

Exploring unusual bodily experiences, basic self disturbances and multimodal hallucinations in the non-clinical population: a cross-sectional study

Lucretia Thomas^{1*}, Renate Reniers², Lénie Torregrossa³ and Clara Humpston⁴

¹Medical School, College of Medical and Dental Sciences, University of Birmingham; ²Institute of Clinical Sciences, University of Birmingham, Institute for Mental Health, School of Psychology, University of Birmingham; ³Department of Psychology, Vanderbilt University and ⁴Institute for Mental Health, School of Psychology, University of Birmingham

*Corresponding author.

doi: 10.1192/bjo.2021.784

Aims. Psychosis research has largely focused on symptoms which are easier to define. Symptoms which are challenging to detect and articulate, including disturbances in the basic- and bodily-self, may not be volunteered by patients, despite causing significant distress. Increased understanding of such symptoms, which may present in the prodromal phase of psychosis and persist following the remission of positive symptoms, may allow patients who experience these to be better supported.

This study aims to explore how disturbances in the basic- and bodily-self relate to multimodal hallucinations. Through sampling a non-clinical population, this study takes the continuum approach to psychosis, where individuals experience sub-clinical psychotic symptoms which do not cause distress or functional impairment.

It is hypothesised that individuals with greater hallucination proneness will exhibit greater severity of ambiguous and imprecise mapping of bodily experiences, and will report greater levels of basic and bodily-self disturbance. This project also aims to evaluate Audiograph as a newly developed tool for creating representations of visual hallucinations.

Method. This is a two-stage cross-sectional study. In stage one, participants completed the Multi-Modality Unusual Sensory Experiences Questionnaire to assess hallucination-proneness. In stage two, all participants were invited to complete seven further validated questionnaires which assessed basic- and bodily self-disturbances alongside co-variables including anxiety and depression symptoms, delusion-proneness and loneliness. Participants also completed embODY, a computer-based task which allows participants to map the bodily sensations they experience during 13 different emotional states. Participants with high-hallucination proneness also completed the Audiograph task. Hierarchical linear regression, conducted using Stata, will be used to model the influence of hallucination proneness on measures of basic- and bodily-self disturbance. MATLAB will be used to generate topographical maps of the data from embODY; maps will be compared between different emotional states using linear discriminant analysis, and between high and low hallucination proneness groups using Spearman's test.

Result. Currently, 50 of the 104 stage one participants have completed stage two.

Since this project comprises a compulsory component of the presenting author's intercalated degree, data collection will cease on the 29th of March in advance of their poster and write-up submission deadlines in May.

Conclusion. Although basic- and bodily-self disturbances have been assessed in previous studies using various techniques, no single study has assessed these alongside multimodal

hallucinations to link these concepts together as a whole, especially not in a general population sample. The added value of this project is to precisely address this gap in knowledge.

A systematic review of the effects of nicotine replacement therapy on agitation among nicotine-dependent psychiatric inpatients

Joseph Toms^{1*} and Jacob King²

¹Queen Elizabeth Hospital King's Lynn NHS Foundation Trust and

²University College London Hospitals NHS Foundation Trust

*Corresponding author.

doi: 10.1192/bjo.2021.785

Aims. This systematic review aims to evaluate the effect of nicotine replacement therapies (NRTs) on measures of agitation amongst nicotine-dependent adult psychiatric inpatients.

Background. Since the introduction of the smoke-free policy for all psychiatric facilities, a psychiatric admission is likely to upset a nicotine-dependent individual's normal routine of nicotine consumption. In addition to the physiological effects of nicotine withdrawal (NW), the interpersonal dynamic which nurse-led guardianship of nicotine products constructs presents stressors to the nicotine dependent patient.

Several systematic reviews evaluating changes in objective measures of agitation amongst smoking patients in medical critical care units have found varied results, with some demonstrating worsening agitation with NRT use. We therefore believe that there is sufficient equipoise in the use of NRT to prompt a review of studies amongst psychiatric inpatients.

Method. This review identified English language studies through developed search strategies in PubMed/MEDLINE, EMBASE, PsychINFO, PSYCHLit, Cochrane databases, and Google scholar. The bibliographies of notable papers were explored. Hand searches of five major psychiatric journals were conducted. Peer reviewed studies of any study design were included if they reported primary data of adult psychiatric inpatients. Studies were extracted from 1990 – present, this was felt appropriate as nicotine replacement patches became available in 1992.

Search strategies were informed by MeSH search terms and included multiple conceptions of "agitation", including variations on; agitation, irritability, and arousal to capture the concept from broad academic constructions. The quality of studies was assessed with the Newcastle-Ottawa and Cochrane Collaboration tools.

This review follows PRISMA guidelines, and an application for PROSPERO registration has been submitted pending acceptance.

Result. Two studies were identified which matched inclusion criteria. A double-blinded randomised placebo-controlled trial of 40 nicotine-dependent inpatients from Allen et al. reported a significant 23% reduction in Agitated Behaviour Scores at 24 hours following NRT administration on admission compared to their matched placebo controls. Yet a retrospective cross-sectional analysis from Okoli using scores for NW identified more severe withdrawal symptoms including "restlessness" and "anger/irritability" than nicotine-dependent patients not provided with NRT.

Conclusion. Despite considerable commentary within literature there is presently only one study providing moderate evidence of a positive benefit to measures of agitated behaviour from the use of NRT amongst nicotine-dependent psychiatric inpatients. There is currently very low evidence whether NRT improves or exacerbates the agitation associated with NW amongst nicotine-dependent psychiatric inpatients.