTion's sessions are mainly of an experiential nature, containing several exercises done in groups, in pairs and individually, with moments of discussion of the individual experience. Between sessions, participants should take up a regular mindfulness practice as well as short tasks. The preliminary efficacy of the #KindGirlsInACTion was tested in a controlled trial, comprising an intervention group ($n = 52$) and a wait-list control group ($n = 61$), evaluated at baseline (M0), post-intervention (M1) and at a 3-months follow-up assessment (M2). Effects were tested through a 3 X 2 mixed ANOVA and through Reliable Change Index.

Results: Results pointed the feasibility of the Programme, underlining significant time x condition effects for self-compassion, social safeness, and body appreciation, with the intervention group showing a high percentage of reliable improvement from M0 to M1, and between M1 and M2 in these variables, and control group showing a high percentage of reliable deterioration.

Conclusion: The #KindGirlsInACTion Programme seems to constitute a pioneering combination of two empirically validated psychotherapeutic approaches in a format adapted to the functioning and characteristics of the adolescent age group and female gender. Preliminary findings seem to indicate the pertinence of its use to promote self-compassion abilities, establishing caring, understanding, and trusting relationships and fostering positive body image, with a potentially positive impact in well-being and in the prevention of body image and eating-related disorders.

Keywords: School-based Programme, Compassion, Psychological Flexibility, Mindfulness, Adolescence

Talk 2 - Compassion, acceptance, and mindfulness-based intervention for adolescents' test anxiety (AcAdeMiC): a non-randomized mixed-method feasibility study

Authors: Cláudia P. Pires¹; David W. Putwain², Stefan G. Hofmann^{3,4}
& Maria do Céu Salvador¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

²Liverpool John Moores University, UK, School of Education

³Philipps-University Marburg, Germany

⁴Boston University, USA, Department of Psychological and Brain Sciences

Abstract

Introduction: There is growing evidence that compassion, acceptance and mindfulness based psychological interventions (i.e., contextual-based interventions) are effective in helping teens cope with a myriad of anxiety difficulties and in improving their mental health and well-being. Furthermore, and even if it is not an aim of these interventions, there is actually a decrease in anxiety symptoms. Test anxiety is a highly prevalent and impairing difficulty for students in secondary education, with the tendency to worsen in the transition to university. However, manualized contextual interventions that target test anxiety are, from our knowledge, non-existent.

Aim: To test the feasibility of a new, culturally adapted, non-randomized compassion, acceptance and mindfulness-based online intervention for adolescents with test anxiety (AcAdeMiC – Acting with Acceptance, Mindfulness and Compassion to overcome test/exam anxiety).

Method: Participants were 17 students (70.6% female; Mage = 16.65; SD = 1.00) from public and private schools in the Centre region of Portugal, who undertook the AcAdeMiC, a manualized intervention which consists of 12 weekly online individual sessions

with a trained therapist. The sessions aimed to boost competencies of self-compassion, acceptance and mindfulness to help cope with test anxiety. Feasibility was assessed in five domains (acceptability, implementation, practicality, integration, and preliminary effectiveness), using self-reports, overall programme assessment, attrition, attendance, and home practices. Using a pre-post within-subject design, changes were measured in self-reported test anxiety, well-being, self-compassion, acceptance, mindfulness, and self-criticism.

Results: The AcAdeMiC was feasible in all five domains. Participants revealed significant decreases in test anxiety and significant increases in self-compassion. Although the remaining changes were uneven, reliable change analysis showed that half of the participants also significantly improved in well-being and self-criticism levels.

Conclusions: This study provides evidence that the AcAdeMiC is feasible and may be effective in reducing adolescents' test anxiety and self-criticism, and in boosting their self-compassion and well-being. These findings call for further investigation within a pilot study.

Keywords: test anxiety, adolescents, intervention, contextual therapies, feasibility

Talk 3 - MEDITAGING-Luxembourg: A Study Protocol of a RCT verifying the MBSR Effects on Older Portuguese-speaking Migrants

Authors: Ana C. Teixeira-Santos¹, Carine Federspiel², Jean-Paul Steinmetz², & Anja Leist¹

Affiliations:

¹Department of Social Sciences – Institute for Research on Socio-Economic Inequality, University of Luxembourg, Esch-Belval, Luxembourg

²Zitha, Luxembourg

Abstract

Introduction/aims: In Luxembourg, migration has a strong relationship with aging, since the first-generation immigrants who came to the country in the 1960s/70s are older adults nowadays, 32% of which are Portuguese. Most of these individuals are at higher risk of cognitive impairment and stress, due to on average lower educational and life-time occupational levels. Therefore, it is of utmost importance to validate interventions that promote healthy aging in this population. One of the fields that has been explored lately is mindfulness, especially the mindfulness-based stress reduction (MBSR) program. Previous studies have shown its positive impact on cognition and stress. However, only few studies verified its effects in older adults, especially with vulnerable populations. The MEDITAGING aims to investigate feasibility of the MBSR and its effects in old-Portuguese-speaking adults living in Luxembourg in comparison to a health promotion program.

Methods: MEDITAGING is a two-arm randomized-double blinded-controlled study, including 90 adults aged fifty-five and older. The MBSR will be conducted in groups

during eight weeks, incorporating the traditional curriculum of weekly meetings with mindfulness activities and extra home practice. The active control condition will have the same structure but will include contents of health promotion. Neuropsychological assessments and qualitative interviews will be conducted at baseline, immediately after and one-month post-intervention. We will also do pre-post salivary cortisol and heart rate variability analyses, as surrogate measures to assess stress levels.

Results: The MEDITAGING is in the recruitment phase and sixty-five participants were already recruited in the local community and there are 43 participants that have finished the protocol. We have not started the data analysis phase yet but, based on the feedback of the participants during the interviews, the programs are feasible to execute in this population. The main subjective effects pointed by both MBSR and control group participants are related to increased social connection with other participants, stress relief, as well as improvement in sleep quality and nutrition.

Conclusion: The program showed to be feasible and have positive subjective impact in older migrant participants. The methodology and preliminary results will be discussed in the event. We speculate that the MBSR group will present larger gains in attention and stress relief.

Keywords: mindfulness, older adults, immigrants, health promotion, MBSR

Acknowledgements: This work was supported by the Luxembourg National Research Fund (FNR) - Project Reference 15240063

Talk 4 - Stress-busting for Families - an adapted Mindfulness Course benefitting vulnerable parents living in deprived urban areas

Authors: Claire-Louise Symonds¹ & Donna Person¹

Affiliations:

¹The Mindful Parenting & Community Project, Bristol, United Kingdom

Abstract

Introduction / Background: The authors believed that for some parents, when under stress, parenting skills are found to collapse and that with Mindful Parenting, parent's own stress, suffering, and, if present, mental illness are the primary focus of the training rather than the problem behaviour of the child.

Aims / Hypotheses: To better understand the role of mindfulness for parents and its effect on parental stress and the parent child relationship.

Methods: In this small-scale study, 31 parents were recruited, and 21 parents completed the eight-week MBSR adapted course, via three different pilot studies in the more deprived areas of Bristol.

They were asked to complete pre and post course questionnaires looking at parental stress, mental wellbeing and ability to be mindful in everyday life. Parents also had the opportunity to set and be measured on their own intention for the course for themselves and in relation to their children.

Results: The results showed that on average participants showed significantly higher dispositional mindfulness scores after completing the mindfulness group than before starting the course (Five Facet Mindfulness Questionnaire); significantly higher levels of self-compassion post course (Self Compassionate Scale); significantly higher levels of mindful parenting after the course (Interpersonal Mindful Parenting Scale); significantly lower Parental Stress Score post intervention than before.

Discussion: We would like to propose that Mindfulness for Parents provides useful tools that support parents who have complex needs to: manage stress more effectively, improve their emotional regulation, improve family communication and relationships and have greater awareness of present moments

Conclusions: Whilst recognizing that further evaluations are needed for larger numbers, we believe that there is sufficient evidence from this study, to recommend that mindfulness be brought into parent infant work in Bristol.

Keywords: Mindfulness, Parenting, Self-Compassion, Deprivation, Vulnerable

Oral Presentation Session #4

Topic: Psychological Interventions

Chair: Maria do Céu Salvador

Talk 1 - CT@TeenSAD: Changes throughout treatment modules of remotely delivered cognitive therapy for adolescent SAD

Authors: Diana Vieira Figueiredo¹, Ana Ganho-Ávila¹, Daniel Rijo¹ & Paula Vagos^{1,2}

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

²Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense, Porto, Portugal

Abstract

Introduction/goals: Cognitive therapy (CT) is recommended as first-line treatment for adult social anxiety disorder (SAD). It has also shown promising effects in adolescents diagnosed with SAD, both when delivered face-to-face and through an online platform with no human interaction (combined with support sessions delivered by phone by clinical psychologists). However, the efficacy of a CT program completely delivered online using videoconference, has not been tested before. The current work intended to examine change in outcomes relevant to social anxiety symptoms, as reported by adolescents and their therapist, as they go through the CT@TeenSAD program, which consists of 10 manualized sessions of cognitive therapy delivered online. **Method:** Twenty-one adolescents (81% girls; Mage = 16.10) with a primary diagnosis of generalized SAD participated in the program. Adolescents reported their perception of change on their social anxiety symptoms by the beginning of each session while their therapists reported on how adolescents improved by the end of each session. Adolescents and therapists' reports were aggregated and compared across four intervention modules (Module 1: individualized model of social anxiety; Module 2: flexible attention and pre- and post-event processing; Module 3: behavioral experiments; Module 4: review gains and relapse prevention). Self and therapist-reported change across intervention modules was estimated using repeated measures ANCOVAs and controlling for adolescents' gender. **Results:** Findings show a significant effect of time, both for self-reported ($F(3,57) = 6.30, p = .005, \eta^2 = .25$) and for therapist-reported change ($F(1,57) = 49.31, p < .001, \eta^2 = .72$). Consequent post hoc pairwise comparisons showed significant differences across modules over time ($p < .005$): adolescent boys and girls reported a continuous perception of decrease in their symptoms and their therapists reported a continuous clinical improvement in their patients.

Conclusions: Current findings support the foundational assumption of CT, according to which adolescents need to develop cognitive skills first, which will be necessary for them to successfully proceed to behavioral experiments in feared social events. Moreover, these results add to previous evidence on the positive impact of CT for SAD in adolescence, and so encourage continuous work with adolescent SAD on promoting the development of a more realistic and flexible cognitive approach to everyday social events.

Keywords: cognitive therapy, social anxiety disorder, adolescence, change throughout therapy, multi-informant

Talk 2 - ACT@TeenSAD: Changes throughout treatment modules of remotely delivered ACT for adolescent SAD

Authors: Francisca Alves¹, Diana Vieira Figueiredo¹, Joana Marta-Simões¹, Daniel Rijo¹ & Paula Vagos^{1,2}

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

²Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense, Porto, Portugal

Abstract

Introduction/ Goals: The current work intends to investigate change in self-reported and therapist-reported symptoms of social anxiety disorder (SAD) throughout the ACT@TeenSAD intervention, which consists of 10 ACT-based manualized sessions delivered synchronously using videoconference. SAD has its usual onset during adolescence, then following a usually chronic and unremitting course if left untreated. At the same time, it is still one of the disorders less responsive to specialized treatment, indicating the need to provide evidence-based and diversified ways of intervening in SAD. Namely, Acceptance and Commitment Therapy may be applicable to change adolescent SAD. **Method:** Participants were twenty-two adolescents (86.4% girls; Mage = 15.90) who fulfilled criteria for a primary diagnosis of generalized SAD. They reported on their symptoms at the beginning of each intervention sessions in comparison with before beginning treatment. Their therapists also provided information on their perception on adolescents' improvement at the end of each intervention session, in comparison with before treatment began. Those reports were combined and compared across four intervention modules (Module 1: The role of psychological (in)flexibility in SAD; Module 2: The foundation of psychological flexibility; Module 3: Psychological flexibility in action; and Module 4 Revision of gains and relapse prevention), using repeated measures ANCOVAs and controlling for adolescents' gender. **Results:** Findings show a significant effect of module on self-reported ($F(3,60) = 8.79, p = .002, \eta^2 = .31$) and therapist-reported change ($F(3,60) = 13.18, p < .001, \eta^2 = .39$); the interaction effect of intervention module and gender was not statistically significant.

Subsequent post hoc comparisons showed significant change across all four modules for adolescents ($p < .001$), with social anxiety symptoms continuously diminishing. For therapist, improvement was also continuous across modules, with statistical differences been found for all comparisons except module 3 with module 4. Conclusions: Though preliminary, these findings point to the ACT@TeenSAD being a useful option to change the course of SAD in adolescence. Because the ACT@TeenSAD is entirely deliverable online, it may also be an available and user-friendly option to those adolescents who are usually more reluctant to seek specialized help. Future works should seek to consolidate these findings via more robust designs, so that adolescents with SAD may be provided with diversified and tailored ways of helping them pursue a valued and committed developmental pathway.

Keywords: acceptance and commitment therapy, social anxiety disorder, adolescence, change throughout therapy, multi-informant

Talk 3 - Implementation project to promote social and emotional skills in 5th grade students – pontes project

Authors: Adriana Sofia Baptista¹, Ana Paula Bizarro¹, Ana Ganicho² & Diana Alves²

Affiliations:

¹Agrupamento de Escolas da Zona Urbana da Figueira da Foz, Figueira da Foz, Portugal

²University of Porto, Porto, Portugal

Abstract

The socio-emotional skills have proved to be essential in the promotion of academic and lifelong success.

The relationships between emotional knowledge and academic competence have been studied mainly with regard to the socio-emotional learning model that emphasizes that learning at school is a deep social process.

Being a basic need in the specific Portuguese school context, the promotion of these skills among the 5th grade students, seeks to contribute to their well-being, improving their school adjustment and to promote the development of good practices of socio-emotional learning, by the community school.

The Pontes Program was implemented with the 13 classes of the 5th grade of the Escola da Zona Urbana da Figueira da Foz, Portugal in a total of 254 students (121 males).

It consisted of 17 sessions of 50 minutes each, held weekly, applied in a classroom context, using active learning. The sessions were facilitated by a psychologist, with the collaboration of the class director.

Parents were involved on a regular basis, through the “Desafio para casa” (home challenge), and on a more specific basis, through informative and training meetings. At the beginning and at the end of the implementation of PONTES, the socio-emotional skills and school adaptation of the students were evaluated, together with them, their parents, and class directors. Considering the nature and object of the study, qualitative measures of satisfaction with the Pontes Project were collected (students, parents and class directors).

From the results obtained, it was possible to infer that the groups involved in the Project were satisfied with the implementation of the Pontes project. Similarly, we also found the same result in relation to parents and class directors.

Pontes is pointed out as a project as a good contribution to the development of social relationships and emotional skills among students.

Programs aimed at socio-emotional learning, empirically validated, are urgent in the Portuguese education system.

Keywords: Socio-emotional skills

Talk 4 - An affirmative contextual therapies-based group intervention for sexual minorities (Free2Be): Development and preliminary feasibility results

Authors: Daniel Seabra¹, Jorge Gato², Nicola Petrochi^{3,4} & Maria do Céu Salvador¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

²Faculty of Psychology and Education Sciences and Centre for Psychology, University of Porto, Portugal

³Department of Economics and Social Sciences, John Cabot University, Rome, Italy

⁴Compassionate Mind ITALIA, Rome, Italy

Abstract

Introduction: Sexual Minority (SM) individuals present lower levels of mental health when compared with heterosexual individuals, and this disparity is as a consequence of chronic stress associated to social stigma. Minority stressors contribute to an increased risk of experiencing negative mental health outcomes, and an increased difficulty in accessing and benefiting from affirmative mental health care. Cognitive-Behavioural Therapy is an appropriate and suitable evidence-based psychological approach for intervention with SM individuals, and the processes inherent to contextual therapies have been proven to be useful and positive for this population. There are no evidence-based contextual therapies-based group interventions for SM in Portugal.

Aims: To describe the development and preliminary feasibility results of a new, culturally adapted, non-randomized, affirmative contextual therapies-based group intervention for SM in Portugal (Free2Be – F2B).

Methods: Eighteen Portuguese participants who self-identified as SM (Mage = 30.8 years old ($SD = 9.7$)) were selected to participate in a 13-week group intervention, that included mindfulness, acceptance, and self-compassion techniques. Feasibility was assessed in six domains (acceptability, implementation, practicality, integration, expansion, and preliminary effectiveness), using mixed-method (quantitative self-report measures and objective measures, and qualitative interviews), and with multi-informant responses (participant-reported outcome measures, and institutional responses). There were several moments of assessment (pre, during, and post-intervention). Using a pre-post design, changes were assessed in self-reported centrality of sexual identity, self-criticism, and fears of compassion both for completer and non-completer participants.

Results: The F2B was feasible in all six assessed domains. Furthermore, completer participants revealed significant decreases in fear of compassion for others, fear of compassion for self, and inadequate self, as well as significant increases in the centrality of sexual identity after the F2B intervention. Non-completer participants did not reveal any significant change. Additionally, some suggestions were offered by participants to improve the program.

Conclusions: In general, this intervention seems to be feasible and effective in reducing processes that seem to be related to low levels of well-being. These promising feasibility findings warrant further investigation through the conduction of a pilot study.

Keywords: School-based Programme, Compassion, Psychological Flexibility, Mindfulness, Adolescence

Oral Presentation Session #5

Topic: Mental Health & Well-being

Chair: Ana Fonseca

Talk 1 - Mindful Parenting Within the Association Between Preadoption Maltreatment and Adoptees' Emotional and Behavioral Difficulties

Authors: Mariana Sofia Rodrigues¹, Maria Cristina Canavarro² & Raquel Pires²

Affiliations:

¹Faculty of Psychology and Educational Sciences, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Objectives: To explore the association between preadoption maltreatment and adoptees' emotional and behavioral difficulties (EBD) while examining the potential role of adopters' mindful parenting on this association. **Method:** This cross-sectional study comprises a sample of 277 adoptive parents of children aged 2 to 17 years old. The data was collected through an online survey, using self-report measures. Pearson correlations, hierarchical linear regression models, and moderated moderation models were performed to identify the contribution of study variables to the adoptees' EBD. **Results:** Our findings suggest that the experience of preadoption maltreatment is associated with higher EBD among adoptees, even after controlling for a wide range of other parent-, child-, and adoption-related variables. Mindful parenting had a direct explicative role on adoptees' EBD, even if preadoption maltreatment occurred. Mindful parenting also had a buffering effect on the association between preadoption maltreatment and adoptees' EBD for children up to 8 years old. **Conclusions:** Our results can allow a more informed approach to parenting interventions among adoptive parents, namely those parenting previously maltreated children; they suggest the importance of intervening with adoptive parents through mindful parenting interventions, namely in families with children up to the age of 8 years old.

Keywords: Child maltreatment, adoptees' emotional and behavioral difficulties, mindful parenting, adoptive parents

Acknowledgments: The authors wish to thank all research partners to the instrumental support provided to the implementation of this investigation: Instituto de Segurança Social, I.P. (PT), Instituto da Segurança Social dos Açores, ISS, IPRA (PT), Instituto

de Segurança Social da Madeira, ISSM, IP-RAM (PT), ProChild CoLAB Against Child Poverty and Social Exclusion, Associação Tempos Brilhantes (PT) and Santa Casa da Misericórdia de Lisboa.

Talk 2 - Exploring gender differences on the association between adoptive parents' psychological resources and parenting stress.

Authors: Ana Luz Chorão¹, Maria Cristina Canavarro² & Raquel Pires²

Affiliations:

¹Faculty of Psychology and Educational Sciences of the University of Coimbra, Coimbra, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Introduction/Aims: Although parenting stress has been recognized as one of the most important and highly acceptable targets for post-adoption psychological intervention, the investigation about the modifiable factors contributing to explaining this type of outcome among adoptive parents remains limited. Moreover, parenting stress research has also been primarily focused on mothers, with most of the studies not fully considering the role of fathers. In fact, there are various individual, biological, and cultural gender differences that can influence how fathers and mothers exercise their parental role and how they deal with the challenges that emerge from that. Therefore, it becomes necessary to explore how the parents' gender influences the relationship between their psychological resources and the levels of parenting stress experienced. This is the aim of the present study.

Methods: Cross-sectional data from 302 adoptive parents (75.5% mothers and 24.5% fathers) with at least an adoptive child aged between 1 and 17 years were collected through an online survey disseminated by all Portuguese adoption agencies.

Results: Higher levels of parents' mindfulness, psychological flexibility, and self-compassion were significantly ($p < .01$) associated with lower levels of parenting stress (even after controlling for a wide range of child-, adoption-, and other parent-related variables). This association occurred regardless of the parents' gender, i.e., parents' gender seems not to be a significant moderator of this relationship, since higher levels of mindfulness ($p=0.71$), psychological flexibility ($p=0.98$), and self-compassion ($p=0.49$) were associated with lower levels of parenting stress in both mothers and fathers.

Conclusions: Our exploratory results highlight the role these psychological resources may play in preventing and reducing parenting stress among both adoptive mothers and fathers. Moreover, it allows us to reflect on new and more accurate guidelines for preventive and remedial interventions with these parents, given the seeming added value

of including these resources in pre- and post-adoption psychological interventions aimed to reduce parenting stress.

Keywords: Child maltreatment, adoptees' emotional and behavioral difficulties, mindful parenting, adoptive parents

Acknowledgements: This work was supported by the Portuguese Foundation for Science and Technology (CEECIND/02463/2017). The authors wish to thank the research partners for the instrumental support provided to the implementation of this investigation: Associação Tempos Brilhantes (PT), Instituto de Segurança Social, I.P. (PT), Instituto da Segurança Social dos Açores, ISS, IPRA (PT), Instituto de Segurança Social da Madeira, ISSM, IP-RAM (PT), ProChild CoLAB Against Child Poverty and Social Exclusion (PT), and Santa Casa da Misericórdia de Lisboa (PT).

Talk 3 - The role of depression and anxiety symptoms on cognition in motherhood: Systematic Review and Meta-Analysis

Authors: Ana Margarida Ferreira¹, Mónica Sobral¹, Ana Tomás¹, Johanna Pozo-Neira², Maria Coimbra¹ & Ana Ganho Ávila¹

Affiliations:

¹University of Coimbra, Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

²Catholic University of Cuenca, Spain

Abstract

Introduction/Objectives: Women in the perinatal period frequently report forgetfulness, disorientation, and short attention span. However, research has yielded inconsistent results about their objective neuropsychological functioning. The experience of depressive and/or anxiety symptoms during pregnancy and the postpartum period might account for women's experiences of compromised memory and attention. Here, we present a systematic review aiming at characterizing the association between depressive/anxiety symptoms and memory, attention, and cognitive flexibility in motherhood (up to 1 year postpartum).

Methods: We searched PubMed, Web of Knowledge and PsycINFO electronic databases. Reviewers independently screened for title/abstract and full-text, as well as extracted data and performed the risk of bias assessment. Qualitative narrative synthesis and meta-analysis were conducted.

Results: We included 44 articles. Whereas affective symptoms seem to be positively associated with subjective memory complaints, no associations were found with recognition and verbal memory across the perinatal period. Likewise, only one study discussed the association between affect and cognitive flexibility, showing no significant results. Inconsistent results were observed on the association between depressive/anxiety symptoms

and working memory and attention across the perinatal period. Studies focusing the correlation between attention and depressive symptoms in the postpartum were pooled in a random-effects model. Results were non-statistically significant ($r = -0.45$; 95% CI = $[-0.79 - 0.12]$; $p = .114$; $Q = 182.66$, $I^2 = 96.17$, $p < .001$). Meta-regression analysis showed that sample size, type of study, and other confounding variables did not significantly impact the results (all p values $> .05$).

Conclusions: While there seems to be an association between affective symptoms and subjective memory, no association is evident between affect and recognition or verbal memory. Additionally, inconsistent results were observed for working memory and attention. Results might be hindered by the low methodological quality and high heterogeneity across studies in what concerns population definition and neuropsychological testing. Other variables that may contribute to the association between affective symptoms and cognitive functioning (e.g. sleep quality and social perspectives of women's adaptations to motherhood) have not been considered. Future research should aim for higher quality studies and increasingly complex models to explain the intertwined relationships between affective symptoms and cognitive capacity in motherhood. Biophysical changes, hormonal fluctuations, neuroinflammatory processes, and genetic/ epigenetic factors should be new venues for research in multimodal studies of motherhood.

Keywords: Cognition, depression, anxiety, peripartum, systematic review

Oral Presentation Session #6

Topic: Mental Health & Well-being

Chair: Carlos Carona

Talk 1 - Physician-patient communication: Associations with patients' and physicians' adjustment outcomes – Preliminary findings from a systematic review

Authors: Ana C. Alves-Nogueira¹, Carolina Góis¹, Maria Cristina Canavarro¹, Cláudia Melo¹ & Carlos Carona¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Introduction/Objectives: Physician-patient communication (PPC) is at the core of patient-centred healthcare, and empathic communication skills in physicians are considered one of the key competencies for the practice of medicine. PPC has been associated with patients' health outcomes, specifically physical and emotional health improvements, treatment adherence and well-being. In fact, a few systematic reviews have reported these findings, notwithstanding several shortcomings at methodological level. On the other hand, a few studies have addressed the associations between PPC and physicians' own adjustment outcomes and, to our knowledge, no systematic review has been conducted to ascertain these associations. Therefore, this systematic review is aimed to analyse and describe the associations reported to date between PPC and adjustment outcomes of both patients and physicians.

Methods: This systematic review was conducted according to the PRISMA statement guidelines and was registered in the INPLASY platform (INPLASY202260062). The search strategy was conducted in the following databases: PubMed/MEDLINE, PsycINFO, Embase, SocIndex and Communication Source. Systematic search identified 11.488 non-duplicated studies for screening. Studies were selected by two independent reviewers, according to the following eligibility criteria: (i) quantitative or mixed-methods articles; (ii) encompassing a sample of patients and/or physicians; (iii) with PPC conceptualized as an independent variable with a clear association with an adjustment outcome. Quality assessment was performed for included studies, based on the Mixed-Methods Appraisal Tool (MMAT), and data was extracted for analysis.

Expected results: A very reduced number of articles will be included for quality assessment and data extraction. PPC will be mainly associated with patients' adjustment outcomes, specifically with health outcomes. Very few, if any, studies will be included regarding the association between PPC and physicians' adjustment outcomes.

Conclusions: This systematic review will provide concise and updated evidence of the links between PPC and patients' adjustment outcomes. Specifically, it will highlight the role of PPC in the improvement of patients' adjustment outcomes (e.g., physical and psychological health), as well as emphasize the need of improving physicians' communication skills during medical training and continuing professional development. This was also a first systematic review on the associations between PPC and physicians' adjustment outcomes. According to the expected results, this review will unveil the need for further research about the impact of PPC on physicians' own adjustment outcomes. Finally, this systematic review will identify overall current research trends and gaps to better inform future studies on PPC (e.g., PPC conceptualization and assessment).

Keywords: systematic review, physician-patient communication, patient-reported outcomes, physicians' outcomes, adjustment outcomes

Talk 2 - Volunteering in mental health care in Portugal - a focus group study

Authors: Jaime Oliveira¹ & Mariana Pinto da Costa^{2,3,4}

Affiliations:

¹University of Aveiro, Aveiro, Portugal

²Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, UK

³Institute of Biomedical Sciences Abel Salazar, University of Porto, Porto, Portugal

⁴Institute of Public Health of the University of Porto, Porto, Portugal

Abstract

Introduction: Volunteering has been defined as a “non-paid, voluntary activity that benefits others”. Volunteering programmes in mental health care usually range from befriending to peer support. These aim to help patients to engage with their communities by offering a spectrum of volunteering relationship practices, where at one end is a more structured intervention and at the other end, there is a closer resemblance to a naturally occurring friendship. There are two key stakeholders in the provision of voluntary support in mental health: the mental health professionals and the volunteers. The former identifies recovery needs, prescribes and recommends their patients to volunteering programmes, while the latter is the “fuel” that is fundamental to the existence of those programmes.

Objectives: To explore and compare the perspectives on volunteering in mental health of two stakeholders: mental health professionals and volunteers in Portugal.

Design: A secondary qualitative analysis of data taken from an international focus group study of six focus groups with $n=28$ participants, using inductive reflexive thematic analysis.

Participants: Mental health professionals ($n = 16$; mostly women, $n = 11$, 68.8%; age range of 26-58, $\bar{x} = 33.4$, $Mdn = 28$) and volunteers ($n = 12$; mostly women, $n = 9$, 75%; age range of 21-66, $\bar{x} = 38.4$, $Mdn = 38$) in Portugal.

Results: Four main themes arose: (1) the nature of the volunteering relationship; (2) volunteering has multiple aims; (3) technology has potential for volunteering; (4) volunteering has its challenges. Among these, there was consistency in the number of commonalities and differences identified. There was a notorious difference between mental health professionals and volunteers, as the former leaned onto a rigorous and structured view of volunteering and the latter took a more flexible, phenomenological and humanitarian stance.

Conclusions: In Portugal, mental health professionals and volunteers regard programmes of volunteering in mental health as a significant opportunity to positively impact both patients and volunteers. Overall, stakeholders' perspectives suggested a need for structured recruitment and support, training, defining boundaries and fighting the stigma of mental health. However, promoting volunteering opportunities in mental health in the Portuguese society may be the primary goal, especially in light of the current paucity of such initiatives.

Keywords: volunteering, volunteers, mental health professionals, mental health, secondary qualitative analysis

Talk 3 - Sleep problems among Portuguese patients on renal replacement therapy

Authors: Maria Inês Clara^{1,2}, Ana Rita Monteiro², Mariana Miller-Mendes^{1,2}, Helena Rebelo², Isabel Maias² & Ana Allen Gomes^{1,2}

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

²Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

Abstract

Introduction: End-stage renal disease (ESRD) is associated with an increased risk for sleep disturbances through different pathophysiologic and psychological mechanisms. Following the growing incidence of ESRD, the prevalence of sleep problems is likely to increase. Notably, Portugal has one of the highest ESRD rates worldwide. Despite adversely impacting health and functional status, sleep problems remain largely under-assessed and undertreated among ESRD patients. Kidney transplantation is thought to improve sleep-related problems associated with hemodialysis. We aimed to characterize

and compare the sleep and psychological complaints of Portuguese patients undergoing different kidney replacement therapies, as well as against the general population, and their impact on quality of life.

Methods: After approval by the Faculty and Dialysis Center Ethical Commissions, sleep outcomes (sleep quality, insomnia, obstructive sleep apnea, daytime sleepiness), health-related quality of life, psychological distress, sociodemographic and clinical data assessed by questionnaires/scales (PSQI, ISI, Stop-Bang, ESS, WHOQOL-Bref, HADS) were collected for 223 participants (45.29% women; 64.22 ± 16.66 years-old; 92 patients on hemodialysis; 40 kidney transplant recipients), 54 of which were age- and sex-matched (18 hemodialysis patients, 18 transplant recipients, and 18 non-ESRD controls) to ensure equivalency.

Results: Poor sleep quality was strikingly prevalent among ESRD patients, affecting 82.61% of hemodialysis and 67.50% of transplant patients. Severe anxiety symptoms were reported by 70.65% of hemodialysis and 55.00% of transplant patients. Severe depression symptoms were reported by 67.50% of transplant and 45.65% of hemodialysis patients. Hemodialysis patients were at higher risk of obstructive sleep apnea than kidney recipients [$\chi^2=28.01$, $p<0.01$] and reported the most impaired quality of life [$F(2,51)=4.25$, $p=.02$, $\eta^2=.14$]. Albeit most patients on both replacement therapies reported routine use of hypnotic medication (86.96% of hemodialysis; 53.41% of transplant patients). Transplant recipients reported greater insomnia symptoms [$F(2,51)=4.69$, $p=.01$, $\eta^2=.16$]. Sleep quality was the best predictor of patients' health-related quality of life ($\beta=-.26$, $p=.01$), followed by depression ($\beta=.24$, $p=.01$) and daytime sleepiness ($\beta=.21$, $p=.01$). Patients with comorbid diabetes reported poorer sleep quality [$F(1,130)=4.31$, $p=.04$; $\eta^2=.02$] and were in higher risk for obstructive sleep apnea [$F(1,130)=13.45$, $p<.001$; $\eta^2=.04$] than those without diabetes.

Conclusions: Portuguese ESRD patients reveal poor sleep and psychological health. Kidney transplant might improve quality of life, but insomnia symptoms may endure. Poor sleep lays significant burden to the quality of life of end-stage renal disease patients, particularly those undergoing hemodialysis. Hence, therapies targeted at improving psychological and sleep health, including treating comorbid sleep disorders, may constitute critical adjuncts to renal treatment.

Keywords: chronic kidney disease, hemodialysis, psychological distress, quality of life, renal transplantation, sleep disorders

Acknowledgements: The last (corresponding) author responsible for the scientific coordination of this research wishes to express her deep recognition to all patients, the Clinical Directors, and the Social Worker, from the hemodialysis unit at the Santa Filomena Clinic in Coimbra (Nefrovida Diálise / Sanfil Medicine Group), who made this study possible, as well as to the National Medical Director of Diaverum who authorized the present study, and all other medical and nursing staff for their help. The first author was granted a doctoral scholarship from the Portuguese Foundation for Science and Technology (grant number 2020.05728.BD).

Talk 4 - Psychological Quality of Life in Neurodegenerative Conditions: The Influence of Clinical Factors, Experiential Avoidance, and Engaged Life

Authors: Teresa Carvalho^{1,2}, Carolina Gomes¹, Carolina da Motta³
& Andreia Ventura¹

Affiliations:

¹Instituto Superior Miguel Torga, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

³Lusófona University, HEI-Lab, Lisboa, Portugal

Abstract

Introduction: Chronic diseases with associated neurodegenerative conditions, such as Parkinson's, Alzheimer's and Huntington's disease, Amyotrophic Lateral Sclerosis, and Multiple Sclerosis, are potentially disabling diseases presenting significant and increasing prevalences worldwide. Thus, they represent a major challenge to global public health. Although such diseases can be devastating for patients and can compromise their quality of life (QoL), scientific knowledge about predictors of QoL in patients with chronic neurodegenerative conditions (PwCNC) remains insufficient.

Objectives: To explore whether neuropathic pain, fatigue, and general disability – typical clinical conditions in PwCNC –, experiential avoidance, and engaged living – emotional regulation processes conceptualized by Acceptance and Commitment Therapy (ACT) – predict psychological QoL in PwCNC, specifically, in patients with Parkinson's Disease, Amyotrophic Lateral Sclerosis, and Multiple Sclerosis.

Method: This cross-sectional study used a convenience sample of 93 PwCNC, with no other neurological diseases, and no positive screening for cognitive decline. Were used the following self-report instruments: a sociodemographic and clinical questionnaire, Six Item Cognitive Impairment Test, Visual Analog Scale of the Pain Detect Questionnaire, Visual Analogue Scale for Fatigue, World Health Organization Quality of Life Assessment–Bref, World Health Organization Disability Assessment Schedule, Acceptance and Action Questionnaire-II, and Engaged Living Scale-short form.

Results: All the potential predictors correlated with psychological QoL and were significant predictors in simple linear regression models, therefore have been selected to integrate the multiple linear regression model. In this last model, experiential avoidance and engaged life, with negative and positive beta values respectively, significantly predicted psychological QoL and explained 66% of its total variance.

Conclusions: The findings provide preliminary support to consider the role of experiential avoidance and engaged life as factors that positively and negatively influence the psycho-

logical QoL of PwCNC, respectively, both in clinical and research settings. Because ACT is an intervention that uses acceptance and mindfulness strategies to promote valued-based action and a consequent sense of life fulfillment, it is a recommended approach to maximizing adaptive emotional regulation and improve psychological QoL in PwCNC.

Keywords: Neurodegenerative conditions, quality of life, predictive factors, clinical conditions, emotion regulation processes

Acknowledgments: The authors would like to thank the Portuguese Association of Parkinson's Patients (APDPK), the Portuguese Association of Amyotrophic Lateral Sclerosis (APELA) and the Portuguese Society of Multiple Sclerosis (SPEM) for their cooperation in the recruitment of participants.

Oral Presentation Session #7

Topic: Mental Health & Well-being

Chair: Ana Ganho

Talk 1 - Effects of healthy lifestyles and social media usage on social anxiety in social media users

Authors: José Jacinto Branco Vasconcelos-Raposo^{1,2}, Daniel Santos da Costa² & Carla Maria Carvalho Aguiar Teixeira²

Affiliations:

¹Institute for Systems and Computer Engineering, Technology and Science, Portugal

²University of Trás-os-Montes and Alto Douro, Vila Real, Portugal

Abstract

The interaction between social anxiety (SA) and the use of social media has already been reported. Research shows that the practice of physical exercise and smoking habits have an impact on the manifestation of anxious symptoms. However, the relationship between lifestyles, social media usage habits and SA in social media users is less investigated. Therefore, the aim of this study is to analyze the impact of healthy lifestyles and social media usage habits on the dimensions of SA in social media users. The sample of this study consisted of 501 Portuguese university students who had social media usage habits. Data was collected using a sociodemographic, lifestyle and social media usage questionnaire and the Social Anxiety Scale for Social Media Users (SAS-SMU). Reliability was: .920 for shared content anxiety (SCA), .856 for privacy concern anxiety (PCA), .944 for interaction anxiety (IA) and .893 for self-evaluation anxiety (SEA). Through multivariate analysis of covariance (MANCOVA), significant differences of small effect were found, which were explained by the dimensions of the SAS-SMU, in the variables: sex, practice of physical exercise, time spent in social media and in the covariate age. Thus, all dimensions of the SAS-SMU explained the differences found in the sex variable. As for physical exercise, the differences found were explained by IA and SEA. As for the time spent on social media by its users, only IA explained the differences found in this independent variable. Finally, differences were found for the covariate age, and these were substantiated by IA and SCA. No significant differences were found in the variable regarding smoking habits. No significant differences in the interaction of the factors were discovered in any MANCOVA. Overall, these results demonstrate that multiple factors (sociodemographic, lifestyles, social media usage habits) influence SA in social media users in a sample of Portuguese university adults.

Keywords: social anxiety, social media, healthy lifestyles, university students, multivariate analysis of covariance

Talk 2 - Internet dependency and depressive symptoms during the COVID-19 pandemic: the moderating effect of mindfulness

Authors: Beatriz Cristina Loureiro¹, Jéssica Catarina Duarte¹, José Joaquim Costa¹ & Ana Paula Matos¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

During the COVID-19 pandemic, internet usage increased significantly. This use can become problematic (i.e., internet addiction) when it is excessive and compulsive. Internet addiction is associated with the development of psychiatric comorbidities, such as anxiety and depression. The literature has identified mindfulness as a protective factor against depression and internet addiction. The present investigation aims to: 1) study the differences between genders in mindfulness, internet addiction, and depressive symptoms; 2) analyze the relationships between mindfulness, internet addiction, and depressive symptoms; 3) study the moderating effect of mindfulness on the relationship between internet dependency and depressive symptoms during the COVID-19 pandemic. The sample is composed of 930 Portuguese adults aged between 18 and 87 years old ($M = 41.3$, $SD = 16.7$), 67.7% being female ($n = 630$) and 32.2% male ($n = 300$). Sample collection was carried out online. Depressive symptoms were measured using the Depression dimension of the Mental Health Inventory (Pais Ribeiro, 2001). Internet dependency was assessed by the Generalized Internet Dependency Scale (Matos et al., 2018) and mindfulness by the 15-item Portuguese version of the Five Facets of Mindfulness Questionnaire (Matos et al., 2021). Statistically significant differences were found between genders, with females presenting higher levels of depressive symptoms and mindfulness in the facets of observing and describing. Male participants had higher levels of mindfulness in acting with awareness and non-judgmental facets. Internet dependency was significantly and positively associated with depressive symptoms. The facets of describing, non-judging, and acting with awareness were negatively associated with depressive symptoms and internet dependency. However, a significant and positive correlation was found between the observing facet and internet dependency. There was a moderating effect of the facets of mindfulness, observing, and nonjudging, on the relationship between internet dependency and depressive symptoms. The association was stronger for individuals with higher levels of non-judgment compared with those with average and low levels. It was also possible to identify a stronger association for individuals with low levels of observing compared

to participants who had moderate or high levels. These results allow us to identify the non-judgmental facet of mindfulness as a potential emotion regulation strategy in adults with internet dependency and depressive symptoms.

Keywords: internet addiction, depressive symptoms, mindfulness, adults, COVID-19 pandemic

Talk 3 - Relationship between mindful parenting and children's depressive symptoms: the mediating effect of children's self-compassion

Authors: Mariana Cunha Resende¹, Jéssica Catarina Duarte¹ & Ana Paula Matos¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Adolescence is a developmental period marked by difficulties with emotional regulation and a consequent decrease in the emotional well-being of adolescents. In Portugal, studies have shown a prevalence of depressive symptoms in adolescence that varies between 11.2% and 14.8%. The literature has identified several protective factors for the development of depressive symptoms, such as self-compassion and mindful parenting. Self-compassion is considered an emotion regulation strategy that is associated with lower levels of depressive symptoms in adolescence. Mindful parenting contributes to the development of this emotional regulation strategy through a parenting approach based on acceptance and compassion. In the present study, we intend to analyze: 1. the existing relationships between mindful parenting, self-compassion, and depressive symptoms; 2. the mediating effect of children's self-compassion on the relationship between mindful parenting and depressive symptoms in adolescents. The sample is composed of 342 pairs of parents and children. Parents are aged between 29 and 64 years ($M = 44.23$; $SD = 5.023$). The ages of children are between 11 and 15 years old ($M = 12.7$; $SD = .900$). To assess children's depressive symptoms, the Children's Depression Inventory (Marujo, 1994) was used. To measure self-compassion in adolescents, the Self-Compassion Scale for Youths was applied (Matos et al., 2020). As a measure of mindful parenting, the Mindfulness in Parenting Questionnaire (Matos et al., 2020) was administered, which was answered by the parents. Children's depressive symptoms correlated negatively and significantly with children's self-compassion and mindful parenting. A mediating effect of self-compassion was found in the relationship between mindful parenting and children's depressive symptoms, controlling the effect of children's gender. These results make it possible to identify self-compassion and parenting based on the principles of mindfulness, acceptance, and compassion, as

protective factors for the development of depressive symptoms in adolescence. It is pertinent to take into account the self-compassion and mindful parenting variables in the development of programs for the prevention and treatment of depression in adolescents.

Keywords: mindful parenting, depressive symptoms, adolescence, self-compassion

Talk 4 - Corroborating Nurses' Self-reports of COVID-19-Related Post-Traumatic Growth by Significant Others

Authors: Catarina Alves Vitorino¹, Maria Cristina Canavarro¹, Maria Inês Caçador¹ & Carlos Carona¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Background. Recent evidence has been showing that COVID-19 outbreak can pave the way for the nurses' subjective perception of positive psychological transformations. However, it has been under debate whether self-reports of post-traumatic growth (PTG) portray realistic appraisals of adaptation or distorted perceptions that allow individuals to compensate for the negative effects of trauma. The main goals of the present study were: (1) to ascertain the level of agreement between nurses' self- and significant others' proxy-reports of PTG; (2) to evaluate the differences between the dimensions of self- and proxy-reported PTG; (3) to explore the patterns of directional discrepancy ('self-report > proxy-report', 'agreement' and 'self-report < proxy-report') between the reports of nurses and significant others.

Method. For this cross-sectional study, a convenience sample was collected online, between September and December 2021. The total sample comprised 51 dyads, composed by nurses and significant others. A sociodemographic and clinical form was developed to assess participants' situation (e.g., gender, psychological/psychiatric treatment history). Perceived centrality (Centrality of Event Scale) of the COVID-19 pandemic outbreak and self-reports of PTG (Post-traumatic Growth Inventory – Short Form) were collected to investigate the nurses' experiences. Significant others reported on nurses' PTG using a proxy version of the Post-traumatic Growth Inventory. Intraclass correlation coefficients were used to examine the level of agreement between self- and proxy-reports of PTG, at the individual level; to assess differences between subsamples, at the group level, a paired samples t-test was conducted. Absolute and directional discrepancies were calculated to evaluate the extent and direction of disagreement, respectively.

Results. At the individual level, nurses-proxy agreement on reported PTG was poor to moderate. At the group level, there were no differences between subsamples, except for Spiritual Change. Directional discrepancies suggest that nurses have a slight tendency

to overestimate positive transformations, in comparison with significant others. Further analyses on the categories of directional discrepancies found no differences between groups, except for Spiritual Change that showed higher rates of 'Agreement'. Observed frequencies demonstrated that there were no significant differences between the majority of dyads on their evaluation of nurses' PTG.

Conclusions. These findings confirm the overall accuracy of nurses' self-perceived positive transformations, reinforcing the importance of considering multiple informants to complement self-reports in the reliable assessment of PTG. It is crucial to develop psychological interventions aimed at addressing pandemic centrality in order to promote meaningful narratives of the experience and positive outcomes in the aftermath of the COVID-19 pandemic.

Keywords: COVID-19, event centrality, nurses' post-traumatic growth, self-proxy agreement, post-traumatic stress

Talk 5 - Working by the body clock: Lessons from COVID-19

Authors: Maria Inês Clara^{1,2} & Ana Allen Gomes^{1,2}

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

²Faculty of Psychology and Educational Sciences, University of Coimbra, Coimbra, Portugal

Abstract

Introduction: Busy lifestyles with long working and commuting hours and early work schedules are prompting a chronically sleep deprived, socially jet-lagged workforce. Sleep loss and circadian desynchrony are associated with a substantial economic burden to organizations and governments, as well as impaired productivity and health hazards to workers. Adverse health outcomes have been consistently found to be more common among evening-types. Social times, and thus sleep-wake behavior, changed worldwide due to COVID-19 social restrictions.

