

ues in all goodness of fit indices (χ^2 df = 1,906; CFI = .94; PCFI = .736; GFI = .93; PGFI = .607; RMSEA = .067).

Conclusion DPSS-R obtained good psychometric properties and may therefore be proposed as a valid instrument to assess DS and DP in the Portuguese population. This instrument may provide an important contribute to study the development and maintenance of psychopathology associated with disgust.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.550>

EW433

Mood instability and clinical outcomes in mental health disorders: A natural language processing (NLP) study

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Introduction Mood instability is an important problem but has received relatively little research attention. Natural language processing (NLP) is a novel method, which can be used to automatically extract clinical data from electronic health records (EHRs).

Aims To extract mood instability data from EHRs and investigate its impact on people with mental health disorders.

Methods Data on mood instability were extracted using NLP from 27,704 adults receiving care from the South London and Maudsley NHS Foundation Trust (SLaM) for affective, personality or psychotic disorders. These data were used to investigate the association of mood instability with different mental disorders and with hospitalisation and treatment outcomes.

Results Mood instability was documented in 12.1% of people included in the study. It was most frequently documented in people with bipolar disorder (22.6%), but was also common in personality disorder (17.8%) and schizophrenia (15.5%). It was associated with a greater number of days spent in hospital (B coefficient 18.5, 95% CI 12.1–24.8), greater frequency of hospitalisation (incidence rate ratio 1.95, 1.75–2.17), and an increased likelihood of prescription of antipsychotics (2.03, 1.75–2.35).

Conclusions Using NLP, it was possible to identify mood instability in a large number of people, which would otherwise not have been possible by manually reading clinical records. Mood instability occurs in a wide range of mental disorders. It is generally associated with poor clinical outcomes. These findings suggest that clinicians should screen for mood instability across all common mental health disorders. The data also highlight the utility of NLP for clinical research.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.551>

EW434

Automatic attentional processing of faces with disease cues

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Introduction Stimuli that are relevant to our survival, especially those that signal the presence of a threat in the environment (e.g., threatening faces), automatically attract our attention.

Objective The same may be true for faces displaying subtle disease cues as they may signal danger of potential contamination and, hence, disease-avoidance behaviour, which was the focus of the present research.

Aim The present study investigated, for the first time to our knowledge, whether faces with disease cues (DF), compared to control stimuli (faces without such cues) (CF), interfered with the participants' performance in a letter discrimination task.

Method Eighty-six (44 women) university students volunteered to participate in a letter discrimination task where 240 DF and 240 CF were presented.

Results The results confirmed our hypothesis by showing that for DF, compared to CF, participants took longer to discriminate the target letters. Moreover, the results from a further rating task showed that DF, compared to CF, were rated as significantly more disgusting and associated with disease, thus confirming our experimental manipulation and suggesting that disgust may be driving automatic attention to DF.

Conclusions Our findings provide important insights on the possible influence of exogenous attention to disease cues in social avoidance behaviour, which may have relevant implications in clinical disorders with disgust at its core.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.552>

EW435

Sensory processing disorders, duration of current episode, and severity of side effects in major affective and anxiety disorders

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Introduction Longer duration of untreated illness, longer duration of current episode, and severity of medication side effects may negatively influence the psychosocial functioning in major affective and anxiety disorders. Studies also suggested the involvement of sensory perception in emotional and psychopathological processes.

Objective The objective of this study is to investigate the nature of the association between duration of untreated illness, duration of current episode, and severity of medication side effects.

Aims The study is aimed to examine the relationship between sensory processing disorders (SPD), duration of untreated illness, duration of current illness episode, and the severity of side effects related to psychoactive medications.

Methods The sample included 178 participants with an age ranging from 17 to 85 years (mean = 53.84 ± 15.55); psychiatric

diagnoses were as follow: unipolar major depressive disorder (MDD) (50%), bipolar disorder (BD) (33.7%), and anxiety disorders (16.3%). subjects completed a socio-demographic questionnaire, the Udvalg for Kliniske Undersøgelser (UKU), and Adolescent/Adult Sensory Profile (AASP) questionnaire.

Results Longer duration of current episode correlated with greater registration of sensory input and lower avoidance from sensory input among unipolar patients, lower registration of sensory input, and higher tendency for sensory sensitivity/sensation avoidance among bipolar participants. In addition? longer duration of current episode correlated with lower sensory sensitivity/avoidance among anxiety participants, respectively. Mean UKU total scores were associated with lower sensory sensitivity among bipolar individuals as well.

