

from another 10 people to determine how accurate the model would be with ten new individuals for whom it had not been developed.

**Results:** We defined success as a prediction of onset within 10% of the actual date and a prediction of the slope of the trend within 20%. We had 7 successes. We were able to engage 6 of the 10 in interacting with the model to change health behaviors.

**Conclusions:** Computer simulation modeling may provide an opportunity to study the long-term effects of health behaviors and to engage people in interacting with the program to change behavior.

**Disclosure:** No significant relationships.

**Keywords:** computer simulation modeling; cognitive impairment; prediction; major neurocognitive disorder

## Pain

### O200

#### The role of interoception in the mechanism of pain and fatigue in fibromyalgia and myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS)

H. Sharp<sup>1,2,\*</sup>, K. Themelis<sup>1,3</sup>, M. Amato<sup>1</sup>, A. Barritt<sup>1</sup>, K. Davies<sup>4</sup>, N. Harrison<sup>1,5</sup>, H. Critchley<sup>1,2</sup>, S. Garfinkel<sup>1,6</sup> and J. Eccles<sup>1,2</sup>

<sup>1</sup>Department Of Neuroscience, Brighton and Sussex Medical School, PX, United Kingdom; <sup>2</sup>Psychiatry, Sussex Partnership NHS Foundation Trust, EP, United Kingdom; <sup>3</sup>Department Of Psychology, University of Warwick, AL, United Kingdom; <sup>4</sup>Department Of Clinical And Experimental Medicine, Brighton and Sussex Medical School, PX, United Kingdom; <sup>5</sup>Cardiff University Brain Research Imaging Centre, University of Cardiff, HQ, United Kingdom and <sup>6</sup>Institute Of Cognitive Neuroscience, University College London, AZ, United Kingdom

\*Corresponding author.

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**Introduction:** Pain, fatigue and anxiety are common features of fibromyalgia and ME/CFS and significantly impact quality of life. Aetiology is poorly defined but dysfunctional inflammatory, autonomic and interoceptive (sensing of internal bodily signals) processes are implicated.

**Objectives:** To investigate how altered interoception relates to baseline expression of pain, fatigue and anxiety symptoms in fibromyalgia and ME/CFS and in response to an inflammatory challenge.

**Methods:** Sixty-five patients with fibromyalgia and/or ME/CFS diagnosis and 26 matched controls underwent baseline assessment: pressure-pain thresholds and self-report questionnaires assessing pain, fatigue and anxiety severity. Participants received injections of typhoid (inflammatory challenge) or saline (placebo) in a randomised, double-blind, crossover design, before completing heartbeat tracking tasks. Three interoception dimensions were examined: subjective sensibility, objective accuracy and metacognitive awareness. Interoceptive trait prediction error was calculated as discrepancy between accuracy and sensibility.

**Results:** Patients with fibromyalgia and ME/CFS had significantly higher interoceptive sensibility and trait prediction error, despite no differences in interoceptive accuracy. Interoceptive sensibility and trait prediction error correlated with all self-report pain, fatigue

and anxiety measures, and with lower pain thresholds. Anxiety mediated the positive-predictive relationships between pain (Visual Analogue Scale and Widespread Pain Index), fatigue impact and interoceptive sensibility. After inflammatory challenge, metacognitive awareness correlated with baseline self-reported symptom measures and lower pain thresholds.

**Conclusions:** This is the first study investigating interoceptive dimensions in patients with fibromyalgia and ME/CFS, which were found to be dysregulated and differentially influenced by inflammatory mechanisms. Interoceptive processes may represent a new potential target for diagnostic and therapeutic investigation in these poorly understood conditions.

**Disclosure:** No significant relationships.

**Keywords:** Interoception; Pain; fatigue; Anxiety

## Personality and personality disorders

### O201

#### Do personality traits influence the stigmatizing attitudes toward people with mental illness? A web-survey among university students

L. Fusar-Poli\*, G. Saitta, M. Mormino, C. Avanzato, M.S. Signorelli and E. Aguglia

Department Of Clinical And Experimental Medicine, University of Catania, Catania, Italy

\*Corresponding author.

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**Introduction:** People from the general population often tend to believe that psychiatric patients may be incurable, dangerous, and unpredictable. Stigma represents a critical issue which should be defeated. In spite of the interest of research, little is known about the relationship between personality traits and level of stigma toward people with mental illness.

**Objectives:** To evaluate whether certain personality traits can influence the level of stigma towards mental illness in a population of university students.

**Methods:** A web-survey was spread on social networks between March and June 2020 through Google Forms. Eligibility criteria for inclusion were: 1) Being 18 years of age or older; 2) Attending a degree course in an Italian University; 3) Provide informed consent. Socio-demographic characteristics of the participants were collected. Stigma was measured using the Attribution Questionnaire (AQ-27), personality traits were evaluated through the Big Five Inventory (BFI) and the Mental Health Knowledge Schedule (MAKS-i) investigated the knowledge about mental illness. Statistical analyses were performed using SPSS 24.0.

**Results:** We computed a multiple linear regression to calculate potential predictors of stigma, adjusted on the basis of the knowledge of mental illness. Results showed that age and faculty class were not related to stigma. Agreeableness (A) and Openness to experience (O) were associated with less stigmatizing attitudes. Conversely, Neuroticism (N) and Conscientiousness (C) seemed to predict higher levels of stigma.

**Conclusions:** Our results suggest an interesting relationship between personality traits and stigmatizing attitudes, which deserves