Methods: In this review, we summarize the detrimental effects of social time pressure on sleep, as well as the impact of sleep restriction and circadian misalignment on health and performance. We examine state-of-the-art evidence on the effects of COVID-19-mandated social restrictions on sleep-wake patterns. We discuss the promise of a flexible work culture to improve workers' sleep and circadian health – and, consequently, mental, physical health, and productivity.

Results: The considerable sleep deficit and social jetlag under pre-pandemic conditions emphasized the negative impact of early morning work schedules and commuting. Before lockdown, evening-types seemed particularly REM-sleep deprived. COVID-19-related

working-from-home (WFH) allowed for less social time pressure by eliminating the need to commute between work and home and less stringent workhours. Under WFH lockdown, sleep timing was delayed, allowing workers to align their sleep-wake patterns more closely to their biological preference, and sleep duration increased. People approached lockdown workdays as pre-pandemic free days, indicating their sleep behavior on free days truly depicts their circadian sleep window. The lengthening of sleep duration persisted throughout lockdown and seems to reflect actual sleep need rather than a compensation of previous sleep debt. Under WFH arrangements, an evening preference was no longer a risk factor for sleep restriction and sleep problems, thereby decreasing evening-types' vulnerability to depression.

Conclusions: Maintaining post-pandemic workplace flexibility is critical to improve workers' sleep health. The conflict between early work schedules and the innate circadian preference in sleep time may partly explain why the evening-type is a risk factor for health hazards. Albeit circadian predisposition has a substantial genetic component that can hardly be changed, commute time and work schedules are modifiable social determinants of sleep. Flexible work practices supporting more relaxed schedules should benefit health, well-being, productivity, and safety via decreased sleep impairments. Building on the lessons learned from the COVID-19 circadian experiment, organizations can foster a more rhythm-inclusive workplace.

Keywords: circadian rhythms, occupational sleep medicine, sleep health, working-from-home, workplace flexibility

Acknowledgements: MIC was awarded a doctoral scholarship by the Portuguese Foundation for Science and Technology (grant 2020.05728.BD).

Oral Presentation Session #8

Topic: Mental Health & Well-being

Chair: Carlos Carona

Talk 1 - Infertility-related Stress and Adaptation to Infertility

Context: The Role of Psychological Inflexibility

Authors: Carolina Barbosa¹, Susana Santos^{2,3,4} & Juliana Pedro^{5,6}

Affiliations:

¹Department of Psychology and Education, Portucalense University, Porto, Portugal

²Portucalense Institute for Human Development, Universidade Portucalense Infante D. Henrique, Porto, Portugal

³University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

⁴PIN - Partners in Neuroscience

⁵Centre for Reproductive Genetics A. Barros, Porto, Portugal

⁶Centre for Psychology at University of Porto, Porto, Portugal

Abstract

Introduction: The existence of an infertility diagnosis and of medically assisted reproductive treatments are characterised as a stress-inducing and potentially painful experience. Infertility-related stress seems to be positively associated with depressive and anxious symptoms, as well as negatively associated with quality of life. However, it is not yet very clear through which pathway this happens. Therefore, the purpose of this study was to analyze the associations between infertility-related stress and depressive and anxious symptoms, and quality of life. Moreover, specifically examine psychological inflexibility as pathway through which infertility-related stress is linked to anxious and depressive symptoms, and quality of life in individuals experiencing infertility.

Method: We expect a minimum 100 Portuguese participants collected through convenience sampling. To data collection, a Demographic Questionnaire, a Clinical Questionnaire, the Acceptance and Action Questionnaire-II, the COMPI Fertility Problem Stress Scales, the EUROHIS-QOL, and the Depression, Anxiety, and Stress Scales – 21 will be used. In addition, descriptive and mediation analyses will be run, using process or Amos.

Expected results: We expect infertility-related stress to be positively associated to anxious and depressive symptoms and negatively related to quality of life. Furthermore, we expect inflexibility to be a mediator between infertility-related stress and depressive and anxious symptomatology and quality of life.

Conclusion: We hope to conclude that higher levels of infertility-related stress, indicate higher levels of psychological inflexibility which lead to poor adaptation in infertility context. Furthermore, we hope to conclude that an intervention such as ACT, which works on processes such as psychological inflexibility, may be helpful in this change of maladaptive course.

Keywords: infertility-related stress, psychological inflexibility, anxiety, depression, quality of life

Talk 2 - Development of at-distance and online parental intervention program promoting parental involvement in elementary school parents

Authors: Sandra Mesquita¹, Armanda Pereira², Ana Guimarães¹, Daniela Rosendo¹, Sara Teixeira¹ & Pedro Rosário¹

Affiliations:

¹Psychology Research Center, School of Psychology, University of Minho, Braga, Portugal

²Department of Education and Psychology, School of Human and Social Sciences, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal

Abstract

The current study aims to develop and evaluate a parental intervention program focused on parental involvement (PI) promotion and, consequently, on self-regulation learning strategies promotion in children. PI can be observed through parents' behaviors at school (e.g., meetings with teachers) and at home (e.g., helping with homework), being seen as a predictor of academic success. PI results from the dynamic relationship of psychological and contextual factors that create the different forms of PI and different mechanisms to support children's learning. In everyday life, parents can instruct and promote self-regulation strategies in their children. Self-regulation strategies are another strong predictor of children's academic success. These strategies are core competencies that allow individuals to organize their resources toward goals. There is a strong need to promote PI in the child's educational pathway, especially in the early years, due to the importance of this initial stage in learning. Even so, educators point to PI as limited and lower than expected. At-distance and online parental interventions have been favorable responses due to their ease and flexibility in their access. The effectiveness program evaluation will be conducted following a longitudinal RCT study with an expected duration of six months. The intervention will be delivered through a combination of at-distance and online to parents of children from elementary school's 1st and 2nd grades. One hundred fifty parents will participate and be randomly distributed by three conditions: i) Experimental Group - will benefit from a program based on the self-regulatory narrative "Yellow's Trials and Tribulations" to support parents in promoting self-regulation strategies. In this sense,

reflections concerning self-regulation strategies worked on in the story (e.g., goal setting) will be prepared in video format (2-5 minutes); ii) Active Control Group - will benefit from different educational content on study methods (e.g., how to write a summary?); iii) Passive Control Group - will not benefit from intervention. Each session will consist of asynchronous moments (video reflection viewing) and synchronous moments (session via Zoom® for joint reflection). Regarding data collection, information will be collected with parents, children, and teachers in five moments: pre, intermediate, post, and two moments of follow-up. Parents are expected to increase PI and knowledge of self-regulation, and their children improve their self-regulation strategies and school performance.

Keywords: Parental intervention, at-distance intervention, online intervention, parental involvement, self-regulation

Talk 3 - The role of competitive mentality on insomnia

Authors: Mariana Miller^{1,2}, Ana Allen Gomes^{1,2}, Maria Inês Clara^{1,2} & Paula Castilho^{1,2}

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

²Faculty of Psychology and Educational Sciences, University of Coimbra, Coimbra, Portugal

Abstract

Introduction: Many factors are known to be involved in Insomnia, and selfcompassion has been proposed as a protective factor against sleep difficulties. However, the potential role of competitive mentality (self-criticism, shame, and submissive behaviours) on Insomnia is not clear. This study aimed to explore, in a non-clinical sample, the role of selfcriticism, shame and submissive behaviours on Insomnia. Specifically, we aim to test if self-criticism, external shame, and submissive behaviours were mediating the relationship between shame experiences and insomnia.

Methods: 315 participants (68% F), 18-80 years-old (40.28±15.34), from the community, completed an online questionnaire evaluating: severity of insomnia complaints (ISI); sleep quality (BaSIQS); selfcompassion (SCS); forms of self-attacking and self-reassuring (FSCSR), external shame (OAS), submissive behaviours (SBS), centrality of a shame memory (CES); and anxiety, stress and depression symptoms (DASS-21). A selfcriticism composite score was computed by summing the two negative dimensions of FSCSR. Mediation analysis was performed using SPSS PROCESS macro, version 4.2 (model 4), with bootstrap confidence intervals not including zero indicating a significant effect. For all the analyses, a *p*-value at .05 was set.

Results: A simple mediation model was constructed with centrality of a shame memory (CES) as the predictor, external shame (OAS), submissive behaviours (SBS) and selfcriticism (FSCSR) as mediators, and insomnia severity (ISI) as the outcome. Depression was

included as a covariate. We found that centrality of shame memory relates to insomnia severity indirectly through its effect on external shame (OAS), $b = .012$, 95% bootstrap CI = 0.0004 to 0.0264. Participants who report a greater centrality of shame memories (CES), scored higher external shame (OAS) ($b = 0.092$, $p < 0.01$, 95% CI = 0.0619 to 0.1214), which in turn were associated with higher insomnia severity (ISI) ($b = .133$, $p < 0.05$, 95% CI = 0.0111 to 0.2542). The results showed that there is not a direct effect of centrality of shame memories (CES) on insomnia severity (ISI), $b = 0.014$, $p = 0.384$, 95% CI = -0.018 to 0.047. The remaining variables (submissive behaviors [SBS] and selfcriticism [FSCSR]) did not present a mediating effect on insomnia severity (ISI).

Conclusions: Controlling for depression symptoms, external shame appears to mediate the relationship between the centrality of shame memories and insomnia symptoms, yet submissive behaviours and selfcriticism did not play a role in this pathway. Results suggest a possible association between competitive mentality and insomnia.

Acknowledgements: MMM was supported by a doctoral grant from the Portuguese Foundation for Science and Technology (SFRH/BD/147556/2019).

Keywords: insomnia, selfcriticism, shame, submissive behaviours

Oral Presentation Session #9

Topic: Child & Adolescent Psychology

Chair: Sofia Major

Talk 1 - The association between family functioning and children's social emotional and behavioural problems: The role of co-parenting

Authors: Ana Isabel Cunha¹, Marta Pereira Alves¹ & Sofia Major²

Affiliations:

¹University of Beira Interior, Portugal

²University of Azores, Portugal

Abstract

From a family systems' perspective, problems of individual family members can never be fully understood outside the overall family unit. Research in the context of child's development has emphasized the importance of examining the role of family processes and environment. Several aspects of family functioning have been related to children's psychological adjustment and literature shows that, generally, poorer family functioning is associated with more emotional and behavioural problems among children. Also, the influence of co-parenting in family functioning, in parent-child interaction and in child development has been consistently evidenced in family research. The purpose of this study was to explore the association between perceived family functioning and children's social emotional and behavioural problems and to test the mediating role of co-parenting in this relationship, in two parent-families of preschool and school-age children. The sample included 273 parents (mostly mothers, 84.9%) of children aged 3-9 years old ($M = 5.70$, $SD = 2.16$; 50.2% girls). The participants completed the Portuguese versions of: a) the Systemic Clinical Outcome and Routine Evaluation (SCORE-15; Stratton et al., 2014), a measure of family functioning across three dimensions - family strengths, communication, and difficulties; b) the Coparenting Questionnaire (CQ; Margolin, Gordis, & John, 2001), to assess three dimensions of co-parenting for parents currently living together - cooperation, triangulation, and conflict; and c) the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), a brief behavioural screening questionnaire. In this study, only the total difficulties score (emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship problems) was used. Results were calculated through the estimation of OLS regression-based models, controlling for child's age and gender. Both direct and indirect effects were estimated. Results revealed that: 1) a poorer family functioning negatively predicted parenting cooperation and positively predicted paren-

ting conflict and triangulation and children's difficulties; 2) both parenting conflict and cooperation were significant predictors of children's difficulties (a positive and a negative predictor, respectively); and 3) parenting conflict revealed to be a significant mediator in the association between family functioning and children's difficulties. In conclusion, the results suggest that, when families reveal more family problems and parents show more conflict and less cooperation in parenting, the frequency of child's problems increase. Moreover, the link between family functioning and children's problems is mediated by conflict between parents, showing that more family problems increase children's difficulties indirectly through the increase of parenting conflict.

Keywords: family functioning, coparenting, social emotional and behavioural problems, children

Talk 2 - Inclusive education: social skills, behavioral problems, and academic competence of students with intellectual disabilities

Authors: Eliza França e Silva¹, Catarina Grande² & Luciana Carla dos Santos Elias¹

Affiliations:

¹ Faculty of Philosophy, Sciences and Letters at Ribeirão Preto, University of São Paulo, Brazil

² Faculty of Psychology and Educational Sciences, University of Porto, Portugal

Abstract

Introduction/objectives: Social Skills can be understood as specific categories of behaviors that an individual exhibit to complete a social task successfully. They contribute to social competence, which in turn has an evaluative meaning regarding performing the social task appropriately, based on the demands of the situation and culture, considering instrumental and ethical criteria. The acquisition of social skills is critical to a child's social development and well-being. It is even more crucial in the case of children with disabilities, given the challenges they face throughout life. The literature points to associations between deficit social skills repertoire and a higher incidence of behavior problems; social skills can be considered a protective factor for behavior problems, as they enable children to interact more positively with family, teachers, and peers. These associations are also presented in studies on children with disabilities, as these children have a deficit repertoire of social skills and high rates of behavior problems. The inclusive context, specifically inclusive education, is essential in the acquisition of social skills, as it provides spaces for social interaction and learning, enhances integral development, and allows acceptance and coexistence with peers. In Brazil, inclusive education is widely advocated, and supported by several laws, movements, and public policies. Given the above, the importance of social skills in child development and the context of inclusive education, this study aimed to characterize and associate social skills, behavior problems, and academic competence of students with intellectual disabilities in school inclusion; to

verify predictive values for social skills and differences between groups diagnosed with intellectual disability and other associated diagnoses. Methods: This was a quantitative, cross-sectional, descriptive, correlational, predictive, and comparative study. Forty-four students with intellectual disabilities participated (11 of them presented other associated diagnoses). Teachers and parents answered instruments to describe children's variables. Results: Social skills were negatively associated with behavior problems and positively associated with academic competence; behavior problems and diagnosis were predictors. There were significant differences in the group, in total social skills and the categories of responsibility, affectivity, cooperation/civility, and self-control. Conclusions: This study enabled the understanding of the social repertoire of students who are the focus of educational inclusion from different perspectives. Furthermore, it highlights the importance of studies on educational inclusion within the theoretical and practical field of social skills. Finally, it supports the importance of continued interventions and social skills as a protective factor against interaction difficulties in this population.

Keywords: Social Skills, Behavior Problems, Intellectual Disability, Educational Inclusion.

Talk 3 - Development of Socio-Emotional Skills Through Play in Children From 7 to 12 Years Old

Authors: Catarina Bettencourt¹, Joana R. Rato², Cláudia Ribeiro da Silva¹, Inês Tomás¹,
Rafaela Nunes³ & Paula Pimentel³

Affiliations:

¹Instituto de Ciências da Saúde, Universidade Católica Portuguesa, Portugal

²Centro de Investigação Interdisciplinar em Saúde, Universidade Católica Portuguesa, Portugal

³Departamento de Educação, Câmara Municipal de Cascais, Portugal

Abstract

Introduction/Objectives: Previous research in education, psychology, or cognitive neurosciences, demonstrated the importance of play for children's development. However, in school-age children, playfulness has been continuously reduced in the school context, reflecting a concept of play that is separated from other forms of learning, sometimes restricted to playgrounds and playrooms. This study aimed to measure the development of socio-emotional skills through the 'Brincar em Cascais' project, within the scope of Gulbenkian Knowledge Academies, in the domains: i) adaptability - the capacity to adopt more flexible behaviors, and prompt responsibility and curiosity; ii) resilience - the ability to deal with adversities, stress resistance and encourage persistence and perseverance, and iii) problem-solving - the ability to realistically assess problems, look for alternatives and generate solutions, promoting empathy and tolerance.

Methods: A weekly program consisting of 25 sessions of playful activities designed to develop socio-emotional skills was applied to 164 children from nine classes and five schools in the Municipality of Cascais throughout the 2021/2022 school year. The sessions were guided by professionals trained for this purpose (Academia of Play-Mentors) who worked on three main domains: adaptability, resilience, and problem-solving. We conducted a qualitative analysis of the content of the children's answers to monitor the program implementation and evaluate executive functioning (EF) in the experimental and control groups before and after the program time. For EF, we used the Behavior Rating Inventory of Executive Function (BRIEF – parent form).

Results/Conclusions: The qualitative data reveal not only the children's satisfaction, which guarantees that the playful factor has not been lost at these ages, but also reflects that they recognize the same skills we intended to work. Through content analysis of around 4000 responses (in total sessions), 25% evoke socio-emotional skills such as cooperation, empathy, communication, and adaptability. As for the quantitative data, the expected results understand that the children involved in the program present an optimization of the executive functions perceived by the parents.

Keywords: Play, socio-emotional competencies, executive functions, primary school children

Talk 4 - Neonatal and social factors associated with language, memory and learning in children born very preterm

Authors: Rachel Barbabela^{1,2}, Catarina Tojal^{1,3}, Henrique Barros^{1,3,4} & Raquel Costa⁵

Affiliations:

¹EPIUnit, Instituto de Saúde Pública, Universidade do Porto, Portugal

²Unidade de Saúde Pública de Matosinhos, Unidade Local de Saúde de Matosinhos, Portugal

³Laboratório para a Investigação Integrativa e Translacional em Saúde Populacional (ITR), Universidade do Porto, Portugal

⁴Departamento de Ciências de Saúde Pública e Forrenses, e Educação Médica, Faculdade de Medicina da Universidade do Porto, Universidade do Porto, Portugal

⁵HEI-Lab: Digital Human-Environment Interactions Lab, Universidade Lusófona, Portugal

Abstract

Introduction/Objectives: Preterm birth is a relevant global public health problem. It has long-term consequences, increasing the social burden and economic costs for families and developmental problems for children. Using data from the population-based cohort, Effective Perinatal Intensive Care in Europe (EPICE) and the follow-up study, Screening to Improve Health in Very Preterm Infants in Europe (SHIPS), we intend to analyse and compare language, memory and learning at five years of age in children born extremely premature (EPT) and very premature (VPT). Furthermore, we intend to determine the

risk of language, memory and learning problems considering maternal and perinatal characteristics.

Methods: The sample consists of 377 children (284 VPT and 93 EPT) born before the 32nd week of gestation in 2011 and 2012 in the North and Lisbon and Tagus Valley regions. Perinatal data were extracted from clinical reports and the NEPSY-II* subtests to assess language, memory and learning were performed at five years of age. Descriptive statistical analysis was performed. A Pearson's chi-square (χ^2) test was performed to analyse differences in the proportion of EPT and VPT with a performance borderline/ below expected on language or memory and learning subtests. Logistic regression models were tested to analyse the association between gestational age, neonatal morbidity, bronchopulmonary dysplasia, respiratory support, neonatal infection, maternal age, and maternal education and borderline or below-expected language performance, memory and learning.

Results: Most children are male (57,4%), singleton pregnancies (78,9%), birth weight \geq 750g (92,6%), whose mothers are under 35 years old (66,4%), mostly Portuguese (87,5%), without higher education (61,7%) and employed (74,5%). Lower gestational age, neonatal morbidity, younger age, and maternal education are associated with an increased risk of having borderline or below-expected language performance. Lower gestational age, neonatal morbidity and bronchopulmonary dysplasia are associated with an increased risk of borderline or below-expected performance in memory and learning. Lower gestational age (OR [95% CI] 1.870 [1.113-3.141]) and lower maternal education (OR [95% CI] 2.135 [1.276-3.573]) are associated with worse performance in terms of memory and learning. Neonatal morbidity (OR [95% CI] 2.926 [1.127-7.594]) and lower maternal education (OR [95%] 2,281 [1,296 - 4,015]) are associated with worse language performance.

Conclusions: Neonatal and social factors are associated with different primary skills related to memory, learning and language in children born EPT and VPT. The implementation of a national program that develops predictive modelling to identify at-risk children before they show symptoms should be a public health focus.

Keywords: Memory, Language, Learning, NEPSY-II, Preterm

Oral Presentation Session #10

Topic: Child & Adolescent Psychology

Chair: Luís Pires

Talk 1 - Self-concept among polyvictimized adolescents: a comparative study between residential care and community samples

Authors: Alexandra M. Lino^{1,2}, Luiza Nobre-Lima² & Isabel Alberto²

Affiliations:

¹Faculdade de Psicologia e Ciências da Educação da Universidade de Coimbra, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Introduction/Objectives: Exposure to multiple forms of violence has been found by extant research to have a damaging influence on core psychosocial resources responsible for the development of a positive self-concept. Little is known, however, about the reality of Portuguese adolescents, particularly those at-risk. The present study intends to fill this gap in research by analyzing the impact of polyvictimization in the reported self-concept of adolescents in residential care.

Methods: An adapted lifetime version of the Juvenile Victimization Questionnaire and the Piers-Harris Children's Self-Concept Scale were used as screening measures for victimization and self-concept, respectively, on 116 adolescents in residential care and 241 adolescents from the community, boys and girls aged between 12 and 17 years old. Adolescents experiencing four or more victimization types within their lifetime were defined as 'polyvictims' (Finkelhor et al., 2007). They were further subdivided into non-polyvictim (0-3 types), low-polyvictim (4-6 types), mid-polyvictim (7-10 types), and high-polyvictim (11 or more types) groups. The Mann-Whitney U was calculated to compare the mean ranks of the adolescents' self-concept scores in both samples. Statistical differences between polyvictim groups were ascertained with a multivariate Kruskal-Wallis H test. Post-hoc pairwise comparisons were processed using the Dunn-Bonferroni test to determine which polyvictim groups differed.

Results: Adolescents in residential care reported significantly lower behavioral adjustment, happiness, and total self-concept perceptions. Compared to the non-polyvictim group, high-polyvictims in residential care reported a significantly higher perception of anxiety, and lower perceptions of popularity, happiness, and total self-concept. In the community

sample, high- and mid-polyvictims displayed a significantly poorer self-concept in all domains, compared to non-polyvictims. Compared to the low- polyvictim group, high-polyvictims also reported a significantly higher perception of anxiety, and lower perceptions of popularity, happiness, intellectual status, and total self-concept. Mid-polyvictims in the community sample reported a significantly lower total self-concept than low-polyvictims.

Conclusion: Polyvictimization is associated with impairments in the self-concept of adolescents from both samples, however, its impact seems to be more pronounced in the community sample. For polyvictim adolescents in residential care, it is possible that having experienced, witnessed, and acknowledged that others are also subjected to violence and victimization made them less prone to change their beliefs about their own worthiness. Polyvictim adolescents from the community may, in turn, experience less acknowledgment and support in the face of interpersonal violence, thus exacerbating the feeling that something is wrong with them for being victimized.

Keywords: self-concept, polyvictimization, adolescents, residential care, community sample

Acknowledgements: This work was supported by the Portuguese Foundation for Science and Technology (SFRH/BD/147521/2019).

Talk 2 - Portuguese version of the Self-Rating Scale for Pubertal Development (SSPD): Psychometric and normative data in a large sample of (pre)adolescents

Authors: Ana Sofia Moreira^{1, 2}, Daniel Ruivo Marques^{3, 4}, Luís Pires^{1, 4, 5, 6} & Ana Allen Gomes^{1, 4}

Affiliations:

¹ Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal.

² Mental School, Portugal.

³ University of Aveiro, Department of Education and Psychology, Portugal.

⁴ Centre for Research in Neuropsychology and Cognitive Behavioral Intervention, University of Coimbra, Portugal.

⁵ Department of Psychology, School of Life Sciences, University of Hull, United Kingdom.

Abstract

Introduction: Pubertal development is related with a myriad of variables, such as mental health. In order to estimate the pubertal status stages described by Tanner without using pictorial representations or interviews, Carskadon and Acebo (1993) converted the interview-based puberty-rating scale of Petersen into a self-rating scale, called the Self-rating Scale of Pubertal Development (SPSS), composed of 5 items. The Portuguese version of the SPSS, named Escala de Autoavaliação da Puberdade (EAP), was developed by Crosóstomo (2013) who also reported the first Portuguese psychometric results in 431 students aged between 9 and 15 years. The aim of the present study was to expand the

reliability and validity studies of the EAP in a wider sample of Portuguese adolescents and to delineate Portuguese norms.

Methods: A starting sample of 1036 participants was collected (594 girls, 12-20 years-old, 7th-12th school grades). Then, given the homogeneity of pubertal development found in preliminary analyses (particularly in girls), data from participants aged 9 to 11 years-old were added, which resulted in a composite sample summing 2108 students, comprising 1148 girls (54.5%) and 959 boys (45.5%), aged 9 to 20 years old, from the 4th to 12th school grades. Test-retest was conducted in a subsample of 8th graders ($n=48$). In addition to EAP, students answered scales assessing other constructs to examine validity (CSM; SDQ; BaSIQS). A Confirmatory Factor Analysis was performed to test a one-factor solution.

Results: The scale showed satisfactory to good internal consistency considering the composite sample, $\alpha=.79$ and $\omega=.82$ for girls, $\alpha=.84$ and $\omega=.85$ for boys. As to the temporal stability (test-retest subsample), intraclass correlation coefficients were .74 (girls) and .78 (boys). The correlation coefficients of the EAP scores with other scales measuring distinct constructs were low ($r<.30$). A unidimensional factor structure was confirmed, both for boys and for girls. Normative scores were computed for participants from 9 to 17 years-old. It was possible to observe differences between the rate of development when comparing girls and boys of the same age. Median values in this 9-17 years-old participants corresponded to the late puberty stage in girls (43.0%), and the intermediate puberty stage in boys (29.8%).

Conclusions: We may conclude that the EAP (the Portuguese version of the SSPD) is a reliable, valid, and unidimensional scale. Given that the EAP/SSPD is a minimally invasive method to estimate pubertal development, it may be a valuable tool both for clinical/practical and research purposes.

Keywords: pubertal stage, scale, self-report, reliability, validity

Talk 3 - Children and adolescents mental health in primary health care

Authors: Suzana Barbosa¹ & Raquel Costa^{2,3}

Affiliations:

¹Unidade de Saúde Pública Gerês/Cabreira, ACES Cávado II - Gerês/Cabreira, Portugal

²EPIUnit, Instituto de Saúde Pública, Universidade do Porto, Portugal

³Laboratório para a Investigação Integrativa e Translacional em Saúde Populacional (ITR), Universidade do Porto, Portugal

Abstract

Introduction: Childhood and adolescence are vulnerable times in terms of mental health and most of these problems may persist during adulthood and have a negative impact

in the future. Mental health problems are associated with greater use of health services, especially Primary Health Care. In Portugal, there is a lack of epidemiological studies that characterize mental problems in children and adolescents, especially in primary care. This knowledge is of utmost importance in order to improve the health care provided.

Objectives: The main objective of this study is to describe mental healthcare among the population of children and adolescents registered in the Group of Health Centers Gerês/Cabreira, by age group and sex, between 2020 and 2022. Specific aims are to: describe the mental symptoms and diseases identified in primary health care; identify the occurrence of other symptoms, diseases or social problems among children/adolescents with diagnosed mental problems; compare the average number of medical appointments and visits to the emergency room among children/adolescents with diagnosed mental health problems and the total number of children/adolescents; describe the psychotropic therapeutics prescribed to children/adolescents with diagnosed mental problems.

Methods: Our study population consists of around 18500 children and adolescents aged 0 to 19 years old registered in the Group of Health Centers Gerês/Cabreira, Portugal, from 2020 to 2022. The data will come from the Primary Health Care Identity Card platform (BI-CSP). This platform provides primary care data about problems/diagnosis using the International Classification of Primary Care (ICPC-2). We will be focusing primarily on the Psychological chapter and on the symptoms/complaints and diseases components.

Expected Results: Based on the most recent report of the NHS (2017), it is estimated that one in eight 5 to 19 year olds in England have a mental disorder and the rates of mental disorder are higher in older age groups. When it comes to sex, young women have been identified as a high risk group in relation to mental health.

Conclusions: This research project will provide information about diagnosed mental problems in primary care among children and adolescents. Additionally, it will provide information on regional mental health care needs for children and adolescents.

Keywords: Mental health, children, adolescents, primary health care

Talk 4 - Cognitive distortions mediate the relationship between adverse childhood experiences and juvenile delinquency

Authors: Filipa Godinho Duarte¹, Hugo Santos Gomes² & Ângela Maia³

Affiliations:

1School of Social Sciences at Nottingham Trent University, UK

2Center for Psychology at University of Porto, University of Porto, Portugal

3Research Centre on Psychology (CIPsi), University of Minho, Braga, Portugal

Abstract

Research has shown the link between juvenile delinquency and adverse childhood experiences (ACE), where often offenders have higher prevalence rates of adversity and trauma compared to the youth in general (Baglivio et al., 2014). Further research is needed to understand this association, in particular, ACEs' relation to violent and non-violent delinquent behavior, and so investigating transgressions from normative information-processing may prove to be key in doing so. Indeed, self-serving cognitive distortions have been positively associated with externalizing behaviors, with previous studies highlighting the role of cognitive distortions as a mediator in the relationship between moral maturity and antisocial behavior (Lardén et al., 2006). However, according to our literature review, no studies have explored the cognitive distortions mediating role in the association between ACE and juvenile delinquency, despite its potential.

Therefore, the aim of the present study is to test whether self-serving cognitive distortions mediate the relationship between childhood adversity and juvenile delinquency, whilst providing data on the prevalence of ACE and delinquent behavior in a Portuguese community sample.

Data from a total of 232 participants between the ages of 16 and 22 were collected in this study. Participants answered a sociodemographic questionnaire, the ACE study questionnaire (Felliti et al., 1998; Portuguese version by Silva & Maia, 2008), the self-report questionnaire for measuring delinquency and crime (D-CRIM; Basto-Pereira et al., 2015), and the How I Think Questionnaire (Barriga et al., 2001; Portuguese version by Gomes et al., 2022). Descriptive analyses were carried out, along with Spearman correlation analyses, and the PROCESS macro extension (with the bootstrapping technique, based on 5000 bootstrap samples) to test the mediation model.

Regarding delinquent behavior, 37.2% of participants reported having practiced, at least, one of these behaviors during their lifetime, whilst 54.7% reported, at least, one type of ACE. Results also showed that experiencing adversity had a statistically significant indirect effect on total delinquency, as well as, on violent and non-violent delinquent behaviors, through cognitive distortions.

The results indicate that self-serving cognitive distortions mediate the relationship between adverse childhood experiences and delinquency, even when considering violent and non-violent delinquent behavior individually. These findings suggest that it is important to develop interventions focused on self-serving cognitive distortions as a way of preventing involvement in delinquent behavior by youth victimized in childhood.

Keywords: ACE, Cognitive distortions, Juvenile Delinquency

Oral Presentation Session #11

Topic: Neuropsychology

Chair: Ana Rita Silva

Talk 1 - Relationship Between Arsenic Levels in Hair and Cognitive Performance in Adults and Older Adults

Authors: Bianca Gerardo^{1,2,3}, Marina Cabral Pinto³, Joana Nogueira^{1,2}, Agostinho Almeida⁴, Mário R. Simões^{1,2} & Sandra Freitas^{1,2}

Affiliations:

1 Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC) - Faculty of Psychology and Educational Sciences of the University of Coimbra, Portugal

2Psychological Assessment and Psychometrics Laboratory (PsyAssessmentLab) - Faculty of Psychology and Educational Sciences of the University of Coimbra, Portugal

3Geobiotec Research Centre - Department of Geosciences of the University of Aveiro, Portugal

4Laboratory of Applied Chemistry - Faculty of Pharmacy of the University of Porto, Portugal

Abstract

Introduction/Aims: Trace element homeostasis is crucial for normal brain function. While many non-essential trace elements can cause severe brain toxicity even in small amounts, imbalances in essential trace element levels can also have important detrimental effects, to which the aging brain and its performance are increasingly sensitive. In this study, we aim to investigate associations between Potentially Toxic Elements (PTE) and cognitive performance in adults and older adults by assessing residents of two different geographic regions.

Methods: A total of 76 subjects recruited from the central coast and inland of Alentejo (Portugal) were included in this study. Neuropsychological data on general cognitive performance were collected by administering the Mini Mental State Examination (MMSE) screening tool. Systemic PTE status was assessed based on metal levels in hair samples, analyzed using Inductively Coupled Plasma Mass Spectrometry. Eleven PTE were included in the study: Aluminum (Al), Chromium (Cr), Manganese (Mn), Iron (Fe), Nickel (Ni), Copper (Cu), Zinc (Zn), Arsenic (As), Cadmium (Cd), Mercury (Hg), and Lead (Pb).

Results: Of the total sample, 39.5% scored below the clinical cut-off for Alzheimer's disease and other dementias (26 points). Overall MMSE scores correlated significantly with Cr, Fe, Ni, Zn, As and Pb levels in hair ($r=-0.238$ to $r=-0.495$, $p<0.01$ to $p<0.05$). Linear regression analysis revealed that As was the only PTE to significantly predict global MMSE scores ($\beta=-0.347$, $t=-3.935$, $p<0.001$) in a model that included both age and education

for statistical control. Arsenic emerged as the second most relevant predictor of MMSE scores, closely preceded by education ($\beta=0.361$, $t=3.656$, $p<0.001$). Comparisons between participants from central coast Portugal (CC) and inland of Alentejo (IA) pointed to the IA group as having lower cognitive performances and higher As levels in hair, regardless of the between-group differences. Inland of Alentejo regions exhibit higher levels of As in soil and water and they were strongly associated with the Iberian Pyrite Belt, where abandoned mining areas can be found.

Conclusions: Higher hair levels of As appear to be associated with worse global cognitive performance in adults and older adults. Future research should attempt to bridge cognitive performance and systemic PTE status with environmental indicators of exposure, as they may constitute potential risk factors for cognitive impairment.

Keywords: Cognitive Performance, Arsenic, Potentially Toxic Elements, Mini Mental State Examination, Adults and Older Adults

Talk 2 - Preliminary results on the efficacy of an outpatient neuropsychological rehabilitation program following acquired brain injury

Authors: Sofia Carlos Aguiar¹ & Joana Câmara²

Affiliations:

¹Serviço de Saúde da Região Autónoma da Madeira (SESARAM, EPERAM), Funchal, Portugal

²Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

Abstract

Introduction/objectives: Neuropsychological rehabilitation (NR) entails several approaches that aim to mitigate the impact of cognitive, emotional, and psychosocial deficits resulting from brain injuries. (ABI). This NR should be implemented in the early stages of ABI, along with other rehabilitation therapies (physiotherapy, speech and language therapy and occupational therapy) to optimize patients' overall recovery and functional outcomes. In this study we assessed the preliminary efficacy of a new outpatient NR program devised for ABI survivors, implemented in the Physical Medicine and Rehabilitation Department of SESARAM (the Regional Health System of Madeira Island).

Methods: Currently, a total of 16 patients concluded the personalized 24-sessions NR program comprising psychoeducation, psychotherapy, compensatory strategies training, and cognitive training through conventional methods (paper-and-pencil) and virtual reality. All patients were submitted to a baseline, post-intervention and one-year follow-up neuropsychological assessment using the Montreal Cognitive Assessment (MoCA), the INECO Frontal Screening (IFS), the Trail Making Test parts A and B (TMT-A and

TMT-B), and the Hospital Anxiety and Depression Scale (HADS). Rehabilitation goals were defined and assessed using the Goal Attainment Scale (GAS).

Results: A within-group analysis of the baseline and post-intervention neuropsychological assessment results revealed statistically significant differences in global cognition (MoCA), and executive functions (IFS). Additionally, we found differences in the post-intervention GAS, suggesting that patients were able to accomplish their rehabilitation goals related to functional abilities. Finally, a within-group assessment considering the baseline and the one-year follow-up assessment results demonstrated that patients improved significantly in global cognition (MoCA), attention, visual scanning, processing speed and eye-hand coordination (TMT-A).

Conclusions: The results of this small clinical study are promising and suggest the positive impact of the NR program in patients' cognitive functioning at a short and long-term, allowing patients to achieve and maintain their functionality-oriented rehabilitation goals.

Keywords: Acquired Brain Injury, Neuropsychological Rehabilitation, Functional Abilities

Talk 3 - Prevalence of Mild Cognitive Impairment and Dementia in a Clinical Sample

Authors: Catarina de Sousa Santos¹ & Sofia Carlos Aguiar¹

Affiliations:

¹Hospital Central Dr. Nélío Mendonça (SESARAM, EPERAM), Portugal

Abstract

Introduction: Mild Cognitive Impairment (MCI) and dementia are increasingly more frequent worldwide due to population ageing, which affects the quality of life of millions of patients and their families. Dementia is the term used to describe the symptoms of an extended group of diseases that cause cognitive decline and interfere with the occupational, domestic, or social function of subjects, while MCI is a phase of cognitive deficit before the criteria for dementia are complete; they can also be called Major and Minor Cognitive Impairment respectively. These depend on biological and environmental factors, such as age, gender, lifestyle and social factors, history of neurological diseases and psychiatric disorders, that can accelerate or delay the physiological changes that occur at the brain. Worldwide it is estimated that 47.5 million people live with dementia and in Portugal the same happens to 1.88% of the population, mostly women. However, for this population, there is still no concrete data.

Objective: Estimate the prevalence of MCI and Dementia in the Appointment for Neuropsychology of the Neurology Service at the Central Hospital of Funchal.

Method: A retrospective study of patients referred to the Neuropsychology Appointment between 2015 and 2019, for evaluation and differential diagnosis of cognitive complaints in aging or suspected dementia. Sociodemographic and clinical data were collected from the clinical process and appointment records.

Results: The sample was taken from 551 patients referred to the appointment, of which only 191 met the inclusion criteria. The prevalence of dementia was 10% in MCI, 32/23 cases female to male and 25% in dementia 88/48 cases similarly. Regarding the types of dementia, Alzheimer's disease was the most prevalent (9.6%) followed by Frontotemporal Dementia (4.5%) and Vascular Dementia (3.3%). The dementia study concentrated on women aged between 60 and 79 years, married, with low education levels and non-qualified professions.

Conclusions: This study, even being a clinical sample, confirmed the association with some sociodemographic variables, such as age and sex, and the relationship with history of acquired brain injury and psychiatric pathology to some types of dementia. Given that epidemiological surveillance is a key tool for planning, management, and distribution of resources in following the evolution of dementia and evaluating the impact of preventive programs. It would be important to create a clinical registry of epidemiological surveillance in the Regional Health System, as well as the identification of the modifiable risk factors, essential in prevention practices of neurodegenerative conditions.

Keywords: Demographic aging, Mild Cognitive Impairment (MCI), Dementia, Prevalence, Risk Factors

Talk 4 - The Mini-Linguistic State Examination (MLSE): development of the European-Portuguese version of a comprehensive language test

Authors: Marisa Lima^{1,2}, Alexandre Pais³, Cristina Martins⁴, Miguel Tábuas-Pereira¹, João Durães¹, Peter Garrard⁵, Mário R. Simões^{2,3} & Isabel Santana¹

Affiliations:

1Serviço de Neurologia, Centro Hospitalar e Universitário de Coimbra

2University of Coimbra, PsyAssessmentLab, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

3Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

4Faculty of Arts and Humanities, University of Coimbra, Portugal

5Molecular and Clinical Science Research Institute, St George's, University of London, London, United Kingdom

Abstract

Background/Aims: The Mini-Linguistic State Examination (MLSE) was recently developed as a brief yet comprehensive language test for use in patients with Primary Pro-

gressive Aphasia (PPA) variants. It is composed by 11 tasks (picture naming, syllable and polysyllabic word repetition, repeat and point, non-word repetition, semantic association, sentence comprehension, sentence comprehension with picture stimuli, word and non-word reading, sentence repetition, written description and picture description) which correspond to the major linguistic domains commonly affected in the disease: motor speech; semantic knowledge; phonology; syntax and working memory. Unlike other conventional neuropsychological instruments, the performances are measured using an error-recognition approach rather than simple 'percent correct' scores. As part of an international consortium [MRC research grant: MR/N025881/1], we developed the European-Portuguese version of the MLSE, which included full translation and linguistic adjustment of the instrument and manual.

Methods: After the process of translation and linguistic adjustment we conducted an exploratory study with an experimental version of the MLSE. It was administrated to 10 Alzheimer's disease (AD) patients with language impairment matched for age and education with 10 community-dwelling subjects. Patients were independently diagnosed and classified according to comprehensive neuropsychological assessment and CSF/imaging biomarkers. After analysing the performances of the exploratory version, changes were made in the MLSE leading to its final version.

Results: Mean age was 69.27 ($SD=9.90$), with 53.3% female ($n=11$). Mean MLSE total score for controls was 97.50/100 ($SD=1.76$) and for AD patients was 84.33/100 ($SD=7.00$). There were no significant correlations between MLSE total scores, age and educational level ($p>.05$). Mann-Whitney test analysis showed significant differences between groups in MLSE total score, total error score, semantic knowledge (all $p<.001$), syntax ($p=.008$) and working memory ($p=.026$) domains. Specific task analysis showed differences between groups in repeat and point ($p=.036$), sentence comprehension ($p=.012$), sentence repetition ($p=.026$) and picture description ($p<.001$). Internal consistency was good ($\alpha=.843$). Changes were made in the following items: picture naming, repeat and point, semantic association and picture description.

Conclusion: The experimental version of the MLSE showed good psychometric proprieties as a language test for degenerative dementia. After the exploratory study we will now proceed with the application to PPA patients to validate the final version.

Keywords: Primary Progressive Aphasia, Mini-Linguistic State Examination, MLSE, Alzheimer's disease, Frontotemporal dementia

Oral Presentation Session #12

Topic: Forensic Psychology

Chair: Diana R. Silva

Talk 1 - Emotion processing and psychopathy among female offenders: A Systematic Review

Authors: Marina Pinheiro¹, Rui Abrunhosa Gonçalves¹ & Olga Cunha²

Affiliations:

¹School of Psychology, University of Minho, Braga, Portugal

²Lusófona University of Porto, Porto, Portugal

Abstract

Most studies on the psychopathy construct focus on male samples, with a growing interest in the female population and the gender differences that may exist in recent years being evident. This systematic review was designed to understand the existing literature about emotional processing and psychopathy in women, given that empirical findings have shown that individuals with psychopathic traits manifest significant anomalies in the processing of emotions. However, there are doubts about whether affective deficits are comprehensive across the emotional spectrum and in all situations or specific to certain situations or women in particular.

Using a structured protocol based on the PRISMA methodology duly registered with the OSF, the systematic review process began, seeking to corroborate the hypotheses raised. It should be noted that this review included articles that met the following eligibility criteria: (i) a sample of female participants, aged 18 or over, in a prison or community context and whose published articles were written in English, Spanish or Portuguese. In the case of articles with mixed samples, only those that carried out the data analysis separately were considered. It is expected to find results in the literature demonstrating that psychopathy influences emotional processing in women and that women with psychopathic traits have difficulties/deficits in emotional processing. There are few existing studies in the area, and more investigations are needed about these constructs, believing that the compilation of existing information in the literature, especially with female samples, can represent an added value in understanding the problem raised.

Keywords: Psychopathy, female, emotional processing, emotional deficits, systematic review

Talk 2 - Child Welfare and Protection Systems: Complexity is necessary!

Authors: Carolina Coelho^{1,2}, Dora Pereira^{2,3} & Madalena Alarcão^{4,5}

Affiliations:

¹University of Coimbra

²UMA-CIERL – Centro de Investigação em Estudos Regionais e Locais da Universidade da Madeira

³Faculdade de Artes e Humanidades da Universidade da Madeira

⁴Faculty of Psychology and Educational Sciences, University of Coimbra

⁵CES- Centro de Estudos Sociais, University of Coimbra

Abstract

Introduction: Children's harm is a delicate topic that organizations and politicians try to control with reductionism and linearity. A culture of blame, with public scrutiny and criticism, motivates the use of analysis based on linear thinking. The aim of this critical reflection is to identify the main challenges professionals face in Child Welfare and Protections Systems (CWPS) and an approach that best suits these problematics.

Method: Two research questions were defined: i) "What are the main challenges of CWPS?"; ii) "What approach can help conceptualization and intervention in CWPS?". A literature search was carried out in EBSCO, Google Academic and RCAAP, considering peer-reviewed articles, CWPS reports, and books written in English and Portuguese, published until 2022. "Child Welfare and Protection services", "CWPS challenges", "Wicked problems" and "CWPS reports" were used as keywords. A critical reading and discussion of the bibliographic sources was performed.

Results: A complex approach is crucial to deal with the challenges of dissipative systems as families involved in CWPS. When working with complex cases referred by multiple risk factors, we need to consider multilevel interacting agents such as family members, formal/informal systems, and professionals, the quality of these interactions, fractal scaling, and the strengthens and family's capacity to spontaneously self-organize through non-linear processes. Professional practice itself can be an obstacle to a practice based on complexity, namely by the 1) lack of time for an integrated assessment, 2) need to prioritize some requirements while neglecting others, 3) lack of training and resources, 4) professional turnover, 5) lack of collaboration between services, 6) high stress experienced by professionals and 7) the persistence in a causal reasoning that looks for quick answers. It is important to reasoning in terms of systems and complexity when dealing with wicked problems. Thus, it is essential to promote a) the familiarity with uncertainty, b) the integration of a wider number of variables in the analysis of cases, c) reflection on systems structures and functions, d) the focus on systems as a whole rather than a compartmentalized procedural approach, e) power sharing, and f) the conception of risk as a social fractal.

Conclusion: It is crucial to consider the influence of social systems complexity on the practice of child protection professionals, and to discuss how we can stimulate complex reasoning.