Conclusions SPD expressed in either hypo-/hypersensitivity may be used to clinically characterize subjects with major affective and anxiety disorders.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.553>

EW436

Dysfunctional meta-cognitive beliefs across psychopathology: A meta-analytic review

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Introduction It is assumed that dysfunctional meta-cognitive beliefs about one's thoughts increase problematic appraisals and coping behaviors, which further contribute to the development of mental disorders (Wells and Matthews, 1994; Wells, 2000). Although this research interest originated around generalized anxiety disorder (GAD), recent studies have begun to examine similar meta-cognitive processes in other disorders. The majority of studies using Meta-cognitions Questionnaire (MCQ; Cartwright-Hatton & Wells, 1997) and its variants to assess meta-cognitive beliefs.

Objectives We conducted a meta-analysis to integrate empirical findings on group differences in meta-cognitive beliefs between healthy individuals and patients with various psychiatric disorders. **Methods** We followed the PRISMA guideline (Liberati et al., 2009). A systematic literature search was conducted. We included studies that involved a diagnosed psychiatric group and healthy controls (aged 18 or above), reported group comparisons of metacognition, and were published during the period of 1990–27 August 2015. Effect sizes were computed.

Results A final set of 43 studies was included. Large combined effect sizes were found on each subdomain of the MCQ, indicating increased levels of dysfunctional meta-cognitive beliefs in patients. Subgroup analyses were carried out based on psychiatric diagnosis (i.e. psychosis, $n = 10$; GAD, $n = 7$; obsessive-compulsive disorder, OCD, $n = 15$; anorexia nervosa, $n = 5$). All patient groups were more dysfunctional on each subtype of meta-cognitive beliefs than controls. Effect size of U/D was particularly large for GAD, and that of CSC was particularly large for OCD.

Conclusions Dysfunctional meta-cognitive beliefs are evident across several psychiatric disorders, with specific types of beliefs being more marked in certain diagnoses.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.554>

Psychopharmacology and pharmacoeconomics

EW438

Hematological safety of olanzapine

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Introduction Olanzapine is an atypical antipsychotic medication, previously expected to be safe in terms of hematological side effects and an alternative choice to clozapine in patients who develop hematotoxicities. However, since olanzapine was introduced to the market, a lot of cases reports have been published revealing it could cause hematoxicity. Some of them indicate that olanzapine induces agranulocytosis. Because of that, it raises the concerns about hematological safety of olanzapine.

Objective To date, no review discusses this topic specifically, so we conducted a systemic review to explore and address this issue.

Methods We searched Pubmed, Google Scholar, Ovid and Medline databases for articles between 1998 and 2015 that include keywords olanzapine, leukopenia, neutropenia, and agranulocytosis.

Results A total of 38 publications were identified. The case reports included patients aged 16 to 83 years. Doses ranged from 2.5 to 30 mg. After starting treatment, onset of hematotoxicity varied from the first day to 2–3 years, but most commonly within the first month. Also, olanzapine could induce leukopenia in patients who have never developed drug-related leukopenia.

Conclusion Among antipsychotic medications, olanzapine is the third leading cause of neutropenia and the second leading cause of atypical antipsychotic medication. Because of the small body of literature regarding the hematotoxic side effects of olanzapine, we encourage further research to understand the mechanism by which olanzapine causes granulocytopenia. The identification of risk factors could facilitate the development of new surveillance guidelines in patients taking olanzapine. We recommend that the guidelines of using and monitoring olanzapine need to be reconsidered.

Disclosure of interest The authors have not supplied their declaration of competing interest.

<http://dx.doi.org/10.1016/j.eurpsy.2016.01.556>

EW439

Utilization of psychotropic drugs in Europe: Why is Portugal such a particular case?

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Introduction Psychotropic drugs are among the most utilized medications in Europe.

Objectives To perform an international comparison of the utilization trends of antidepressants, anxiolytics, hypnotics and sedatives (AHS).

Methods We used data from the Organization for Economic Cooperation and Development (OECD). We used the World Health Organization's Defined Daily Dosage (DDD) per 1000 inhabitants per day (DHD) methodology. We performed a general comparison between 14 European countries and a more detailed comparative analysis between Portugal, Italy, Spain and Germany. These