Keywords: Complexity, Child Welfare and Protection services, Wicked Problems

Talk 3 - Forensic interview techniques in child sexual abuse cases: A scoping review

Authors: Delfina Fernandes¹, João P. Gomes¹, Pedro B. Albuquerque¹ & Marlene Matos¹

Affiliations:

¹Escola de Psicologia da Universidade do Minho, Portugal

Abstract

Introduction/Objectives: Child sexual abuse is a global public health problem with negative consequences for the victims, family system, and society. In these cases, the child is often the only witness to the crime, given the absence of physical or biological evidence. Since the testimony of child sexual abuse victims is primordial to the case outcome, the forensic interview takes on a key aspect in the criminal investigation. Whereas previous research has highlighted the importance of forensic interviewing in collecting testimony from child sexual abuse victims, the weaknesses of this population, and the best practices that interviewers should follow to overcome these challenges, identified the actual judicial procedures for collecting child sexual abuse victims' testimony through an evidence-based approach and a structured methodology remains unknown. For this purpose, we decided to conduct a scoping review, representing the first direct demonstration to fill this research gap. **Method:** Following PRISMA-ScR guidelines, articles were identified through manual reference checking and in four electronic databases, namely PsycARTICLES, PubMed, SCOPUS, and Web of Science. **Results:** One hundred forty-six articles were included. Thirty different forensic interview procedures to collect the child victim's testimony were found. The National Institute for Child Health and Development investigative interview protocol was the most frequently mentioned. **Conclusions:** Despite the variety of protocols, it was possible to conclude that they have a similar structure. Specifically, the included studies highlight the importance of starting with an introduction where the interviewer provides some explications. Then, it is necessary to rapport building with the child and practice the child's narrative of events. Subsequently, the interviewer should allow the child to freely recall the alleged abusive experiences progressing to questioning, through a funnel approach. Finally, the interview should be ended neutrally. These stages should be adapted according to the child's individual needs. This review also identified gaps in interviewing practices with child sexual abuse victims. This has consequences for the criminal investigation, the legal system, and the child's recovery process.

Keywords: Victims; child sexual abuse, forensic interview, testimony, scoping review

Talk 4 - AdapT – A Manualized Program for Remanded Prisoners

Authors: Joana Mendes Andrade¹, Rui Abrunhosa Gonçalves¹
& Andreia de Castro Rodrigues²

Affiliations:

¹Institute Universidade do Minho, Portugal

²ISPA - Instituto Universitário, Portugal

Abstract

Introduction: Considering the specific circumstances of pre-trial detention, remand prisoners tend to report a higher risk of suicide, mostly during the first periods of custody. Despite the lack of studies focused on remand prisoners, literature suggested that this group is particularly vulnerable to psychological problems, even though they are usually excluded from the interventions. The present study aims to present a brief group intervention designed for remanded prisoners. The main goals of the program are: (i) to promote pre-trial detainees' adaptation to the prison environment; (ii) to incite emotional literacy, (iii) to develop self-regulation skills, and (iv) to prevent suicide. **Method:** AdapT is a manualized program for remanded prisoners that targets emotion and behavior regulation, cognitive distortions, problem-solve skills, and suicide prevention. It is a cognitive-behavioral that consists of bi-weekly 10 sessions (for six weeks), each lasting between 60 and 90 minutes. Each group of interventions should include between eight and 10 participants. The effectiveness of the program will be assessed by comparing pre- and post-intervention measures in both experimental and control groups. We will use measures to assess symptomatology (BSI-18), suicide concerns (SCOPE-2), emotional regulation (DERS-SF), and positive and negative affect (PANAS). **Expected results:** It is expected that, after the intervention, participants of the experimental group had developed skills to facilitate their adjustment to prison as well as to regulate their emotions and their behaviors. We anticipate that compared to the control group, those who were on the intervention show lesser levels of symptomatology, higher ability to self-regulate themselves, fewer suicide concerns, higher levels of positive affect, and fewer levels of negative affect. **Conclusions:** Considering the difficulties experienced by remanded prisoners, we expect that AdapT might be a crucial and valid tool to support them and assist their needs

Keywords: remanded prisoners, pre-trial detention, psychological intervention, prisons

Oral Presentation Session #13

Topic: Educational Psychology

Chair: Pedro Palhares

Talk 1 - Exploring the Mediating Role of Self-Compassion between Dispositional Mindfulness and Mindfulness in Teaching

Authors: Miguel Barata Gonçalves¹, Carlos Fernando Carona¹, Daniela da Costa², Margarida Pedroso de Lima¹ & Albertina Lima de Oliveira¹

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Escola Superior de Música e das Artes do Espetáculo do Porto, Portugal

Abstract

Teachers with greater dispositional mindfulness show higher-quality relationships with students. This suggests a possible link between teachers' dispositional mindfulness and teachers' mindfulness during interactions with students; however, potential mediators explaining that link haven't yet been explored. Moreover, dispositional mindfulness and self-compassion have a protective role to mitigate educators' stress. Nevertheless, the specific effects of self-compassion on teachers' mindfulness haven't yet been examined.

Objectives: The aim of the present study was to analyze the associations between dispositional mindfulness, self-compassion, and mindfulness in teaching. Specifically, we aimed to explore the mediating role of self-compassion on the links between dispositional mindfulness and mindfulness in teaching. Accordingly, a theoretical model was outlined to investigate the direct and indirect effects, via self-compassion, of dispositional mindfulness on mindfulness in teaching.

Methods: The sample included 863 teachers (82.4% female; mean age = 50.1 years; $SD = 7.8$) working in Portugal, who were administered self-report measures of dispositional mindfulness (Mindful Attention and Awareness Scale, MAAS; $\omega = .92$), mindfulness in teaching (Mindfulness in Teaching Scale, MTS; Intrapersonal subscale, $\omega = .86$, Interpersonal subscale, $\omega = .61$) and self-compassion (Self-Compassion Scale – short form, SCS-SF; $\omega = .89$). The software JASP was used to conduct statistical analysis of main and indirect effects using a diagonally weighted least squares (DWLS) estimator and 5000 bootstrapped samples.

Results: Dispositional mindfulness (DM) and Self-Compassion (SC) showed a moderately positive correlation with teachers' intrapersonal mindfulness (MT_intra), $r = .544$ and

.426, and a weak positive correlation with teachers' interpersonal mindfulness (MT_inter), $r = .111, .193$. Mediation analysis results revealed that SC mediates the link between DM and MT_intra, with path coefficients: DM-MT_intra ($\beta = .442; p < .001; 95\%CI = [.361; .524]$), SC-MT_intra ($\beta = .193; p = .001, 95\%CI = [.116; .267]$), and has an indirect effect between DM and MT_inter, path coefficients: DM-MT_inter ($\beta = .013; p = .826; 95\%CI = [-.068; .105]$), SC-MT_inter ($\beta = .186; p = .001; 95\%CI = [.104; .265]$).

Conclusions: This study provides promising evidence that greater dispositional mindfulness is likely to facilitate mindfulness in teaching through the enhancement of teachers' self-compassion. Therefore, it's suggested that Mindfulness-based Interventions (MBI) for teachers may be more effective in improving mindfulness in teaching when concomitantly addressing teachers' self-compassion within a broader framework of emotion regulation. Future research needs to investigate further this finding, examining the impact of a targeted self-compassion curriculum for teachers' MBI and its impact on mindfulness in teaching.

Keywords: Mindfulness in Teaching, Dispositional Mindfulness, Self-Compassion, Mediation analysis, Education

Talk 2 - Relationship of educational psychologists knowledge, self-efficacy, and attitudes in inclusive education promotion: study protocol

Authors: Beatriz Machado Pires¹, Armanda Sofia Pereira¹, José Jacinto Vasconcelos-Raposo², André Oliveira³, Ana Cunha³ & Bárbara Macedo³

Affiliations:

¹Department of Education and Psychology, School of Human and Social Sciences, University of Trás-os-Montes and Alto Douro

²International Health and Exercise Psychology Research Group, University of Trás-os-Montes and Alto Douro, Portugal

³Psychology Research Center, School of Psychology, University of Minho, Portugal

Abstract

An inclusive school context is understood as a school that can promote the inclusion of all students with diverse and specific learning needs, i.e., a school where everyone can develop their potential and achieve academic success. The inclusive education concept development and increased relevance over the years have led to a change and adjustment in the roles of educators, namely school and educational psychologists. The literature suggests the quality of inclusive practices requires qualified training and continuous development of knowledge and skills by educators. These tend to enhance their attitudes and self-efficacy. The relationship between these three variables has been studied in different populations of educational professionals, except school and educational psychologists. This study aims to analyze the relationship between declarative knowledge and attitudes toward inclusive

education practices mediated by self-efficacy with educational psychologists (either in training or carrying functions of educational psychologists). Thus, this study will follow a quantitative cross-sectional design and will comprise a probabilistic sample composed of 652 university students in the 2nd cycle of studies (i.e., master students) of School and Educational Psychology, as well as school and educational psychologists with one to ten years of professional experience across the country. For this purpose, sociodemographic data, previous knowledge, attitudes, and self-efficacy regarding inclusive practices will be collected through self-report measures. Self-efficacy is expected to partially mediate the relationship between knowledge and attitudes toward inclusive practices in participants. This study may provide knowledge about what psychologists and future psychologists know about inclusive education and the training they have had and how they perceive what they know and how to apply it in practice. Furthermore, since learning about inclusive practices during educators' training tends to enhance their attitudes and self-efficacy, these also become two variables of interest.

Keywords: inclusive education, psychologists, self-efficacy, attitudes

Talk 3 - SoMovED Project: A new opportunity for higher education

Authors: Margarida Pocinho^{1,2,3}, Soraia Garcês^{1,2,3} & Sara Agrela^{1,3}

Affiliations:

¹University of Madeira/Department of Psychology

²Research Centre for Tourism, Sustainability and Well-being/University of Algarve

³Research Center for Regional and Local Studies

Abstract

The SoMovED – Social Education on the Move project has the main objective of developing, implementing and disseminating innovation, using a “Mobile Social Education Model (MmsED)” and introducing it in higher education. This project seeks to introduce innovative ideas into the university, especially with the promotion of “moving” activities, that is, activities carried out outside the classroom. Its main particularity is to develop the teaching process in motion, outside the “walls” of the university, with the participation of the community, namely, representatives of institutions and organizations, people at risk of marginalization, citizens and activists.

This is an Erasmus+ KA2 project, and the team is made up of 11 partners, from 10 different countries, more specifically, Poland, Croatia, France, Italy, Portugal, Czech Republic, Holland, Romania, United Kingdom and Turkey, having as a lead partner University of Zielona Gorá, Poland. The SoMovED project started in 2020 and ends in 2023.

Regarding the methods used, this is a project that is carried out in the development of classes, adopting teaching and learning methods outside the classroom context, based on the “Mobile Social Education Model (MmsED)”, based on a structure of Positive Psycho-

logy. This model consists of three modules, namely, 1) Research Walks; 2) Study Visits; and, 3) Learning Games on The Move. In this sense, it is expected that these teaching and learning methods will have a positive impact on the well-being of students and teachers. Thus, it concludes with the need to develop and apply teaching models that can enhance well-being in European higher education.

Keywords: SoMovED Project, Higher Education, Positive Psychology, Well-being, Teaching Methods

Talk 4 - Relating Transcription, Executive Functions, and Text Quality in Grades 2-3: A Cross-Lagged Panel Analysis

Authors: Ana Isabel Vieira¹, Sofia Magalhães¹ & Teresa Limpo¹

Affiliations:

¹Institute for Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto, Portugal

Abstract

Introduction: It has been suggested that children's writing is dependent on transcription and executive functions. However, there is a need for more research examining the relationships among those variables in primary school children, given that most existing studies are cross-sectional and assess transcription and executive functions separately, and there are scarce and mixed longitudinal findings.

Aims: This study used a cross-lagged panel model to explore the relationships among transcription skills, executive functions, and text quality from Grade 2 to 3.

Sample: The sample included 353 Portuguese children (195 boys, 155 girls) in Grade 2, who were reassessed in Grade 3.

Methods: Children were assessed on transcription, executive functions and writing tasks at two time points.

Results: Transcription skills and executive functions in Grade 2 positively predicted the same variables in Grade 3. At Grade 2, transcription skills were associated with executive functions and text quality. At Grade 3, we only found an association between executive functions and text quality. Finally, text quality in Grade 2 predicted transcription skills in Grade 3, but both transcription and executive functions in Grade 2 did not predict text quality in Grade 3.

Conclusions: Transcription skills and executive functions seem to be stable over time, but previous performance on these skills does not seem to predict later text quality. Overall, these findings do put into question the direction of the typically assumed relationships,

especially between transcription and text quality. Findings also provide information that can guide the development of instructional programs in primary school.

Keywords: Writing, transcription skills, executive functions, text quality, cross-lagged panel analysis

Oral Presentation Session #14

Topic: Educational Psychology

Chair: Sofia Major

Talk 1 - Hope: A mediator between school climate and teachers' readiness for inclusiveness in higher education

Authors: Bárbara Macedo¹, Armanda Pereira², André Oliveira¹, Ana Guimarães¹, Beatriz Pires², Daniela Rosendo¹, Sofia Vidal¹ & Pedro Rosário¹

Affiliations:

¹Psychology Research Center, School of Psychology, University of Minho, Braga, Portugal

²Department of Education and Psychology, School of Human and Social Sciences, University of Trás-os-Montes and Alto Douro, Vila Real, Portugal

Abstract

Inclusive education is a process that involves transforming schools and other learning places to meet all students' needs, regardless of the student's stage of schooling. Despite students with disabilities having equal access to higher education, they face several educational barriers during their academic path that impact their inclusion. These barriers, such as lack of flexibility and diversity in teaching resources, typically conduct into unsuccess and early dropout from higher education. Teacher support is suggested as an essential enabler in creating inclusive educational environments. An inclusive educational environment subsumes factors inherent in the school climate that impact students and teachers, such as a sense of safety and belonging. An effective readiness toward inclusive education is essential to promote a positive school climate. Readiness for inclusive education comprises knowledge, skills, and attitudes. Specifically, teachers with positive attitudes toward inclusive education are more prone to be effective inclusive professionals. Although research suggests that the university education community typically expresses positive attitudes toward inclusion, students with disabilities face barriers, particularly in accessing learning. We hypothesize that higher education teachers who are more likely to promote inclusive education strategies actively seek alternative teaching methodologies. In other words, they believe and nurture hope for an inclusive education approach in higher education. Therefore, the main purpose of this study is to examine whether school climate and teachers' readiness for inclusive education is mediated by hope for inclusive practices. For this study, hope is considered a construct defined by the ability one has to envision a better future and the confidence to make it happen. The study will follow a quantitative cross-sectional design and comprise a probabilistic sample composed of 652 teachers of higher education Portuguese institutions. To achieve the study's main

goal, sociodemographic data, school climate, readiness for inclusion perceptions, hope in inclusive education practices, and perceived importance for inclusive practices will be collected through self-report measures. We anticipate, as main results, hope is expected to partially mediate teachers' readiness for inclusive education. The study may pose practical implications by drawing attention to the need to intervene with higher education teachers, promoting teachers' readiness for inclusive education and hope for inclusive practices which will improve the school climate.

Keywords: Inclusive education, School climate, Readiness, Hope

Talk 2 - Development of a private tutoring program to promote self-regulation in students

Authors: Margarida Ferreira¹, Armanda Pereira¹, Sara Teixeira², Sandra Mesquita², Sofia Vidal² & Ricardo Barroso¹

Affiliations:

¹Department of Education and Psychology, School of Human and Social Sciences, University of Trás-os-Montes and Alto Douro, Vila

²Psychology Research Center, School of Psychology, University of Minho, Braga, Portugal

Abstract

Increasingly, families are turning to educational tools that support formal education to increase the academic success of their children. For instance, private tutoring is a practice that involves a set of structured activities developed outside the school. Private tutoring is, therefore, a private and usually paid service supplementary to that provided by formal education, typically exercised by teachers outside the school. It usually takes place in study centers, in a group or individual format, and can be carried out face-to-face or online. This practice arises as a response to the difficulties experienced in formal education and focuses on overcoming difficulties, enriching skills, and preparing for tests and exams. In this sense, it may represent an excellent context for the development of self-regulation, defined in the literature as an active process in which the child takes control of and responsibility for his/her behaviors, cognitions, and emotions to achieve previously self-established goals. The constructs of private tutoring and self-regulation are the basis for this project which aims to explore the impact of a private tutoring program on promoting self-regulation skills among elementary school students. The impact of this program will be evaluated in a quantitative, quasi-experimental study. The sample will consist of approximately forty elementary school students (from 4th, 5th, and 6th grades), randomly assigned to one of two groups (control and experimental) of about 20 students each. The control group will include students not attending private tutoring or study centers. The experimental group will include students attending study centers in the North region of Portugal in a private tutoring program with weekly sessions for 3

months. The measurement instruments will be a sociodemographic questionnaire, the Inventory of Learning Self-Regulation Processes (IPAA), and microanalytical interviews (measuring attributions and adaptive inferences) to calculate the frequency of the reported self-regulation strategies in your study. At the end of the intervention, it is expected that students attending the private tutoring program report greater use of self-regulation strategies compared to their peers.

Keywords: private tutoring, shadow education, tutoring, self-regulation

Talk 3- Mental Health Ambassadors in Higher Education

Authors: Dora Isabel Pereira¹, Marta Diana Fernandes², Filipa Isabel Oliveira² & Luciana Maria Ferreira²

Affiliations:

¹Universidade da Madeira, Portugal

²Serviço de Psicologia da Universidade da Madeira, Portugal

Abstract

In response to the increasing number of mental health problems and difficulties in the university context, peer-to-peer support and intervention-based programs have been widely used as resources to promote psychological well-being, mental health, and the development of personal skills, as facilitators of students' social integration. The Well-BEING UMa Project integrates the activity of higher education students as promoters of psychological well-being and mental health literacy with their peers. This study aims to characterize the group of volunteer students, who intend to be Ambassadors of Mental Health (ESM), in order to understand whether their motivation to assume this role with peers is associated with specific characteristics regarding their psychological well-being, affective empathy, and mental health literacy. The study included 56 university students from the 1st and 2nd cycles of studies, to whom were applied, the Psychological Well-Being Manifestation Measure Scale, the Affective and Cognitive Empathy Questionnaire and the Mental Health Literacy Questionnaire. It is expected that the results show the type of distribution of the results, and in the case of their non-normality, what is their meaning and the associations between the various instruments. The results will be discussed considering the factors that enhance the effectiveness of peer mentoring activity. The conclusions will focus on the implications of the results for working with mental health ambassadors/mentors, more specifically regarding the promotion of psychological health literacy and socio-emotional skills among peers in a university context. It is intended that these results enhance the mechanisms for responding to and preventing mental health problems in higher education, also strengthening the responsibility of higher education institutions in the preparation of responsible, creative, and inventive citizens and in the construction of an active, participatory, and inclusive citizenship.

Keywords: Psychological Well-being, Mental Health Literacy, Mental Health Ambassadors, Socio-Emotional Skills, Mentoring

Talk 4 - Validation of the Bedtime Routines Questionnaire: An Exploratory Study with Portuguese Preschoolers

Authors: Sofia O. Major¹, Ana A. dos Santos², & Ana I. Cunha²

Affiliations:

¹University of Azores, Portugal

²University of Beira Interior, Portugal

Abstract

Routines have a significant role in the development and well-being of preschool-aged children. Bedtime routines are a set of sequential activities that take place in the hour before going to bed, such as putting on the pajamas, brushing teeth, reading a story. These routines have benefits on preschool children's sleep quality, as they help the child to relax, fall asleep earlier, decrease sleep onset latency, reduce night awakenings, increase sleep duration, and act as a protective factor against sleep problems. Also, several positive effects have been associated with consistent implementation of bedtime routines, such as fewer behavior problems, better language and vocabulary development, or greater readiness for school learning. The growing interest in children's sleep evidenced in the last decades contributed to the development of several assessment instruments in this field, although few focused exclusively on bedtime routines. The objective of this study is to conduct an exploratory study of validation of the Portuguese version of the Bedtime Routines Questionnaire (BRQ; Henderson & Jordan, 2010), a parent-report measure of children's bedtime routines across 31 items. The participants included 110 parents (mostly mothers, 89.1%) of children aged 3-6 years old ($M = 4.01$, $SD = 0.87$; 52.7% boys), who completed the Portuguese versions of the BRQ and the Child Routines Questionnaire: Preschool Version (CRQ:P; Wittig, 2005). Results from the exploratory factor analysis (Principal Component Analysis with Promax rotation) confirmed the original factor structure of the BRQ: Bedtime Routine Consistency (Routine Behaviors and Routine Environment), Reactivity and Activities (Adaptive and Maladaptive Activities). Cronbach Alpha values ranged from .66 (Routine Environment) to .91 (Routine Behaviors). Positive and significant correlations between Consistency and Adaptive Activities scales from the BRQ-PT and the CRQ:P scores were obtained ($r = .28-.55$, $p < .01$). No significant correlations were found between the BRQ-PT Reactivity and Maladaptive Activities scales and the CRQ:P scores. In conclusion, despite the exploratory results, the availability of a Portuguese version of the BRQ will allow researchers and clinicians to further study bedtime routines of Portuguese preschool-age children. It also represents an important resource in the assessment of bedtime routines for children with sleep problems, which are quite common in preschoolers. These sleep problems have a negative impact on children's

development and well-being, as well as on parents/caregivers' well-being. As such, the early identification and intervention of these problems are extremely important.

Keywords: Child routines, bedtime, preschool, Bedtime Routines Questionnaire, validation

Oral Presentation Session #15

Topic: Social & Political Psychology

Chair: Margarida Lima

Talk 1 - Change in continuity' or a new landscape? Values in Salazar's speeches and current Portuguese society

Authors: Joaquim Pires Valentim¹, Teresa Forte², Ana Cabrita¹, Gonalo Rosete² & Marta Patr o²

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Departamento de Ci ncias Sociais, Pol ticas e do Territ rio, University of Aveiro

Abstract

Introduction/goals: This paper presents ongoing research about the possible endurance of values disseminated during Salazar dictatorship (1926-1974) in current Portuguese society. Whereas the long-lasting effects of political regimes on economic development have been widely explored, their impact on ideological stances and attitudes (prejudice and political attitudes) is an emerging research stream. From a psychosocial viewpoint, citizens' values should also be considered when studying historical legacies of non-democratic regimes. As they are stable guiding principles in the life of a person or group, those that were indoctrinated by non-democratic regimes may endure long after the transition to democracy, especially if aligned with historically rooted legacies. This may be particularly relevant in the Portuguese case with Salazar's authoritarian past of 48 years of dictatorship entangled with the Catholic cultural matrix.

Methods: First, 96 speeches by Salazar, from 1933 to 1967, were subjected to a deductive thematic analysis, by three independent judges. Using the 10 values of Schwartz model as codes, the resulting ranking was compared with European Social Survey (ESS) Portuguese data on the same 10 values collected in six rounds from 2008 to 2018. Second, regression analyses were conducted to explore the effects on the pattern of "Salazaristic" values" of 1) socialization, considering the extent of the exposure to the dictatorship in different age periods and 2) regional main political tendencies considering the regional differences in the 1958 Presidential election results.

Results: Comparison of the ranking of values in Salazar speeches with ESS, show both permanence and change. Permanence in benevolence as the most important value as well as in the relatively high position of security and tradition. An almost radical change occurred regarding universalism, from barely present in Salazar speeches to highly valued

in current Portuguese society. Also noteworthy is the shift in the increasing importance of self-direction and the fall of power to the least important value. Regarding different socialization periods, we found again a double effect of age groups socialized during dictatorship in endorsing security and benevolence alongside with a rejection of the devaluation of universalism. Data from different regions are under analysis and will be presented at the Congress.

Conclusions: A twofold mixed pattern of permanence and change occurs taking into account both the hierarchy of values and socialization effects. We discuss the indoctrination explanation and how to disentangle the psychosocial mechanisms at stake in these processes.

Keywords: values, authoritarianism, democracy, political attitudes, socialization

Talk 2 - Understanding housing social representations and practices in Portugal: A mixed methods approach

Authors: Raquel Ribeiro¹, Daniela Sofia Neto¹, Joaquim Pires Valentim², Ana Cabrita³, Ana Cordeiro Santos¹ & Gabrielle Poeschl²

Affiliations:

¹Centro de Estudos Sociais, Universidade de Coimbra, Portugal

²Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

³Católica Lisbon School of Business & Economics, Universidade Católica Portuguesa, Portugal

Abstract

The last two decades have been characterized by profound changes in real estate in Portugal. The deepening of financialised forms of housing provision, the increased commodification of housing and its use as an asset for financial investment have increased housing inequalities, severely compromising the access to housing. The COVID-19 pandemic exposed such inequalities in health and well-being as confinement at home was required to stop the virus. The current crisis, with rampant inflation and increasing mortgage interest rates, have accentuated the housing crisis in the country and threatens to increase even more housing inequalities.

Considering that social representations constitute lay theories guiding action and organizing social practices, this communication presents a research on the evolution of housing social representations in Portugal since the beginning of the century, as well as housing practices and underlying motivations. It is assumed that the sociopolitical and material changes produce interactions between social representations and practices that lead to profound transformations in social representations, namely when new practices are perceived as irreversible or in contradiction with previous representations.

Our research on the evolution of housing social representations uses a mixed methodology which includes the secondary analysis of 42 semi-structured interviews conducted in 2014 and 2018; 1455 interventions of residents in Lisbon and Porto Municipalities

and Porto City Council Executive public meetings (2014-2020); and a survey that will be conducted in 2023.

Preliminary results of the content analysis from interviews and interventions of residents highlight changes in housing social representations and practices that are related to different public policies and their impacts on the real estate market (e.g., promotion of the country as a destination for visiting, investing in, living in and studying in; Golden Visa). Results also suggest that as housing unaffordability increases, housing ownership is not only perceived as a means to obtain social status, as an asset to leave to the next generation, but perhaps more importantly as a way of guaranteeing the fulfillment of the right to housing. Interventions of residents facing problems in accessing to housing reveal a sense of exclusion, fear and anxiety, as well as a sense of relative deprivation, resentment, and the reinforcement of local identity. First data from the survey (not yet available) will be presented at the Congress.

Results are discussed considering the importance of studying the interrelationships between political-economic and psycho-sociological processes to address complex problems such as those posed by the current housing crisis.

Keywords: Housing, financialisation, social representations, housing practices, mixed methods

Talk 3- Social representations of suicide on the internet: an analysis based on comments from Twitter users

Authors: Lorena Schettino Lucas¹, Mariana Bonomo² & Joaquim Pires Valentim³

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²University Federal of Espírito Santo, Brazil

³University of Coimbra, Portugal

Abstract

This study was developed from the theoretical-methodological approach of the Theory of Social Representations (TRS). Currently, essential aspects for the production of social representations are present on the internet: social structures composed of people, sharing of values and goals, information exchange, collective knowledge production and connection based on common identity traits. Communication phenomena and sociability processes involving social representations in this environment are in constant transformation. The creation of websites related to mental health and suicide prevention issues, the dissemination of news on the subject in the online environment and the consequent discussion among internet users in social network forums represent common spaces in which the

topic of suicide has been discussed with bigger frequency. From the societal approach of the TRS, this study aimed to investigate the social representations of suicide among Twitter users. Were collected 3302 comments made by Twitter users on news about suicide published by the Brazilian newspaper Folha de São Paulo, between 2015 and 2021. Sociodemographic data will be collected from 120 Twitter users whose comments were selected as representative of the representational field, from an online questionnaire. Initial data processing was conducted through Correspondence Factor Analysis, statistical analysis and Descending Hierarchical Classification, made possible by the Iramuteq software. The preliminary results point to a shared field that reflects on the rights to life and death in Brazil. The users' discussion about the regulation of firearms and euthanasia stands out. Contents related to the Covid-19 pandemic and the actions of the Brazilian government are evoked. The role of the media in suicide prevention and as a trigger for new cases is also discussed by users. Religion and negative feelings such as sadness, suffering and guilt are associated with the theme. In addition, the meanings attributed to suicide as a public health issue include the debate on the Brazilian public health system, the understanding of suicide attempts as a consequence of depression, and medical and psychological follow-up as forms of treatment.

Keywords: suicide, social representations, media, internet, social networks

Talk 4 - Work Representations and Meaning of Work: A Study with Education Professionals in Mozambique

Authors: Ana Cabrita¹, Joaquim Pires Valentim¹ & Teresa Forte²

Affiliations:

¹Institute Faculdade de Psicologia e de Ciências da Educação, Universidade de Coimbra

²Departamento de Ciências Sociais, Políticas e do Território, Universidade de Aveiro

Abstract

Introduction and Objectives: The undeniable changes in the labor market and workforce, and the focus of prior empirical research in European populations, lead to our proposal of studying the Social Representations of Work (SRW) and the Meaning of Work (MOW) in a non-European context. The first study aimed to analyze and explore the SRW on this population, and the second study aimed to test the influence of human values (HV) and social justice (SJ) on the MOW.

Method and Analysis: The sample was composed of 194 professionals from the Portuguese School of Mozambique in Maputo, most participants being Mozambican and Portuguese. In study 1, we used a free association task, and three hypotheses were tested comparing teacher vs. non-teachers, older vs. younger participants, and higher-paid vs. lower-paid

participants. In study 2, questionnaires on MOW, HV, and SJ were used. Pearson correlations and multiple linear regressions were performed to test the influence of the HV and SJ dimensions on the dimensions obtained from the MOW inventory.

Results: Concerning the SRW, we found that words such as "remuneration" and "sustenance" played a central role in the description of "work". The results also revealed that intellectual activities are considered more representative of "work". As for the hypotheses, although we found no differences in age groups, the teachers related work to intellectual activities, and participants with lower salaries attributed more obligation elements to work. As for the MOW, we found a statistically significant relationship between procedural justice and the purpose of work, and between self-transcendence values and the later.

Conclusions: With this research, we conclude that there is an empirical continuity in the association of work with remuneration aspects. Although, on the other hand, there is an evolution in the signification of work, where work is more related to intellectual activities, no longer having manual work as a prototype. Finally, we conclude that MOW is positively associated with self-transcendence values and with the perception of procedural justice, but not with the perception of distributive justice.

Keywords: social representations of work, the meaning of work, human values, social justice

Acknowledgments: We thank the Portuguese School of Mozambique.

Oral Presentation Session #16

Topic: Social & Political Psychology

Chair: Sérgio A. Carvalho

Talk 1 - Emotions and Populism: (im)Possibilities? in a growing research agenda

Authors: Clara Margaça¹, Nicky Huijboom², Lisete Mónico² & Cristiano Gianolla³

Affiliations:

¹University of Salamanca, Espanha/Universidade de Coimbra, Portugal

²University of Coimbra, Portugal

³Centre for Social Studies of the University of Coimbra, Portugal

Abstract

The role of emotions has become central and intertwined with populism, largely in part because several researches highlighted that populist voters exhibit distinct personality traits when compared to other voters. With this work we aim to provide a systematic literature review on the influence of emotions in the spread of populism. To this end, we limited the search language, and a total set of 111 articles from Scopus was gathered, which allowed for a critical and in-depth review in the research topic, as well as providing a set of avenues for future research. This systematic review used the PRISMA Protocol and the VOSviewer software for cluster analysis. The articles gathered in this work cover the annual period from 2004 to 2022, and allowed the identification and analysis of the main themes on emotions and populism. The systematic analysis brought to light integrative relationships between the both concepts, which allowed the construction of an overview of this spectrum of study. Furthermore, European countries are the most contributory in terms of publications (almost 75% of publications). This resulted in four large groups of analysis, and 21 items (Cluster 1: emotions, Facebook, political communication, populist communication, right-wing populism, social media, twitter; Cluster 2: affect, Brexit, democracy, nationalism, neoliberalism, resentment; Cluster 3: anger, anxiety, authoritarianism, fear, populism; and Cluster 3: dark triad, negative campaigning, personality), that point the direction of the literature. The main contributions resulted in the presentation of principles and recent scientific ideas, which consider emotions as a central influence in populism attitudes. This systematic literature review contributes to a more robust and grounded understanding of this relationship, and makes it possible to underline the outstanding importance of social networks. In addition, this research provides an inci-

sive understanding on emotions and populism research agenda with the aim of being a starting point for deepening knowledge about the synergies of studies on both themes.

Keywords: emotions, populism, (im)possibilities, bibliometrics analysis

Talk 2 - Understanding populist polarisation through emotion theories

Authors: Cristiano Gianolla¹

Affiliations:

¹Centre for Social Studies of the University of Coimbra, Portugal

Abstract

Introduction/Objectives: The social science and humanities scholarship has generated copious but fragmented evidence about the relationship that exists between emotions, intergroup identity formation and political behaviour and a number of studies are emerging in relation to populism. This article aims to propose a new theoretical approach defined as ‘Emotion Narrative’ theory. It is an interdisciplinary construct outlined by a dialogue with the literature on political mythology (political philosophy, political science, political sociology), in order to investigate the entanglement of emotion and cognition in politics.

Methods: This article critically reviews and systematises three theoretical approaches: Affective Intelligence Theory (political psychology), Intergroup Emotion Theory (social psychology), and the temporal typology of feelings (sociology of emotions), in proposing an ‘Emotion Narrative’ theory.

Results: While Emotion Narratives are expected to be relevant in relation to politics widely, this article envisages their theoretical foundation with a focus on populism because it proves to be skilled in managing emotions, polarising the intergroup identity formation and impacting on political behaviour. This theoretical contribution promises to facilitate the conceptualisation of research hypotheses and methodologies to design and implement empirical studies and draw theoretical reflections.

Conclusion: The Emotion Narrative theory provides a deeper understanding of the interplay of cognition and emotions with the aim to provide a theoretical contribution of interest to researchers in the social sciences and humanities aimed at understanding how emotions impact on social identity formation and political behaviour.

Keywords: Emotion narrative, social identity, political behaviour, political mythology, populism

Talk 3- The work of journalists and commentators in the transmission of emotion narratives of political parties

Authors: Nicolas Eyck van Dyck¹, Lisete Mónico¹ & Cristiano Gianolla²

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Centre for Social Studies, University of Coimbra, Portugal

Abstract

Journalists and political commentators are essential players in disseminating emotion narratives as within their work, they reinforce, moderate, or pass over the emotion narratives of political parties. That includes the positive emotions towards ingroups and negative emotions towards outgroups. While political science studies mainly the demand side (citizenry) and provides side (party leaders and political parties), the work of journalists and commentators is highly influential in putting both in relation. Political communication focuses on the work of journalists and commentators, however marginally and with reduced attention to their role in transmitting emotions from the supply and demand side of politics and reverse. This study aims to comprehend the role played by journalists and political commentators in the transmissions of emotion narratives of political parties, focusing on their contribution, capacity, and success. Therefore, a comparative analysis of the discourses of journalists, commentators, and representatives of political parties will allow an understanding to what extent they contribute to the transmission of emotional narratives established about their ingroup and outgroup. Additionally, monitoring the reactions of the broad mass on social networks will allow investigating the repercussion of this interaction at the level of public opinion. The study may benefit from secondary data, which comprises 14 debates and 14 commentator's programs carried out by public and private media organizations with candidates for the Portuguese Assembly for the occasion of the elections in Portugal in January 2022. The textual corpus will be analyzed with mixed methods, employing descending hierarchical classification and critical discourse analysis using IRaMuTeQ and MAXQDA software, such as CrowdTangle, for social media analysis.

Keywords: journalists, populism, emotion narratives, political communication

Talk 4 - Representations of European integration in history textbooks: text, images and identification processes

Authors: Ana Joel Marques¹, Joaquim Pires Valentim¹ & Isabel Miguel²

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Departamento de Psicologia e Educação da Universidade Portucalense Infante D. Henrique

Abstract

Introduction/Goals: School textbooks are an important tool in the construction of common sense and identity processes, particularly in national and supranational political identities, such as the European Union, which is a relatively recent political entity. In fact, the alignment of school textbooks with school curricula allows them to exert a social influence on students, future citizens, regarding the construction of the above-mentioned identities. In the present research, we sought to know what social representations of European integration have been present, over time, in Portuguese textbooks and what processes of identification may give rise to these representations.

Methods: Text and images of 17 Portuguese 9th grade history textbooks published between 1957 and 2021 were analysed by three independent judges using a deductive and an inductive approach. Four time periods were considered: "Before entry": 1970s; "Pre-entry": 1981-1986; "Consolidation": 1990s-2000s; "Crises": 2015-2021. Regarding text thematic analysis, percentages were calculated by dividing the number of words in each category by the total number of words about European integration in each period and multiplying by 100. From these calculations, comparisons were made between periods.

Results: While showing a growing importance of European integration, describing an institutional and top-down political integration of the European Union, results reflect a distant normative approach (mainly legal rights). There is a reduced presence of actors, events and symbolic elements that promote emotional attachment. In terms of images, again there is, for the most part, an institutional approach, with tables, maps, charts, and photographs of the European institutions as well as of the treaty signing ceremonies. The European project appears from a perspective of national identity that, in more recent textbooks, gives voice to some elements of resistance and criticism, based on its advantages and disadvantages.

Conclusions: There is a lack of elements that could constitute opportunities for (European) supranational identification: lack of references to European citizenship, political action, critical thinking, and values. There is also a lack of (supranational) actors and events, concerns, and satisfactions that could contribute to a European representation (common destiny, interdependence, and supranational identity).

Keywords: School textbooks, social representations, identity processes, European Union

Oral Presentation Session #17

Topic: Cognitive Neuroscience

Chair: Daniela Valério

Talk 1 - Multivariate analysis of multimodal brain structure properties predicts individual differences in risky and intertemporal preferences

Authors: Fredrik Bergström^{1,2}, Guilherme Garcia^{3,4}, Caryn Lerman⁵ & Joseph W. Kable⁵

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Department of Psychology, University of Gothenburg, Sweden

³Idiap Research Institute, Martigny, Switzerland

⁴École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland

⁵Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA 19104, USA.

Abstract

Who we are as a person is contained in the structural composition of our brains. Structural brain properties can therefore be used to understand and predict individual differences in behavior. However, univariate analyses and small sample sizes ($n < 100$) have produced inconsistent and non-replicable results when trying to link brain structure to behavior. It has thus been argued that it is necessary to have sample sizes in the thousands for reliable results. However, it is possible that taking advantage of the multivariate and distributed nature of the brain may produce more reliable links between brain and behavior. Here, we therefore used multivariate Thresholded Partial Least Squares (T-PLS) regression analyses on a multimodal structural brain data set ($n = 105$) with volumetric (grey matter volume), surface-based (fractal dimension, sulci depths, gyrification index, cortical thickness), and diffusion-based (fractional anisotropy, mode of anisotropy, radial diffusivity) MRI measures of the whole brain, all together, to predict individual differences in well-measured (120 trials per task) risky and intertemporal preferences. Using the same brain structure data, we were able to predict individual differences in risky and intertemporal preferences at a similar rate in the immediate future, but less strongly after 10 weeks in a smaller subset ($n = 84$). Interestingly, using all structural brain properties together produced higher out-of-sample prediction rates than using any single property alone. Moreover, by examining T-PLS model coefficients, we could visualize the relative contributions of brain regions across structural brain properties. Thus, taking advantage of the multivariate and

distributed nature of the brain's structure-to-function mapping, across many structural brain properties, and with well-measured behavioral phenotypes, can be a cost-effective way to produce reliable out-of-sample predictions for individual differences in behavior, while linking brain structure to behavior.

Keywords: MRI, brain structure, multivariate analysis, risky choice, intertemporal choice

Talk 2 - Age-related impairments in decision-making under uncertainty are associated with deficits in arousal responses

Authors: Maria J. Ribeiro^{1,2}, Nádia Canário¹, Hugo Quental¹, Miguel Castelo-Branco^{1,2}, Joshua Calder-Travis³, Ruud L. van den Brink³ & Tobias H. Donner³

Affiliations:

¹CIBIT-ICNAS, University of Coimbra, Portugal

²Faculty of Medicine, University of Coimbra, Portugal

³Computational Cognitive Neuroscience Section, Department of Neurophysiology and Pathophysiology, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Abstract

INTRODUCTION: Ageing affects the way uncertainty modulates decisions. When an individual is required to choose between different possibilities, the belief of which one is the correct choice and the uncertainty associated with that belief depend on the accumulated evidence. In turn, the process of evidence accumulation depends on how certain the individual is about the current belief. Uncertainty modulates the rate of belief update: we change our minds more easily if we are unsure about our current belief. Older adults present reduced levels of belief update during periods of high uncertainty, leading to sub-optimal decision-making that can have potentially dramatic consequences (for example, when deciding whether to cross the road in foggy conditions). The noradrenergic system modulates arousal state. Studies using pupil dilation as a proxy for noradrenergic activity suggest that uncertainty is associated with enhanced arousal levels. In this study, we tested the hypothesis that impaired uncertainty processing in older individuals is associated with abnormal recruitment of the noradrenergic system during decision-making tasks.

METHODS: We tested a group of young (20-30 years; $N = 27$) and a group of older adults (50-70 years; $N = 26$). We used an inference task where participants had to make decisions about which one of two possible sources of noisy signals generated a given piece of information and used a normative model to estimate the decision uncertainty based on the evidence presented. During task performance, we recorded the participants' pupil size as an indirect measure of arousal modulation and investigated the relationship between pupil size and uncertainty. We also characterized the global cognitive function

of the participants to evaluate if deficits in arousal modulation were associated with cognitive decline.

RESULTS AND CONCLUSIONS: We observed a significant correlation between pupil size and uncertainty - periods of high uncertainty were characterized by bigger pupils – confirming the association between uncertainty and arousal. Older people showed reduced modulation of pupil size with uncertainty and lower task accuracy suggesting that age-related deficits in inference performance are associated with reduced modulation of the ascending arousal systems. Further data analyses are planned to elucidate the impact of changes in the arousal system's reactivity on age-related cognitive decline.

Keywords: ageing, pupil-linked arousal, decision-making, uncertainty, inference

Talk 3- Alzheimer's disease classification using Deep Learning on 2D MRI images

Authors: Igor Vaz^{1,2}, Jorge Almeida^{1,2}, Ana Rita Silva^{1,2} & André Peres^{1,2}

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC); Portugal

Abstract

By 2050 it is estimated that 1 in every 6 individuals in the world will be over the age of 65. With dementia being one of the major causes of incapacity in the elderly population, detecting abnormal cognitive decline in early stages or even before it happens is crucial for prompting medical interventions that will directly impact the quality of life and well-being of all patients.

Classical machine learning techniques for classification of medical images use a four-step pipeline: preprocessing, segmentation, feature extraction and classification, where each step needs to be carefully hand-crafted and induce bias. However, in recent years, deep learning workflows have emerged since the proposal of the AlexNet convolutional neural network (CNN) in 2012. These types of models do not follow the typical image analysis and processing workflow, because they can extract features automatically without the need for specific feature extraction techniques. Deep learning algorithms differ from conventional machine learning methods, as they require few or no image preprocessing and can infer an optimal data representation from raw images, resulting in a less biased and more objective process. Therefore, deep learning algorithms are better suited for detecting anatomical abnormalities that would otherwise go unnoticed with classical machine learning approaches.

Although deep architectures are able to process a whole 3D image in an end-to-end manner, the high computational cost and low number of samples for training are the challenging issues. Splitting 3D neuroimages to 2D slices is one of the techniques applied to analyze such data.

Using a subset containing 1100 subjects from the ADNI dataset, a stratified split of 70%, 20% and 10% was done for training, validation and testing, respectively. After splitting the dataset, a preprocessing step was done using fmripreg, and the T1w skull-stripped images were used to train for 20 epochs, a ImageNet pre-trained AlexNet model for classification of Alzheimer's disease (AD) versus healthy condition using axial slices from the T1w images.

On the test dataset, the trained model achieved an F1-score of 71% (average of 5 fold cross-validation scores), achieving similar results of previous studies that used a similar approach.

Our results show that even with the information reduction introduced by the 2D slice approach, the model was able to accurately classify AD, therefore paving the way for more sophisticated techniques such as 3D kernels and multimodal neural networks.

Keywords: Alzheimer, Dementia, Classification, MRI, Deep Learning

Talk 4 - Multimodal Neurostimulation Program in older people, residents in nursing home, who have moderate cognitive impairment- Protocol

Authors: Janaina Pereira¹

Affiliations:

¹Residências Montepio, Lisbon

Abstract

INTRODUCTION/ OBJECTIVE: Within the non-pharmacological modalities of intervention for older people, there are several means that present themselves as a promising alternative to minimize, or at least delay, cognitive impairment resulting from a dementia process. The Neurostimulation Program was designed with the aim of maintaining or improving cognitive functioning, maintaining or improving communication and interaction skills, improving quality of life, reducing behavioral and psychological symptoms, promoting well-being and promoting or enhancing socio-environmental skills.

METHOD: An initial neuropsychological assessment is carried out that allows you to understand the degree of cognitive deficit and which functions are maintained and altered. Three sessions are carried out per week, with each participant approximately during a period of six months: one in a group (activities taken from the Make a Difference manual for facilitators) and two individual (one with pencil and paper training and another with

table games and activities). Standardized cognitive tasks are developed with a focus on stimulation and cognitive training, focused on attention, processing speed, memory and language. Every 6 months, a new neuropsychological assessment is carried out to assess the effect of the intervention within the scope of the Program. The expected results are the maintenance and recovery of capacities of each individual, Through the accomplishment of a set of tasks/ activities

Keywords: Non-pharmacological intervention, Older people, Dementia, Cognitive stimulation

POSTER PRESENTATIONS

Poster Presentation #1

Psychometric properties of the Difficulties in Emotion Regulation Scale (DERS) in Spanish older adults. Preliminary results

Authors: Adoración Reyes Moliner Albero¹, Inmaculada Aragonés Barberá¹
& Carmen Moret-Tatay¹

Affiliations:

¹Facultad de Psicología, Universidad Católica de Valencia, España

Abstract

Introduction. Psychological factors related to resilience and well-being have a recognized importance in achieving positive trajectories in aging. Emotion regulation refers to all processes involved in adapting to relatively strong emotional episodes and, specifically, in identifying, differentiating and monitoring intense emotional states to cope with stressful situations. Difficulties in regulating emotions are associated with problems such as depression, anxiety and maladaptive behaviors. Various instruments have been developed to assess emotion regulation. One particularly relevant factor is the use of emotion regulation strategies to overcome chronic and acute adversity linked to the aging process. One is a self-evaluation of emotion regulation processes known as DERS (Difficulties in Emotion Regulation Scale). This scale is the most comprehensive tool for measuring difficulties with emotion regulation.

Aims. The purpose of this study is to validate the version of the DERS, adapted to the Spanish population, in elderly population.

Method. The sample for this study consisted of 180 Spanish older adults who volunteered participate in the study. Inclusion criteria were as follows: i) the participants had to be over 60 years old, ii) be a resident in Spain, iii) a Mini-Mental State Examination (MMSE) score over 25 to depict lack of cognitive impairment. This study was approved by the Ethics Committee of the Catholic University of Valencia.

Participants completed: Difficulties in Emotional Regulation Scale (DERS; Gratz and Roemer, 2004). The Spanish adaptation (Hervás & Jodar, 2008). Generalized Anxiety Disorder (GAD-7; Spitzer, Kroenke, Williams, & Löwe, 2006). Spanish validation by Garcia-Campayo et al., (2010). The Brief Resilient Coping Scale (BRCS; Sinclair and Wallston, 2004).

A confirmatory factor analysis (CFA), accompanied by goodness of fit indices, was conducted. Confirmation of the adequacy of the model used absolute fit indices; the chi-square statistic χ^2 , the comparative fit index (CFI) with a reference value of 0.90, and,

within parsimony adjustment indices, the error of the root mean square approximation (RMSEA), for which the smaller the value the better the fit, the reference value being 0.06.

Results. The version adapted to the Spanish elderly population was validated by confirmatory factor analysis. The 5 factors already found in the Spanish validation were confirmed.

Conclusions. Difficulties in Emotional Regulation Scale (DERS) has adequate psychometric properties and offers the possibility of accurately assessing various dysfunctional aspects of emotional regulation in elderly.

Keywords: Emotion, Regulation, Difficulties, Elderly

Poster Presentation #2

Facilitators and barriers to adherence to medical recommendations among adolescents with cancer: A systematic review

Authors: Ágata Salvador^{1,2}, Shivani Atul Mansuklal¹, Maria Moura^{2,3}, Carla Crespo² & Luísa Barros²

Affiliations:

¹Lusófona University, HEI-Lab, Lisbon, Portugal

²Research Center for Psychological Science, Faculty of Psychology, University of Lisbon

³Instituto Português de Oncologia de Lisboa Francisco Gentil EPE: Lisboa

Abstract

Introduction/Aims: Suboptimal adherence to medical recommendations is a major health concern in the pediatric oncology context, especially among the adolescent population. Research has consistently shown that nonadherence has adverse consequences for patients, families, and healthcare systems. This makes it urgent and compelling to uncover the factors driving nonadherence in adolescence with cancer. This knowledge is needed both to better recognize those at risk and to inform better practices and effective interventions to promote adherence during this developmental period. A systematic review was conducted to identify the barriers and facilitators of adherence among adolescents with cancer (10-24y), following a comprehensive approach to adherence that goes beyond medication-taking.

Methods: PRISMA guidelines for systematic reviews were followed. Empirical studies published in English exploring determinants of adherence to medical recommendations among adolescents (10-24y) with cancer were identified in PubMed, PsycInfo, and Web of Science, up to October 2021. The records and full-text articles were reviewed by two independent reviewers. Factors that were extracted from the included studies were classified according to the WHO multidimensional adherence model. Out of the 2845 articles initially identified, 16 studies met the inclusion criteria.

Results: Despite the small number of studies and the heterogeneity in the definition and measurement of adherence, literature supported barriers and facilitators at the patient, treatment, condition, healthcare team/system, and social/economic levels. Concretely, patient-related factors (i.e., psychological functioning and beliefs about disease and treatment) and social-related factors (i.e., family functioning) were found to be the major determinants of adolescent adherence to medical recommendations. Few studies were conducted, and inconsistent findings were found for other determinant dimensions (i.e., healthcare team/system, treatment, and condition-related factors).

Conclusions: Adherence to medical recommendations among adolescents with cancer is a complex and multidetermined phenomenon, influenced by an interplay of potentially modifiable factors on the five dimensions of adherence as proposed by WHO. Gaps in the literature related to the role of healthcare team/system, treatment, and condition-related factors, lack of qualitative study designs, and limited attention to how multiple factors jointly influence adherence were identified. More research is needed to provide critical insights for both policymakers and healthcare professionals in planning interventions and strategies that effectively and adequately address meaningful barriers and facilitators to adherence among adolescents diagnosed and treated for cancer.

Keywords: Adherence, Adolescent, Oncology, Barriers, Facilitators

Poster Presentation #3

The influence of synchrony/asynchrony effect on eyewitness memory performance

Authors: Ana Carolina Oliveira¹, Pedro F. S. Rodrigues² & Mariana Pinto da Costa¹

Affiliations:

¹Instituto de Ciências Biomédicas Abel Salazar, Universidade do Porto, Portugal

²Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense, Portugal.

Abstract

Introduction/ Objectives: People can be classified according to their chronotype, which is their individual preference to develop certain activities at the time-of-day in which the peak of physical and mental activity is reached. There are three main types of chronotype: morning-, evening- and neither-type. Research so far has suggested that the synchrony between time-of-day and chronotype could potentially result in better performance and productivity. On the other hand, asynchrony with our internal rhythms could cause negative effects, such as decline in cognitive performance.

This study aimed to analyse a possible interaction between chronotype (morning-type/ evening-type) and time-of-day (morning/end of day) and how this interaction could influence the eyewitness's memory performance.

Methods: To this end, 44 participants (24 evening-types and 20 morning-types) performed two memory tasks that took place in two online sessions, at different times of the day: one in the morning (optimal time-of-day for morning-types and non-optimal for evening-types) and another at the end of the day (optimal time-of-day for evening-types and non-optimal for morning-types). In each session (interval between sessions of one week), it was requested to each participant to visualise two videos, one of a crime scene and another of a neutral situation, answer questions related to the videos and complete questionnaires to collect additional variables that influence memory (e.g., stress, depression and anxiety). The order of the sessions (synchrony/asynchrony) and the presentation of the videos were counterbalanced across participants.

Results: In general, the results indicated that the participant's memory performance was better in the synchrony moment when compared to the asynchrony moment. In the crime videos it was found a statistically significant difference between synchrony ($M=11.27$, $DP=3.42$) and asynchrony ($M=9.52$, $DP=3.20$) moments in the central details correctly recalled ($p=.006$) and in the neutral videos was shown a statistically significant difference in peripheral details correctly recalled (synchrony: $M=8.09$, $DP=3.75$, asynchrony: $M=6.16$, $DP=2.25$; $p=.003$). It was also found that the type of chronotype did not influence the obtained results, which means that what explains the differences is just the fact that the chronotype is in synchrony or asynchrony. Finally, it was also found an influence of stress, anxiety and depression, more pronounced in neutral videos.

Conclusions: These results allowed to improve knowledge about the influence that the synchronization between the time of day and the chronobiological rhythm can have on eyewitness memory performance. This study also could have important implications to research and to interrogation practices.

Keywords: Time-of-day, Synchrony/Asynchrony effect, Chronotype, Memory, Eyewitness testimony.

Poster Presentation #4

The Unified Protocol for the Transdiagnostic Treatment of Emotional Disorders in Children: A Case Study

Authors: Ana Carolina Góis¹, Brígida Caiado¹, Diana Santos¹, Bárbara Pereira¹, Maria Cristina Canavarro¹ & Helena Moreira¹

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Introduction: The experience of emotional disorders (EDs), such as anxiety and depressive disorders, during childhood, is prevalent and it is associated with high comorbidity,

having a significant impact on a child's life and family context. The Unified Protocol for the Transdiagnostic Treatment in Children (UP-C) is a transdiagnostic cognitive-behavioral approach, for children and parents, aimed at reducing the frequency and severity of aversive emotional experiences through the development of more adaptive emotion regulation strategies.

Objectives: This case study aims to present the application of UP-C to an 8 years-old Portuguese female child (B.) with anxiety symptoms (e.g., separation anxiety; specific phobia (dogs); agoraphobia and social anxiety).

Methods: Prior to treatment, B.'s emotional symptomatology was assessed via the Mini Neuropsychiatric International Interview for Children and Adolescents. B.'s and her mother were also assessed at pretreatment, posttreatment and 3-months posttreatment, through self-report measures assessing the children's anxiety and depression and its interference and severity. At pretreatment and at posttreatment, it was also evaluated the overall severity of children's difficulties and child's improvement, from the therapist's perspective.

Results: After 15 group treatment sessions, B. demonstrated significant reductions in anxiety symptomatology, as well as functional improvements in social functioning (e.g., greater involvement in activities and ability to interact with others).

It was also observed significant improvements in depressive symptoms, although depression was not the main diagnosis of B. These improvements were maintained after 3 months of follow-up.

Conclusions: The case of B. illustrates that UP-C may be an effective therapeutic approach for cooccurring disorders by focusing on the underlying common mechanisms of emotional disorders. These results are promising and permit a subsequent randomized controlled trial (RCT) to examine the efficacy of the UP-C in a range of anxiety and mood disorders.

Keywords: Unified protocol; Transdiagnostic treatment; Children; Emotional disorders; Case study

Poster Presentation #5

CovMIND - An online neurotherapeutic approach proposal for Generalized Anxiety Disorder in the COVID-19 context

Authors: Ana Ferreira^{1,2}, Ana Pina Rodrigues¹, Paula Vagos^{3,4} & Miguel Castelo-Branco^{1,2}

Affiliations:

¹Coimbra Institute for Biomedical Imaging and Translational Research CIBIT, Institute for Nuclear Sciences Applied to Health ICNAS, University of Coimbra, Coimbra, Portugal,

²Faculty of Medicine FMUC, University of Coimbra, Coimbra, Portugal,

³Portugalense Institute for Human Development, Universidade Portugalense Infante D. Henrique, Porto, Portugal,

⁴University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Introduction: Social distancing measures resulting from COVID-19 generated unexpected changes in daily life, contributing to the widespread prevalence of symptoms of Generalized Anxiety Disorder (GAD). GAD consists of excessive and uncontrollable worries associated with cognitive symptoms and autonomic responses, which can arise without external stimuli. In neuroimaging, this seems to be related to an abnormal variability in activity and connectivity of regions associated with future simulations, and the Default Mode Network (DMN) appears to be implicated in self-referential disorders with rumination on past/present and future concerns. Acceptance and Commitment Therapy (ACT) has been proven to be effective in reducing symptoms of GAD. This psychotherapy uses acceptance of the internal negative experiences as part of human living, combined with the commitment to actions that give value and meaning to life. However, there is still a lack of evidence about its efficacy when implemented online (iACT), as well as about the impact of this model on the neuronal circuits associated with GAD. **Objectives:** Thus, we aim to study the efficacy of an iACT model for GAD, as assessed by the severity of GAD symptoms. We will also investigate the impact of iACT on central constructs of ACT and activity and connectivity of DMN. **Methods:** 56 adults with GAD will be selected using a diagnostic, medical and sociodemographic interviews, and a comprehensive neuropsychological assessment, and randomly allocated to the experimental group or the active control group. All included participants will be evaluated by self-report instruments on symptomatology and ACT central constructs and functional Magnetic Resonance in three moments (pre-intervention, post-intervention and 3-month follow-up). The iACT will consist of 8 modules, focused on concern, that will be carried out on the neurohab.pt platform. The active control group will receive a placebo intervention, i.e., activities not considered an evidence-based psychological intervention. Both groups will have video call sessions and weekly diary activities. **Expected Results/Conclusions:** We predict that iACT will be more efficient in reducing generalized anxiety symptoms in GAD patients, when compared to the active control group. It is expected that the symptoms reduction from pre- to post-intervention will be mediated by constructs that are central to ACT. Furthermore, we expect that both activity and connectivity of DMN will be modulated by the intervention in iACT group. This study will provide information on the efficacy of an ACT remote model and provide evidence for the potential of neuro-biomarkers in the evaluation of the efficacy of this type of intervention.

Keywords: COVID-19; online Acceptance and Commitment Therapy; Generalized Anxiety Disorder; Default Mode Network; neuroimage

Poster Presentation #6

Positive and adverse experiences in childhood and symptomatology in adulthood: Poly-victims and non-poly-victims

Authors: Ana Francisca Matos¹, Jorge Cardoso^{1,2} & Telma Catarina Almeida^{1,2}

Affiliations:

1Instituto Universitário Egas Moniz, Caparica, Portugal

2LabPSI – Laboratório de Psicologia Egas Moniz, CiiEM – Centro de Investigação Interdisciplinar Egas Moniz, Instituto Universitário Egas Moniz, Caparica, Portugal

Abstract

Introduction/Aim: Childhood experiences have a fundamental role in cognitive development. Adversity experienced by young children can impact later in life and lead to low self-esteem, functional problems, and negative thoughts, as well as contribute to superior levels of neuroticism, negative emotions, anxiety, and depression in adulthood. On the other hand, positive childhood experiences strengthen emotional self-regulation and resilience, providing a better adjustment to change and increased mental health. This study aims to: a) analyze the relationship between childhood experiences, depression, and anxiety in adulthood; and b) compare poly-victims and non-poly-victims concerning childhood experiences and psychopathology. **Method:** Our sample comprised 145 Portuguese adults, 89 being women (61.4%) and 56 men (38.6%), with ages between 18 and 64 ($M=30.73$, $SD=12.81$). From the total sample, 60 (41.4%) participants experienced poly-victimization in childhood, and 85 (58.6%) did not experience poly-victimization in childhood. Participants answered online to a sociodemographic questionnaire, the Childhood Adverse Experiences Questionnaire, the Benevolent Childhood Experiences Scale, and the Inventory of Psychopathological Symptoms. All participants were granted their consent to participate in this study. **Results:** Depression is positively correlated with emotional ($r=.607$, $p<.001$) and physical abuse ($r=.211$, $p=.011$), emotional neglect ($r=.443$, $p<.001$) and anxiety ($r=.788$, $p<.001$). Anxiety is positively correlated to emotional abuse ($r=.210$, $p<.001$) and emotional ($r=.270$, $p=.001$) and physical neglect ($r=.193$, $p=.020$). Both depression ($r=-.446$, $p<.001$) and anxiety ($r=-.302$, $p<.001$) are negatively correlated with positive childhood experiences. Poly-victims presented higher levels of depression ($M= 6.86$, $DP=6.34$), [$F(1, 143)=6.670$, $p=.011$] and substance use in family ($M=.33$, $DP=.47$, [$F(1, 143)=6.72$, $p=.011$]), and lower levels of positive childhood experiences ($M= 8.79$, $DP=1.78$),

[$F(1, 143)=6.536$, $p=.012$]. **Conclusions:** These results indicate that childhood experiences are linked to an individual's mental health. Poly-victims show an increased propensity to experience adversity in the family household and more psychopathology. These results corroborate previous studies. Psychological intervention with victims could significantly

improve their mental health, diminishing psychopathology levels, through developing adaptive coping strategies.

Keywords: Poly-victims; Childhood experiences; Anxiety; Depression; Adults.

Poster Presentation #7

European Portuguese Version of the Stimulant Relapse Risk Scale (SRRS): Preliminary psychometric characterization

Authors: Joana Andreia Dias¹, Ana Paula Caetano^{1,2} & Pedro F. S. Rodrigues³

Affiliations:

¹IPSS Florinhas do Vouga; Portugal

²Serviço Social da FPCE-UC/FCH-UCP; Portugal

³Instituto de Desenvolvimento Humano Portucalense – INPP, Universidade Portucalense Infante D. Henrique; Portugal

Abstract

Introduction/Aims: Substance abuse relapse is a global problem and an integral component of the recovery process. Global statistics of substance abuse relapse after treatment are disturbingly high, averaging about 75% over a period of 3 to 6 months after treatment (Appiah, 2017). According to the literature, individuals with substance use disorders have higher negative emotional levels with impairments in emotional regulation, compared to people without substance abuse (Stellern, 2022). In addition, higher frequency and quantity of substance abuse is associated with greater emotional dysregulation, namely in controlling impulsive behaviors (Garke et al., 2021). Therefore, in recent years, relapse prevention in individuals with substance use disorders has been widely studied and related to other dimensions, such as emotional regulation and impulsivity (Garke et al, 2021; Ogai et al., 2006; Wint, 2008). The Stimulating Relapse Risk Scale (SRRS) was developed and validated in Japan (Ogai et al., 2006), based on the Marijuana Craving Questionnaire. The SRRS was created including a variety of relapse risk, such as craving (expectancy, compulsivity, etc.) and emotionality problems. This study aims to adapt and validate the SRRS for the European Portuguese version.

Methods: The SRRS assesses 5 main factors of relapse in substance abuse: (a) compulsiveness, (b) negative experience with drug use, (c) clear intent to use drugs, (d) positive experience with drug use, and (e) emotional problems; these 5 factors are divided into 35 items. Our sample, will be composed about 350 participants, individuals with substance use in treatment or outpatient, from the central region of Portugal. To consolidate the results, the outcomes will also be conduct statistical analyses with the Barratt Impulsivity Scale (BIS-11) and the Emotional Regulation Questionnaire.

Results: We expected to perform descriptive analyses, internal consistency, factor analysis and concurrent validity and discuss our results in light of the existing literature.

Conclusion: This investigation intends, within a year, to provide a European Portuguese version of the SRRS, a valid instrument to assess the risk of relapse in substance users and a validated tool for health professionals and researchers.

Keywords: Substance abuse; Relapse; Emotional regulation; Impulsivity; psychometric characterization.

Poster Presentation #8

Relation between subjective and objective (working) memory in young and older adults

Authors: Ana Babo¹ & Pedro F. S. Rodrigues²

Affiliations:

¹Universidade Portucalense Infante D. Henrique; Portugal

²Instituto de Desenvolvimento Humano Portucalense, Universidade Portucalense Infante D. Henrique; Portugal

Abstract

Introduction/Aims: The relation between autobiographical memory and memory complaints has been widely studied. Results has been inconsistent and explained by several factors (e.g., age, emotional state, nature of the tasks). On other hand, the relation between subjective memory complaints and working memory is sparsely studied. The current work aimed to understand the relation between subjective memory complaints and objective memory tasks, specifically visuospatial tasks and immediate evocation.

Method: The sample consisted of 80 participants: 40 young adults aged between 18 and 35 years and 40 older adults aged 65 years or over. The following instruments and tasks were applied: Sociodemographic Questionnaire, Subjective Memory Complaints Questionnaire, Montreal Cognitive Assessment (MoCA), objective memory tasks (i.e., digit span; word span; colors span and corsi blocks), State-Trait Anxiety Inventory (STAI) and the Beck Depression Inventory (BDI).

Results: The results indicated the existence of significant differences in subjective memory complaints between young adults and older adults. The results also indicated that individuals with higher levels of depression had more subjective memory complaints, and this fact was particularly evident in the older adults.

Conclusion: The study indicates that there is a relation between subjective memory complaints and results obtained in objective tasks among young adults and older adults. It also indicates that there are differences between age groups in subjective memory complaints.

However, the depression variable may be a contributing factor to the emergence of these subjective memory complaints.

Keywords: Subjective memory complaints; Working memory; Aging; young adults; Depression

Poster Presentation #9

Integration of body and brain signals to decode neural responses to objects

Authors: Ana Rafaela Marques^{1,5}, Nuno Sousa^{1,5}, Rogério Medeiros^{1,5}, Filipa Machado^{1,5}, Nuno Rodrigues^{1,5}, Davide Borra², Marco Simões^{1,3} & Maria J. Ribeiro^{1,4}

Affiliations:

¹ CIBIT-ICNAS, University of Coimbra, Portugal

² Department of Electrical, Electronic and Information Engineering “Guglielmo Marconi” (DEI), University of Bologna, Cesena, Italy

³ Centre for Informatics and Systems (CISUC), Department of Informatics Engineering, University of Coimbra, Coimbra, Portugal

⁴ Faculty of Medicine, University of Coimbra, Portugal

⁵ Faculty of Sciences and Technology of Coimbra, Portugal

Abstract

INTRODUCTION: The perception of a sensory stimulus depends on the neural state at the time of the stimulus. Many authors believe that these neural states have a significant influence on neural processing. For example, warning stimuli produce a state of expectation that facilitates perceptual decision-making. This state modulates cortical activity, activates the parasympathetic system, which causes the heart to slow down, and activates the sympathetic system, which is reflected in pupil dilation and changes in skin conductance. The goals of this study are three-fold: to investigate how this state of expectation is reflected in changes in body and neural physiological signals; to check whether this pre-stimulus state modulates cortical processing of visual stimuli and, consequently, visual perception; and to identify the neural mechanisms underlying this modulation.

METHODS: We used a warned visual discrimination task where participants were required to determine if the presented visual stimulus consisted of a car or a house. Each trial started with an auditory warning cue that alerted participants of the upcoming stimulus. While participants were engaged in the task, we simultaneously acquired electroencephalography (EEG) and body physiological signals (electrocardiography, respiration, electromyography, electrogastrography, pupillography and eye movements). To study the effect of the neural and body state before stimulus onset on visual processing, we tested different classifiers – like support vector machine and convolutional neural networks – while classifying the

type of the presented stimulus (car vs. house) from the single-trial EEG, and evaluating if the pre-stimulus body and neural activity affect the classification accuracy.

RESULTS/CONCLUSIONS/FUTURE WORK: Between the warning and the presentation of the stimulus participants showed cardiac deceleration, a decrease in saccade and blink probability associated with motor inhibition, and pupil dilation. No modulation in the respiratory activity was observed. These findings confirm that a warning stimulus induces changes in body physiology. From the EEG, the visual stimuli evoked ERPs with a negative waveform that peaked approximately 170 ms after stimulus presentation (N170). The ERP evoked by cars presented an N170 more negative than the one evoked by houses. Classifiers were able to discriminate above the chance level between the two types of stimuli (car vs. house) from the single-trial EEG. Future work will use these classifiers to explore the interaction between pre-stimulus body and neural activity and visual processing.

Keywords: Machine Learning, Single-trial EEG, pre-stimulus activity, body-brain interactions, object perception

Poster Presentation #11

The use of the internet in the pandemic: impact on emotional regulation and school performance of adolescents

Authors: Jéssica Catarina Duarte¹, Maria do Rosário Pinheiro¹, José Joaquim Costa¹, & Ana Paula Matos¹

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

The use of the internet has increased significantly in recent decades, especially during the COVID-19 pandemic. There has been a significant risk of developing problematic use of the internet during adolescence. This is because the internet is a daily tool in young people's routines. The present study aims to: 1. characterize the pattern of internet use among Portuguese adolescents during the COVID-19 pandemic; 2. Study the differences between young people who report spending more hours on the internet during the pandemic, compared to those who did not show changes in this pattern of use with the outbreak of the pandemic, in psychological and school adjustment indicators. The sample included 712 adolescents aged between 11 and 18 years ($M = 12.91$; $SD = .952$), 54.2% ($n = 386$) female, and 45.8% male ($n = 326$). Participants answered the Portuguese version of Matos et al. (2020) of the following self-report instruments: The Self-Compassion Scale for Youths (Neff et al., 2019), a 15-item version of the Five Facets of Mindfulness Questionnaire (Baer et al., 2012), and the Perceived Difficulties

Associated with Performance in School Scale (Fröjd et al. (2008). 84.1% ($n = 582$) of the adolescents reported that they started to use the internet more during the pandemic and that the average number of hours of daily use was 5.66 ($SD = 3.859$). The study found that adolescents who reported spending more hours on the internet perceived more difficulties associated with school performance (in the overall dimension and in the dimensions of schoolwork and interpersonal relationships). These young people also had lower levels of self-compassion (in the overall dimension and in the self-kindness, mindfulness, and self-criticism dimensions) and mindfulness (in the describing and acting with awareness facets). The results reinforce the importance of developing interventions to address the increased use of the internet by young people in response to events perceived as more stressful and potentially traumatic, such as the pandemic COVID-19. These interventions must take into account the impact of increased use of the internet on school difficulties and on emotional regulation strategies.

Keywords: Use of the internet, Adolescents, COVID-19 pandemic, Mental Health

Poster Presentation #12

Neural correlates of joint attention in infants aged up to 24 months: a systematic review

Authors: Ana Carolina Santos¹, Vera Lúcia Mateus^{2,3} & Ana Ganho Ávila³

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique, Porto, Portugal

³ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Background/ Objective: Joint attention, or the ability to coordinate visual attention with a social partner towards an object or external event, is an earlier marker of social cognition, which emerges around nine months of age and becomes more frequent in infant behavioural repertoire during the second year of life. This socio-cognitive ability plays a key role in the development of more advanced abilities, such as language, social competence and Theory of Mind. Furthermore, impairments in joint attention abilities are crucial for the diagnosis of Autism Spectrum Disorder. Previous studies have investigated the neural correlates of joint attention and evidence suggests the recruitment of several brain areas, such as superior temporal sulcus, temporoparietal junction, prefrontal cortex, and precuneus/parietal cortex. However, studies on this topic have also showed some inconsistency regarding the involvement of other brain regions, which may be related

to the technique used to assess brain activation. Thus, this study aims to systematically review the existing literature on the neural correlates of joint attention during the first two years of life, to understand which brain areas are recruited and associated with this important socio-cognitive ability. Method: Several databases will be searched for empirical studies published in English from inception up to November 2022, using a combination of keywords related to joint attention, brain activation, and infancy. Studies retrieved from the literature search will be screened based on the title and abstract, according to several inclusion and exclusion criteria previously defined. The full text of potentially relevant studies will be examined for confirmation of the eligibility criteria. Screening of the studies will be conducted by two independent researchers. Expected Results: The literature search in databases is ongoing. A summary of the main results of the studies included in the systematic review will be presented separately by the technique used to assess brain activation. Conclusion: We expect that this work will contribute to the field of joint attention, especially in what concerns the identification of the brain regions associated with this ability. Findings may inform the design of early intervention programs in child development and help to identify neural signatures for neurodevelopmental disorders.

Keywords: Systematic review; Joint attention; Brain activation; Neuroimaging; Infancy

Poster Presentation #13

Efficacy of cognitive rehabilitation programs for cancer-related cognitive impairment: Systematic review of randomized controlled trials

Authors: Ana Filipa Oliveira^{1,2}, Juliana Dias Reis³, Sofia Fernandes⁴, Isabel M. Santos^{2,5} & Ana Torres^{1,2,6}

Affiliations:

¹ Center for Health Technology and Services Research of the Health Research Network (CINTESIS@RISE)

²Department of Education and Psychology, University of Aveiro, Aveiro, Portugal

³Department of Mathematics, University of Aveiro, Aveiro, Portugal

⁴Instituto Superior de Psicologia Aplicada (ISPA), Lisbon, Portugal

⁵William James Center for Research (WJCR)

⁶Faculty of Human and Social Sciences, University of Beira Interior, Covilhã, Portugal

Abstract

Introduction/Objectives: Cancer-related cognitive impairment (CRCI) is a common and debilitating side-effect associated with cancer and cancer treatments experienced by cancer survivors. Cognitive problems, including attention, memory, and executive functions, can be measured using patient self-reported measures (subjective cognitive functioning). This is a practical, effective, and valid approach to understand patient distress and perception

of cognitive functioning. International guidelines consider cognitive rehabilitation as the first-line intervention to address CRCI. Increasing interest in developing and test cognitive rehabilitation programs leads to the importance of providing current and comprehensive integration of available evidence. Therefore, we conducted a systematic review of randomized controlled trials (RCTs) of cognitive rehabilitation for CRCI to evaluate the efficacy of these interventions at improving subjective cognitive function in non-central system cancer (non-CNS) cancer survivors.

Methods: This systematic review was conducted according to the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) statement. Electronic searches in three databases (PubMed, Scopus, and Web of Science), complemented by a manual search of other relevant articles, were conducted in November 2022, considering the past 15 years, by two independent reviewers. Studies were assessed for inclusion and data were extracted from each article using a standardized form by two authors. RCTs describing cognitive rehabilitation interventions for adult (≥ 18 years) cancer survivors (excluding CNS cancers) and including at least one subjective cognitive measure assessed through self-report questionnaires were included and independently appraised by two reviewers using the Cochrane Risk of Bias Tool for Randomized Trials.

Results: Preliminary findings are presented. Eighteen studies met inclusion criteria. Ten studies used a computerized cognitive training program, four a manualized intervention, and four combined computer and manualized formats. The most used self-report instrument for measuring subjective cognitive functioning was the Functional Assessment of Cancer Therapy-Cognitive Function (FACT-Cog). Preliminary results indicated beneficial effects following cognitive rehabilitation compared to control group.

Conclusions: The available evidence supports positive results of cognitive rehabilitation intervention efficacy at improving subjective cognitive functioning in non-CNS cancer survivors. Future meta-analysis is needed to synthesize findings and inform future research and clinical implementation of cognitive rehabilitation.

Keywords: Cancer survivors; Cancer-related cognitive impairment; Cognitive rehabilitation; Randomized controlled trials; Systematic review

Poster Presentation #14

Big Five personality aspects predict individual differences in utilitarian moral choice

Authors: Patrícia Fernandes¹, Sangil Lee², Inês Duarte¹, Ema Leitão¹, Salomé Mateus¹, Daniel Granja¹, Diego Prade¹, Sara Chacim¹, Joseph W. Kable³, Liad Mudrik^{4,5}, Uri Maoz^{6,7,8,9} & Fredrik Bergström^{1,10}

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Haas School of Business, University of California, Berkeley, CA 94720

³Department of Psychology, University of Pennsylvania, Philadelphia, USA

⁴School of Psychological Sciences, Tel Aviv University, Israel

⁵Sagol School of Neuroscience, Tel Aviv University, Israel

⁶Department of Psychology, Chapman University, Orange, CA 92866, USA

⁷Institute for Interdisciplinary Brain and Behavioral Sciences, Chapman University, Irvine, CA 92618, USA

⁸Anderson School of Management, University of California Los Angeles, Los Angeles, CA 90095, USA

⁹Division of Biology and Biological Engineering, California Institute of Technology, Pasadena, CA 91125, USA

¹⁰Department of Psychology, University of Gothenburg, Sweden.

Abstract

Introduction/aims: It is sometimes necessary to make difficult utilitarian moral choices or societal policies that have dire consequences for a few but greatly benefit the lives of many (e.g., in healthcare and epidemiological policies). However, there is large individual variability in moral attitudes and behavior that likely reflect underlying differences in brain systems. Personality traits are relatively stable across the lifespan and likely represent underlying brain systems. Moreover, personality traits can predict a variety of important behaviors and life outcomes. However, only a few studies have looked at the relationship between Big Five personality traits and utilitarian moral choice, but they have low sample sizes ($n < 80$) and inconsistent findings. However, none have used the ten Big Five personality aspects (extraversion: enthusiasm and assertiveness, conscientiousness: industriousness and orderliness, openness/intellect: openness and intellect, agreeableness: politeness and compassion, and neuroticism: withdrawal and volatility) or multivariate analysis in relation to utilitarian moral choice. Our aim is therefore to use multivariate analysis to predict individual differences in utilitarian moral choice from the Big Five personality aspects.

Methods: We used multivariate regression to predict individual differences in the proportion of utilitarian (kill one to save many lives) moral choices (across 50 trolley-like moral dilemmas) from the ten Big Five personality aspects of a healthy sample ($n = 210$), and used the coefficients to see which aspects that contributed to the out-of-sample prediction.

Results: Our results show that the Big Five personality aspects can predict individual differences in utilitarian moral choice better than chance. Specifically, higher levels of enthusiasm and politeness predicted a lower proportion of utilitarian moral choice.

Conclusions: Enthusiasm relates to positive emotions and sociability, while politeness relates to the tendency to follow social rules and avoid aggressive or exploitative behavior. Consistently, functional neuroimaging has shown that higher BOLD signal change in brain areas related to valuation, emotion, and social processing is associated with making non-utilitarian moral judgments. Our findings thus suggest that individual differences in moral choice are grounded in differences in relatively stable personality traits and their underlying brain systems.

Keywords: Personality; Big Five; Moral dilemma; Moral judgment; Multivariate analysis

Acknowledgements: This work was supported by Fundação para a Ciência e Tecnologia (CEECIND/03661/2017 to F.B.).

Poster Presentation #15

Development and preliminary feasibility testing of a brain health education program for individuals at risk of dementia – the GPS-C

Authors: Ana Rita Silva¹, Carolina Miranda², Maria João Gonçalves², Maria João Figueiredo², Sofia Fonseca², Vera Gonçalves² & Catarina Baptista¹

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

² Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

Abstract

Introduction: Around 152 million people worldwide will live with dementia by 2050, but about a half of dementia cases is related with modifiable risk factors. The WHO defines brain health as a state in which an individual can realize their abilities and optimize their cognitive, emotional, psychological, and behavioral functioning to cope with life situations. Modifiable risk factors for dementia are threats for brain health and research is growing in the efforts to face these risk factors. Improving brain health by education is described as an important strategy to improve brain health literacy, motivation for the adoption of healthier lifestyles, and conscientiousness and, ultimately, contribute to engage individuals in dementia risk reduction plans. To our knowledge, no manualized evidence-based brain health education tool is available in our country.

Objectives: This poster aims to describe the development of a brain health education manual (GPS do Cérebro – GPS-C) and to test the integration of the best available evidence about brain health and cognitive decline risk factors into a tool that could be further incorporated in dementia risk reduction trials.

Methods: A preliminary integrative review on brain health education tools was developed, and contents from 19 papers were extracted. Secondly, based in the literature review and in international recommendations for brain health communication (Altomare et al. 2021), 8 themes were defined to structure the manual (1. Modifiable risk factors for dementia; 2. Brain care and healthy lifestyles; 3. Memory and its functions; 4. Memory difficulties; 5. Communication and cognition; Executive functions and everyday life; 7. Compensatory aids; 8. Socialization). Both PPT slides and handouts were built for the 8 themes, with instructions for the brain health educators, to account for certain degree of adaptation and clinical sensitivity according to the recipients. A preliminary testing of this manual

is being developed with 15 community dwelling individuals aged 55 years old at-risk of dementia who will perform a comprehensive neuropsychological assessment session prior and after the 8 weekly sessions of the GPS-C.

Expected results: Relevant data on the acceptability, satisfaction and adherence to the GPS-C program will be gathered, and an association between pre and post intervention motivation and knowledge about dementia risk will be examined.

Conclusions: With this study, it will be possible to make available an engaging and feasible tool for brain health education that can be used by health professionals and researchers working with older adults and/or in the prevention of cognitive decline.

Keywords: Brain health; Psychoeducation; Dementia risk reduction; Manualized intervention; Older adults

Poster Presentation #16

Study Protocol for a Randomized Controlled Trial Assessing the Efficacy of a Cognitive-Emotional Intervention Program for Homebound Older Adults

Authors: Andreia Gabriel Jesus¹, Margarida Pedroso de Lima¹, Manuela Vilar¹ & Nancy Ann Pachana²

Affiliations:

¹ Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

² School of Psychology, The University of Queensland, Australia

Abstract

Background: Evidence suggests that homebound older adults present multiple mental health problems, including mild cognitive impairment and depressive/anxious symptomatology. Providing this particularly vulnerable older population with evidence-based home-delivered non-pharmacological interventions is crucial to delay a possible cognitive impairment progression to dementia, prevent psychological disorders, and improve their quality of life. Here, we present the study protocol for a home-delivered cognitive-emotional intervention aimed at homebound older adults with mild cognitive impairment and depressive and/or anxiety symptoms – the Homebound Elderly People Psychotherapeutic Intervention (HEPPI). Methods: A two-arm, open-label, parallel randomized controlled trial will be conducted comparing an intervention group receiving the HEPPI to a treatment as usual group. Participants will be recruited from the community through contact with their formal and informal healthcare networks. Homebound older adults in both groups will complete the baseline, post-intervention, and follow-up assessments. Primary outcomes

will include changes in episodic memory and depressive and anxiety symptoms. Changes in general cognition function, attentional control, subjective memory complaints, quality of life, functional status, and loneliness will be the secondary outcomes. Linear mixed models will be performed to assess the effects of the intervention over time on primary and secondary outcomes. Expected Results: The efficacy of the HEPPI is expected to be explained by intervention group homebound older adults' improvements in primary and secondary outcomes at post-intervention and follow-up assessment times. Conclusions: This trial has the potential to establish an empirically based home-delivered non-pharmacological intervention for the growing number of homebound older adults lacking mental health care services in the Portuguese context. Clinical Trial Registration: www.clinicaltrials.gov, identifier: NCT05499767.

Keywords: HEPPI program; Homebound older adults; Mild cognitive impairment; Depressive and anxiety symptoms; Randomized controlled trial

Poster Presentation #17

STOP - Sooth, Transform, Organize, Produce: development and preliminary results of a procrastination intervention group

Authors: Andreia Ferreira¹, Marisa Marques¹, Sandra Xavier¹, Sofia Caetano¹, António Queirós¹ & Maria João Martins¹

Affiliations:

¹University of Coimbra Social Services, Occupational Health and Safety Management Services

Abstract

Introduction: Procrastination is defined as a voluntarily delay of an intended course of action despite expecting to be worse off for the delay. Literature has shown its association with psychopathology symptoms, personality traits (perfectionism) and protective mechanisms, such as self-compassion or psychological flexibility. Procrastination and consequent difficulties within the academic community have been registering high prevalence. **Aims:** We aim to 1) develop, 2) implement and preliminarily evaluate the benefits (acceptability study) of a new psychotherapeutic group intervention: "STOP Procrastinating: Sooth, Transform, Organize, Produce".

Methods: The STOP intervention was developed by a team of clinical psychologists and had its theoretical roots in the rationales from acceptance and commitment therapy and compassion-focused therapy. For the acceptability study, a sample of higher education students and researchers who sought psychological therapy for managing procrastination was recruited. Participants filled in a battery of self-response questionnaires one week before and after the intervention (Pure Procrastination Scale, Multidimensional Perfectionism

Scale, Depression, Anxiety and Stress Scales, Comprehensive Assessment of Acceptance and Commitment Therapy Scale and Self-Compassion Scale).

Results: The STOP intervention will be divided into four phases that will encompass 10 weekly, face-to-face, group sessions. The first phase includes the construction of the group as a secure base and the devolution of psychoeducation about the concept and dysfunctional forms of emotional regulation. The second aims to build motivation to manage procrastination based on participants' values and perception of self-efficacy, and to learn about the positive and negative impact of procrastination. The third involves identifying and working on personal barriers including rigid rules (perfectionism), cognitive fusion, experiential avoidance, and self-criticism (shame and guilt), through developing self-compassion. Finally, the fourth will involve "putting into practice" the relationship between emotional regulation strategies and practical strategies learned so far. This study is still ongoing and the preliminary acceptability results will be presented. We expect participants to improve in levels of procrastination and psychological suffering and that those improvements will be associated with increased mindfulness, acceptance and compassion competencies.

Conclusions: The STOP intervention intends to provide higher education students and researchers with difficulty in managing procrastination, a set of strategies that allow a significant reduction in symptoms, an increase in quality of life and improvement in academic performance. With further study, the current findings may be useful to inform mental health services and add on to the psychotherapeutic responses available in universities aiming at mitigating the effect of procrastination and improve mental health.

Keywords: Procrastination, Cognitive-Behavioral Therapy, Group Therapy, Self-compassion, Psychological Flexibility

Poster Presentation #18

Heterosexism Experiences and Psychological Quality of Life in a Portuguese LGBTQ+ Population Sample: Effect of Mediating Variables

Authors: Aniana Maísa Martins¹ & Marina Isabel Cunha^{1,2}

Affiliations:

¹Instituto Superior Miguel Torga, Portugal

² University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Introduction: Experiences of heterosexism and harassment are frequently felt by LGBTQ+ individuals and may be associated with general feelings of shame, a low sense of belonging or connectedness with others, and emotionally negative symptoms. **Aim:** Test the mediator effect of shame feelings and social safeness on the relationship between heterosexism and psychological quality of life within the LGBTQ+ population.

Methods: Participants were 158 LGBTQ+ Portuguese individuals with ages ranging between 18 and 48 years old ($M = 22.65$, $SD = 5.75$). Self-report measures were completed through an online form. A path analysis was conducted to estimate whether shame feelings and social safeness would mediate the association between heterosexism and an LGBTQ+ individual's quality of life.

Results: Positive significant correlations were shown between heterosexism and shame feelings, anxiety and depression symptoms. Moreover, a negative significant correlation between heterosexism and connectedness with others and psychological quality of life was found. The mediation model accounted for 42% of quality-of-life variance, and revealed an excellent model fit: $\chi^2(1) = 1.102$, $p = .294$; CFI = .999; TLI = .997; RMSEA = .026 [90% CI .00 - .22; $p < .001$]. Heterosexism presented a direct positive effect of .37 on shame feelings ($b_{\text{heterosexism}} = 0.29$; $Z = 5.06$; $p < .001$) and a direct negative effect of -.33. on social safeness ($b_{\text{heterosexism}} = -0.34$; $Z = -4.43$; $p < .001$). Shame feelings presented a direct negative effect of -.39 ($b_{\text{shame}} = -0.18$; $Z = -0.05$; $p < .001$) on quality of life, and social safeness presented a direct positive effect of .32 ($b_{\text{socialsafeness}} = 0.11$; $Z = 4.15$; $p < .0001$). Furthermore, heterosexism presented an indirect effect of -.026, being totally mediated by shame feelings and social safeness (95% CI = -0.13 to -0.05, $p = .004$).

Discussion: The present study gave a signifying contribution by exploring the distinct way the heterosexist experiences were associated with other variables (e.g., shame feelings, negative emotional symptoms, and psychological quality of life). This mediational model seems to suggest that individuals who experienced more harassment, rejection, and discrimination events tend to present lower levels of psychological health through lower levels of feelings of belonging and connecting to others and higher levels of feelings of worthlessness, failure, and non-acceptance from others. These findings will allow new approaches to research and new courses of action to diminish the negative impact of this phenomenon, promoting the quality of life of LGBTQ+ individuals.

Keywords: Heterosexism, Shame, Psychopathological symptoms, Connectedness, Quality of life

Poster Presentation #19

Development and acceptability test of a gender and dual-parent sensitive mindful parenting post-adoption intervention

Authors: Bárbara Caetano¹, Maria Cristina Canavarro¹ & Raquel Pires¹

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Introduction/Aims: Psychological and parenting functioning is a recommended target for post-adoption interventions. In Portugal, the lack of resources in the adoption field determines the need for acceptable and evidence-based psychological interventions. Although there are multiple studies of mindful parenting interventions regarding biological parenthood, the research of them in adoptive parents is recent and scarce. However, this seems to be a promising approach in the adoption field. Evidence suggests that Mindful Parenting Interventions are highly acceptable among both fathers and mothers and that including the parental dyad in parenting programs could improve both parents' and child's positive outcomes and help to maintain them over time. This suggests that including the parental dyad in Mindful Parenting Interventions may be a promising practice among dual-parent adoptive families. However, to ensure the involvement of both parents, it's necessary to adapt the intervention to several gender and dual-parent specificities. The present study aimed to: 1) develop and evaluate a gender and dual-parent sensitive version of the Mindful Parenting Post-Adoption Intervention (MPPAI-dual) and 2) assess the acceptability of MPPAI-dual. **Methods:** This project is part of a larger project, namely Mindful Families. In the scope of Mindful Families, ongoing studies about both parents' and gender preferences and specificities will guide the intervention's development. After that, to assess the acceptability of the intervention, an online survey will be disseminated by all the Portuguese adoption agencies. **Results:** We expected the development of an intervention protocol sensitive to gender specificities and the needs and preferences of the parental dyad; high levels of acceptability from both elements of the parental dyad, namely regarding the perceived utility of, and their availability to participate in MPPAI-dual are expected. **Conclusions:** The acceptability study will inform us if the intervention is well developed and if are need some adaptations to ensure that the intervention meets the parental dyad preferences and some gender specificities. Furthermore, this will be essential to implementing evidence-based interventions among adoptive parents. Specific implications for research and practice will be discussed.

Keywords: Mindful parenting interventions, Development, Gender-sensitive interventions, Post-adoption, Dual-parent adoptive families

Poster Presentation #20

Influence of community and family factors on substance consumption among Portuguese youth

Authors: Bárbara Pinheiro Freitas¹, Daniela Soares Moniz¹, Hugo S. Gomes² & Ângela Costa Maia¹

Affiliations:

¹Psychology School, University of Minho, Portugal

²Faculty of Psychology and Education Sciences of the University of Porto, University of Porto, Portugal

Abstract

Drugs, alcohol, and tobacco consumption is a highly prevalent problem, not only in Portugal but also throughout the globe. In response, multiple international studies have been carried out in the light of the Communities That Care (CTC) system on the subject with the objective of understanding the most important risk and protective factors associated with drug use, as well as developing evidence-based prevention interventions. According to the literature, community risk factors, such as the perceived availability of drugs, have a direct effect on the consumption of these substances. Inversely, family protective factors, such as family attachment, have been shown to have a buffer effect on the consumption of substances by young people. This study aims at studying the potential moderation role of family protective factors in the relationship between risk community factors and substance consumption.

The present study used the Portuguese version of the CTC-YS questionnaire (Communities That Care – Youth Survey) translated and culturally adapted to the Portuguese population (Gomes et al., 2022). The data collection was carried out in regular and professional schools of the Autonomous Region of the Azores and the north of Portugal. When it comes to data analyses, the SPSS Statistics software was used, with the assistance of the PROCESS extension, in a way to test the proposed moderation model.

The present sample was composed of a total of 364 participants, 192 (53%) males and 170 (47%) females. The mean age of the adolescents is 15 years ($M = 14.82$, $SD = 2.57$). Results showed that among the more consumed substances were alcohol (57%), followed by tobacco (43%), and marijuana (10%). The community risk showed to be a significant predictor of drug consumption. More precisely, young people exposed to a high community risk presented 91%, 80%, and 77% more probability to consume alcohol, tobacco, and illicit drugs, respectively. The moderation analysis showed that in young people exposed to community risk, the presence of family protective factors was not an effective protective factor in buffering the negative impact of community risk factors on substance consumption.

These results challenge the literature on the theme, by reinforcing that focusing merely on family protection factors in an interventional phase may be insufficient, and effective reduction of community risk factors is essential in order to prevent juvenile substance consumption.

Keywords: Communities That Care – Youth Survey; Substance consumption; Family protection factors; Community risk factors

Poster Presentation #21

Psychometric properties of the Short-form of the Positive and Negative Affect Scale for Children (PANAS-C) in Portuguese children with and without emotional disorders

Authors: Pereira, B.¹; Caiado, B.¹, Ferreira, D.¹, Góis, A.C.¹, Canavarro, M.C.¹ & Moreira, H.¹

Affiliations:

¹University of Coimbra, Center for Research in Neuropsychology and Cognitive-Behavioral Interventions, Faculty of Psychology and Educational Sciences

Abstract

Over the last few years, the distinction between positive affect (PA) and negative affect (NA) has been studied, and it has become increasingly evident that it is possible to identify and discriminate children with emotional disorders using scales that assess these dimensions. The Positive and Negative Affect Schedule for Children-Short Form (PANAS-C-SF) is a self-report scale that includes 10 items, five items assessing PA (joyful, lively, happy, energetic, and proud) and five items assessing NA (depressed, angry, fearful/scared, afraid and sad)).

The main objective of this study is to explore the factor structure and psychometric properties of the brief version of the PANAS-C-SF in a Portuguese clinical and community child sample. This instrument was employed in a community sample of 286 Portuguese children aged 6 to 12 years old and in a clinical sample of 153 Portuguese children aged from 6 to 12 years old. A two-factor model was analyzed, in both samples, through confirmatory factor analysis and the validity of the PANAS-C-SF was also analyzed by the correlations with measures of child anxiety and depression. Gender and age differences were also evaluated.

The tested model presented a good model fit in both samples and the validity of the PANAS-C-SF was also supported by its significant correlations with child anxiety and depression variables. Gender and age differences are discussed. Thus, in the present study,

The PANAS-C-SF proved to be a valid measure to assess PA and NA in both clinical and community Portuguese samples.

Keywords: Positive affect; Negative affect; emotional disorders; psychometric properties

Poster Presentation #22

The first COVID-19 lockdown: Useful activities and emotion regulation processes

Authors: Bárbara Monteiro^{1,2}, Ana Galhardo^{1,2}, Marina Cunha^{1,2} & José Pinto-Gouveia^{1,2}

Affiliations:

¹University of Coimbra, Center for Research in Neuropsychology and Cognitive and Behavioural Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

²Instituto Superior Miguel Torga, Coimbra, Portugal

Abstract

Introduction: The first wave of COVID-19 pandemic imposed the need to find new resources and lifestyle changes. The current study aimed to investigate the perceived utility of activities for dealing with the first lockdown and explored the association of these activities and emotion regulation processes.

Methods: 238 participants (M1; 186 women; 52 men) (M2 – N = 134) completed online surveys between April (M1) and June (M2) 2020. Participants presented a mean age of 43.08 ($SD = 10.96$) years old and a mean of 16.20 ($SD = 2.40$) years of education. During the first lockdown, most participants were at home ($n = 203$; 85.3%) for a mean of 36.89 days ($SD = 17.93$). Perceived utility of several activities to deal with the lockdown (e.g., exercise, talking to friends) was assessed using a 6-point scale. Mindfulness, Self-Compassion, Compassion for others, and Rumination were measured by self-report instruments. To address the perceived utility of activities, medians were computed. Kendall's correlations were calculated to investigate the associations between the perceived utility of activities and emotion regulation processes.

Results: Participants reported as the more useful activities (Mdn = 4.0) to deal with the lockdown “Being outdoors”, “Reading”, “Talking to friends”, “Video calls or group calls”, and “Helping and soothing others” (HSO). “Gardening” (Mdn = 1.0), “Watching the news” (Mdn = 2.0), and “Online courses” (Mdn = 2.0) were perceived as less useful. At M1, medium correlations were found between Awareness, “Reading” ($\tau_b = .23, p < 0.01$), and HSO ($\tau_b = .27, p < 0.01$). At M2, medium correlations were found between Brooding and the “Social media use” ($\tau_b = .22, p < 0.01$), Self-compassion and “Exercise” ($\tau_b = .20, p < 0.01$), and between Compassion for others, “Video calls or group calls” ($\tau_b = .24, p <$

0.01) and HSO ($\tau_b = .31, p < 0.01$). At M2, Acceptance showed a medium correlation with “Watching the news” ($\tau_b = -.26, p < 0.01$) and Awareness with HSO ($\tau_b = .22, p < 0.01$).

Keywords: COVID-19 lockdown; Activities; Emotion regulation processes

Poster Presentation #23

Towards an Artificial Intelligence model to automatically infer patient’s mental states associated with engagement in psychological interventions

Authors: Beatriz Carvalho¹, Ana Rita Silva² & Luís Lopes Macedo¹

Affiliations:

¹CISUC - Centre for Informatics and Systems of the University of Coimbra

² University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Introduction: Many health problems require long term treatments. These treatments are sometimes hard to accomplish by the patients. It is generally acknowledged that patients’ engagement plays a critical role in the success of those treatments. It is frequent that patients lose their motivation, their interest, during the treatment period. It is thus very import to detect fluctuations of the patients’ level of engagement along the entire duration of the treatment and produce alerts when it departs from normal levels so that professionals can act on time to try to correct the situation. Patients usually do not communicate those situations, because they are not able to detect it or do not want to give feedback. The solution might be incorporating Artificial Intelligence (AI) techniques so that those states can be detected automatically and quickly.

Methods: For this study we initially used a dataset consisting of 35887 facial images of various people, taken from Kaggle. To divide the images into "engaged" and "not engaged", the clustering technique was used and then, the division into training, test and validation data was made. To form the machine learning model, VGG16, a successful CNN (Convolutional Neural Network) architecture was used. To bring this study as close as possible to reality, a real dataset, composed of video frames of adults aged 55 or plus participating in a brain health education program, will be used to test the model already developed and trained.

Expected Results: At this point, the model is already trained, having obtained a test accuracy of approximately 93%, F1-Score of 94%, among other metrics of similar results, which denotes that the model performs well during training and validation stages, and it

is ready to be tested with the real dataset. After this test, good metric values are expected, indicating that this algorithm can identify involvement in individuals at risk of dementia at the time of the intervention, detecting early on the lack of engagement and loss of interest and motivation.

Conclusions: The connection between AI and health is not new. The benefits of AI in the health domain can be found in various ways. Algorithms can analyze data much faster than humans, can suggest possible treatments, monitor a patient's progress, and alert the human professional to any concerns. With the current project, testing the collaboration between human and AI, it might be possible to enlarge new pathways to handling data and making predictions in chronic conditions adherence to treatments/interventions.

Keywords: Engagement, brain health, AI, CNN, prediction

Poster Presentation #24

Development and evaluation of Programa Cuida: Positive educational practices program for social educators from residential care institutions in Brazil

Authors: Bruna Wendt¹, Jaqueline Portella Giordani² & Débora Dalbosco Dell'Aglio^{2,3}

Affiliations:

¹Instituição Evangélica de Novo Hamburgo (IENH) e Universidade Federal do Rio Grande do Sul (UFRGS)

²Universidade Federal do Rio Grande do Sul (UFRGS)

³Universidade La Salle (Unilasalle)

Abstract

Currently, 34.157 children and adolescents are in residential care in Brazil. Offering technical support and training social educators contribute to strengthening the social support network for children in care, thus ensuring them integral protection and qualified care. This research aimed to develop, implement and evaluate outcomes and process implementation of a positive educational practices program for social educators from residential care institutions of children and adolescents from the south of Brazil, entitled Cuida Program. The objective of the program was to offer educational support mechanisms and tools with to expand the educational and care skills and capacities of social educators. The intervention, brief and multi-component, was based on the theoretical assumptions of Positive Parenting and methodological assumptions of Experiential Methodology, and occurred between 2018 and 2019. The intervention consisted of eight-weekly sessions, of two hours each session, in a group format. Each session focused on different topics related to positive educational practices: emotional regulation, assertive communication, conflict resolution strategies, self-care and self-efficacy. The intervention evaluation study

included 47 social educators from the south of Brazil, with a mean age of 44.28 years ($SD=9.34$). The Educational, Emotional and Social Skills of the Social Educator Scale was constructed and validated to evaluate the educational practices of social educators before and after the intervention. Statistical analysis indicated that no major effects were found between pre and post-intervention, however there was a tendency to increase the emotional regulation scores for the experimental group. Based on a qualitative evaluation and data triangulation, it was found that most educators were satisfied with the intervention learning and reported having rethought and modified some of their practices, especially regarding communication and conflict resolution strategies. Limitations related to the program extension and the sample size should be considered. Even so, the relevance of this research is highlighted considering its pioneering in Brazil. The Cuida Program reinforces the importance of offering care to those who care through early and preventive interventions. Study data can support new interventions, as well as support the qualification of residential care teams.

Keywords: Intervention; Out-of-home care; Social educator; Educational practices; Positive parenting

Poster Presentation #25

Are subjective memory complaints (un)related to working memory performance? A study with Portuguese young- and older-adults

Authors: Bruno Miguel Pereira¹, Carolina Morais Barbosa¹ & Pedro Filipe Rodrigues¹

Affiliations:

¹Portugalense's Psychology Institute (I2P), Porto, Portugal

Abstract

Introduction/Aims: Normative deficits in memory capacity are usually associated with subjective memory complaints, however, the relationship between the declines of objective memory and the subjective memory complaints is not clear. This cross-sectional study aimed to understand the relationship between subjective memory complaints frequency (i.e., memory lapses) and objective memory decline both in young and older adults.

Method: A sample of 60 Portuguese participants was composed through convenience sampling. The participants were divided in two groups regarding their age. The group of the young-adults was composed of 30 participants (19 males and 11 females), with ages ranging from 18 to 35 years ($M = 24.33$; $SD = 4.42$). The group of the older adults was composed of 30 participants (14 males and 16 females), with ages ranging from 65 to 86 years ($M = 74.20$; $SD = 5.77$). To data collection, a Sociodemographic Questionnaire, the

Questionnaire of Memory Lapses, Montreal Cognitive Assessment and three verbal working memory tasks (digit span, sequence of letters and numbers, and arithmetic) were used.

Results: As expected, the older adults reported more memory lapses and a worst performance in the working memory tasks in comparison with the adults' group. Moreover, was found a negative correlation between general cognitive performance and the frequency of subjective memory complaints in the older adults. At the same time, no significant correlations were obtained between the subjective and objective cognitive assessments in the adults' group.

Conclusion: In light of the results of our study, we conclude that memory lapses may be related to working memory loosening and deficits. Furthermore, our results sustain this conclusion with evidence that fewer memory lapses are present when there is a better cognitive performance. These findings lead us to conclude that, memory lapses can constitute an important indicator of memory loosening, associated with aging or the onset of dementia.

Keywords: Subjective memory complaints, Working memory assessment, General cognitive assessment, Older adults

Poster Presentation #26

Is there a relationship between the Wisconsin Card Sorting Test and specific tests from BANC?

Authors: Carolina Sousa^{1,3}, Sofia Marcos^{1,3}, João Castelhana^{2,3}, Ana Pina Rodrigues^{2,3}, Ricardo Almeida⁴, Emília Bigotte⁴, Miguel Castelo-Branco^{2,3,5}, Susana Mouga^{2,3} & Inês Bernardino^{2,5}

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Institute for Nuclear Sciences Applied to Health ICNAS, University of Coimbra, Portugal

³Coimbra Institute for Biomedical Imaging and Translational Research CIBIT, University of Coimbra, Portugal

⁴Caspae, Coimbra, Portugal

⁵Faculty of Medicine, University of Coimbra, Portugal

Abstract

Introduction: Executive functions (EF) are a collection of capabilities that allows an individual to adapt their behaviour to the environment and plan and adapt their response in future events. Some studies tried to understand if there is a relationship between different measures of EF, namely Wisconsin Card Sorting Test (WCST), Verbal Fluency (VF) and the Trail Making Test (TMT). Most of these studies conclude that there is a significant weak correlation between these tests. Other studies found a strong concurrent association

between EF and language during the early school years. This study aims to understand if there is a relationship between the performance on the WCST and four subtests from the Coimbra's Neuropsychological Evaluation Battery (BANC) that assess these domains.

Methods: Fifty-five participants (28 girls, 27 boys), aged between 8 and 10 years old, performed the WCST as well as the Phonemic VF test (letters P, M, R), TMT (Part A and B), Phonological Awareness (PA) (Deletion, Substitution) and Comprehension of orders/instructions, from BANC. We ran correlation analyses (Spearman Rho) between WCST and the subtests from BANC. Statistical analysis was performed with the Statistical Package for Social Sciences, version 27. A significance level of 0.05 was adopted.

Results: We found significant, although weak, correlations between WCST measures and VF, PA-Substitution and TMT-B. VF negatively correlated with WCST total errors, perseverative errors and conceptual level responses. PA (substitution) was positively correlated with WCST total of errors, perseverative errors and conceptual level responses and negatively correlated with the total WCST number of trials. Finally, we found a negative correlation between time of execution in TMT-B and the number of trials to complete the first category and a positive correlation with the WCST non-perseverative errors.

Conclusions: Our results corroborate the knowledge we have about the processes involved in WCST. Set shifting, flexibility, inhibition and working memory, are assessed by the WCST and are also involved in the execution of VF, PA and TMT-B. Supporting our findings, Amuts et al. (2020) conclude that there are weak, but significant, correlations between the TMT and the VF, and between VF and the number of WCST perseveration errors. We can conclude that EFs, as assessed by WCST, are associated with other tests from BANC that evaluate not only EF but also specific language abilities.

Keywords: Wisconsin Card Sorting Test; BANC; Trail Making Test; Verbal Fluency; Executive functions

Poster Presentation #27

Validation of the Motivation for PhD Studies Scale: Preliminary psychometric properties among Portuguese doctoral students

Authors: Catarina Filipa Cardoso¹, Maria Cristina Canavarro¹ & Marco Daniel Pereira¹

Affiliations:

¹University of Coimbra, Center for Research in Neuropsychology and Cognitive-Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Introduction/Objectives: The dropout rates from doctoral studies are a significant and worrying theme in Higher Education. Although motivation of doctoral students has been identified as a determining factor for doctoral completion, there are few studies that analyse motivation and its multidimensionality in this specific context. Self-Determination Theory (SDT) supports the multidimensionality of motivation, as it advocates the existence of several types of motivation that regulate human behaviour. Based on SDT, the Motivation for PhD Studies Scale (MPhD) is a 15-item self-report measure that was recently developed and that aims to assess the motivation for doctoral studies. Accordingly, the objective of this study is to present the preliminary psychometric properties of the European Portuguese version of the MPhD.

Methods: The sample consisted of 243 Portuguese doctoral students (78.6% female; mean age = 31.67 years), who completed a web-based questionnaire. In addition to a demographic and PhD-related questionnaire and the European Portuguese version of the MPhD, participants completed a research protocol comprising relevant measures assessing self-determination (Self-Determination Scale), quality of life (EUROHIS-QOL-8), anxiety, depression, and stress (Depression Anxiety and Stress Scale), burnout (Oldenburg Burnout Inventory), self-efficacy (General Self-Efficacy Scale) and procrastination (Irrational Procrastination Scale).

Results: The Confirmatory Factor Analysis (CFA) supported the original structure suggesting five types of regulation (CFI = .95; RMSEA = .06; 90% CI for RMSEA = [.06; .08]; SRMR = .06). Acceptable reliability was found for the different types of regulation, with Cronbach's alphas ranging between .79 (identified regulation) and .80 (external regulation). Only introjected regulation was below the .70 threshold (Cronbach's alpha = .67). The correlations with variables related to doctoral degree (e.g., overall satisfaction with the PhD) and other relevant measures were all in the expected direction and supported the validity of the MPhD.

Conclusions: Our findings demonstrated that the European Portuguese version of the MPhD has very satisfactory and promising psychometric properties of reliability and validity, which support its use in Portuguese doctoral students.

Keywords: Motivation for PhD studies scale; PhD studies; Doctoral students; Psychometric properties; Self-determination theory

Acknowledgements: The authors would like to thank Foundation for Science and Technology (FCT) for funding this research project, through a PhD Research Grant (Reference: 2021.07830.BD).

Poster Presentation #28

Personality Styles and Attachment Patterns in Men with Premature Ejaculation

Authors: Catarina Pereira¹, & Cátia Oliveira²

Affiliations:

¹Faculdade de Psicologia Educação e Desporto, ULP; Portugal

²Faculdade de Psicologia Educação e Desporto, ULP; CPUP, Universidade do Porto; Portugal

Abstract

Introduction/Objectives: Premature Ejaculation (PE) is one of the most common and complex sexual dysfunctions in men, and the literature still does not clarify its definition and etiology, much less other associated psychological factors. The present study aimed to investigate the relationship between attachment patterns and personality factors in men with premature ejaculation. Differences between these variables in men with and without premature ejaculation were evaluated. Also, the predictive capacity of certain dimensions of the variable's, on sexual satisfaction and sexual functioning was also explored.

Method: The study was carried out online, and had the participation of 117 men, subdivided into 30 with premature ejaculation and 87 without premature ejaculation. All participants answered to a set of different questionnaires: Sociodemographic Questionnaire; Questionnaire for Activation of Cognitive Schemas in Sexual Context (Nobre & Pinto-Gouveia, 2002); International Index of Erectile Function (IIEF – 15; Gomes & Nobre, 2012); Neo-FF NEO-Five Factor Inventory (Lima et al., 2014); Young's Schemas (YSQ-S3; Pinto-Gouveia et al., 2005); Adult Attachment Scale (Canavarro, 1997).

Results: The results showed the existence of significant differences regarding the variables under study in men with and without premature ejaculation. It was possible to observe that men with premature ejaculation have higher levels of neuroticism ($p < .004$) and conscientiousness ($p = .038$), as well as dimensions of attachment, anxiety ($p < .001$) and trust in others ($p = .04$), higher levels of early maladaptive schemas such as excessive vigilance and inhibition ($p = .04$), and sexual schemas of undesirability/rejection ($p = .003$) and incompetence ($p < .001$), compared to men without premature ejaculation. It is added that men with premature ejaculation demonstrate lower levels of sexual satisfaction ($p = .009$) and general satisfaction ($p < .001$). Personality ($p = .044$) and sexual schemas ($p < .001$) (desirability/rejection) were significant predictors of sexual satisfaction and functioning.

Conclusions: The results confirmed the importance of different psychological variables in the experience of premature ejaculation, reinforcing, in turn, the need for a better understanding and broader evaluation of this problem and its nature. We recommend the development of more studies in men with PE to explore different psychological varia-

bles, to create clearer definitions, as well as help clinicians in appropriate and effective treatments for PE.

Keywords: Premature Ejaculation (PE); Attachment; Attachment in Adults; Personality Styles; Young's schemas.

Poster Presentation #29

NIH Toolbox Cognition Battery in Aging: the European Portuguese App

Authors: Catarina Marques-Costa^{1, 2, 3}, Mário R. Simões^{1, 2, 3}, Pedro A. Almiro^{2, 3, 4}, Gerado Prieto^{3, 5} & Maria Salomé Pinho^{1, 2, 6}

Affiliations:

¹University of Coimbra, Faculty of Psychology and Educational Sciences, Coimbra, Portugal

² University of Coimbra, Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC), Coimbra, Portugal

³ University of Coimbra, Psychological Assessment and Psychometrics Laboratory (PsyAssessmentLab), Coimbra, Portugal ⁴Autonomous Univ, Lisbon, Research Center for Psychology (CIP), Lisbon, Portugal

⁵ University of Salamanca, Faculty of Psychology, Salamanca, Spain

⁶ University of Coimbra, Memory, Language, and Executive Functions Laboratory, Coimbra, Portugal

Abstract

Introduction: The NIH Toolbox is a multidimensional set of brief computerized instruments that assess cognitive, sensory, motor and emotional functions in people aged from 3 to 85 years old, taking about 2 hours to complete (National Institutes of Health [NIH] & Northwestern University, 2016). It measures key constructs over the life cycle and allows monitoring of neurological and behavioral function over time. An iPad version of the NIH Toolbox was released in 2015 (NIH & Northwestern University, 2016). The NIHTB-Cognition Battery (NIHTB-CB) provides measures of multiple domains of cognition, including episodic memory, executive function, processing speed, working memory, and language. This battery includes 7 tests: (i) Flanker Inhibitory Control and Attention Test (ii) Dimensional Change Card Sort [DCCS] Test (both to evaluate attention and executive function), (iii) Picture Vocabulary Test, (iv) Oral Reading Test (both to evaluate language), (v) Picture Sequence Memory Test [PSM] (to evaluate episodic memory), (vi) List Sorting Working Memory Test [LSWM] (working memory evaluation), and (vii) Pattern Comparison Processing Speed Test [PC] (to evaluate processing speed). It comprises also two supplemental measures for adults: Auditory Verbal Learning Test [Rey](episodic memory evaluation) and Oral Symbol Digit Test (processing speed). The first Portuguese European iPad version of NIHTB-CB has only 5 tests (the language tests were not included) and one supplemental test (Oral Symbol Digit Test).

Methods: Community-based research procedures were used to enhance enrollment of older adults. Study procedures involve the comparison of the NIHTB-CB without the supplemental tests to analogous measures as Montreal Cognitive Assessment, Trail Making Test, WAIS-III (Letter-Number Sequencing, Digit Symbol Coding, Symbol Search, and Digit Span tests), Stroop, Auditory Verbal Learning Test [Rey].

Expected Results: We expect that NIHTB-CB results are in accordance with analogous measures.

Conclusions: The NIHTB-CB measures provide a valid assessment of neurocognitive domains that are important to evaluate healthy aging. Future investigation about the construct validity and reliability of the NIHTB-CB will be carried out with the administration of the European Portuguese iPad version.

Keywords: NIHTB-CB, Older adults, Cognition, Aging, iPad

Acknowledgements: FCT, Portuguese Republic/Science, Technology and Higher Education, Portugal 2020, European Social Fund through the Human Capital Operational Programme (HCOP) and POR-CENTRO under Grant No.: SFRH/BD/128597/2017].

Poster Presentation #30

REMINDER4Care: A protocol for a cluster randomized controlled trial of a dementia risk reduction program

Authors: Catarina Belo Baptista¹, Ana Rita Silva¹, Margarida Pedroso Lima¹ & Rosa Marina Afonso^{2, 3}

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

²Universidade da Beira Interior, Portugal

³CINTESIS, Faculty of Medicine, Porto, Portugal

Abstract

Introduction/Objectives: Social isolation, social disengagement and loneliness are significant risk factors for dementia onset in older adults with 65 or more years old. Residential and day care facilities' (RDCF) users are particularly vulnerable to these risk factors, who were amplified by COVID-19 pandemic. We aim to test and validate a dementia reduction program (REMINDER4Care) specifically targeting RDCF users. This program is a multidomain neuropsychological risk reduction intervention, incorporating cognitive training, group activities, education, and mindfulness, and will include co-creation of the program activities incorporated in a first feasibility test.

Methods: Two studies will be developed: a) the first study will test the feasibility of the original REMINDER program for older adults assisted by RDCE, incorporating a participatory design to co-create an adapted version for further testing; b) the second will validate the REMINDER4Care in a cluster randomized controlled trial design (RCT). In Study 1 we will collect a sample of 50 older adults assisted by RDCE, with 65 or more years old, without dementia, 25 will take the experimental condition, and the other 25 participants will be a waiting list control condition (assessed pre and post intervention, and further contacted to participate in study 2). In Study 2 we plan to collect a total sample of 100 participants assisted by RDCE. The facilities will be randomly allocated to the experimental condition (REMINDER4Care intervention) or control condition (wait-list control condition). A 3-months follow-up assessment will be applied to the experimental condition.

Expected results: Given the scientific evidence that social isolation and loneliness have negative effects on the cognitive functioning of older adults, a program will be implemented that works on several skills that reduce the risk of dementia, and then culminating on the consequences of social isolation and loneliness. It is expected that with the application of this program this will help to reduce the levels of social isolation and loneliness in older adults. In addition, with the creation of an attractive, engaging, well accepted and accessible manualized tool, we expect to amplify the RDCFs manualized tools available to prevent dementia amongst their residents, given that in these contexts the rate of people with dementia is significantly high, which significantly increases costs of care.

Keywords: Social Isolation; Older People; COVID-19; Dementia Risk Reduction; Residential and Day Care Facilities

Poster Presentation #31

Prevention in mental health: Development and acceptability of a brief transdiagnostic intervention (UP-PREVENT)

Authors: Catarina Francisco¹, Marco Pereira¹, Ana Dias Fonseca¹
& Maria Cristina Canavarro¹

Affiliations:

¹University of Coimbra, Center for Research in Neuropsychology and Cognitive-Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Introduction/Aim: Emotional disorders (EDs), particularly anxiety and mood disorders, present a high prevalence worldwide and bring consequences and costs for economy, society and primary care services. Relatedly, the proportion of patients with subclinical symptoms of anxiety and/or depression (i.e., individuals who report significant clinical

symptoms, but do not fulfil all the criteria for having a disorder) has been alarming. These symptoms affect the functioning and quality of life of individuals, increase the risk of development an ED and increases the use of the health services. Primary care services are one of the main contexts that these individuals use, however, with the lack of human resources and the high number of patients demanding mental health care, it is common the long waiting lists until they receive treatment. Therefore, it is important to develop an intervention that can be applied in this context and early intervene with the subclinical population. The Unified Protocol (UP) is a transdiagnostic intervention that focuses on the transdiagnostic mechanisms (e.g., neuroticism) of EDs and has proved to be effective with many populations/contexts. The UP has several advantages such as it can be applied in a group format and have reduced costs and time for patients and mental health professionals. Recently, very brief versions of the UP (e.g., workshops) were developed to intervene with individuals with subclinical symptoms of anxiety and/or depression. This reinforces the potential of the UP as a preventive intervention but also underline the need of developing an UP-based intervention with a longer duration. Thus, this study aims to develop a short version of the UP (UP-PREVENT) in a group format and to assess its acceptability.

Methods: The UP-PREVENT will be developed based on the existing literature, the debate among the research team and their international network, and a focus group with therapists with training and experience in applying the UP. Further, it will be conducted a pilot study to assess the acceptability of the UP-PREVENT.

Results: It is intended to obtain a brief version of the UP that is tailored for individuals with subclinical symptoms of anxiety and/or depression.

Keywords: UP-PREVENT; Unified Protocol; Emotional Disorders; Subclinical symptoms

Poster Presentation #32

Sexual Violence in Sports: A Systematic Review

Authors: Cláudia Daniela Rodrigues¹, Bárbara Alexandra Moreira¹, Eunice Martins Carmo¹
& Joana Patrícia Carvalho¹

Affiliations:

¹CPUP: Center for Psychology of Porto University, Faculty of Psychology and Educational Sciences, Porto University, Porto, Portugal

Abstract

Introduction and Aim: The phenomenon of sexual violence in sports (SVS) has received increasing attention. SVS happens at any competition level and is perpetrated by many agents: coaches, athletes, sports leaders, or directors. Given the worldwide nature of SVS and the lack of systematized evidence aimed at promoting a scientific discussion on this

topic, the aim of the current work was to perform a systematic review of the literature considering the following research questions: What is the prevalence of SVS? How does the coach-athlete relationship prompt sexual violence? How does SVS take place? What are the risk factors for SVS? What are the consequences of SVS?

Method: The current systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines (PRISMA). Articles search was done on the following platforms: Web Of Science Group, PubMed, Science Direct, and SAGE Journals; articles published until December 31, 2021, were considered. After applying the inclusion/exclusion criteria, 23 articles, including original investigations, cross-sectional studies, retrospective studies, and case studies, were eligible.

Results: Findings revealed that the prevalence of SVS varied from 0 to 72%. SVS is most often perpetrated by male athletes, while victims are mostly women. Victims of SVS report negative consequences such as reduced well-being, abandonment of the sports career, or changing sport. Some risk factors have been identified such as poorly defined boundaries between coaches and athletes, lack of sports guidelines regarding those boundaries, soft or absent sentences regarding SVS cases, or excessive/frequent physical touch.

Conclusion: SVS is a prevalent phenomenon with negative consequences in general well-being and in athletes' careers. Risk factors are still putative but suggest that ethical and professional guidelines in sports must be designed within the realm of sexual violence prevention. Contrary to public discourses, SVS prevalence was higher among athletes rather than in the coach-athlete dyad. Some limitations have been detected, particularly related to the lack of solid research approaches.

Keywords: Sexual violence; Sports; Systematic review; Prevention of sexual violence

Poster Presentation #33

Development and Efficacy Study of a CBT-ACT Enhanced Treatment for OCD: Study protocol

Authors: Cristina Pablo Maria do Céu Salvador^{1,2} & Mariana Moura Ramos³

Affiliations:

¹Universidade Lusófona, Centro Hospitalar Psiquiátrico de Lisboa, Portugal

²Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra, Centro de Investigação em Neuropsicologia e Intervenção Cognitivo-Comportamental, Portugal

³Centro Hospitalar Universitário de Coimbra, Centro de Investigação em Neuropsicologia e Intervenção Cognitivo-Comportamental, Portugal

Abstract

Introduction: Obsessive-Compulsive Disorder (OCD) has a chronic evolution and is defined by the presence of recurrent and intrusive thoughts (obsessions) and by compulsions, usually performed to suppress or neutralize obsessions and related anxiety. Despite cognitive-behavioral therapy (CBT), namely, exposure with response prevention (ERP), is considered the gold standard of psychological treatment in OCD, some patients show poor adherence. The third wave of CBT, such as Acceptance and Commitment Therapy (ACT), has drawn attention to psychological flexibility processes in OCD. Therefore, integrating ACT into OCD cognitive-behavioral treatment is conceptually congruent, and can enhance the difficulties identified in ERP such as acceptability, engagement in exposure, and abandonment or refusal. Even though there is some support for its efficacy, studies are scarce, highlighting the need for further research on the topic.

Objectives: To develop a study protocol that includes 1) the development of an integrative ACT+CBT intervention protocol for OCD and 2) to test the efficacy of this intervention comparing its effectiveness with a traditional OCD CBT intervention and with a treatment as usual (TAU) in routine clinical practice,.

Methods: The intervention protocol will be developed based on the existing literature on ACT relevant processes in OCD. The experimental study will compare CBT and ACT+CBT interventions with a control group in a hospital setting. Participants, aged between 18 and 65 years old, should meet DSM criteria for OCD as their main diagnosis, and will be randomly assigned to three different groups. Outcomes will be measured at pretreatment, posttreatment, and 3-months follow-up. Instruments will be measuring primary outcomes, CBT, and ACT processes. Data analysis will focus on testing the efficacy of the intervention and its acceptability.

Expected results/Conclusions: Significant Improvements are expected in outcome measures in the TAU, CBT and ACT-CBT groups. CBT and ACT-CBT groups are expected to present better results when compared to TAU, with gains being maintained over time (i.e., at 3-month follow-up). ACT-CBT group is expected to present enhanced gains over the CBT-group gains (e.g., in adherence). ACT-CBT will be more effective in reducing ACT-related processes (e.g., defusion), and these processes will account for the variance of outcome measures. With this study we expect to add scientific knowledge to OCD psychological intervention, namely, developing an integrative CBT-ACT intervention that could enhance OCD treatment.

Keywords: Obsessive-compulsive disorder (OCD), Cognitive-behavioral therapy (CBT), Exposure and response prevention (ERP), Acceptance and commitment therapy (ACT), Psychological flexibility

Poster Presentation #34

Faking a smile: The effect of masks in children s Duchenne smiles recognition

Authors: Daniela Bernardino de Sousa¹, Raquel Maria Baptista de Lemos Guerra de Oliveira¹
& Alexandre Constância Fernandes¹

Affiliations:

¹ ISPA, Portugal

Abstract

The facial expression of emotions is one of the most powerful tools of nonverbal communication, expressing what we feel, such as happiness through the smiles we exhibit. Two types of smiles are considered: Duchenne Smiles or genuine smiles that involve the activation of the zygomatic major muscle and the orbicularis oculi muscle, unlike the so called Non Duchenne Smiles – or non-genuine smiles – which activates only the first. Thus, when masks were implemented to contain the COVID-19 virus, we lost many clues that allow us to identify various emoticons, such as a smile. This study aims to understand wheter the use of masks decreases the recognition of Non Duchenne Smiles compared to non-use and wheter there is an effect of age progression on this recognition. The sample consisted of 46 children aged between 6 and 10 years-old who performed a discrimination task, being randomly presented faces with and without face masks, representing the basic expressions, indicating wheter the face was happy or not. The results showed a decrease in smile recognition when the face mask was present, with Non Duchenne Smile being the most affected by this accessory. A significant interaction between the mask and the age group of the participants was also reported, with younger children being the most impacted by the presence of masks in discrimination. The good results of Duchenne Smile discrimination emphasize the importance of the activation of the orbicularis oculi muscle in the judgment of happiness.

Keywords: Face Masks; Duchenne Smile; Children; Happiness; Smile Discrimination

Poster Presentation #35

Where we all meet: ACT transdiagnostic approach to adolescents with different anxiety disorders

Authors: Diana Vieira Figueiredo¹, Maria do Céu Salvador¹, Daniel Rijo¹ & Paula Vagos^{1,2}

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

²Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique, Porto, Portugal.

Abstract

Introduction/Goals: Psychological Flexibility/Inflexibility (PF/PI) have been recognized as adequate transdiagnostic conceptualizations of psychopathology, and may more truthfully reflect the complexity and dimensionality of mental health problems. Likewise, interventions derived from PF/PI (Acceptance and Commitment Therapy; ACT) have been proven efficacious, though evidence for PI/PF's role, specifically, in adolescents' mental health is scarce. This seems worrisome, considering that 10 to 20% of adolescents experience mental health problems. In youth, Anxiety Disorders (AD) are the most common disorders, particularly, Social Anxiety Disorder (SAD) and Generalized Anxiety Disorder (GAD), which are highly comorbid in adolescence. Therefore, this project aims to develop and study the efficacy of an ACT intervention and to explore how conceptualization and interventions may come together to understand and intervene in AD in adolescence, thus increasing adolescents' well-being. **Method:** Participants will be adolescents with SAD, GAD, and without diagnosis, aged between 14 and 18 years old, of both sexes, recruited in schools. Concerning conceptualization, PI/PF processes networks and differences in these relational patterns will be compared between the two clinical groups and in relation to healthy adolescents. Regarding intervention, a controlled trial with a control group will be implemented to test the efficacy of the new ACT intervention in adolescents with SAD or GAD. Outcome measurement will be conducted at pre-intervention, post-intervention, and at 3- and 6-month follow-ups.

Expected results/Conclusions: Clinical groups are expected to present higher levels of PI and lower levels of PF than healthy adolescents. PI/PF processes are expected to account for the variance of outcome measures (e.g., anxiety symptoms) in clinical and healthy adolescents. PI/PF processes are also expected to similarly relate to each other and to outcome measures in all groups, with variations occurring in the strength of their relations. Concerning the ACT intervention, improvements in outcome variables (e.g., anxiety symptoms) are expected at post-treatment. When comparing changes in outcome variables between the control and the clinical groups, improvements are expected only in the groups receiving intervention. Additionally, similar effects on outcome measures are

expected in both clinical groups with intervention gains being maintained over time (i.e., at 3- and 6-months follow-up). Finally, changes in PI/PF processes are expected to predict changes in outcome variables in both clinical groups. This project will contribute to test ACT assumptions as accurate transdiagnostic conceptualizations of highly prevalent AD in adolescents and identify key ingredients of change in therapy, amplifying the scope of delivering ACT and enhancing its benefits.

Keywords: Acceptance and Commitment Therapy; Transdiagnostic Processes; Psychological Flexibility/Inflexibility; Adolescents; Anxiety Disorders

Poster Presentation #36

Chronotype and time-of-day effects on attention to facial features: Evidence from eye tracking

Authors: Diâner Felipe Queiroz¹, Pedro Bem-Haja², André Silva^{1,3}, Paulo Rodrigues⁴, Fábio Monteiro⁵, Pedro J. Rosa⁶, Teresa Ávila¹, Susana Gomes Jorge¹, Daniela Machado¹, Henrique Marques Valente¹, Rafaela Catarino Garcia¹, Joana Sá Ferreira¹, Carlos F. Silva⁷ & Isabel M. Santos⁷

Affiliations:

¹Department of Education and Psychology, University of Aveiro, Portugal

²CINTESIS@RISE, Department of Education and Psychology, University of Aveiro, Portugal

³ISEIT, Piaget Institute, Portugal

⁴University of Beira Interior, Portugal

⁵Cognitive Psychology Institute, University of Coimbra, Portugal

⁶CHEI Lab, University Lusófona of Humanities and Technology, Portugal

⁷William James Center for Research, Department of Education and Psychology, University of Aveiro, Portugal

Abstract

Introduction: Face identity recognition is an important ability for social interactions, and internal facial features (eyes, nose and mouth) seem to be particularly important in the recognition of familiar faces. However, the way that we perceive and interpret faces may depend on chronotype and time-of-day, which may affect how we attend to the different regions of the face and the overall engagement with them.

Objectives: This study aimed to understand possible effects of chronotype and time-of-day on the recognition of famous and unfamiliar faces, and also to understand the pattern of eye-movements while exploring the faces.

Methods: Forty-nine participants (25 morning-types and 24 evening-types, classified according to the Morningness Eveningness Questionnaire) performed a famous face recognition task where they were asked to indicate if the face was famous or not while

their eye-movements were recorded. The task was performed twice, at their optimal and non-optimal times (7:30 am and 7:30 pm), separated by a 1-week interval.

Results: Overall, there was an effect of familiarity and an interaction between familiarity and chronotype on Total Fixation Duration (TFD) and Fixation Count (FC) in the eyes, nose and mouth. Moreover, the shorter processing time indexed by these metrics for the famous faces only appeared for the morning-types; the evening-types tended to explore famous and non-famous faces with equal time. Our results also showed that the Time to First Fixation (TFF) in the eyes was lower for the evening-types and the First Fixation Duration (FFD) was significantly higher in this group for the same AOI in comparison to the morning-types. Additionally, morning-types presented lower TFF and higher FFD in the nose at their non-optimal time-of-day. Interestingly, the same happened for the evening-types, which suggests an asynchrony effect for these two attentional metrics, which give us information about stimulus salience (TFF) and attentional engagement (FFD).

Conclusion: The results seem to indicate that morning-types tend to need significantly more time to recognize unfamiliar faces. These results can be explained by the worst performance in unfamiliar face processing already reported in the literature, but which might be protected in the processing of familiar faces due to the fact that morning types are more sociable. The most resounding result is related to the asynchrony effect found for the nose. The nose is an important feature in face processing and this asynchrony effect seems in line with the literature that shows better performance at non-optimal times for both chronotypes in several cognitive tasks.

Keywords: Face recognition, Chronotype, Time-of-day, Eye tracking, Synchrony effect

Poster Presentation #37

Semantic features of manipulable objects: a feature selection study

Authors: Ema Leitão¹, Daniela Valério^{1,2}, Igor Vaz^{1,2}, Jorge Almeida^{1,2} & André Peres^{1,2}

Affiliations:

¹Proaction Lab - Perception and Recognition of Objects and Actions Laboratory, FPCE, University of Coimbra, Portugal.

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

Abstract

Introduction: Our ability to recognize and discriminate one manipulable object among many others is essential for us to complete the most basic daily activity. In order to efficiently recognize the objects that surround us, we need to know, for instance, that a cup

is a container used for liquids, is made of ceramic and has a handle. Thus, the questions are which features are essential for object recognition and how they are represented in the brain.

In a recent study by Valério and Almeida (in preparation), 130 volunteers freely generated features related to 80 manipulable objects. 807 features were obtained, as well as their production frequencies (i.e., the number of times that a feature was listed for each concept), where strongly related features were mentioned more often. Analyzing such a large dataset can be troublesome, often generating spurious correlations. Therefore, an ideal scenario would be to reduce its dimensionality by removing all the features that are not relevant. Here, our goal is to test three feature selection methods.

Methods: In this study, we will analyze the performance of these strategies: Elimination of discriminative features (shared by few objects), Principal Component Analysis (PCA), and Principal Feature Analysis (PFA).

Expected Results: The simplest and most intuitive strategy is to remove those features that are less shared. However, this method does not take into account the mutual information of two features, that is, even if two features are shared by many objects, but are very similar, they convey little information. On the other hand, PCA algorithms combine features according to their mutual information. Although this method is very effective, after this processing it is no longer possible to treat each feature separately. Lastly, the PFA algorithm is relatively new, therefore its suitability for the set of features we are analyzing still needs to be evaluated. For a preliminary analysis, we used the first method. Using the output from this analysis, we calculated the cosine of similarity. The next step was comparing the original similarity matrix with the reduced one, using a Pearson correlation, which resulted in a 0.81 correlation coefficient.

Conclusion: The most elementary method allowed a reduction from 807 features to 61, showing that it is possible to reduce the dimensionality without affecting global meaning whilst diminishing spurious results. However, we expect that PCA and PFA will further reduce the number of features while improving their importance to object recognition.

Keywords: Feature Selection, Principal Component Analysis, Principal Feature Analysis, object recognition

Poster Presentation #38

Positive psychology, well-being and meaning: Reflections on the promotion of mental health in educational contexts

Authors: Ester Câmara¹, Saúl Neves de Jesus¹ & Margarida Pocinho¹

Affiliations:

¹Research Centre for Tourism, Sustainability, and Well-being (CinTurs), Gambelas Campus, Universidade do Algarve - Faro, Portugal

Abstract

Introduction: Positive psychology is known as the science of the promotion of well-being and is related to happiness and meaningful life. In this sense, the focus is on how individuals, communities and societies flourish and how this phenomenon leads to increased well-being. Inevitably, positive emotions are central, considering their role in optimizing well-being under favourable conditions. Associated with the above, the search for meaning is a crucial element in promoting well-being, associated with feelings of belonging, purpose, life narratives and transcendence. These four characteristics come together in promoting life events that allow the subject to be more involved in his development. As psychologists and researchers, we can be pioneers in promoting initiatives that allow people to promote their psychological growth and improve their well-being.

Objectives: From this, two reflections result, which motivates the development of the poster here proposed: 1) the need to encourage the investment in mental health, since that more important than focusing on mental illness, is the determining role of the promotion of mental health; 2) the vital role of educational institutions in the development of initiatives focused on promoting healthy mental habits, taking into account their moderating role in increasing adaptability and, consequently, well-being and meaning.

Methodology: This parallel reflection is derived from exploring the literature on positive psychology, well-being, mindfulness, and meaningful experiences, without restrictions on the contexts in which they could be applied. Several future guidelines were discussed, from which the team highlighted the role of educational institutions and their importance in educating for citizenship and, thus, for the promotion of positive character strengths, emotions, and well-being.

Expected results: It is expected that this theoretical poster could lead to the development of empirical studies focused on the development of good practices in our educational institutions, starting with the ones focused on early education and how they can be complemented during all the following educational stages, including middle school, high school and higher education programs, focusing the need to invest on these positive initiatives over all the educational cycle.

Keywords: Meaning; Mental health; Positive psychology, Well-being

Poster Presentation #39

Portuguese Judges' Perceptions regarding female-perpetrated rape against adult men: a qualitative study

Authors: Eunice Martins do Carmo¹, Daniel dos Santos Cardoso^{2,3}, Nélío Freitas Brazão⁴ & Joana Pereira Carvalho⁵

Affiliations:

¹Faculty of Psychology and Educational Sciences of the University of Porto; Portugal

²CICANT - Universidade Lusófona, Portugal

³FCSH - Universidade Nova de Lisboa, Portugal

⁴University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

⁵William James Center for Research, Department of Education and Psychology, Universidade de Aveiro, Portugal

Abstract

Introduction and Aim: The literature has identified a delay in the recognition of the sexual victimization of adult men by women, which can be explained by social scripts regarding sexual violence (SV), namely male rape myths. The aim of this study was to provide a detailed understanding of the perceptions of Portuguese judges regarding SV committed by women against adult men.

Method: This study consisted of eight interviews with male and female Portuguese judges. Participants were asked to read a vignette describing a sex crime committed by a young woman against a young man. The interview was conducted using a semi-structured guide with questions regarding participants' professional training and experience, their perceptions concerning how the judicial system handles SV cases, and about the vignette. The data were analysed using thematic analysis.

Results: Five main themes emerged from the thematic analysis. Within theme 1 (Case perceptions), participants shared their ideas regarding female-perpetrated SV, considering it realistic but uncommon. Despite having no personal or professional contact with female-perpetrated SV, judges considered the situation in the vignette a crime. Judges reflected on historical and cultural changes, described the influence of circumstantial factors, and reflected on the impact of alcohol consumption on perceptions regarding female-perpetrated SV. Within theme 2 (Gender), participants described gender stereotypes and rape myths, described different perspectives on the danger of SV according to the gender of the perpetrator, highlighted the gender-neutral approach of the Law and made comments on the irrelevance of gender in their perceptions. In theme 3 (Victim), judges reflected on the responsibility of the victim, on his expressions of non-consent, on the possibility of sexual arousal in situations of SV and on the impact of the violence on the victim. Theme 4 (Perpetrator) reflected participants' views on the behaviour of the

offender and on its motivations. Finally, within theme 5 (Justice System), judges reflected on the Justice system, mentioning as challenges the application of consent-based laws and reporting of SV and as opportunities good practice guidelines and training needs.

Conclusion: These findings show that, while identifying gender stereotypes and male rape myths and acknowledging that these could influence decision making, these judges would describe the situation in the vignette as SV and would follow the gender-neutral approach of the Law. These results highlight the importance of providing professional training that allows judicial professionals to challenge gender stereotypes and rape myths, in order to reduce rape-related attrition rates.

Keywords: Judges; Justice System; Male rape myths; Perceptions; Sexual violence

Poster Presentation #40

COVID-19 and Intimate Relationships: Stress perception, Quality of Relationship, Family Functioning and Online Infidelity Behaviors

Authors: Ana Filipa Gouveia¹, Maria Gouveia Pereira² & Alda Patrícia Portugal³

Affiliations:

¹Portuguese Society of Family Therapy, Portugal

²Institute of Applied Psychology, Lisbon; Applied Psychology Research Center Capabilities &Inclusion, Portugal

³University of Madeira, Center for Social Studies of the University of Coimbra, Portugal

Abstract

The world has faced a pandemic crisis caused by the SARS-CoV-2 virus, responsible for the COVID-19 disease. In Portugal, there were several waves of the pandemic, characterized by peaks of infections and deaths, as well as several measures that had an impact on the way people feel and relate to others. The present study aimed to analyze stress during the pandemic and its relationship with family functioning, perceived relational quality and online infidelity behaviors. The sample was composed by 234 subjects (18 to 61 years). Stress was evaluated using the Depression, Anxiety and Stress Scale (DASS-21); family functioning using the Family Adaptability and Cohesion Evaluation Scale (FACES-V); quality of relationship using the Perceived Relationship Quality Components Inventory (PRQCI) and the online infidelity using the Extradynamic Behaviors Inventory (EBI). Results indicate moderate to severe levels of stress, and these were significantly related to online infidelity behaviors. A total of 9.4% of the sample engaged in online infidelity behaviors during the pandemic period (between March 2020 and May 2021) and 12.6% of these behaviors were predicted by the variables under study. Twenty five percent of the sample did not commit online infidelity because they did not have the opportunity. It was concluded that stress and relational quality are risk factors for online infidelity behaviors.

Stress is also related to the dysfunctional dimensions of family functioning. In the aftermath of the pandemic, various aspects of the relationship may have been affected by the levels of stress felt and culminated in online infidelity behaviors and family dysfunction. These findings suggest the importance of relationships as a protective factor against pandemic changes, but also the need to work on relational aspects in times of crisis.

Keywords: COVID-19; stress; relational quality; family functioning; online infidelity

Poster Presentation #41

Visual adaptation and negative hysteresis in cone pathways dominates even in short memory and is abolished by perceptual binding

Authors: Francisca Campos Matias¹, João Miguel Castelhana¹
& Miguel de Sá e Sousa Castelo-Branco

Affiliations:

¹Institute for Nuclear Sciences Applied to Health, Coimbra Institute for Biomedical Imaging and Translational Research, University of Coimbra, Portugal

Abstract

To make perceptual judgements, the human visual system is constantly processing diverse and frequently competing sensory information. This is also true for the color perception domain which is nonlinear, given the competition between distinct perceptual decision mechanisms such as adaptation or visual persistence. Here we studied this problem within the framework of the temporal context and the dependence of perceptual dynamics on visual stimuli trajectories. We took advantage of the phenomenon known as perceptual hysteresis, well-known in the study of physical dynamical systems, and where the two above mentioned mechanisms are also described. The first is persistence, or short-term memory, a cause of positive hysteresis, which forces one to keep a current percept for longer. The second is adaptation or fatigue (a cause of negative hysteresis), which in turn favors the switch to a competing percept early on (leading to negative lags). The goal of this study was to investigate the competition of these temporal context-related mechanisms in color perception in distinct human cone pathways.

We also asked whether high level mechanisms such as memory and perceptual binding influence these mechanisms. To this end we designed a color matching paradigm where we used color changing stimuli in Blue-Green and Green-Red color axes, manipulated in cone space. We used conditions requiring or not holistic perceptual binding (Simple vs Compound, respectively) and with or without the need to use short-term memory. Participants task was to compare the changing color to a target color and press a button

when their color matched. We found that negative hysteresis was present for simple matching (including memory) conditions ($p < 0.001$), showing that adaptation dominates over persistence. The dominance of adaptation however disappeared when the stimulus conditions required binding of local elements into a bound stimulus. These results reveal that ongoing perceptual decision making, is influenced by the trajectory of very recent perceptual experience and depends on whether binding is required or not.

Keywords: Decision making, Hysteresis, Short-term memory, Visual perception, Gestalt

Poster Presentation #42

Low Self-Control Psychopathic Traits Scale: Development and validation study in a university student sample

Authors: Giovana Cordeiro¹, Rita Rodrigues¹, Mário R. Simões² & Pedro Pechorro²

Affiliations:

¹ University of Coimbra, Faculty of Psychology and Educational Sciences

² Center for Research in Neuropsychology and Cognitive and Behavioral Intervention, Faculty of Psychology and Educational Sciences, University of Coimbra

Abstract

Introduction/Objectives: Current investigations in criminology indicate a significant and reciprocal impact of psychopathy and self-control on criminal behavior. Therefore, when analyzing self-control through the General Theory of Crime by Gottfredson and Hirschi and the construct of psychopathy, both present common elements. Within this context, the present study aims to develop the Low Self-Control Psychopathic Traits Scale (LSCPTS), which will include both low self-control and psychopathy constructs, being composed by a four-factor structure characterized by the impulsivity and self-centeredness factors of the Low Self-Control Scale (LSCS), callous and unemotional traits and the antisocial/criminal factor associated with the Conduct Disorder. This scale will be also correlated with a social desirability measurement.

Methods: The protocol includes the following self-report instruments: Dark Factor of Personality Scale (D), Propensity to Morally Disengage Scale (PMDS), Weinberger Adjustment Inventory (WAI), Short Dark Tetrad Scale (SD4), Low Self-Control Scale Short Form (LSCS-SF), Inventory of Callous-Unemotional Traits (ICU), Antisociality/Criminality Scale (ACS), Evaluation of Violence Questionnaire (EVQ), Brief Multidimensional Self-Control Scale (BMSCS), Brief Self-Control Scale (BSCS), Light Triad Scale (LTS), Basic Empathy Scale adapted brief version (BES-A) and Social Desirability Scale (EDS-20). The research intends to utilize a Portuguese students sample consisting of participants over 18 years

old, aiming to maintain a proportion of 10 to 20 participants per item of the analyzed scale using an exploratory and confirmatory factor analysis.

Results: The Low Self-Control Psychopathy Traits Scale (LSCPTS) is expected to present a tetra-factorial structure composed by the impulsivity and self-control factors of the LSCS, callous/unemotional traits and the antisocial/criminal factor associated with Conduct Disorder. Furthermore, subjects with higher results on the LSCPTS factors are also expected to show the same tendency on the D, PMDS, SD4, LSCS, ICU, ACS, EVQ, BMSCS, and BSCS scales. In contrast, these subjects are expected to have lower scores on the LTS and BES-A. Finally, it is anticipated subjects' responses to the LSCPTS factors not to be influenced by Social Desirability.

Conclusions: This investigation aims to highlight LSCPTS good psychometric qualities (e.g., convergent validity) and its viability as a measure of low self-control and psychopathy.

Keywords: Low self-control, Psychopathy, Low Self-Control Psychopathic Traits Scale, Psychometric Validation

Poster Presentation #43

Diurnal type (DT) distribution in a Portuguese sample – Influence of age and sex

Authors: Imke Buekenhout¹, Ana Allen Gomes¹ & José Leitão¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Introduction/Aims: Diurnal type (DT) refers to the individual differences in sleep/wake patterns and in preferred time of activity, and shows a near-Gaussian distribution in a given population, ranging from early to late types. DT is influenced by genetics and undergoes significant changes throughout the lifespan. Sex differences have been reported in some studies. We aimed to generate the first overview of DT distribution in a Portuguese sample representing a broad range of ages, and to assess the influence of age and sex on this distribution.

Method: The sample comprised 2710 participants (12 – 95 years, $M = 37.94$ years, $SD = 20.74$, 55.1% F) who completed the Composite Scale of Morningness (CSM). The frequency distribution of CSM scores was analyzed in the total sample and in different age groups (5-year age bins and an 82+ age bin). To test for the influence of age and sex on DT, regression analyses were conducted within two different subsamples, corresponding

to distinct developmental stages: adolescence (12 – 24 years, $M = 19.01$, $SD = 3.57$, 51.8% F) and adulthood (25 – 95 years, $M = 49.95$, $SD = 17.99$, 57.2% F).

Results: DT was nearly normally distributed within the total sample, with a slight shift towards morningness ($M = 34.03$, $SD = 7.38$). The distribution's mean values were systematically different with age, with DT shifting later with adolescence and earlier from the age of 24 years onwards. In the late 70's, a peak in morningness occurred and was followed by greater eveningness. Variability in DT was found in each age group, and was greatest in the 32 – 36 age group. No sex differences were found in our sample.

Conclusions: We found a near-normal DT distribution in our population sample. The distribution was influenced by age, with increasing eveningness in adolescence and a shift towards morningness thereafter. The shift towards greater eveningness later in life is quite a novel finding, and was hinted at in only a few studies. This might be due to a less robust circadian system in old age, less regular light and social schedules, or higher variability in the midpoint of sleep between individuals.

Keywords: Diurnal type distribution, Age, Sex, Composite Scale of Morningness

Acknowledgements: This work was partially supported by a BIAL Foundation grant (234/14), and the first author by a doctoral scholarship from the Portuguese Foundation for Science and Technology (FCT, PhD grant 135878/2018).

Poster Presentation #44

Study protocol for the RCT of the Mind programme: An ACT intervention in breast cancer

Authors: Trindade, I. A.^{1,2}, Pereira, J.¹, Carreiras, D.¹, Boaventura, P.^{3,4}, Carvalho, S. A.^{1,5}, Castilho, P.¹, Ferreira, N.⁶, Galhardo, A.^{1,7}, Lourenço, Ó.⁸, Martins, T. C.^{1,9,10}, Matos, M.¹, Palmeira, L.^{1,11,12}, de Sousa, B.¹, Teixeira, R. J.^{1,13} & Moreira, H.¹

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

² University of Gothenburg, Department of Molecular and Clinical Medicine, Institute of Medicine, Sahlgrenska Academy, Gothenburg, Sweden

³ University of Porto, Institute of Molecular Pathology and Immunology (IPATIMUP), Porto, Portugal

⁴ University of Porto, Institute for Research and Innovation in Health, Porto, Portugal 5Lusófona University, HEI-Lab: Digital Human-Environment Interaction Lab, School of Psychology and Life Sciences, Lisbon, Portugal

⁶ University of Nicosia, Department of Social Sciences, Cyprus

⁷ Instituto Superior Miguel Torga, Coimbra, Portugal

⁸ University of Coimbra, CeBER, Faculty of Economics, Coimbra, Portugal

⁹ Radiobiology, Department of Medical Physics, Portuguese Institute for Oncology at Coimbra Francisco Gentil, EPE, Coimbra, Portugal

¹⁰University of Coimbra, Centre for Neurosciences and Cell Biology, Coimbra, Portugal

¹¹Portucalense Infante D. Henrique University, Portucalense Institute for Human Development (INPP), Porto, Portugal

¹²Centro Hospitalar e Universitário de Coimbra (CHUC), Clinical Psychology Service (SPC), Coimbra, Portugal

¹³Mental Health Clinic, Porto, Portugal.

Abstract

Introduction: Breast cancer is the most diagnosed cancer in women, comprising several millions of new cases each year worldwide. Both the condition and associated treatments lead to poor physical and psychological functioning. Acceptance and Commitment Therapy (ACT) and compassion-based approaches have been pointed out as promising to achieve these goals in cancer populations. Furthermore, as ACT and compassion-based approaches are complementary and compatible, their integration has received growing interest and presented significant added benefits in several populations with medical conditions. For these reasons, the Mind programme for cancer patients (Trindade et al., 2020) was previously developed through the integration of ACT and compassion components adapted to the needs of a cancer population. A recent pilot study on this intervention showed high acceptability and preliminary efficacy in improving self-reported psychological health in breast cancer patients. The aim of this study is to optimize the Mind programme taking into consideration the results from its pilot study and test its efficacy in a larger trial.

Method and Results: This abstract presents the study protocol of a Randomized Controlled Trial on the efficacy of the Mind programme in improving mental health outcomes and biological markers in women with breast cancer. The superiority of the Mind programme will be compared to a support group intervention through the analysis of changes in depressive symptoms and anxiety severity, cancer-specific quality of life and psychological experiences, and immunological and epigenetics markers related to mental health and breast cancer prognosis. Participants will be recruited at a Radiotherapy Department in Central Portugal at the beginning of radiotherapy treatment. After sample collection, participants will be randomly allocated to one of the two conditions (Mind programme or support group) and will be asked to attend 8 weekly sessions. All participants will be assessed at three different times: prior to the intervention's start, post-intervention, and 6 months after the intervention. A total sample size of 154 participants would provide a power of 80% to determine a significant effect size of $f=0.265$ (10% dropout rate).

Discussion: The Mind programme is expected to empower women with breast cancer by fostering psychological strategies that promote illness adjustment and well-being, and prevent subsequent distress. This study is expected to provide important and robust findings on the value of delivering the Mind programme to women with breast cancer and to advocate for the inclusion of psychological assessment and intervention in the usual healthcare of this condition.

Keywords: ACT; Breast cancer; Compassion; Mind programme; Mindfulness; RCT

Poster Presentation #45

O (des)ajustamento parental face à doença prolongada de um filho: O papel da autocompaixão e do suporte social

Authors: Inês Pinto¹, Cristiana Lameiras¹, Inês Trindade², Joana Marta-Simões²,
Lénia Carvalhais³ & Lara Palmeira^{2,3}

Affiliations:

¹Instituto Superior Miguel Torga (ISMT), Coimbra, Portugal

² University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

³Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique, Porto, Portugal

Abstract

A chronic illness diagnosis in a child is an event that will require some parental adjustment. This adjustment is a complex process that depends on the perception and beliefs that parents develop about the illness. The existent literature emphasizes the protective role of social support in parental adjustment in the face of a chronic illness. On the other hand, self-compassion has been considered as a fundamental resource associated with well-being and resilience. Thus, the main objective of this study is to explore the mediating role of inter and intrapersonal factors (social support and self-compassion) in the relationship between parents' perception of their children's illness and psychopathological symptoms. The sample consisted of 71 mothers of a children up to six years of age with a diagnosis of chronic illness with a mean age of 35.1 ($SD=4.12$). Most children (69,4%) were females, with a mean age of 25.63 months ($SD_{age} = 21.89$) and had a diagnosis of hip dysplasia (86.1%; $n = 62$). Mothers who agreed to participate in this study were asked to respond to a set of self-response questionnaires that assess illness perception, social support, self-compassion and psychopathological symptoms.

Keywords: Chronic Disease, Illness Perception, Self-Compassion, Social support, Mediating analysis

Poster Presentation #47

Institutional Ageism Perception in Health and Social Contexts Scale (PIICS): Portuguese Validation Studies

Authors: Inês Branco¹, Luís Miguel Pires² & Rosa Marina Afonso¹

Affiliations:

¹Faculdade de Ciências Sociais e Humanas da Universidade da Beira Interior, Departamento de Psicologia e Educação

²Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra, Portugal

Abstract

Introduction: Allied to the aging of the population, it has been detected the presence of ageism, stereotypes and discrimination towards older adults in various contexts. Ageism might be manifested at a micro level (individual practice), meso (mass media) or macro (institutions) and it can be performed in a conscious or unconscious way. This study, focus on institutional ageism, in contexts of health and social care and aims to assert the psychometric properties of a perceived institutional ageism scale with professionals who work directly in care of this population.

Method: Professionals who work with older adults ($N=240$; 223 women), from 21 to 65 years old ($M=37.97$ years old; $DP=11.72$) replied to the protocol of evaluation of the present study. The Perceived Institutional Ageism in Health Care Context (PIICS) scale is made of 18 items, which describe ageist situations, for which the professional should select an option, which they considered to correspond to the frequency with which this situation occurred. The PIICS scale emerged from the EVE discrimination questionnaire (EVE-D), developed in Spain (Casado et al., 2016), and previously studied in Portugal (Ferreira et al., 2022). Reliability, confirmatory factorial analysis (CFA) and correlational analysis between PIICS scores and variables related to institutional ageism were performed.

Results: The results showed good psychometric properties of the PIICS scale with an excellent internal consistency, considering the total score ($\alpha=.918$; $\omega=.906$), and acceptable to good values, for each one of the three scale domains. As for the construct validity of the scale, it was found support, with CFA, for a 3-related factors model in the PIICS: Factor 1) "Perceived Direct Discrimination", Factor 2), "Perceived Indirect Discrimination" and Factor 3) "Perceived Discriminatory Communication". Large correlations ($r >.653$, $p <.001$) were obtained between these 3 factors and the scale's total score. Lastly, the analysis of correlations between the total and the scale domains with other variables seems to highlight the importance of scholarship, profession, specific training about aging and planning of aging for the perception of institutional ageism frequency, with significant, weak to moderate correlations.

Conclusions: The PIICS scale thus presents itself as a good solution for the evaluation of institutional ageism with professionals who work directly in the care of older adults. Institutional ageism evaluation can be an important first step towards the development of interventions that aim to diminish ageist practices in health and social care contexts.

Keywords: Ageism; Institutional Ageism; Older Adults; Care delivery; Psychometrics

Poster Presentation #48

On hemispheric specialization: a systematic review and meta-analysis of orbitofrontal activity during social games cooperation

Authors: Inês Alexandra Almeida¹, Isabela Benício Chedid² & Elmer Jorge Carlos²

Affiliations:

¹Faculdade de Medicina FMUC, Instituto de Ciências Nucleares Aplicadas à Saúde ICNAS, Centro de Imagem Biomédica e Investigação Translacional CIBIT, Portugal

²Faculdade de Ciência e Tecnologia FCTUC, Universidade de Coimbra, Portugal

Abstract

The orbitofrontal cortex (OFC) is a core region involved in value-based decision-making. Nevertheless, its exact core function has been a source of debate. Recent proposals point to its centrality in the creation of a cognitive map of the task environment in order to predict behavioural outcomes such as value. Functional differences of OFC have been assigned in terms of its subdivisions, medial and lateral. However, several studies in both vertebrates and invertebrates have shown that some brain functions are lateralized, i.e. brain regions and circuits are preferentially involved in different functions in the right and left part of the brain. This hemispheric asymmetry seems to bring advantages such as the increase of cognitive capacity and segregation of neural processing. Although these advantages only require lateralization at the individual level, lateralization at the population level is widely observed raising the question about what drives direction of lateralization. A hypothesis is that population level asymmetries can arise when coordination of behaviour among asymmetrical individuals is required. Importantly, some evidence of asymmetrical OFC responses to reward exists. Work in humans and non-human primates suggests this could reflect underlying hemispherical differences in OFC functional connectivity. Likewise, there is evidence for specialization of the right hemisphere in evaluation and response during social situations. Nevertheless, no clear segregation of functions within left and right OFC subregions have been systematized, in particular considering type of tasks. Recent hyperscanning studies show the participation of OFC in cooperative responses during social games with real partners, suggesting the importance of alignment of brain responses for the emergence of synergies (cooperation). Here, we consider that social games involving cooperation vs competition can provide an adequate context to test the existence

of OFC lateralization at the population level. For this, we will systematically review and analyze the previous literature in reward/value-based decision-making applied to social tasks and dilemmas to answer if there is accumulated evidence of OFC lateralization and if particular features of the experimental design (environmental context) can explain an hypothesized lateralization. We will follow the PRISMA statement for studies selection, using data from included studies as input to a neuroimaging meta-analysis. The results are thought to inform if OFC subregions activation is lateralized during reward-based decision-making tasks with a social cooperation component. The work aims to contribute towards the understanding of hemispheric asymmetries at the population level, focusing the OFC and social games in which coordination of behaviour is required.

Keywords: Systematic review, Neuroimaging meta-analysis, Hemispheric asymmetry, Orbitofrontal cortex, Cooperation

Poster Presentation #49

Association between risk factors, protective factors and suicidal behaviors in patients with severe mental disorder.

Authors: Inmaculada Aragonés Barberá¹, Adoración Reyes Moliner Albero¹ & Carmen Moret-Tatay¹

Affiliations:

¹Universidad Católica de Valencia, España

Abstract

Introduction: Suicide is a major public health problem. In this way, Psychiatric pathology has been identified as one of the most important risk factors related to suicidal behavior. Despite the existence of a large body of research that have analyzed suicide risk factors in severe mental disorder, some controversial results have been reported.

Aims: Analyze the relationship between factors such as disease awareness, the level of personal self-stigma, perceived load and frustrated belonging, "engagement", social functioning, symptomatology, quality of life, meaning of life, and the risk of suicidal behavior in patients with severe mental disorder. Profiles and the variables that best predicted them were also analyzed in this population.

Method. Twenty-seven patients with mental health disorder participated in the study. Sociodemographic (age, sex, marital status, educational level and living unit) and clinical data (diagnosis, symptomatology, illness awareness "Insight", years of illness evolution, years of attendance to a rehabilitation resource and risk of suicidal behavior) was collected. Subsequently, self-stigma, frustrated belonging and perceived burden, participation in meaningful activities, engagement, social functioning, quality of life and meaning of

life, were assessed. The criteria for the selection of the sample were to meet the criteria for severe mental disorder, to have been previously diagnosed and referred by their referring physician (psychiatrist) from the Mental Health Unit to the Rehabilitation and Social Integration Center (CRIS) and to be between 18 and 65 years.

This study was approved by the Ethics Committee of the Catholic University of Valencia.

Descriptive analyses were carried out to describe the clinical and sociodemographic characteristics of the sample. We also performed correlation analyses to explore the relationships between the study variables. Secondly, a cluster analysis was performed on the variables involved in the definition of the user profile. This analysis allows us to include both continuous and categorical variables. This was performed using the maximum likelihood test and examining the cluster size ratio.

Keywords: Severe mental disorder, Suicidal risk

Poster Presentation #50

Validation Study of the Reading the Mind in the Eyes Test and Ekman's Faces Test in a sample of patients with Multiple Sclerosis: preliminary results

Authors: Irina Santos¹, Marisa Lima², Rita Machado², Lúvia Sousa², Isabel Santana^{2,3} & Sónia Batista^{2,3}

Affiliations:

¹Centro de Neurociências e Biologia Celular (CNC), Universidade de Coimbra, Portugal.

²Serviço de Neurologia, Centro Hospitalar e Universitário de Coimbra, Portugal.

³Faculdade de Medicina, Universidade de Coimbra, Portugal.

Abstract

Introduction: Cognitive dysfunction in multiple sclerosis (MS) is characterized by a multidomain deficit involving memory, attention, processing speed and executive functions. Recently, there has been an increased interest in the study of social cognition in MS, with one of the central aspects being the Theory of the Mind (ToM), referring to the ability to infer about the mental state and content of another person. The Reading the Mind in the Eyes Test (RMET) and the Ekman's Faces Test (EFT) allows to assess ToM, more specifically the ability to recognize and understand distinct facial expressions and emotions.

Objective: The aim of this study was the preliminary validation of the RMET and EFT in patients with MS, through the analysis of the psychometric properties and diagnostic acuity of the tests, aiming at the establishment of cutoff points in the future.

Methods: 60 participants (10 controls and 50 MS patients) were included. Patients were diagnosed according to the most recent international diagnostic criteria. The diagnostic acuity of the tests was evaluated by the analysis of ROC (Receiver Operating Characteristics) curves. For each of the indexes, the cut-off points providing the highest Youden value were selected, representing a maximization of sensitivity and specificity.

Results: The total score in both tests differed only for the EFT ($p<.005$; RMET: $p=.107$). For EFT, an AUC=.780 (95% IC=.599-.961), $p=.005$, was obtained. The sensitivity and specificity values of the EFT were calculated, obtaining, respectively, 94% and 60%. The test revealed a diagnostic acuity of 78% for patients with MS.

Conclusions: RMET did not allow to distinguish MS patients from controls. The EFT showed excellent sensitivity values, but weak specificity. A larger sample of healthy controls and MS patients will be required to allow for the establishment of cut-off points that are of great use in both clinical and investigative practice.

Keywords: Social Cognition, Multiple Sclerosis

Poster Presentation #51

The Role of Cognitive Reserve in Moderating the Cognitive Effects of Chemotherapy in Breast Cancer

Authors: Isabel Manica¹, Raquel Lemos^{2,3}, Berta Sousa⁴, Maria Vânia Silva Nunes^{1,5}, Fátima Cardoso⁴ & Albino Oliveira-Maia^{2,6}

Affiliations:

¹Instituto Ciências da Saúde, Universidade Católica Portuguesa, Portugal

²Champalimaud Foundation, Champalimaud Research & Clinical Centre, Lisbon, Portugal

3ISPA – Instituto Universitário de Ciências Psicológicas, Sociais e da Vida, Lisbon, Portugal

⁴Champalimaud Foundation, Champalimaud Clinical Centre, Breast Unit, Lisbon, Portugal

⁵Centro de Investigação Interdisciplinar em Saúde (CIIS), Lisbon, Portugal

⁶NOVA Medical School, NMS, Universidade Nova de Lisboa, Lisbon, Portugal

Abstract

Introduction/Goals: The effect of cancer treatments on cognition has been a matter of scientific debate for several years. Early identification of risk/protective factors that may interact with this cognitive impact could lead to a better quality of life during and after oncological treatments. Cognitive reserve is known in the neurodegenerative context as a moderating factor between brain pathology and its clinical manifestations. Although already studied in the oncological context, there is no record that a more comprehensive assessment model for Cognitive Reserve has been used. CRIq is a socio-behavioral questionnaire that estimates an individual's level of cognitive reserve by collecting information

related to their adult life. The main objective of this work is to assess the differences in cognitive functioning, through the neuropsychological performance, before treatment and six months after its beginning, as well as to understand the role of cognitive reserve as a moderator factor of the possible changes.

Methodology/Results: Thirty-two women diagnosed with early breast cancer and indicated for chemotherapy treatment were recruited. Results showed a significant relationship between cognitive reserve and cognitive functioning before starting chemotherapy, but this effect was not seen at six months. There were no cognitive changes between the two moments; however, there was an improvement in performance in three cognitive measures at six months compared to the first assessment. Other cognitive reserve factors may interact with cognitive functioning than those assessed in the CRIq, and practice effects may have been involved in the cognitive performance improvement.

Keywords: Cognitive Reserve, Breast Cancer, Chemotherapy, Cognition, CRCI

Poster Presentation #52

Emerging adults' subjective experience of self-esteem: Interviews with a demographically diverse sample

Authors: Ivanilda Benedito da Costa¹, Patrícia M. Pascoal² & Sérgio A. Carvalho³

Affiliations:

¹Universidade Lusófona - Centro Universitário do Porto, Faculdade de Psicologia, Educação e Desporto

²Universidade Lusófona - Centro Universitário de Lisboa, Escola de Psicologia e Ciências da Vida

³Universidade de Coimbra, Faculdade de Psicologia e de Ciências da Educação

Abstract

Introduction/Objectives: Low self-esteem (LSE) has been associated with a variety of negative outcomes (e.g., anxiety, depressive symptoms, unemployment). Studies suggest LSE can be exacerbated by certain life events, such as developmental milestones associated with transitioning to different social contexts (i.e., university, first employment). Emerging adults (18 – 25 years old) may be at a higher risk for emotional difficulties because of their developmental tasks. CBT interventions stemming from Fennell's cognitive model for LSE is effective in reducing LSE, anxiety and depressive symptoms in samples of adults and adolescents. However, most of the studies do not consider many of the participants' sociodemographic characteristics that might operate as vulnerability factors for LSE. For example, studies suggest that individuals from racial/ethnic minority groups, as well as sexual and gender minority individuals, are at a higher risk of developing LSE, namely due to minority stress. However, CBT interventions for LSE have neglected to incorporate them as targeted processes. In order to develop culturally sensitive CBT interventions

that target the specificities of different ethnic/racial, sexual and gender populations, it is crucial to explore the subjective experience and perception of influencing factors of LSE in ethnic/racial, sexual and gender-diverse samples of emerging adults. In this study, we aimed to explore Portuguese emerging adults' perception of LSE, including emerging adults from ethnic/racial, sexual and gender minorities, through semi-structured individual online interviews.

Methods: The study will be conducted in a convenience sample of Portuguese emerging adults aged 18-29 years, recruited from social media, academic associations, and associations for ethnic/racial, sexual and gender minority people. Semi-structured interviews will be developed online, and we will use reflexive thematic analysis (Braun and Clarke, 2022) to analyse interviews' transcriptions.

Expected results: We expect to find information regarding emerging adults' perceptions of LSE to expand the knowledge of this phenomenon, including the perceptions of minorities, and thus inform further culturally sensitive CBT interventions for LSE.

Conclusion: This research intends to bring new knowledge about the perceptions of LSE from emerging adults, through an intersectional view of LSE by considering individuals' ethnic/racial, sexual and gender identities.

Keywords: Low self-esteem; Emerging adults; Intersectional; Thematic analysis

Poster Presentation #53

Write 'n' Let Go 2.0: Improving university students' distress through an internet-based writing intervention.

Authors: Janine C. Marinai¹, João Batista¹ & Miguel M. Gonçalves¹

Affiliations:

¹Centro de Investigação em Psicologia (CIPsi), Escola de Psicologia, Universidade do Minho

Abstract

Introduction/Objectives: Promoting mental health among the Portuguese academic population is unquestionably relevant, given the high prevalence of students diagnosed with mental disorders, a situation exacerbated by the Covid-19 pandemic. Writing-based interventions have been studied in psychology for the past 30 years with varied populations, including university students. The self-directed and accessible nature of writing interventions has the potential to increase reach and awareness of the importance of mental health. Despite many successes in improving psychological health variables, it is still unclear which factors explain its efficacy and the underlying psychological mechanisms promoting changes. This project aims to test the efficacy of an internet-based combined

writing intervention to improve students' rumination and psychological distress. Ambivalence towards change will be studied as a mediator of intervention outcomes.

Method: The program consists of 20-minute writing sessions on 4 consecutive days related to a problem or difficult life situation identified by each participant. Write'n'Let Go web application will be used for data collection, guiding participants through the entire program workflow, which includes enrolment, screening, online consent signature, completing the questionnaires, and performing the writing tasks. The application randomly allocates participants among 3 groups (expressive writing, combined writing or waiting list). Ambivalence, rumination, and psychological distress are collected at pre-test, immediately after each writing session (or wait days for controls), at 1-week post-test and 2-week follow-up.

Results: Significant reductions are expected in psychological distress and rumination from pre-test to follow-up in the writing groups compared to the waiting list. Ambivalence is expected to mediate these reductions.

Conclusions: Write 'n' Let Go seeks to address relevant questions in the literature (e.g., processes of change) and may contribute to addressing university students' life difficulties with a preventive framework, by decreasing both distress and rumination.

Keywords: School engagement, Student engagement, Elementary school, Systematic map review

Poster Presentation #54

Childhood adversities, family context and poly victimization in an adult Brazilian sample

Authors: Jaqueline Portella Giordani¹, Carolina Palmeiro Lima¹, Bruna Wendt², Clarissa Marcelli¹ & Clarissa Marcelli Trentini¹

Affiliations:

¹UFRGS, Brazil

²IENH/UFRGS, Brazil

Abstract

In Brazil, data indicate a high prevalence of different adversities in the first period of life - childhood and adolescence. This research seeks to understand how human development took place in these conditions and how the experience of adult survivors of adversities occurred during the first 18 years of life. Despite the abundance of research on childhood adversity, most studies focus only on one type of adversity or one kind of mental health outcome. The authors emphasize the importance of understanding childhood adversities in both a specific way and their co-occurrence to understand factors that are contributing to the overall mental health outcome and long-term quality of life. Childhood adversities

investigated include violence, neglect, violence witnessed, and other relevant events that are prejudiced to human development. This study was a retrospective research that aimed to investigate the occurrence of childhood adversity and poly victimization, the association between different forms of adverse experiences, and its relationship with family configuration and social support networks. 598 participants aged 18-59 years ($MD = 30.38$; $SD = 10.18$), 78.3% women, answered a sociodemographic questionnaire and the Maltreatment and Abuse Exposure Scale (MAES). Only 11.7% of the sample reported not experienced any type of childhood adversity, and the group that indicated high exposure to adversities had a worse perception of childhood social support networks. Parental emotional neglect and emotional abuse by peers were the most reported adversities, being present in the trajectory of almost half of the sample. The results also indicated that the different adversities are, in large part, highly correlated. This means that being a victim of a form of violence or negligence increases the chance of being more exposed to other forms of adverse experiences. The family configuration was not associated with early adverse experiences. Both contextual risk and psychological abuse seem to be important in cases of poly victimization. The developmental context, concerning parents or other guardians, seemed important in cases of alcohol abuse, drug use, parental prison incarceration, or witnessing interparental violence. Any of these adverse contexts were associated with the experience of a higher number of different types of adversities. Correlation between the different adversities and a family context of risk, which seems important for the cases of poly victimization, are discussed. Discovering which moderators can reduce the effect of these adversities can lead to the development of intervention actions and policies that promote healthy development, even in adverse conditions.

Keywords: Childhood adversities; Family; Social support; Poly victimization

Poster Presentation #55

Mentoring Support Educational Policy: What predicts its success?

Authors: Jennifer Cunha¹, Juliana Martins¹, Sara Miranda¹ & Pedro Rosário¹

Affiliations:

¹Escola de Psicologia, Universidade do Minho

Abstract

In 2016, the Portuguese Ministry of Education published an educational policy focused on providing mentoring support to students. The target was students older than 12 years old with at least two school retentions. Despite several studies focused on the implementation of mentoring support programs, their impact, and variables associated with their effectiveness, the assessment of mentoring support is scarce in Portugal. Considering this scenario, the present research aimed to increase our knowledge about the mentoring support

provided within the scope of the educational policy by analyzing the mentor's variables (i.e., quality of the mentoring relationship, mentor's self-efficacy, affective commitment, and the prior experience of the mentor) that predict its benefits perceived by mentors. One hundred and forty teachers with specific training to be mentors participated in the study. Data was collected using an online form. A multiple linear regression model was run and showed that only two variables predicted (i.e., relationship quality and self-efficacy) the perceived benefits of the mentoring support provided to students experiencing school failure. Unexpectedly, prior experience and affective commitment are insufficient to the success of the mentoring support provided in schools. This result highlights the need to rethink current practices in selecting teachers to be mentors.

Keywords: Affective commitment; Mentoring; Mentor's prior experience; Mentor's Self-efficacy; Relationship quality.

Poster Presentation #56

The psychological impact, among Portuguese adults, of the COVID-19 pandemic during the first confinement

Authors: Jéssica Catarina Duarte¹ & Ana Paula Matos¹

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

The beginning of 2020 was marked by the appearance of the disease COVID-19, caused by a new type of Coronavirus, Sars-CoV2. In order to deal with the evolution of the COVID-19 pandemic, the Portuguese government decreed confinement for 3 months. The literature has pointed to quarantine and periods of social isolation as risk factors for the development of psychological distress. In this study, we aim to analyze the emotional impact of the first confinement and some psychological tools that can help cope with a pandemic. The sample consists of 1539 Portuguese adults aged between 18 and 79 years ($M = 35.83$; $SD = 14.531$), 77.8% ($n = 1197$) female, and 22.2% male ($n = 342$). Sample collection was carried out online. Participants completed the Pandemic and Me scale (Matos et al., 2021) which assesses the level of positive (e.g., happiness) and negative (e.g., sadness, anger) emotionality and personal resources (e.g., compassion, sense of humor) before the pandemic and during the first confinement. The study found that, among Portuguese adults, there was a significant increase in negative emotions, such as sadness, fear, and anger. In contrast, there was a decrease in positive emotions, such as happiness and gratitude. A decrease in some psychological resources was also observed. This includes confidence in oneself and in others, the ability to focus on the present

moment, competence to take care of oneself, and compassion towards others. As a result, it is imperative to develop and implement interventions and preventive measures tailored to the Portuguese population's needs to deal with the psychological suffering caused by COVID-19. Taking into account the results obtained, it is pertinent to develop emotion regulation strategies such as mindfulness and compassion to deal with negative emotions.

Keywords: COVID-19 pandemic, Mental health, Adults, Lockdown

Poster Presentation #57

Age as a predictor of Working Memory Performance

Authors: Beatriz Magalhães Gonçalves¹, Joana Isabel Oliveira¹ & Pedro Filipe Rodrigues²

Affiliations:

¹Universidade Portucalense Infante D. Henrique, Portugal

²Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique, Portugal.

Abstract

Introduction: Working memory is a retention of a small amount of information in an easily accessible way, it is essential in the execution of numerous daily tasks. Existing literature has shown that working memory declines with adult age. Digit Span Test (DST) is often used in clinical practice to assess working memory.

Objectives: The present study was conducted to assess individuals' working memory and its relation with age. We examined if there are differences in working memory between the age groups (Group 1: 18-29 YO; Group 2: 30-59 YO; Group 3: 60+ YO). Further we analyzed if those differences would remain when controlling de effects of state-anxiety. Moreover, we intended to assess if age is predictive of working memory performance.

Methods: We collected a sample of 39 participants ($M = 41.67$, $DP = 20.52$). To assess state-anxiety we used the Self-Evaluation Questionnaire (STAI-Y2). To assess the working memory, we used the Digit Span Test in forward and backward order.

Results: The results of the one-way analysis of variance showed statistically significant differences in the scores between the age groups in the forward order, Group 1 performed better on the task than Groups 2 and 3, also, Group 2 performed better than Group 3. The covariance analyses demonstrated that the effect of age in the individuals' performance remained when controlling for the effect of state-anxiety. The regression analyses revealed that age is a statistically significant predictor of performance in the backward order.

Conclusions: This study supports the existing literature that emphasizes age as a predictor of working memory performance. We concluded that as age increases, performance in

working memory decreases. Pointedly, aging is associated with deterioration of working memory capacities and psychological flexibility.

Keywords: Working Memory; Digit Span Test; Aging; State-Anxiety

Poster Presentation #58

Adaptation and validation of the Female Sexual Subjectivity Inventory (FSSI) in a Sample of the Portuguese Population

Authors: Joana Pereira Martins¹ & Cátia Margarida Oliveira^{1,2}

Affiliations:

¹Faculty of Psychology, University Lusófona of Porto, Portugal

²CPUP, Porto University, Portugal

Abstract

Introduction/Objective: To assess sexual subjectivity, more precisely women's sexual self-perceptions about bodily pleasure and the experience of being sexually active, Horne and Zimmer-Gembeck (2006) created the Female Sexual Subjectivity Inventory (FSSI). The aim of the present study is to adapt, validate, and explore the psychometric properties of this instrument in a sample of Portuguese women.

Methods: The sample was collected online, with the participation of 206 Portuguese women over 18 years old, who completed a set of self-response measures.

Results: Confirmatory factor analysis revealed a 5-factor structure, like the structure of the original questionnaire. The internal consistency was good, with Cronbach's alpha values varying between .70 and .80. The Intraclass Correlation Coefficient indicated that there is moderate reliability (ICC = .68). The presence of convergent and divergent validity was verified through association tests. The right to self-pleasure, the right to a pleasure partner, and sexual self-reflection were positively correlated with sexual self-focus ($r_s = .17$; $r_s = .21$; $r_s = .18$, respectively) and body self-esteem and sexual self-efficacy had a negative correlation with sexual embarrassment ($r_s = -.29$; $r_s = -.24$, respectively). Body self-esteem, the right to self-pleasure, the right to a pleasure partner and sexual self-efficacy were found to be positively correlated with body appreciation ($r_s = .67$; $r_s = .15$; $r_s = .14$; $r_s = .22$, respectively) and negatively correlated with sexual anxiety ($r_s = -.29$; $r_s = -.53$; $r_s = -.31$; $r_s = -.39$, respectively).

Conclusions: The results obtained indicated that the FSSI is an adequate instrument to assess the sexual subjectivity of Portuguese women, and this version revealed, in general, good psychometric properties. It is hoped that this study will contribute to a better

intervention in the area of sexual health, namely in terms of sexual education, and the treatment of sexual dysfunctions.

Keywords: Female sexual subjectivity inventory, Validation, Reliability, Sexual subjectivity, Portuguese women

Poster Presentation #59

Sexual Attraction and Self-Efficacy in Women with Sexual Pain

Authors: Joana Portela¹ & Cátia Oliveira^{1,2}

Affiliations:

¹Faculdade de Psicologia Educação e Desporto, ULP, Portugal

²CPUP, Universidade do Porto, Portugal

Abstract

Genito-Pelvic Pain Disorder/Penetration affects about 45.4% of women and its origin may be associated with multiple biopsychosocial factors. However, it is still not understood how attraction to the partner can influence the intensity of sexual pain in women, and how it enhances the avoidance of penetrative sexual relations and maintains relational and individual difficulties.

In this context, the present study aimed to explore and understand the relationship between sexual attraction and self-efficacy in female sexual pain, and its impact on functioning, sexual satisfaction, and pain intensity, analyzing the differences between women with sexual pain and women of the general population.

The study was carried out in an online format. A total of 300 Portuguese women over 18 years of age participated in the study: 222 women from the general population and 78 women with sexual pain.

The results demonstrate significant differences between the two groups. It was possible to observe that women with sexual pain showed lower levels of self-efficacy ($p < .001$) and attraction ($p = .031$), as well as in the dimensions of desire ($p < .001$), arousal ($p < .001$) and sexual satisfaction ($p < .001$), and higher levels in lubrication ($p < .001$), pain ($p < .001$) and vaginismus ($p < .001$), compared to women in the general population. Of the women who experienced sexual pain, attraction ($p = .269$) and sexual self-efficacy ($p = .745$) did not predict pain intensity. Although, self-efficacy ($p < .001$) (interpersonal interest-desire/orgasm) was observed to be a significant predictor of sexual functioning and satisfaction.

With these results, we try to contribute to the demystification of the taboo around sexuality, provide greater literacy about sexual dysfunctions, and raise awareness of the lack

of support and information about this theme. The results are also meant to contribute and help future investigations, favoring the development of more individualized and specialized assessment and intervention models for sexual pain.

Keywords: Sexuality, sexual dysfunctions, Female sexual pain, Sexual functioning, Attraction, Sexual self-efficacy

Acknowledgments: Would like to thank Universidade Lusófona do Porto for providing the necessary resources for the development of this study. I would also like to thank all the participants for availability and trust.

Poster Presentation #60

Comparing Full-body Interaction with Tablet-based Cognitive Training: feasibility, acceptability and impact assessment in psychiatric inpatients

Authors: Joana Câmara^{1,2}, Luís Ferreira², Ana Lúcia Faria^{2,4}, Manuela Vilar¹
& Sergi Bermúdez i Badia^{2,3}

Affiliations:

¹Faculdade de Psicologia e de Ciências da Educação, Universidade de Coimbra

²NOVA Laboratory for Computer Science and Informatics, Universidade da Madeira

³Faculdade de Ciências Exatas e Engenharia, Universidade da Madeira

⁴Escola Superior de Saúde, Universidade da Madeira

Abstract

Introduction: There is limited but encouraging evidence on the efficacy of technology-based simultaneous cognitive training (CT) and physical activity (PA) in clinical and non-clinical populations. The aim of this study was twofold: (a) primarily to assess the feasibility and acceptability of two training approaches – full-body interaction cognitive training (FBI-CT) and tablet-based CT (T-CT) – inspired by instrumental activities of daily living in chronic psychiatric inpatients; and (b) secondarily, to explore their preliminary impact on cognitive and noncognitive outcome measures.

Methods: In this single-blind pilot randomized controlled trial, twenty psychiatric inpatients were randomly assigned to the FBI-CT group ($n=10$) or the T-CT group ($n=10$). The 14-session computerized CT programs consisted of several tasks based on IADLs (e.g., planning a meal, paying for groceries shopping, remembering to take medication). Groups were exposed to the same computerized CT program, but its implementation varied between them – full-body interaction versus tablet. Participants were submitted to neuropsychological assessment at three different time points: baseline (one-week prior to the intervention), post-intervention (after six weeks) and follow-up (three months).

At post-intervention, feasibility was assessed by considering retention rates and session attendance, and acceptability through a satisfaction questionnaire.

Results: Regarding feasibility, both groups showed high completion rates at post-intervention and follow-up. Satisfaction-wise, participants in the FBI-CT reported slightly higher satisfaction levels. In terms of the interventions' effects, at post-intervention, a within-group analysis revealed improvements in the FBI-CT group for processing speed and sustained attention for short periods, verbal memory, semantic fluency, depressive symptomatology, and quality of life. At three-month follow-up, this group maintained verbal memory gains and depressive symptoms amelioration. Concerning the T-CT group, participants exhibited significant improvements in sustained attention for long periods, verbal memory and executive functions. At three-month follow-up, a between-group analysis demonstrated that the FBI-CT group showed greater improvements in depressive symptomatology.

Conclusions: In summary, we found support for the feasibility and acceptability of the two training approaches. FBI-CT and T-CT were associated with different cognitive and noncognitive positive effects; however, these effects did not transfer to ADLs. Due to the pilot nature of this study, it is not yet possible to conclude which training approach is more beneficial. Nonetheless, these preliminary results are promising and will inform subsequent future effectiveness research in this field.

Keywords: Computerized cognitive training; Full-body interaction; Tablet-based interaction; Instrumental activities of daily living; Psychiatric disorders

Acknowledgments: We would like to thank the participants and Casa de Saúde Câmara Pestana for collaborating with us in this study.

Poster Presentation #61

Firefighters through a Mental Health Perspective - from Prevention to Intervention

Authors: Oliveira, J.^{1,3*}, Aires Dias, J.^{1*}, Duarte, I. C.¹, Caldeira, S.², Reis Marques, A.⁴, Rodrigues, V.³, Redondo, J.^{2#} & Castelo-Branco, M.^{1,3#}

*these authors shared co-first authorship for this work

#these authors shared equal seniorship for this work

Affiliations:

¹Coimbra Institute for Biomedical Imaging and Translational Research (CIBIT) /Institute of Nuclear Sciences Applied to Health (ICNAS), University of Coimbra, Coimbra, Portugal

²Centre for Prevention and Treatment of Psychological Trauma (CPTTP), Department of Psychiatry, Coimbra University Hospital Centre (CHUC), Portugal

³Faculty of Medicine (FMUC), University of Coimbra, Portugal

⁴Psychiatrist, Coimbra, Portugal

Abstract

Introduction: Daily, firefighters are exposed to adverse and uncertain events, and deal with cumulative challenging situations, which require immediate actions. This can lead to chronic stress and potentially traumatic experiences. Understanding the idiosyncrasies of these workers is crucial to program earlier interventions and develop timely clinical responses.

Objectives: The purpose of this work was to characterize a sample of firefighters from the Central region of Portugal, to evaluate the psychological impact of continuous exposure to stressful incidents, and to analyze the role of the cumulative adversity. We also aimed at raising awareness to the mental health of firefighters, and implementing a prevention/intervention approach, by following a public health framework, and minimizing the negative impact and major consequences on firefighters' lives, as early as possible.

Methods: 229 firefighters from corporations of the District of Coimbra participated in the study. We used Questionário Sociodemográfico e da Atividade do Bombeiro (Lopes et al.,2016), the Brief Symptom Inventory (BSI; Derogatis,1982; Pt version: Canavarro,1999), and the PTSD Checklist for DSM-5 (PCL-5; Weathers et al.,2013; Pt version: Ferreira et al.,2016) to evaluate sociodemography, psychopathology and post-traumatic stress.

Results: The sample's mean age was 34.1 years-old ($SD = 9.5$), and was predominantly male (66.8%), in active firefighting service for a mean of 12.8 years ($SD=9.3$). 13.5% ($n=207$) presented indicators of psychopathology, while 5.8% ($n=139$) exceeded the threshold of 31 for PCL-5 and 10 participants were flagged for PTSD symptomatology, following DSM-5 criteria (APA,2013). This percentage of PTSD is similar in national (e.g., Marcelino & Gonçalves,2012) and international (e.g., Langtry et al.,2021) studies.

Conclusions: Our study contributes to the field by characterizing a large sample of firefighters, in a particular social setting, rendering comparison with other samples interesting. Furthermore, this allows to fulfil the project's preventive nature by enabling a targeted approach to promote firefighters' well-being in their work, personal, and family life. Aid was made available at CPTTP, to the proportion of firefighters who presented, or were at risk of developing, PTSD or psychopathological symptomatology. Future studies might provide further information on the role of the identified variables on mental health.

Keywords: Firefighters; Mental health; Prevention; Clinical interventions.

Acknowledgments: We would like to thank the Federation of Firefighters of Coimbra, who facilitated the prosecution of this study, and to all the firefighters/headships from corporations who collaborated. We additionally thank the authors of self-report instruments, who provided the materials, and the Ordem dos Médicos Portugueses (Centre Regional Office), with data entry.

Poster Presentation #62

School Engagement Conceptualizations, Definitions and Dimensions: A Systematic Map Review

Authors: Juliana Martins¹, Jennifer Cunha¹ & Pedro Rosário¹

Affiliations:

¹Escola de Psicologia, Universidade do Minho, Portugal

Abstract

Students' disengagement in school activities could lead to further problems such as involvement in disruptive behaviors, loss of interest in studying, low achievement, and increased risk of early school dropout. Extant research highlights the role of school engagement as a protective factor against various academic problems found throughout schooling. However, we can find several conceptualizations, definitions, and dimensions of school engagement in the literature. Therefore, the current systematic map review aims to outline the investigations regarding school engagement without time restrictions. Given that it is important to intervene as soon as possible, the present study is focused on the elementary school level. Concretely, we aim to learn the engagement conceptualizations, definitions, and dimensions examined in the research targeting elementary students. The systematic search of original articles published up to 2018 was conducted in three databases (Web of Science, Scopus, ERIC). The research followed the PRISMA statement and Cochrane's guidelines. A total of 102 articles were included in the review. Findings showed that researchers had grounded their works on different school engagement conceptualizations. Distinct terms were used to approach the school engagement construct, and distinct definitions for the same construct or dimension were found. This diversity has translated into the use of several definitions and engagement dimensions, every so often inconsistent. The inconsistency and variability found in the school engagement conceptualizations, definitions, and dimensions used in the included articles were analyzed and discussed. Finally, implications for practice and research were also provided.

Keywords: School engagement, Student engagement, Elementary school, Systematic map review

Poster Presentation #63

The Clinical Interview for Bipolar Disorder (CIBD): Expert panel evaluation

Authors: Julieta Azevedo^{1,2,3}, Diogo Carreiras², Maria João Martins^{1,2,4}, Paula Castilho², Célia Carvalho Barreto⁵, Ana Telma Pereira^{1,6} & António Macedo^{1,6}

Affiliations:

¹ University of Coimbra, Institute of Psychological Medicine, Faculty of Medicine, University of Coimbra, Coimbra, Portugal;

² University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal;

³ School of Human and Behavioural Sciences, Bangor University, United Kingdom

⁴ University of Coimbra Medical Services, Portugal

⁵ Psychology, University of Azores, Ponta Delgada, Portugal

⁶ Coimbra Institute for Biomedical Imaging and Translational Research (CIBIT), Portugal

Abstract

Introduction: Bipolar disorder (BD) is often underdiagnosed, and current assessment instruments are considered insufficient to detect intervention changes and to provide a more functional and integrated view of the disorder. Thus, the Clinical Interview for Bipolar Disorder (CIBD) was developed, by a multidisciplinary team, based on DSM-5 criteria to diagnose BD and related disorders and provide further functionality assessment.

Objectives: This study aimed to submit CIBD, a new DSM-5-based semi-structured interview, to an expert panel in mental health.

Method: An expert panel comprised of 19 mental health professionals with experience in BD was constituted to assess the interview, with a mean of 12.26 ($SD=8.28$) years of experience. Nine were psychiatrists (47.4%), eight were psychologists (42.1%), and two were other mental health professionals (11.5%). The experts were asked to analyse and evaluate the interview's structure in terms of: (a) usefulness, (b) clarity and (c) completeness; and to evaluate the main sections in terms of: (a) relevance, (b) clarity and (c) completeness. All questions were rated on a 5-point Likert scale (1=not at all; 5=completely). Participants were instructed to write suggestions or comments whenever they felt appropriate or if they scored an item below 3.

Results: All sections (major depression episode, hypomanic/maniac episode, cyclothymic disorder, other specified bipolar and related disorders and alcohol and substance abuse) and structure were rated above 90% of the highest possible score across the different structural and content elements. Suggestions were given regarding clarification of some questions and navigation across the interview.

Conclusions: The CIBD seems to be a reliable and sound interview to assess BD and related disorders, contributing with a measure of assessment that looks at functionality and empowerment on top of the diagnosis, which represents a change towards recovery in the mental health field.

Keywords: Assessment; CIBD; Clinical Interview; Bipolar disorder

Poster Presentation #64

Acceptability and preferences regarding cognitive rehabilitation programs for cancer-related cognitive impairment in breast cancer survivors

Authors: Liliana Loureiro¹, Ana Filipa Oliveira², Ana Bárto^{2,3}, Helena Sousa², Joana Costa¹, Mariana Ramalhe¹, Ana Torres^{1,2,4} & Isabel M. Santos⁵

Affiliations:

¹Department of Education and Psychology, University of Aveiro, Aveiro, Portugal

²Center for Health Technology and Services Research of the Health Research Network (CINTESIS@RISE), Department of Education and Psychology, University of Aveiro, Aveiro, Portugal

³Piaget Institute – ISEIT/Viseu, Viseu, Portugal

⁴Department of Psychology and Education, Faculty of Human and Social Sciences, University of Beira Interior, Covilhã, Portugal

⁵William James Center for Research (WJCR), Department of Education and Psychology, University of Aveiro, Aveiro, Portugal

Abstract

Introduction/ Objective: Breast cancer survivors (BCS) frequently experience cancer-related cognitive impairment (CRCI), which has a negative impact on their quality of life. Studies indicate that cognitive rehabilitation is effective at improving CRCI. However, the literature is scarce on the perspectives of this population towards these interventions. Thus, this study aimed to explore acceptability and preferences regarding cognitive rehabilitation programs for BCS reporting cognitive complaints.

Method: Eighty-six women diagnosed with breast cancer (Mage = 48.7 years, SD=7.7 years; range: 31-63 years), who experienced self-reported cognitive complaints, were recruited through social networks. Participants were asked to answer an online survey with questions about sociodemographic and clinical information, pre-existing knowledge about CRCI, access to support to cope with CRCI, barriers and facilitators to participate in cognitive rehabilitation programs, and acceptability, expectations, and preferences regarding cognitive rehabilitation programs.

Results: Thirty-nine percent of BCS considered having “none” (7.3%) or “little” (31.7%) knowledge about CRCI. Most participants (90.1%) reported that they “do not receive or have never received” support to deal with cognitive difficulties, mainly because they had not heard about the existence of such programs and/or received information on how to enroll in them (79.5%). For the remaining BCS (9.9%), psychological counseling was the main supportive intervention to help cope with CRCI. “Doing something to help yourself” (62.8%) and “help to better deal with cognitive complaints” (61.5%) were identified as the main motivators for enrolling in a cognitive rehabilitation program. Considering the barriers to participating in these programs, “difficulty in finding a program/not knowing where to find help” (44.9%) and “lack of information regarding support for CRCI” (33.3%) were referred as main factors. Among several treatment options for CRCI (e.g., cognitive rehabilitation, exercise, meditation, pharmacotherapy, psychological counseling), 53.6% of participants considered cognitive rehabilitation acceptable. Regarding preferences about the characteristics of these programs, 37.1% preferred a longer program (more than 12 sessions), being held weekly (51.6%), with sessions lasting between 30 and 60 minutes (66.1%). Considering the format of these interventions, BCS preferred a face-to-face group format guided by a professional. Participation in cognitive rehabilitation programs would be “very likely” if suggested by health professionals (medical oncologist or nurse = 66.1%; general practitioner = 55.7%).

Conclusions: Findings from this study support the acceptability of BCS regarding cognitive rehabilitation programs and provide information of utmost importance to inform health professionals and researchers in developing meaningful interventions to increase adherence to these programs.

Keywords: Breast cancer survivors; Cancer-related cognitive impairment; Cognitive rehabilitation; Acceptability; Preferences

Poster Presentation #65

Depression and Life satisfaction: The mediating role of repetitive negative thinking, brooding and reflection

Authors: Maria Manuela Peixoto¹ & Olga Cunha¹

Affiliations:

¹Hei-lab Universidade Lusófona do Porto, Portugal

Abstract

Introduction and Aim: Life satisfaction is negatively impaired by depressive symptomatology. Repetitive negative thinking is a transdiagnostic dimension involved in the maintenance of emotional disturbances, which includes persistent and intrusive negative

thoughts and is found in depressed individuals. Moreover, ruminative thoughts, including brooding and reflection thoughts, which can be conceptualized as a type of repetitive negative thinking, are core features of depression. The current study aims to examine the role of repetitive negative thinking (i.e., persistent and intrusive negative thoughts) and ruminative responses (i.e., brooding and reflection) as mediator variables in predicting depression on life satisfaction.

Methods: An online sample of 432 Portuguese adults ($n = 219$ women; 50.7%) completed the Satisfaction with Life Scale, the Persistent and Intrusive Negative Thoughts Scale, the Ruminative Response Scale-10, Depression, and the Anxiety and Stress Scale-21. Pearson correlation coefficients were obtained and mediation analysis was conducted using Model 4 from PROCESS (Macro 3.5.2 for IBM SPSS software; Hayes, 2018) with bootstrapping confidence intervals.

Results: Results showed positive and statistically significant correlations between repetitive negative thinking, brooding, reflection and depressive symptomatology, and negative and statistically significant correlations between life satisfaction and all other variables. The current results suggest that repetitive negative thinking (i.e., persistent and negative intrusive thoughts) was a significant mediator variable for the predictive role of depression on life satisfaction, over and above the mediating role of brooding and reflection. The mediation model explained 30.8% of the variance in life satisfaction, and repetitive negative thinking mediated over 54.6% of the total effect of depressive symptomatology on life satisfaction in a sample of Portuguese adults, after controlling for gender, with a moderate to large effect.

Conclusion: Overall, the current findings highlight the key role of repetitive negative thinking in the relationship between depressive symptomatology and life satisfaction. They suggest that broader transdiagnostic processes such as repetitive negative thinking should be assessed and represent a psychotherapeutic target for promoting life satisfaction and subjective well-being in depressed adults compared with specific depressive ruminative responses.

Keywords: Repetitive negative thinking; Brooding; Reflection; Depression; Life satisfaction

Poster Presentation #66

Mental health at university: Assessing needs, preferences, and adequacy of an internet-based Unified Protocol intervention

Authors: Maria Inês Caçador¹, Marco Daniel Pereira¹ & Maria Cristina Canavarro¹

Affiliations:

¹University of Coimbra, Center for Research in Neuropsychology and Cognitive-Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Portugal

Abstract

Introduction/Aims: Transition to college is a major life event involving multiple new challenges. Difficulties in coping with these challenges may increase the risk for students to develop anxious/depressive symptoms or mental disorders, which prevalence rates have been increasing. Nevertheless, evidence suggests that only a minority of college students receive adequate professional help, which is particularly alarming given that non-intervening in their psychopathological symptoms and/or emotional disorders may have extremely adverse effects at individual and academic levels. Recently, there has been a growing interest in transdiagnostic mechanisms (e.g., neuroticism) and their association with higher anxious and/or depressive symptoms in college students. However, this association has not yet been studied consistently and exclusively in students transitioning to college. These students also report high anxiety in evaluation situations and numerous barriers to use mental health treatment. The Unified Protocol (UP) is a promising approach for emotional disorders (as well as anxious/depressive symptoms) and internet-based interventions are potentially more appealing to students. Accordingly, two studies will be conducted. The first study aims to characterize the students' mental health during transition to college and analyse the transdiagnostic mechanisms and psychological skills underlying the risk for anxious and/or depressive symptoms, including test anxiety. The second study aims to assess these students' mental health needs and preferences, as well as the adequacy of an internet-based UP intervention.

Methods: The first study will be conducted in a sample of students transitioning to college who will complete self-report measures assessing anxious/depressive symptoms, test anxiety, transdiagnostic mechanisms and psychological skills. The second study will be conducted using three focal groups, each one with 6-8 college students, to assess mental health needs and preferences, as well as the adequacy of an internet-based UP intervention.

Expected Results: In the first study, students' anxious and/or depressive symptoms are expected to be significantly associated with transdiagnostic mechanisms (positively) and psychological skills (negatively). In the second study, we expect that students report their specific mental health needs and preferences (e.g., in different academic situations, such as tests/exams). Both studies may inform the development/adaptation of the internet-based UP intervention.

Conclusions. These results will be crucial to develop a more flexible, feasible, sustainable, and potentially more effective evidence-based intervention for students during transition to college.

Keywords: Anxious symptoms, Depressive symptoms, Transition to college, Internet-based intervention, Unified protocol

Acknowledgments: The Portuguese Foundation for Science and Technology supports this work (2022.12059.BD).

Poster Presentation #67

Health Professional Communication Skills Scale (HP-CSS): Psychometric properties of the European Portuguese version

Authors: Maria Coelho¹, Marco Pereira^{1,2} & Cláudia Melo^{2,3}

Affiliations:

¹University of Coimbra, Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

²University of Coimbra, Center for Research in Neuropsychology and Cognitive-Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal.

³Unit of Cognitive-Behavioral Clinical Psychology (UPC3), University of Coimbra

Abstract

Introduction/Aim: Effective doctor-patient communication is characterized by a patient-centered communication with the main objective of meeting patient needs. It has been recognized as essential in health care, showing a positive impact on patients, doctors, and health institutions. Despite the relevance of doctor's communication skills in doctor-patient communication, existing literature suggests that these are insufficient. However, these studies have limitations and gaps to be considered and, particularly in Portugal, the lack of a measure to assess doctors communication skills is noteworthy. Thus, the objective of this study was to present the preliminary psychometric properties of the European Portuguese version of the Health Professionals Communication Skills Scale (HP-CSS), a brief self-report measure designed to assess the communication skills of health professionals from their perspective.

Methods: The sample of this cross-sectional web-based study comprised 166 Portuguese doctors from different specialties, with a mean age of 32 years ($SD = 8.48$). The study protocol comprised the HP-CSS and self-reported measures assessing empathy (Jefferson Scale Physician Empathy, JSPE), patients role orientations (Patient-Professional Orientation Scale, PPOS) and burnout (Maslach Burnout Inventory – Human Services Survey, MBI-HSS).

Results: The Portuguese version of the HP-CSS presented acceptable values of reliability and validity. The HP-CSS showed good internal consistency indicators for the total scale ($\alpha = .84$). Nevertheless, the dimensions Respect and Social Skills should be analyzed with some caution as the Cronbach's α was below .60. Regarding construct validity, the confirmatory factor analysis corroborated the original four-factor model ($CFI = .90$), despite some modifications were needed to improve the model's fit. Two items (16 and 18) were considered particularly problematic and would benefit of further analyses. Regarding convergent validity, positive and statistically significant correlations were found with other relevant measures of empathy, patients role orientations and burnout.

Conclusions: The preliminary psychometric studies of the HP-CSS provide some evidence of reliability and validity and reinforce the added value of its availability in Portugal, for using both in clinical and research contexts.

Keywords: Doctor-patient communication; Communication skills; Health Professionals Communication Skills Scale; Psychometric properties.

Poster Presentation #68

Protocol of the validation of the FCR7 for Portuguese Adolescents and Young Adults with Cancer

Authors: Maria Carolina Neves¹, Sara Monteiro^{2,3}, Judith B. Prins⁴, Eunice Silva^{5,6}, Diana R. Pereira⁷ & Célia M. D. Sales¹

Affiliations:

¹Center for Psychology at University of Porto, Faculty of Psychology and Education Sciences, University of Porto, Portugal

²CINTESIS@RISE, Department of Education and Psychology, University of Aveiro, Portugal

³Department of Social Sciences and Management, Universidade Aberta, Portugal

⁴Department of Medical Psychology, Radboud University Medical Centre, Netherland

⁵Psychology Service, Portuguese Oncology Institute of Porto, Portugal

⁶Research Centre of IPO Porto/RISE@CI-IPOP, Portuguese Oncology Institute of Porto/Porto Comprehensive Cancer Centre, Portugal

⁷Human Cognition Lab, CIPsi, School of Psychology, University of Minho, Portugal

Abstract

Fear of cancer recurrence (FCR) can reach high levels among 13-62% of adolescents and young adults (AYA) with cancer, negatively affecting their lives. High FCR among these AYAs has been associated with high anxiety and depression, and with lower social and physical functioning and overall quality of life. However, there is no measure validated for AYAs with cancer to evaluate their FCR in Portugal or internationally. Thus, this study aims to validate the FCR7 scale for the Portuguese population of AYAs with cancer.

For this validation study, we intend to focus on AYAs between the ages of 15-25 years at cancer diagnosis, to ensure their developmental challenges are more alike. Before the data collection, a pilot study was conducted to assess face validity. Changes will potentially be made accordingly to the feedback received during the pilot study. Recruitment will occur online, with the questionnaire being disseminated by associations and people with social media platforms with a focus on people with cancer. The scale's concurrent and divergent validity will be evaluated using the Hospital Anxiety and Depression Scale and the Quality of Life Core-30, respectively. For test-retest reliability assessment, a second evaluation moment will be realized by participants that consent to be contacted again

by the research team. This second assessment will take place four weeks after the initial assessment.

It is expected that the results show that the Portuguese version of the scale maintains its unidimensionality. Very good internal consistency and concurrent and divergent validity are also anticipated, considering the results shown by the original scale and a translated version. Test-retest reliability is expected to be good.

This study will, hopefully, show that the FCR7 is an adequate scale to assess FCR levels among Portuguese AYAs. Health professionals and researchers will have a new measure that they can use with AYAs to help identify AYAs that may experience high FCR levels and need additional support.

Keywords: Fear of cancer recurrence; Adolescents and young adults; Cancer; Validation; Reliability

Poster Presentation #69

Intuitive biomechanics: What people know about how their bodies can move

Authors: Artur Pilacinski^{1,2} & Maria Gabriella Andrietta²

Affiliations:

¹Klaes Lab, Ruhr-University Bochum, Bochum, Germany

²Proaction Lab, University of Coimbra, Coimbra, Portugal

Abstract

Place your hand on the table in front of you. Looking at it, do you know how much you can rotate your wrist left or right? Do you know how far out you can open your fingers? Try to measure how accurate you were. Our motor system cannot have such dilemmas. Hand movements have to be fast and precise, taking into account movement ranges, the size of the hand and configurations of the hand joints. Yet, previous research showed that human perception of the size and location of fingers and other parts of the hand is heavily distorted. Does it mean that human conscious access to how our bodies move is similarly distorted? Here we performed the first ever study on human conscious knowledge about body movements. We focused on hand movements as those are most precise and important for humans. We show that human perception of specific hand rotations is inherently biased and does not reflect precision with which humans execute hand movements. Surprisingly, we found that the offset between estimated and real rotation ranges closely mimicked values reported in studies on motor learning, indicating human knowledge about body movements may reflect conscious processes of action monitoring.

Keywords: Biomechanics, Awareness, Movement Perception

Poster Presentation #70

Thinking Eyes - an EEG study on the link between eye movements and memory

Authors: Artur Pilacinski^{1,2}, Maria João Matos² & Gabriel Besson²

Affiliations:

¹Klaes Lab Ruhr-University Bochum

²PROACTION Lab, University of Coimbra

Abstract

What is the biggest country in Africa? How many plants do you have in your flat? You probably noticed that when trying to answer those questions your eyes move. There is a clear link between eye movements and memory, as where we look influences our memory and our memory influences where we look. It was recently proposed that we use the navigational computations to organize non-spatial domains, among them, declarative memory. PPC plays an integrative part in peripersonal space navigation, memory, and eye-movements, and could be the connecting module between the three systems. Moreover, studies focus either on the link between eye movements and memory or on the link between memory and navigation systems. To the best of our knowledge, this is the first study trying to integrate the three. We studied non-visual eye movements (NEMs) in verbal long-term memory retrieval, and how mental search through verbal long term memory system is translated into NEMs. For that end, we employed behavioral and electrophysiological data to study NEMs in three dimensions: performance, NEMs rate, and event-related potentials (ERPs).

We combined EEG and eye-tracking simultaneously. We employed a 40 questions task (questions from WAIS-III information, similarities, and comprehension subtests) to see if the structure of search through the memory system (structured or non-structured) would be reflected in differences in the rate of eye movements for the retrieval of verbal information from LTM. More precisely, if eye movements would vary according to the type of search in LTM and level of abstractness. We also applied and a simple pro- followed by an anti-saccade task, in which participants had two small circles interlayered by a fixation cross and they were instructed to either look toward the blinking circle (pro) or avert the gaze, looking to the other circle (anti). We further asked whether restricting gaze during memory retrieval would impair performance.

We expect that 1. NEMs while retrieving information from LTM are accompanied by PPC activity preceding saccades, like regular saccades; 2. restricting gaze impairs memory recall. Behaviorally, 3. NEMs rate is higher for open compared to structured questions (because of more memory search needed), and the more abstract the concepts retrieved,

the less frequent saccades, but more blinks and larger pupil diameter, as these two serve as an index of mental effort.

Keywords: Eye-movements; Long term memory; EEG; Eye-tracking; Cognitive maps

Poster Presentation #71

Body dysmorphia: Does the effect of cognitive fusion overpower body appreciation?

Authors: Maria Coimbra¹ & Cláudia Ferreira¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Purpose: Body Dysmorphic Disorder is a serious condition, associated with psychological distress and impaired quality of life, characterized by an obsession with a perceived defect that is rarely observable to others or appears as a minimal flaw. Research has highlighted the role that cognitive fusion can have in the development of psychopathology, but despite this, little is known about the relationship between cognitive fusion and body dysmorphia symptomatology. Body appreciation can be defined as an attitude of acceptance and care for one's body, even when acknowledging characteristics that the individual sees as negative or as flaws, and can also be seen as a protective mechanism against body image-related difficulties. Therefore, it would be expected that an individual with higher levels of body appreciation would present higher levels of body dysmorphia symptomatology. Hence, this study aimed to test the moderation effect of cognitive fusion on the relationship between body appreciation and body dysmorphia symptomatology, while controlling for the effect of age.

Methods: The study's sample comprised 404 individuals from the general population, with an age range between 18 and 62 years old. All participants completed an online survey which included several self-report measures.

Results: Correlation analysis showed that body appreciation had a significant negative and moderate association with cognitive fusion and body dysmorphia, and that cognitive fusion and body dysmorphia had a significant and strong correlation. The final model presented excellent model fit indices, and revealed that cognitive fusion moderated the effect of body appreciation on body dysmorphia symptomatology. This model accounted for 40% of the variance of body dysmorphia symptomatology.

Conclusions: Findings confirm the important role of cognitive fusion and suggest that the development of intervention programmes for Body Dysmorphia may benefit from therapies that specifically target cognitive fusion (such as ACT). Indeed, regardless of having higher levels of body appreciation - an attitude of care, love, and respect for one's body - cognitive fusion still presents an overpowering effect in relation to body dysmorphia.

Keywords: Body dysmorphia; Cognitive fusion; Body appreciation; Body image

Poster Presentation #72

Fatigue phenotypes in cancer and noncancer Portuguese populations

Authors: Maria Inês Clara^{1,2}, Maria Cristina Canavarro^{1,2}, Ana Severina³, Susana Ramos³, Carla Rafael³ & Ana Allen Gomes^{1,2}

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

²Faculty of Psychology and Educational Sciences, University of Coimbra, Coimbra, Portugal

³Cancer Center, Centro Hospitalar do Médio Tejo (CHMT), Torres Novas, Portugal

Abstract

Introduction: Fatigue is a multidimensional experience, as it manifests through a multiplicity of constellations of behavioral, somatic, emotional, and cognitive symptoms; and a multifactorial phenomenon, influenced by the complex interaction of demographic, medical, psychosocial, and biological aspects. Identifying consistent correlates of fatigue has been challenging, despite its prevalence and distressing effects. To reduce fatigue-induced burden, we must understand its trajectory and correlates and determine the best ways to prevent and treat it. Considering the complexity of fatigue, we aimed to 1) analyze fatigue patterns in cancer and non-cancer cohorts of the Portuguese population; 2) profile biopsychosocial factors that might help explain the variability of fatigue in people with and without a history of cancer to identify factors that may signalize vulnerable individuals and targets for intervention.

Methods: We analyzed fatigue, psychological distress, clinical status, sociodemographic and sleepiness indicators of 389 participants (68.38% women): 148 cancer patients undergoing active cancer treatment, 55 post-treatment cancer survivors, 75 patients with other chronic disease, and 111 healthy controls, with a mean age of 59.14 ± 11.60 years.

Results: Patients undergoing active cancer treatment reported significant higher levels of emotional fatigue [$F(3,385) = 21.20, p < .001, \eta^2 = .14$], general fatigue [$F(3, 385) = 58.87, p < .001, \eta^2 = .31$] and physical fatigue [$F(3,385) = 53.22, p < .001, \eta^2 = .29$]; as well as less vigor [$F(3,385) = 21.2, p < .001, \eta^2 = .14$]. Chronic disease patients reported higher levels of fatigue in all its dimensions when compared to healthy participants; but did not differ

significantly from cancer survivors (although the latter group exhibited significantly less vigor). Fatigue was expressed distinctively in patients with a previous history of cancer (predominantly general) and in participants without a history of cancer (predominantly emotional). Psychological distress was the best predictor of fatigue in participants with ($\beta=.62, t=11.41, p<.001$) and without ($\beta=.71, t=19.28, p<.001$) a history of cancer. Daytime sleepiness also made a significant, albeit smaller, contribution to the prediction of fatigue in cancer ($\beta=.17, t=2.27, p=.02$) and non-cancer populations ($\beta=.27, t=5.76, p<.001$).

Conclusions: Psychological distress and daytime sleepiness appear to be transdiagnostic factors associated with fatigue that should be promptly managed. The identical pattern in the array of fatigue manifestations among cancer patients and survivors, differentiated from fatigue experienced by non-cancer individuals, suggests cancer-related fatigue has a unique expression. Cancer-related fatigue should be promptly screened and treated for patients at all stages, including survivors who may be dealing with prolonged states of fatigue.

Keywords: Chronic disease, Psychological distress, Fatigue, Neoplasms, Risk factors

Acknowledgements: MIC was supported by a doctoral grant from the Portuguese Foundation for Science and Technology (2020.05728.BD). The authors are thankful to CHMT and to all patients.

Poster Presentation #73

The role of work-related interests and values in the construction of career identity in adolescence

Authors: Mariana Felício¹

Affiliations:

¹FPCEUC, Portugal

Abstract

Currently, one of the factors that determines most of the lives of individuals is the career, which should have the responsibility of providing an opportunity to demonstrate individual talent and help to achieve self-fulfilment.

The existence of a positive career development takes into account several concepts and multiple theoretical contributions. However, there is very few research on this topic in childhood and adolescence, and it is at this stage that development focuses on issues related to career and work. Adequate preparation for a career can have many implications in the lives of individuals, in the sense that it can bring well-being and positive future work experiences. So it is important to take into account variables such as values related to work, vocational interests and career identity, that reveal themselves as a great contribute to the involvement of young people in healthy career paths.

This study intends to constitute an exploratory analysis to validate a scale of work values, as well as to understand the relationship between these and the vocational interests and perceived competences and their impact on the dimensions of career identity.

The sample was composed by 369 students from the 3rd cycle (7th, 8th and 9th grades). A sociodemographic questionnaire was used to collect information on sociodemographic variables relevant to the study, the Portuguese version of the ICA-R to assess interests, the Portuguese version of the Dimensions of Identity Development Scale to assess the dimensions of career identity, and the Hirschi value scale to assess work-related values.

Using multivariate statistical procedures, the formulated hypotheses were tested. The results indicate that Hirschi's scale of values is not a good scale to measure for the Portuguese population in this age group, having presented very low levels of internal consistency. It was also demonstrated that values have a statistically significant positive relationship with career identity's dimensions.

It is important for adolescents to realize that there are different reasons for working and for choosing a particular career. As such, psychologists must assume a role of great relevance in conducting an integrated perspective of personal and social development, helping individuals to thrive a set of social and emotional skills, associated with the dimensions of self-knowledge (for example, interests and values) to deal with current challenges, adopting holistic and integrative strategies that articulate formal learning contexts and non-formal with the construction of their life and career projects.

Keywords: Career identity; Work values; Interests

Poster Presentation #74

A Validation Study of the Female Sexual Distress Scale Revised (FSDS-R) in the Portuguese Population

Authors: Micaela Alves Ribeiro¹ & Cátia Margarida Oliveira²

Affiliations:

¹Faculdade de Psicologia, Educação e Desporto, ULP; Portugal

²Faculdade de Psicologia, Educação e Desporto, ULP; CPUP, Universidade do Porto; Portugal

Abstract

Introduction/Objectives: Currently, sexual distress is considered an important variable and one of the essential criteria for the assessment of female sexual dysfunction (FSD) (Santos-Iglesias et al., 2018), which contributes to its development and maintenance (Frost & Donovan, 2018). The present study aimed to adapt and validate the Female Sexual Dis-

tress Scale-Revised (Derogatis et al., 2008) in a sample of Portuguese women. Method: A sample of 567 participants, aged between 18 and 68 years ($M = 30.99$), with and without sexual problems, was collected. Participants completed a range of online questionnaires, specifically: General Introductory Questionnaire (Oliveira et al., 2011); Female Sexual Distress Scale-Revised (FSDS-R; Derogatis et al., 2008), Female Sexual Functioning Index (FSFI; Rosen et al., 2000) and Golombok Rust Sexual Satisfaction Inventory (GRISS; Rust & Golombok, 1986), respectively. Results: The results of the confirmatory factor analysis (CFA) indicated that the Portuguese version of the FSDS-R assesses the domain of sexual distress, supporting the factorial validity of the scale. The FSDS-R demonstrated high levels of internal consistency (through Cronbach's Alpha) and moderate test-retest reliability, for a period of 1 month. High levels of sexual distress were associated with lower sexual functioning ($rs = -.54, p < .001$) as well as lower sexual satisfaction ($rs = .51, p < .001$). No association was found between sexual distress and participants' age ($p = .309$). However, the FSDS-R was able to discriminate between women with and without sexual distress ($p < .001$). Conclusion: The FSDS-R has good psychometric properties for the Portuguese female population, like the original validation study, as well as the validations carried out in different countries. It thus proves to be a useful tool for understanding the causes and processes involved in the sexual difficulties of Portuguese women.

Keywords: Female Sexual Distress Scale-Revised (FSDS-R); Adaptation and Validation; Portuguese Version; Female Sexual Dysfunction; Sexual Distress.

Acknowledgments: I would like to thank Universidade Lusófona do Porto, for providing the necessary conditions to carry out this research, confident for my personal and professional growth. I address a special thanks to all the women who participated in this study, contributing to the evolution of knowledge on the subject of sexuality in Portugal.

Poster Presentation #75

Confirmatory Factor Analysis of the Portuguese Version of the Mindfulness in Teaching Scale

Authors: Miguel Barata Gonçalves¹, Luís Miguel Pires¹, Carlos Fernando Carona¹, Carlos Alexandre Damas², Daniela da Costa Coimbra³, Margarida Pedroso de Lima¹ & Albertina Lima de Oliveira¹

Affiliations:

¹Faculdade de Psicologia e Ciências da Educação da Universidade de Coimbra, Portugal

²Departamento de Música da Universidade de Évora, Portugal

³Escola Superior de Música e das Artes do Espetáculo do Porto, Portugal

Abstract

Background and objectives: Research on mindfulness-based interventions for teachers is showing a positive outcome on teachers' well-being. The assessment of teachers' mindfulness is an important step for evaluating the efficacy of these interventions. The Mindfulness in Teaching Scale (MTS) has recently been developed to assess teachers' mindfulness in the school context. This scale has been validated in different countries, such as Spain and Korea. Overall findings support that MTS is a valid and reliable measurement tool.

Although there are several self-report measures to assess the construct of mindfulness in Portuguese, they are not designed specifically to measure teachers' mindfulness within the school context. Therefore, the present study aimed to adapt the MTS for the Portuguese population (MTS-PT) and examine its psychometric properties.

Methods: Participants in this study were teachers working in Portugal ($n = 863$), 82.4% were female, mean age of 50,1 years ($SD = 7.8$, range = 22 to 67 years), and a mean of 24.8 years teaching ($SD = 8.87$). All individuals completed online surveys with the following measures: Mindfulness in Teaching Scale, Satisfaction with Teachers' Professional Life, Mindful Attention and Awareness Scale, Positive and Negative Affect Schedule along with a sociodemographic questionnaire.

Results: As expected for concurrent validity, mindfulness in teaching correlated negatively with negative affect, and positively with dispositional mindfulness, positive affect, and job satisfaction. Scale reliability was estimated by computing both Cronbach's α and McDonald's ω , and inter-item correlation, providing adequate internal consistency. Results from Confirmatory Factor Analysis (CFA) revealed very good fit indices for the original two-factor model, with significant factor loadings for the items, ranging from .35 (item 13) to .62 (item 6), except for item 12, with a factor loading of .08.

Conclusions: The MTS-PT demonstrated adequate psychometric properties. As with the original scale, our findings provide evidence for a distinction between teachers' intrapersonal and interpersonal mindfulness measures. CFA indicates that item 12 does not reach the minimum criteria to be kept in the MTS-PT model. Although our study indicates a solution with 13 items, research on the Portuguese version with all its 14 items is recommended, until more evidence of this finding. We expect this research brings more visibility and spread the use of Escala de Mindfulness no Ensino in the assessment of mindfulness in teaching, in Portugal.

Keywords: Mindfulness in Teaching, Confirmatory Factor Analysis, Reliability, Construct Validity, Education

Poster Presentation #76

Spatiotemporal neural dynamics of motor manipulation, function, and visual properties in visual tool processing

Authors: Miguel António Baião^{1,2}, Jon Walbrin^{1,2}, Gabriel Alexandre Besson^{1,2} & Jorge Manuel Almeida^{1,2}

Affiliations:

¹Proaction Laboratory, Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Tools (manipulable objects) assume a central role in virtually all human activities. The complex use of tools is a behavioural characteristic that to a large extent differentiates humans from all other animal species. Although the use of tools seems automatic and effortless, it involves performing complex sequences of coordinated actions, requiring intricate cognitive processes. To date though, how the brain is able to prepare these coordinated actions rapidly and accurately just from seeing a tool still remains largely unknown.

In order to overcome the current limitations in neuroimaging techniques, Cichy et al. (2014, 2016, 2019) introduced an approach based on representational similarity analysis that blends functional Magnetic Resonance Imaging's (fMRI) spatial information with electroencephalography's (EEG) temporal information. Here, for the first time, we applied this fMRI-EEG fusion (EFF) approach specifically to tools. Moreover, after characterizing the 80 everyday tools used in this study along three specific types of properties (i.e., motor manipulation, function, and visual), we further related these variables to the fMRI and EEG neural data. EFF allowed us to determine the timepoints at which dorsal visual stream (superior and inferior parietal lobules; ventral premotor cortex; V7) and ventral visual stream (posterior-middle temporal gyrus; medial fusiform gyrus; V3) areas are differentially associated with each of these variables of the tools. In sum, we obtained a temporal picture of the brain areas correspondingly associated with the motor manipulation, function, and visual properties of tools.

Keywords: fMRI-EEG Fusion; Spatiotemporal Neural Dynamics; Motor Manipulation; Function; Visual Perception

Poster Presentation #77

Impaired brain responses in hippocampus and memory systems in type 2 diabetes without cognitive impairment

Authors: Nádia Isabel Canário¹, Joana Crisóstomo Silva¹, João Valente Duarte¹, Isabel Catarina Duarte¹, Carolina Moreno², Mário Jorge Ribeiro¹, Francisco Paulo Oliveira³ & Miguel de Sá de Castelo-Branco¹

Affiliations:

¹Institute for Nuclear Sciences Applied to Health, Coimbra Institute for Biomedical Imaging and Translational Research, University of Coimbra, Portugal, Faculty of Medicine, University of Coimbra, Portugal

²Faculty of Medicine, University of Coimbra, Portugal, Department of Endocrinology, Centro Hospitalar e Universitário de Coimbra, Portugal

³Champalimaud Research, Champalimaud Foundation, Lisbon, Portugal

Abstract

Introduction: Type 2 diabetes is a metabolic disease with known impact on neural integrity and cognition. Understanding episodic memory impairments and their neural correlates is of great importance given the known association between memory deficits and dementia, namely of Alzheimer's type which has also been linked with diabetes.

Objectives: We aim to explore blood oxygen level dependent (BOLD) related differences in hippocampus in a sample with T2DM compared to non-diabetic controls, during performance of an episodic memory task, using an event related design. Importantly, BOLD was assessed by means of a direct estimation of participants' hemodynamic response function to account for changes in neurovascular coupling. Whole brain analyses focusing on episodic memory circuitry were also performed. **Methods:** Functional magnetic resonance imaging was used to compare brain activity between 17 type 2 diabetes patients and 17 non-diabetic controls, in bilateral hippocampus, ruling out vascular differences by directing calculating the hemodynamic response function. Participants were screened for mild cognitive impairment and all performed both encoding and retrieval tasks in the scan. We applied a random effects multistudy general linear model analysis, within a hippocampus mask, in order to obtain a statistical map from all participants' BOLD response to the memory paradigm. A further two-factor ANOVA was carried out to obtain BOLD differences between type 2 diabetic participants and controls. We further computed a between-group analysis of grey matter fraction in both right and left hippocampus' masks, in order to explore if possible brain functional differences between groups could be explained by regional atrophy. **Results and Discussion:** We found between-group differences in brain activity during the encoding task in both right and left hippocampus, showing a hypoactivation for patients in anterior hippocampus and a hyperactivation in the posterior hippocampus. Whole-brain analysis revealed, for both encoding and retrieval tasks, a between-group differences in virtually all regions of the

Papez memory circuit. No differences in grey matter fraction in hippocampus, nor an association between brain activation and grey matter fraction were found in this region. We suggest that type 2 diabetes without MCI is accompanied by preclinical alterations in brain regions underlying episodic memory.

Keywords: Type 2 diabetes, Memory, Hippocampus, fMRI

Poster Presentation #78

KindMap – an e-mental health intervention for people facing infertility: A feasibility study protocol

Authors: Naír Carolino^{1,2}, Ana Galhardo^{1,2}, José Pinto-Gouveia¹ & Marina Cunha^{1,2}

Affiliations:

¹ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

²Instituto Superior Miguel Torga, Portugal

Abstract

Introduction/Aim: Infertility is a medical condition impacting millions of people of reproductive age worldwide, and its consequences extend to emotional, relational, and social life domains and may result in long-term mental-health impairments. The KindMap is an e-mental health intervention comprising mindfulness, Acceptance and Commitment Therapy, and compassion components, and designed for people facing infertility. The KindMap derived from the Mindfulness-Based Program for Infertility (MBPI) - in-person psychological group intervention. Adapting the MBPI to a cost-free, self-guided web-app will increase accessibility, but it remains unknown if feasible. The current study aims to report the protocol for evaluating the KindMap feasibility.

Methods: A two-arm 1:1 non-blinded feasibility Randomized Controlled Trial will be conducted. Fertility patients will be recruited through APFertilidade and Fertility Europe (patients' associations). Inclusion criteria: a) age 18-45; b) being at any stage of the fertility journey; and c) Internet access. Exclusion criteria: a) currently undergoing any form of psychological intervention; and b) pregnancy. Consenting participants will be randomly allocated to the experimental group (immediate access to KindMap-EG-KindMap) and the waiting-list control group (access to KindMap after T2-WL-CG). At pre- (T1) and post-intervention (T2), participants will complete online a set of standardized self-report measures assessing primary outcomes (well-being and infertility-related self-efficacy), secondary outcomes (depression, anxiety, and infertility-related stress) and potential mechanisms of change (infertility-related psychological inflexibility, mindfulness, self-compassion, ACT-components). At T2, the EG-KindMap will complete a questionnaire

assessing the feasibility criteria. Ecological momentary assessment of well-being and mindfulness will additionally be completed by the EG-KindMap as part of using the KindMap. The limited efficacy dimension will be assessed using modified Intention-to-Treat and per-protocol analyses.

Expected results: It is expected that the KindMap reveals to be a feasible low-intensive psychological intervention with limited efficacy results indicating improvements in well-being and in the perception of self-efficacy to deal with infertility, as well as in mental health indicators.

Conclusion: This is one of the first studies exploring the feasibility of an internet-based self-help tool integrating psychoeducation, mindfulness, compassion, and ACT components specifically designed for people dealing with infertility. If feasible, the KindMap will be an innovative and timely e-mental health tool, reaching a broader number of fertility patients and providing additional support aligned with a more patient-centred care framework.

Keywords: Infertility; E-mental health; Mindfulness; Compassion; Acceptance and Commitment Therapy

Acknowledgments: This project is supported by APFertilidade. The authors thank APFertilidade for funding the KindMap, and APFertilidade and Fertility Europe for disseminating the study and contributing to participants' recruitment.

Poster Presentation #79

Mental health in the university stage: A descriptive study on mental health in Spanish university students.

Authors: Óscar Peris Baquero¹, Jordi Socías Soler¹, Erick Cabrera², Laura Martínez García¹, Alba Quilez Orden¹ & Jorge Osma¹

Affiliations:

¹University of Zaragoza and Institute of Health Research of Aragon, Spain

²University of Zaragoza, Spain.

Abstract

Introduction: The university stage is a time of lifestyle changes where many stressors appear, these can significantly influence the quality of life, psychological distress and increase the likelihood of mental disorders. In fact, according to different studies, between 21.3% and 34.2% of university students report moderate and extremely severe anxiety and depression scores respectively. Moreover, emotional disorders are often accompanied by other problems such as substance abuse, personality disorders, or suicide attempts. **Objective:** The aim of this study is to evaluate the socio-demographic and psychological

factors that influence emotional disorders, in order to develop early detection programs to shorten the duration of possible episodes of depression and anxiety, avoid long-term functional deterioration and prevent more serious disorders.

Methodology: The sample consisted of 507 university students from different Spanish universities, most of them women (85.4%) with a mean age of 23.10 years ($SD = 6.05$, range 18 - 57). The information was obtained through an anonymous online survey consisting of sociodemographic data and instruments such as the Overall Depression Severity and Impairment Scale (ODSIS) and the Overall Anxiety Severity and Impairment Scale (OASIS), the European Quality of Life Scale (Euroqol), among others.

Results: According to the data collected, 38.1% of the total sample reported having received psychological treatment in the past, and 10.3% reported currently receiving some kind of psychological treatment. In terms of anxiety and depression levels, 39.3% of the participants reported moderate levels and 2.8% high levels. It was found that 9.9% of the total sample presented scores above the clinical cut-off point in depressive symptomatology (ODSIS > 10). Likewise, 13.0% of subjects showed scores above the clinical cut-off point in anxious symptomatology (OASIS > 10). Finally, the mean quality of life was 7.80 ($SD = 1.5$, range 1.10 - 10) and 8.3% of the participants showed scores below 5. The rest of the results will be presented in the poster.

Conclusion: A high percentage of students in the Spanish university system present emotional symptomatology. It is necessary to carry out interventions in order to provide students with resources and skills thus symptomatology does not end up developing into an emotional disorder.

Keywords: Mental health, University students, Emotional symptomatology, Quality of life, Depression & Anxiety

Poster Presentation #81

The Brief Peer Conflict Scale: Psychometric characterization across Portuguese adolescents and young adults

Authors: Pedro F. S. Rodrigues¹, Paula Vagos^{1,2} & Josefa N. S. Pandeirada³

Affiliations:

¹Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

³William James Center for Research & Department of Education and Psychology, University of Aveiro

Abstract

Introduction/Aims: The Brief Peer Conflict Scale (Brief PCS) measures aggressive behavior as a multidimensional construct associated with diverse forms (i.e., overt and relational)

and functions (i.e., reactive and proactive). Its psychometric properties have been assessed in adolescent and young adult samples, but these groups have not been compared before. This work aimed to investigate the psychometric properties of the Brief PCS across Portuguese community samples of adolescents and young adults.

Methods: A sample of 891 participants (54.9%) aged 12 to 25 years old ($M=16.69$, $SD=2.97$) responded to the Brief PCS. Of those, 477 composed the adolescent sample (50.7% female) aged 12 to 17 years old ($M=14.30$, $SD=1.43$) and 414 constituted the young adult sample (67.1% female) aged 18 to 25 years old ($M=19.43$, $SD=1.5$).

Results: Confirmatory factor analyses replicated the four-factor measurement model (i.e., proactive overt, reactive overt, proactive relational, and reactive relational aggression) as a good fit for the adolescent and the young adult samples taken separately, though using only 16 of the original 20 items. Acceptable internal consistency values were found for all four measures. Strong measurement invariance based on age-groups (i.e., adolescents and young adults) was found. Adolescents were overall more aggressive than young adults. **Conclusions:** This work provides psychometric properties of the Brief PCS to measure the combinations of the forms and functions of aggression invariantly across adolescents and young adults. The Brief PCS was sensitive to detect age-based differences in the practice of aggression. Its use to explore developmental trajectories of aggression seems justifiable.

Keywords: Brief PCS; Aggression; Adolescents; Young Adults; Portuguese Psychometrics

Poster Presentation #82

The impact of sexual subjectivity and personality factors on women with sexual pain.

Authors: Raquel Da Silva¹

Affiliations:

¹ULP-Psicologia, Universidade Lusófona Do Porto

Abstract

Sexuality plays an important role in an individual's well-being (Tolman et al., 2003). Unfortunately, currently there is still a lack of scientific literature that specifically addresses female sexuality, sexual dysfunctions and possible variables that may influence it (Nobre & Pinto-Gouveia, 2008), specifically when considering sexual pain. The development of sexuality takes place throughout an individual's life. In women there are two developmental phases, adolescence and menopause, in which changes occur at cognitive, biological and social levels (ZimmerGembeck & Helfand, 2008;

Collins et al., 2009). In these stages of development, also occurs the development of sexual subjectivity, which represents a woman's sexual self-concept. According to the literature, the level of sexual subjectivity has an influence on women with sexual

dysfunctions (Horne & Zimmer-Gembeck, 2005, 2006). The personality is influenced by schemes and traits that influence the behavior, attitudes and thoughts of individuals (McCrae, John & Costa, 1992). The literature shows that there is a relationship between sexual dysfunctions and maladaptive schemas (Nobre & Oliveira, 2013). However, there are still few studies that explore these two variables. This study aims to understand how sexual subjectivity and personality factors are related and influence female sexual pain disorder.

The study will include a sample of 200 Portuguese women, 100 women with sexual pain and 100 women from the general population over 18 years old. An online platform will be used to collect data from participants, and informed consent and the respective questionnaires will be presented in advance, which are: General Introductory

Questionnaire, FSSI, NEO-FFI-20, YSQ-S3, PCS, FSFI and McGill Pain Questionnaire. We expect to find higher levels of maladaptive schemas and certain personality dimensions in women from the sexual pain group and also that these will be significant predictors of female sexual pain. Also, we hope to find that low levels of sexual subjectivity are predictors for the presence of sexual pain. Finally, consider that both groups present significant differences. In conclusion, the study intends to promote a greater understanding of the dimension of women's sexual health, specifically sexual pain and contribute to a better sex education and clinical interventions.

Keywords: Sexual dysfunctions; Female sexual pain; Sexual subjectivity; Personality factors.

Poster Presentation #83

Mental Health in Higher Education Students: from Prevention to Treatment

Authors: Ana Lucia Resende Marques¹, Renata Santos Farias¹, Carolina Elizabeth Catumbela Agostinho¹, Raquel Pereira da Silva¹, Ana Raquel Lebre Pereira¹
& Cátia Margarida dos Santos Pereira de Oliveira¹

Affiliations:

¹Universidade Lusófona do Porto

Abstract

Entering Higher Education is characterized as one of the stages of life with higher levels of stress in university students, where new cognitive, emotional, and social skills are required. Currently, there are many mindfulness programs with proven effectiveness in regulating stress and anxiety levels in the clinical population. The present study aims to evaluate the effect of an eight-week Mindfulness program: MBPM - Mindfulness-Based Pain Management (Burch, 2008) on the well-being and quality of life, emotional regulation, and psychological flexibility of university students. The sample will consist of 120 university students from "Universidade Lusófona do Porto" aged 18 years or over, randomly distributed into four groups, each with 15 participants. Of the 120 participants,

60 will correspond to a control group. All participants will complete a set of questionnaires that will assess the dimensions of mindfulness, self-compassion, well-being, quality of life, emotional regulation, and perceived stress. This protocol will be applied in five moments: at the beginning, middle, and end of the study and after three months and six months of the end of the sessions. It is expected that, after participating in the eight-week program, participants will show significant improvements in the investigated variables, and that the gains will be maintained in the long term. Participation is also expected to have benefits in psychological well-being, self-compassion, and mindfulness. It is intended, in this way, to contribute to the improvement of the well-being of higher education students and to the development of research on the effects of mindfulness practice on psychological functioning.

Keywords: Mindfulness; Stress; Well-being and quality of life; Emotional Regulation; Psychological Flexibility; MBPM

Poster Presentation #84

BRIEF-A: Características psicométricas numa amostra em contexto médico-lega

Authors: Maria Manuela Vilar¹, Maria Cristina Albuquerque¹, Marcelino Pereira¹, Maria João Seabra-Santos¹, Octávio Noé Moura¹, Ana Filipa Lopes¹, Sofia Major^{1,2} & Mário Manuel Simões¹

Affiliations:

¹Universidade de Coimbra, Faculdade de Psicologia e de Ciências da Educação, Centro de Investigação em Neuropsicologia e Intervenção Cognitivo-Comportamental, Portugal ²Universidade dos Açores, Portugal

Abstract

Introduction/Objective: Executive Functions can be considered a relevant multidimensional construct for adapting to the different situations we are confronted with on a daily basis. It is due to these functions that we are able to initiate behaviours, inhibit distracting actions or stimuli, plan and organize problem solving, flexibly alternate problem solving, among others, which are crucial in learning, socio-emotional functioning and people's autonomy, so deficits in this domain can jeopardize their survival. In a forensic context, this need is accentuated, since it includes individuals with pathologies, that puts them in a situation of greater vulnerability and/or prone to deviant/criminogenic behavior. In recent years, (neuro)psychological assessment has worked to develop and validate new instruments that can capture these difficulties more efficiently through performance tests and inventories/questionnaires. The Behavior Rating Inventory of Executive Function – Adult Version (BRIEF-A) is as an example of the inventories/questionnaires that are currently most used. The main objective of the present investigation is to contribute to

the validation of BRIEF-A, which assesses an individual's perception of their executive functioning, in a forensic sample, in a medico-legal context.

Method: A sample of 32 subjects was collected at the Instituto Nacional de Medicina Legal e Ciências Forenses, I.P. (Institute of Forensic Science and Legal Medicine), with or older than 18 years ($M = 38.75$; $SD = 10.836$) and divided into subsamples (civil ($N=21$)) and criminal ($N=11$)). Descriptive statistics (means and standard deviations), analyzes of the internal consistency (Cronbach's Alpha), concurrent validity (correlations with Minnesota Multiphasic Personality Inventory - 2 (MMPI-2), Brief Symptom Inventory (BSI) and Raven's Standard Progressive Matrices (RSPM)) and discriminant validity (comparison of means with a community sample and between subsamples) were subsequently performed.

Results: Very good internal consistency values were obtained for BRIEF-A's total result and both indexes, and moderate to very good for scale's results. As for concurrent validity, the instrument showed significant positive correlations with MMPI-2 and BSI indicators. Regarding discriminant validity, the criminal subsample obtained significantly higher results than community sample and the civil subsample.

Conclusion: In the present study, BRIEF-A evidenced robust psychometric properties in a forensic context, proving to be valuable in the assessment of executive functions. It could be implemented as an instrument to be used in forensic (neuro)psychological assessment protocols, in order to obtain a better understanding of the current functioning of adults in a medico-legal context, mainly in criminal cases.

Keywords: BRIEF-A; Neuropsychology assessment; Executive functions; Forensic populations; Psychometric properties

Poster Presentation #85

Dark Factor of Personality Scale (D): Validation studies in a Portuguese university students' sample

Authors: Rita Rodrigues¹, Giovana Cordeiro¹, Mário R. Simões¹ & Pedro Pechorro¹

Affiliations:

¹Faculdade de Psicologia e de Ciências da Educação, Universidade de Coimbra

Abstract

Introduction/Objectives: The term Dark Traits (DT), appeared in the field of personality psychology and refers to personality traits associated with ethical, moral and socially questionable behaviors. Moshagen and collaborators proposed a theoretical conceptualization of a basic and general dispositional tendency underlying DT, designating this common core as the Dark Factor of Personality (D). The Dark Factor of Personality

(D70) represents the common core of Dark Traits (DT) associated with undesirable and problematic behaviors. The present research aims to adapt and validate the D70 scale in a Portuguese university sample whose age range is of 18 years and older.

Methods: The protocol includes the following self-report instruments: Dark Factor of Personality Scale (D70); Propensity to Morally Disengage Scale (PMDS); Weinberger Adjustment Inventory (WAIv); Short Dark Tetrad Scale (SD4); Low Self-Control Scale (LSCS-SF); Inventory of Callous-Unemotional Traits (ICU); Antisociality/Criminality Scale (ACS); Evaluation of Violence Questionnaire (EVQ); Brief Multidimensional Self-Control Scale (BMSCS); Brief Self-Control Scale (BSCS); Light Triad Scale (LTS); Basic Empathy Scale (BES-A); Social desirability Scale (EDS-20). The aim is to reach a sample size of 10 to 20 participants for each D70 item, where exploratory and confirmatory factor analyses will be performed.

Results: It is expected that subjects with high levels of the D factor also show high levels in the instruments that measure the presence of aspects associated with aversive traits: prevalence of the presence of Dark Tetrad traits, low self-control, presence of callous-insensitivity traits, tendency to antisocial behaviors. In contrast, these individuals are expected to show reduced levels of empathy and a reduced or non-existent presence of the positive traits of the Light Triad Scale. Finally, it is expected that individuals respond truthfully and not according to socially desirable norms which is essential for a robust analysis and also imperative to control this variable.

Conclusions: We intend to contribute to the adaptation and validation of the D70 in the Portuguese population, responding to the lack of instruments in the specific domain of Dark Traits and, consequently, substantiating with additional empirical data the recently proposed Dark Factor construct. Additionally, we seek to understand the impact of social desirability on the participants' answers, since the risk of bias is higher in personality and other self-report inventories.

Keywords: Dark traits, Dark factor of personality scale, Social desirability.

Poster Presentation #86

Assessing athletes' perception of coach-related critical attitudes: validation of the scale to adolescent athletes

Authors: Sara Oliveira¹, Marina Cunha², António Rosado³, Rita Gama² & Cláudia Ferreira¹

Affiliations:

¹Centro de Investigação em Neuropsicologia e Intervenção Cognitivo-Comportamental, Universidade de Coimbra, Portugal

²Instituto Superior Miguel Torga, Coimbra, Portugal; ³Faculdade de Motricidade Humana, Universidade de Lisboa, Portugal

Abstract

Introduction/Aims: In the last decade, there has been a growing interest in studying athletes' mental health. Literature has underlined the importance of exploring factors that may contribute to athletes' mental health, such as the coach-athlete relationship. In fact, the relationship between coach and athlete is a crucial component in the life of the athletes that influences not only their performance, but also their physical and psychological development. At the same time, some studies have shown that a coach-athlete relationship based on criticism has been associated with negative indicators of mental health. In this sense, a scale was recently developed to assess athletes' perception of coach-related critical attitudes in a sample of adult athletes (APoCCAS). This 10-item scale revealed good psychometric properties, showing significant correlations with self-criticism, anxiety and depressive symptoms. However, this scale was validated only for the adult population. Taking into account that the coach plays a crucial role, especially during the athletes' adolescence, it is important to validate this measure for the adolescent population. The present study aims to validate the APoCCAS for adolescent athletes (APoCCAS-A).

Methods: The sample of this study comprised 330 adolescent athletes, aged between 12 and 18 years ($M = 15.00$; $SD = 2.28$) who completed a protocol consisting of three self-report instruments that assessed athletes' perception of coaches' critical attitudes (APoCCAS-A), sports anxiety (SAS-2) and sports performance (QPRD). The factor structure of the APoCCAS-A was explored (through Confirmatory Factor Analysis) and its psychometric properties, convergent and external validity, and gender invariance were examined.

Results: The results confirmed the plausibility of the unidimensional structure of the scale ($CMIN/DF = 2.19$, $p < .001$; $CFI = .98$; $TLI = .97$; $RMSEA = .06$) and internal consistency ($\alpha = .87$; $c.r. = .89$). The scale showed convergent validity ($AVE = 0.5$) and significant correlations with anxiety ($r = .32$) and sports performance ($r = -.15$) of athletes. The scale showed to be invariant for female and male genders.

Conclusions: This measure demonstrated to be a robust and useful measure to apply to adolescents in the sports context, constituting a crucial contribution in the practical and research fields, allowing a better understanding of the impact of coaches' critical attitudes on athletes. Thus, this measure could help to identify potential risks associated with negative indicators in athletes during a crucial phase of their development.

Keywords: Teenagers, Athletes, Criticism, Sports, Coaches

Poster Presentation #87

The effect of physical activity on pupil-linked arousal modulation during visual motion discrimination tasks

Authors: Sara F. Oliveira^{1,5}, Susana Mouga¹, Inês Bernardino^{1,2}, Carolina Sousa^{1,4}, Sofia Marcos^{1,4}, Ana Maria Teixeira³, Luís M. Rama³ & Maria J. Ribeiro^{1,2}

Affiliations:

¹CIBIT-ICNAS, University of Coimbra, Portugal, ²Faculty of Medicine, University of Coimbra, Portugal,

³Research Centre for Sport and Physical Activity, CIDAF-FCDEF-UC, 3040-248 Coimbra, Portugal,

⁴Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

⁵Faculty of Sciences and Technologies, University of Coimbra, Portugal

Abstract

Introduction: Changes in the noradrenergic system with ageing are associated with cognitive decline. Noradrenaline increases arousal and is associated with pupil dilation. During and immediately after physical exercise there is an increase in the release of noradrenaline, which results in an increase in arousal. Here, we present a project that aims to evaluate whether a single moderate aerobic physical exercise session facilitates the activation of the noradrenergic system during a cognitive task performed immediately after exercise, in older adults.

Methods: We chose a visual discrimination task that modulates arousal in a way that is associated with decision uncertainty. In this task, participants are instructed to indicate the direction of coherent motion by button press. Different levels of motion coherence are used to modulate task difficulty. Pupil size will be measured during task performance as a proxy for arousal and noradrenergic activation. We will include two groups of participants. The study group composed of healthy older people (50-70 years) will participate in two conditions: exercise and mental activity condition. In the exercise condition, participants will perform the visual discrimination task, followed by 30 minutes of moderate exercise on a cycle ergometer, followed immediately by a repetition of the visual discrimination task.

The mental activity condition will be identical but instead of physical activity, participants will perform mental activity as a control. We will analyze salivary alpha-amylase before and after exercise or mental activity to quantify the changes in noradrenergic activity. A control group of younger people (18-30 years) will be included to compare the performance and pupillary responses evoked by the visual task. The analysis will include intra and inter-group comparisons. The intergroup analysis will assess whether there are differences between younger and older people in the visual discrimination task performance and pupillary responses. The effect of exercise will be evaluated through

intragroup analysis, which will test the hypothesis that exercise could be used to improve activation of the arousal system during cognition.

Preliminary and expected results: Preliminary results showed that the visual discrimination task chosen evokes robust pupillary responses that scale with task difficulty and perceived response confidence. Based on previous findings, we expect physical exercise to rescue impaired modulation of pupillary responses with response confidence thereby strengthening the effect of uncertainty on task learning in older people.

Keywords: Task-evoked pupil dilation, Physical exercise, Ageing, Arousal, Visual processing

Acknowledgment: Sara F. Oliveira received funding within the scope of the program unidade de I&D Verão com ciência – CIBIT, reference UID 4950.

Poster Presentation #88

Association between perinatal mental health during COVID-19 pandemic and Brazilian children subsequent development

Authors: Simone Ávila¹, Vera Lúcia Mateus^{2,3} & Ana Alexandra Osório¹

Affiliations:

¹Developmental Disorders Program and Mackenzie Center for Research in Childhood and Adolescence, Center for Biological and Health Sciences, Mackenzie Presbyterian University, São Paulo, Brazil

²Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique, Porto, Portugal

³ University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Introduction: The adverse effects of exposure to high levels of stress in the early years of life on child development is well documented. Negative events such as the Covid-19 pandemic, which has significantly impacted women's mental health in the perinatal period, the potential to put children at the risk for development difficulties. Recent studies significantly poorer performances in cognitive and self-regulatory skills in infants born and/or in their early years of life during the pandemic. To the best of our knowledge, the impact of the COVID-19 pandemic on children development and its relation with mother's mental health during that period in the Brazilian population is yet to be determined. **Objective:** This study aimed to examine the association between perinatal mental health during the COVID-19 pandemic and children's subsequent development.

Methodology: This work will report data of a follow-up assessment of a larger research project examining perinatal mental health during the COVID-19 pandemic, which was conducted from July 2020 to February 2021. Participants are women who were pregnant

or had an infant up to six months postpartum during the first phase of the larger research project. Participants were recontacted by email and asked to report on their child global development by completing the Ages & Stages Questionnaires (ASQ-3) according to the child's current age. Data collection is ongoing and is expected to be completed by March 2023. Descriptive statistics and correlation analyses will be performed for the study variables.

Expected Results: We expect that more maternal symptoms of depression and anxiety during the pandemic will be associated with children's lower performance in all developmental domains: communication, gross motor, fine motor, problem solving, and personal-social.

Conclusions: Findings of this study will contribute to the literature about the long-term effects of perinatal mental health problems during the COVID-19 pandemic on offspring's subsequent development. Additionally, results can inform the design of personalized intervention programs targeted to minimize the impact of the pandemic on the paediatric population, as well as perinatal mental health policies that can be implemented in future similar situations.

Keywords: Maternal mental health, Perinatal mental health, Covid-19, Pandemic, Child development

Poster Presentation #89

The impact of education in the primacy and recency effects in cognitively healthy aging

Authors: Sofia Areias-Marques¹, Filipa Ribeiro², David Brieber³, Raquel Lemos^{1,4} & Albino J. Oliveira-Maia^{1,5}

Affiliations:

¹Champalimaud Research & Clinical Centre, Champalimaud Foundation, Lisbon, Portugal

²Instituto Ciências da Saúde, Universidade Católica Portuguesa, Lisbon, Portugal

³SCHUHFRIED GmbH, Moedling, Austria

⁴ISPA – Instituto Universitário de Ciências Psicológicas, Sociais e da Vida, Lisbon, Portugal

⁵NOVA Medical School, NMS, Universidade Nova de Lisboa, Lisbon, Portugal Universidade Católica Portuguesa

Abstract

The use of memory strategies can be influenced by multiple factors, some of which are still unknown. When a list of non-related words is presented for future free recall, a predictable serial position pattern appears with a better recall of words from the beginning (primacy) and from the end (recency) of the list. Primacy and recency effects have been mainly studied in cognitive impaired subjects as an attempt to understand impaired learning strategies among clinical samples. Nevertheless, this effect is very understudied in healthy groups despite its potential as a predictor of pathologic aging. In the present study we aimed to verify if the level of education influences learning strategies (serial position effect) in a wordlist test - the Auditory Wordlist Learning Test (from the Cog-

nitive Function Dementia/Schuhfried battery). We included 294 healthy volunteers with ages ranging from 50 to 91, distributed along 4 different education groups: 1 to 6 years; 7 to 9 years; 10 to 12 years and >12 years.

Overall, the two less educated groups presented differences from the most educated group across the four learning trials. Nevertheless, there were no differences in the learning rate. Considering serial position effects, in the first trial, the higher educated group had a clear advantage in the recall of primacy words in the first and fourth trial, as well as recency in the fourth trial. According to these results, education seems to play a role in initial learning, but has no effect in the rate of learning. Education also influenced serial position, especially primacy. Although serial position effects and learning patterns are well identified, they need further analysis in healthy groups and more consistent reproducibility in study results.

Keywords: Learning, Serial position, Primacy, Recency, Aging

Poster Presentation #90

The relationship between intelligence and executive functions in children

Authors: Sofia Marcos^{1,3}, Carolina Sousa^{1,3}, João Castelhana^{2,3}, Ana Pina Rodrigues^{2,3}, Ricardo Almeida⁴, Emilia Bigotte⁴, Miguel Castelo-Branco^{2,3,5}, Inês Bernardino^{2,5} & Susana Mouga^{2,3}

Affiliations:

¹Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

²Institute for Nuclear Sciences Applied to Health ICNAS, University of Coimbra, Portugal

³Coimbra Institute for Biomedical Imaging and Translational Research CIBIT, University of Coimbra, Portugal

⁴Caspae, Coimbra, Portugal

⁵Faculty of Medicine, University of Coimbra, Portugal

Abstract

Introduction: Executive functions are a group of complex cognitive processes that mature with age. Over the years, several studies have tried to establish evidence of a relationship between IQ and executive functions, with inconsistent results. More specifically, it has been shown that only certain executive functions are associated with intelligence. In this study we intended to analyse whether there is a significant relationship between intelligence and executive functions in children, more precisely with their performance on the Wisconsin Card Sorting Test (WCST).

Methods: The evaluation protocol used consisted of the Wechsler's Intelligence Scale for Children – Third Edition (WISC-III) and the WCST. The sample was composed of 55

children (27 boys and 28 girls) between the ages of 8 and 10 attending the 4th grade. Since this data did not meet the assumptions of normality, a correlation analysis was made using Spearman's Rho. Statistical analysis was performed using the version 27 of the Statistical Package for Social Sciences. A significance level of 0.05 was adopted.

Results: We found significant but weak negative correlations between WCST measures (i.e., number of trials and percentage of errors) and the Verbal IQ. Regarding the WISC-III subtests, the same pattern was observed between WCST and Vocabulary. Additionally, Arithmetic scores were negatively correlated with the WCST total number of trials and positively correlated with the WCST total errors and non-perseverative errors. Finally, both positive and negative weak correlations were found between Symbol Search scores and several measures of the WCST.

Conclusions: The pattern of correlations found in this study reveals a weak association between WCST measures and WISC-III subtests that involve problem-solving, flexibility and working memory. Similar findings have also been reported in previous studies that looked at the relationships between psychometric measures of intelligence and executive functions. In support of the weak correlations observed, Arffa (2007) reported that intelligence accounted for 9-12% of the variance in measures of executive functions (e.g., 10% of the variance in WCST non-perseverative errors was attributed to intelligence). We can conclude that executive functioning, as assessed by WCST, is, in part, associated with some cognitive processes involved in the conceptualization of intelligence, as assessed by the WISC-III.

Keywords: Intelligence; Executive functions; Wechsler's intelligence scale for children; Wisconsin card sorting test; Neuropsychological assessment

Poster Presentation #91

Medical support during pregnancy and mother-infant bonding: A serial multiple mediation model of satisfaction with childbirth and postpartum posttraumatic stress symptoms

Authors: Ana Beato¹, Stephanie Alves¹ & Sara Albuquerque¹

Affiliations:

¹Lusófona University, Portugal, HEI-Lab

Abstract

Introduction/Objectives: Several studies have demonstrated that a mother's mental illness, particularly exposure to perinatal trauma, may adversely affect parental confidence and early mother-child connection and bonding. In contrast to other kinds of support, like support from the partner, the role of medical and other kinds of specialized help during pregnancy has been less studied regarding its effects on perinatal trauma and mother-infant bonding. Additionally, satisfaction with childbirth might be impacted by prenatal medical care, which may have an impact on bonding and posttraumatic stress symptoms. This cross-sectional study's primary objective was to investigate the relationship between the medical support that expectant mothers received and the quality of mother-infant bonding. Additionally, we investigated whether satisfaction with childbirth and postpartum posttraumatic stress symptoms mediated this association, independently and sequentially.

Methods: The sample consisted of 525 Portuguese mothers of infants younger than 24 months (M postnatal months = 8.51, DP = 6.49) that completed a questionnaire disseminated online between February and March 2020. Mothers rated their perceptions of the prenatal medical care they felt they received and their overall satisfaction with childbirth and completed the Perinatal Posttraumatic Stress Disorder Questionnaire and the Postpartum Bonding Questionnaire. We tested a simple and serial mediation model in PROCESS (SPSS; Models 4 and 6, respectively). **Results:** The results showed that: (a) satisfaction with childbirth fully mediated the relationship between medical support during pregnancy and mother-infant bonding; (b) postpartum posttraumatic stress symptoms fully mediated this relationship; and (c) satisfaction with childbirth and postpartum posttraumatic stress symptoms both fully and sequentially mediated this relationship.

Conclusions: Our results suggest that the quality of prenatal medical care may have an indirect impact on mother-infant bonding in several ways. According to our research, both alone and when combined in a sequential manner, poor childbirth-related satisfaction and experiencing postpartum trauma may increase the chance of adverse experiences. These findings, if replicated longitudinally, will shed some light on specific risk variables and their relationships, which may be crucial for averting issues with mother-infant bonding

and related adverse outcomes. To prevent harmful effects, it might be useful to enhance the quality of medical care throughout pregnancy.

Keywords: Medical support; Mother-infant bonding; Postpartum posttraumatic stress symptoms; Satisfaction with childbirth; Adaptation to motherhood

Poster Presentation #92

Explaining anxiety symptoms in adoptive parents: Do coparenting and dyadic adjustment play a similar role?

Authors: Stephanie Alves¹, Bárbara Caetano², Ana Luz Chorão³, Maria Cristina Canavarro² & Raquel Pires²

Affiliations:

¹Lusófona University, HEI-Lab, Portugal

²Center for Research in Neuropsychology and Cognitive Behavioral Intervention, Faculty of Psychology and Education Sciences, University of Coimbra, Coimbra, Portugal

³Faculty of Psychology and Educational Sciences of the University of Coimbra, Coimbra, Portugal

Abstract

Introduction/Aims: Prior studies conducted during the transition to normative parenthood have shown a significant association between dyadic and parental functioning variables and anxiety symptoms among parents. However, little attention has been paid to adoptive parents' psychological functioning during the post-adoption period, in general, and its determinants, in particular. Besides, few studies have considered multiple dimensions of the parental dyad's functioning (e.g., marital, parental) together in the same study. This study aimed to explore the associations between supportive coparenting and dyadic adjustment and anxiety symptoms among Portuguese adoptive parents and whether these associations were moderated by sociodemographic, health, and adoption-related variables.

Methods: An online cross-sectional survey was conducted between September 2020 and June 2021. Two hundred eleven participants (73% mothers; Child's M age = 9.89, DP = 3.68; 1-17 years old) completed self-report questionnaires assessing anxiety symptoms (Hospital Anxiety and Depression Scale), supportive coparenting (Parental Perceptions of Coparenting Questionnaire), and dyadic adjustment (Revised Dyadic Adjustment Scale). Multiple hierarchical linear regressions and moderations were computed.

Results: Our results have shown that, in addition to the perceived impact of Covid-19 on the parents' life ($p < .001$) and perceived child's emotional and behavioral difficulties ($p < .001$), dyadic adjustment was significantly and negatively associated with parents' anxiety symptoms ($p < .01$). Supportive coparenting was not significantly associated with anxiety symptoms while controlling for dyadic adjustment. Parents' sex, history of mental health

problems, child's age, and the time passed since adoptive placement did not moderate any of these associations.

Conclusions: Further attention to the unique effects of dyadic adjustment on adoptive parents' anxiety symptoms is needed, as they seem to benefit most from a marital relationship perceived as positive than a supportive coparenting relationship. Universal preventive approaches aiming to promote positive dyadic adjustment among mothers and fathers, at different moments of the post-adoption period and with children of different ages, should be considered.

Keywords: Anxiety symptoms; Post-adoption; Parents; Coparenting; Dyadic adjustment

Poster Presentation #93

A Validation Study of the Sexual Self-Efficacy Scale for Female Functioning in the Portuguese Population

Authors: Telma Filipa Oliveira¹ & Cátia Margarida Oliveira²

Affiliations:

¹Faculdade de Psicologia, Educação e Desporto, ULP, Portugal

²Faculdade de Psicologia, Educação e Desporto, ULP, CPUP, Universidade do Porto, Portugal

Abstract

Introduction/Objectives: Sexual self-efficacy is associated with the level of confidence that individuals have during sexual situations (Brar et al., 2020). Lower levels of sexual self-efficacy contribute to decreased sexual satisfaction (Batmaz & Çelik, 2021) and the development of sexual dysfunctions/difficulties (Khademi et al., 2008). The present study aimed to adapt and validate a version of the Sexual Self-Efficacy Scale for Female Functioning (Bailes et al., 2019) in a sample of Portuguese women.

Method: The sample included 555 Portuguese women aged between 18 and 57 years ($M = 29.43$). Participants answered a set of online questionnaires, namely: General Introductory Questionnaire (Oliveira et al., 2011); Sexual Self-Efficacy Scale for Female Functioning (SSES-F; Bailes et al., 2019); Golombok Rust Inventory of Sexual Satisfaction (Rust & Golombok, 1986) and Attitudes Related to Sexual Concerns Scale (Cowden & Koch, 1995). **Results:** The confirmatory factor analysis (CFA) results revealed that the Portuguese version of the SSES-F can assess levels of female sexual self-efficacy, supporting the factorial validity of the scale. The SSES-F demonstrated good levels of internal consistency (through Cronbach's Alpha) and moderate test-retest reliability, for the time of 1 month. High levels of sexual self-efficacy were associated with greater sexual satisfaction ($p < .001$). In contrast, low levels of sexual self-efficacy were associated with higher levels of sexual dysfunction/difficulties ($p < .001$). No association with age was found (p

<.595). However, sexual self-efficacy was shown to be associated with the development of sexual problems/difficulties ($p < .001$).

Conclusions: The results indicated that the SSES-F has good psychometric properties for the Portuguese female population, like the original validation study. It thus proved to be able to discriminate the levels of sexual self-efficacy present in women with and without sexual difficulties. The present study contributes to the advancement of scientific research, proving the importance of sexual self-efficacy in female sexuality.

Keywords: Sexual self-efficacy; Adaptation; Validation; Sexual Self-Efficacy Scale for Female Functioning

Acknowledgments: To Universidade Lusófona do Porto, I thank them for providing me with all the necessary tools for the development of this research, always with the support of excellent professionals. To all the women who participated in the study, I would like to thank them for their essential collaboration in this investigation, contributing to science and to the development of further studies related to sexuality.

Poster Presentation #94

Representations of approaches to health and wellbeing as an issue for public understanding of science

Authors: Teresa Neiva Forte¹ & Joaquim Pires Valentim²

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Introduction: This study, anchored in the frameworks of Social Representations and Public Understanding of Science, takes conventional and alternative outlooks to health and wellbeing as a case in point to understand the growing opposition to scientific and evidence-based knowledge. The gap between scientific and lay knowledge has been addressed in different ways, spanning from the need to reduce public knowledge deficits to the combination of this necessity with attitudes and values' assessment and a more recent emphasis on trust and expert deficit. The public opposition to conventional/evidence-based perspectives on health is a new challenge for science communication and Public Health accompanied by the increasing adherence to alternative views. To the best of our knowledge, no systematic research has addressed the psychosocial processes underpinning this phenomenon within the Portuguese context.

Objectives: At this stage, we aim to explore how conventional and alternative outlooks of health and well-being are being presented to the public, embedded on disparate discourses, in new media and informative outlets.

Methods: To identify the widespread representations of health and wellbeing in new media sources, an inventory of digital-based and social media pages (Facebook, Instagram) dedicated to Health and Wellbeing is being made by type of business, specific topics, and target groups in the Portuguese context. For the data mining and collection, a proportional sub-sample will be randomly selected. A lexicographic and hierarchical descending cluster analysis will be conducted to explore the typicality and organization of specific repertoires and notions and a thematic analysis will be performed with WordStat to identify overarching themes, latent assumptions and conceptualizations that shape the semantic content.

Expected Results: Evidence-based discourses are expected to draw more on themes of the common deficit-model on a decay function, emphasizing the need for more information, than in more engaging approaches using different channels tailored to the publics. Reliable empirical data regarding prevalence and efficacy is expected to be found. Non-evidence based discourses are expected to advocate for alternative explanatory systems that question the scientific knowledge or CM exclusive validity. Substantiating the efficacy, we expect to find subjective personal comments or ad hoc authority arguments alluding to a specific person.

Conclusions: The exploration of what characterizes the communication of both approaches allows to identify which specific arguments and themes are permeating common sense knowledge and influencing functional processes of meaning-making of health and well-being.

Keywords: Public understanding of science, Social representations, Communication modes, Public health, Conventional and alternative approaches to health and wellbeing

Poster Presentation #95

The longitudinal impact of psychological flexibility and compassion on mother-baby bonding: Care4mmies study protocol

Authors: Lara Sofia Palmeira^{1,2}, Ana Maria Xavier^{1,2}, Joana Maria Silva¹, Paula Emanuel Vagos^{1,2} & Vera Lúcia Mateus^{1,2}

Affiliations:

¹Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique, Porto, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

Abstract

Background/ Objective: Becoming a mother is a life-changing event that is often experienced in a positive way, but may also encompass great vulnerability and uncertainty, with the potential to hinder the mother's well-being and foster disorganization, particularly for women with attachment difficulties dealing with a difficult infant. Risk factors to the quality of mother-infant emotional bonding are well documented, whereas research into the mothers' protective and modifiable factors is scarcer. Psychological flexibility and compassion are adaptive emotional regulation strategies that have been linked to the wellbeing and mental health in diverse populations. The current work intends to present the Care4mommies project, which aims to examine whether prenatal maternal compassion (towards others and the self) and psychological flexibility play a protective role in the development of postpartum mother-infant bonding over time and whether this effect remains relevant regardless of mothers' attachment style and infant temperament.

Method: Participants will be pregnant women to be assessed between 22 and 30 weeks of gestation (T0) and when the infant is three (T1) and nine months old (T2). Participants will respond to an online survey that includes sociodemographic information and questionnaires about their compassion and psychological flexibility to be completed at all three assessments. In addition, mothers' own attachment style will be reported during pregnancy, and infant temperament and mother-infant bonding questionnaires will be administered at T1 and T2. Recruitment will take place through social media advertising, colleagues and acquaintances of the research team members, and family health units attending pregnant women. Data will be analysed using a structural equation modelling approach.

Expected Results: Overall, we expect that higher levels of mother's compassion and psychological flexibility will predict higher quality of mother-infant bonding. In addition, we expect that the impact of less adaptive maternal attachment styles and infant difficult temperament on mother-infant bonding will be moderated by mother's compassion and/or psychological flexibility. Finally, we expect mother-infant bonding at T2 to be predicted by mothers' attachment style, compassion and psychological flexibility, infant temperament, and mother-infant bonding previously assessed.

Conclusion: The study findings will clarify whether mothers' compassion and psychological flexibility may be protective for mother-infant bonding, which can inform future studies in designing and testing specific parental interventions to promote a secure mother-infant bond in the postpartum period.

Keywords: Mother-infant bonding; Psychological flexibility; Compassion; Prenatal and postpartum period.

Poster Presentation #96

Neural correlates of joint attention in infancy: an fNIRS study protocol

Authors: Vera Lúcia Mateus^{1,2}, Ana Ganho Ávila², Mónica Alexandra Sobra^{1,2}, Sara Figueiredo Cruz³ & Ana Alexandra Osório⁴

Affiliations:

¹Instituto de Desenvolvimento Humano Portucalense (INPP), Universidade Portucalense Infante D. Henrique, Porto, Portugal

²University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal

³Department of Psychology, School of Philosophy, Psychology & Language Sciences, University of Edinburgh, Edinburgh, UK

⁴Developmental Disorders Program and Mackenzie Center for Research in Childhood and Adolescence, Center for Biological and Health Sciences, Mackenzie Presbyterian University, São Paulo, Brazil

Abstract

Background/Objective: Joint attention, defined as the ability to coordinate attention with a social partner towards an object, typically emerges around 9 months of age, becoming more frequent in infant behavioural repertoire during the second year of life. This early marker of social cognition is a pivotal skill for the subsequent development of language and social competence. Previous studies highlight the involvement of several networks of the social brain in the processing of joint attention stimuli. However, these studies either focused on a specific brain region, had only one assessment time point, or did not include behavioural measures of joint attention. Thus, the current work presents a study protocol intended to longitudinally characterize the brain regions activated in response to joint attention stimuli during the emergence of the ability and at an intermediate stage of its development and examine the association between brain activation and behavioural manifestation of joint attention over time. **Method:** Participants will be healthy, full-term typically developing infants to be longitudinally assessed at 10 and 13 months of age. At both time points, infants will undergo a neuroimaging assessment, using functional near-infrared spectroscopy (fNIRS), and an infant-tester interaction. The fNIRS paradigm includes two experimental conditions – the joint attention and the interaction – and a baseline condition. Target brain areas are (bilaterally): prefrontal cortex, superior temporal sulcus, and temporoparietal junction. The Early Social Communication Scales will be used to measure joint attention behaviours in terms of responding to joint attention (RJA), by following the line of regard or pointing gestures of the tester, and initiating joint attention (IJA), in terms of the frequency of eye contact, pointing and showing gestures spontaneously used by the infant to share attention with the tester.

Expected Results: Overall, we expect that a stronger brain activation will be observed at 13 than 10 months in response to joint attention stimuli and a stronger brain activation will be associated with more instances of joint attention behaviours. Additionally, we expect that specific patterns of brain activity will emerge for IJA and RJA.

Conclusion: With this study we expect to increase fundamental knowledge on the dynamic interplay between brain functional maturation and behavioural manifestations of joint attention, and to identify typical neural signatures of joint attention that might assist the early screening of neurodevelopmental disorders.

Keywords: responding to joint attention; initiating joint attention; fNIRS; brain activation; infancy

Acknowledgments: Project retained for funding by the Portuguese Foundation for Science and Technology.

Poster Presentation #98

Representations on Vaccines and Children's Vaccination: A Psychological Study on Mother's Representations, Values and Decision-Making Styles

Authors: Isabel Miguel¹ & Joaquim Pires Valentim²

Affiliations:

¹Universidade Portuguesa Infante D. Henrique, Departamento de Psicologia e Educação & Instituto de Desenvolvimento Humano Portucalense

²Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra (Portugal)

Abstract

Introduction/Goals: Development in vaccination is believed to be one of the greatest achievements of the twentieth century for preventing disease, disability and death. However, despite the demonstrated effectiveness of vaccines, vaccination rates are on decline in many areas of the world. Research has provided an understanding of the complex and multi-factorial reasons why parents fear and reject vaccines. However, a socio-psychological perspective on the representational field of vaccination is still missing, for a deeper understanding of the dynamics underlying mothers' ideas around vaccines and vaccination. This study is a contribution to fill such a gap. The present study aims to: i) explore how the representational field about vaccines and vaccinations (myths, hesitancy, conspiracy, confidence, fears) is reorganized by a specific social category of Portuguese mothers; ii) explore how personal values and decision-making styles may introduce specific dynamics in this socio-cognitive organization.

Methods: A sample of 309 Portuguese mothers with children aged 0-6 years answered a self-administered questionnaire on sociodemographic characteristics, children's vaccination history, representations on vaccination, decision-making styles, and values. The association between categorical predictors and continual variables was analyzed by independent sample T tests or analyses of variance (ANOVA). Predictor variables were used in hierarchical multiple regression to predict mothers' representations towards vaccination.

Results: Results showed that psychosocial variables modulate mothers' representations of vaccination: as age (0-3 vs. 3-6 years old) and the number of children (1 vs. 3 children) increases, mothers tend to, respectively, have less confidence in vaccines, and hold more favorable ideas towards parents' freedom of choice and preference for natural immunity. Having searched for information increases mothers' confidence in vaccines. Moreover, results show that representations related to freedom of choice, preference for natural immunity, and conspiracy theories are positively predicted by individualism values and a dependent decision-making style, whereas confidence in vaccines is positively associated with universalism values and a rational decision-making style.

Conclusions: Results of the present study reinforce previous studies showing that variations in the representational content are shaped by important psychosocial factors, such as mothering experience, individual decision-making styles, and values. This psychosocial perspective on the representational field of vaccination can prove a promising window on bigger issues in the evolving health landscape, suggesting tailored measures for vaccination promotion and maintenance. Further, a case also in point is our present time, when the massive vaccination campaigns against COVID-19 recently launched worldwide have been counteracted by worldwide fake-news propaganda against vaccination.

Keywords: Vaccination, Mothers, Representational field, Values, Decision-making styles

Poster Presentation #99

Mental health in veterinary professionals in Portugal

Authors: Maria Manuela Peixoto¹ & Olga Cunha¹

Affiliations:

¹Hei-lab Universidade Lusófona do Porto, Portugal

Abstract

Introduction and Aim: Mental health problems in veterinary professionals, especially in veterinary medicine and veterinary nursing, have been extensively described in the literature and have significant negative effects on personal well-being. Burnout, compassion fatigue, suicidal thoughts, and suicide attempts have been reported by these professionals,

suggesting serious impairment of mental health status. Occupational and work-related stressors such as euthanasia, long working hours, conflicts with colleagues, lack of social support, high client expectations, and individual vulnerabilities have been cited as risk factors for burnout and compassion fatigue among veterinary professionals, which are known to affect mental health and well-being. In Portugal, little is known about what affects veterinary professionals' mental health. Therefore, the current study aims to investigate levels of psychological distress (i.e., anxiety, depression, and stress), burnout, compassion fatigue, suicidal ideation, suicidal behavior, life satisfaction, perceived social support, resilience, and experiences of violence (i.e., victimization and perpetration) among veterinary professionals (i.e., veterinary doctors, veterinary nurses, veterinary assistants, and other veterinary personnel).

Methods: Veterinary professionals will be invited to participate in a web survey and complete a sociodemographic and work-related questionnaire, as well as the Portuguese versions of the Depression Anxiety Stress Scale, the Professional Quality of Life Scale - Version 5, of the Suicidal Ideation Questionnaire, the Suicidal Behavior Questionnaire-Revised, the Brief Resilience Scale, the Multidimensional Scale of Perceived Social Support Scale, the Life Satisfaction with Life Scale, and the Conflict in Adolescent Dating Relationships Inventor-Revised.

Results: Descriptive and inferential statistical procedures will be used. Frequencies, means, and standard deviations of all variables in the study will be reported, and correlations among work-related dimensions, burnout, compassion fatigue, psychological distress, suicidal ideation, and suicidal behavior will be calculated. In addition, predictors of life satisfaction will be examined, specifically potential risk factors (i.e., psychological distress, burnout, compassion fatigue, suicidal ideation, suicidal behavior, and experiences of violence) and potential protective factors (perceived social support and resilience).

Conclusion: The study is expected to contribute to a broader understanding of mental health problems among veterinarian professionals in Portugal, by identifying work-related stressors associated with psychological distress, burnout, and compassion fatigue, as well as potential risk and protective factors that predict life satisfaction. Clinical implications for improving veterinary professionals' mental health will be discussed.

Keywords: Mental health; Burnout; Compassion fatigue; Suicide ideation; Veterinary professionals

Poster Presentation #100

Cognitive functioning and Decision-making in Healthcare: Construction of the Capacity Assessment Instrument – Health (CAI- Health)

Authors: Ana Saraiva Amaral¹, Mário R. Simões¹, Sandra Freitas¹ & Rosa Marina Afonso¹

Affiliations:

¹University of Coimbra, Centre for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), Faculty of Psychology and Educational Sciences, Coimbra, Portugal, PsyAssessmentLab

Abstract

The increasing prevalence of neurocognitive disorders in the older population has been accompanied by the development of tools to measure functional, cognitive, and neuropsychiatric changes. From a functional perspective, patients primarily manifest changes in advanced instrumental activities of daily living, among which, the ability to make decisions regarding healthcare. The neuropsychological assessment of this competence implies, along with the assessment of overall cognitive functioning, the use of an instrument that allows its measurement. Despite the previous research regarding decision making and cognitive functioning, the literature still highlights the need of further investigation to clarify the role of specific cognitive abilities, to allow the establishment of a neurocognitive model of decision making in healthcare.

Keywords: Healthcare decision-making; Capacity assessment; Cognitive impairment; CAI-Health