## SPRiG Sussex Psychosis Research interest Group



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University of Sussex

Sussex Partnership NHS Foundation Trust

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### 1. NIHR-Funded Research

 a. Title: A pilot study to investigate the role of genetic factors in contributing to psychological treatment outcome in psychosis and service users' and carers' attitudes towards genetic research and its implications. Acronym: G-RCT

# Chief Investigator: Dr. Kathryn Greenwood, Sussex Partnership NHS Foundation Trust and University of Sussex

Cognitive deficits are rate limiters on recovery in schizophrenia that respond poorly to pharmacotherapy. Cognitive remediation therapy (CRT), a novel psychological therapy, has produced promising outcomes for cognition. However, little is known about the biological mechanisms that might underlie individual differences in CRT response. Catechol-O-Methyltransferase (COMT) is associated specifically with prefrontal cognition. The COMT Val158Met polymorphism is known to have a functional effect on the rate of dopamine degradation, which may be related to cognitive treatment response. This study aimed to determine whether COMT genotype influences cognitive improvement following CRT in schizophrenia. Participants with schizophrenia were recruited from three randomised controlled trials of CRT compared to treatment as usual, and one CRT treatment only trial, each providing 40 CRT sessions. Eighty-seven participants (40%) agreed to participate in the genetic study, and provided DNA for COMT genotyping. Cognitive function and psychopathology were assessed at baseline, posttreatment and 3-6-month follow-up. People with the COMT Val/Met genotype performed more poorly on categories achieved at baseline on the Wisconsin Card Sorting Test (WCST) than those homozygous for the Val or Met allele. Cognitive function improved with CRT but there was no association between this cognitive improvement and COMT genotype, either in the CRT group or in the total sample. The COMT val158Met polymorphism does not appear to be a clinically useful biomarker of cognitive improvement following CRT in schizophrenia. A complex set of factors may influence cognitive change, however, such that the COMT genotype might still have a subtle effect on response to CRT or similar interventions.

## 2. Student research

a. Title: How individuals with first-episode psychosis positively contribute to their families. A grounded theory analysis

## Student: Justin Allman, Saloman's, University of Christchurch, Canterbury Supervisor: Sara Meddings, Sussex Partnership NHS Foundation Trust

#### Abstract

Aim. The aim of this grounded theory study was to explore whether individuals who have experienced first-episode psychosis positively contribute to their families. Additionally, the study aimed to construct an explanatory model of how positive contribution to families is viewed and supported following first-episode psychosis.

Method. Fifteen participants took part in the study. Seven had direct experience of psychosis, seven were relatives and one was a partner of an individual with direct experience. Participants were interviewed separately, with the accounts analysed using Charmaz's version of grounded theory (Charmaz, 2006).

Results. The constructed theory suggested that individuals who have experienced first episode psychosis can and do contribute to their families, and that such contribution when noticed and valued can lead to an increase in wellbeing. The model suggests that contribution is shaped by the self-concept, the impact of psychosis, the opportunity for contribution and whether it is noticed.

Conclusion. The constructed theory extends current research, and suggests that contribution can positively impact both the individual and family. Limitations and clinical implications of the research are explored and suggestions for further research given.

### b. Title: Reducing Young Children's Prejudice Towards Mental Illness: The Development and Evaluation of an Intervention Combining Education and Extended Contact

#### Student: Christine Carroll, University of Sussex Supervisors: Professor Rupert Brown and Dr. Kathryn Greenwood, University of Sussex

### Abstract

The aim of the present study was to design and evaluate an intervention combining education and extended contact, which could be implemented with young children to reduce the stigma surrounding mental illness. A randomised between groups experimental design was used. Children (N = 42) aged 7-8 years were read short stories featuring characters with and without mental illness in friendship situations, followed by a group discussion. A control condition heard similar stories but with all references to mental health omitted. Results showed that the intervention led to greater knowledge and more positive attitudes and intended behaviour towards people with mental illness. These findings suggest that the combination of education and extended contact may be a successful strategy to reduce psychiatric stigmatisation in young children.

### c. Title: Investigating the development of mental health stigma in children aged 7-11 years.

### Student: Lucy Crowters, University of Sussex Supervisor: Dr. Kathryn Greenwood, University of Sussex

#### Abstract:

One of the biggest barriers to the uptake of and adherence to mental health services in mental health stigma. The prevalence of mental health stigma has been widely researched in adults and adolescents, however relatively little is known about mental health stigma in young children. The broad aim of this study was to investigate the development of mental health stigma in children aged 7-11 years. 77 participants recruited from two primary

schools completed a questionnaire devised to examine mental health knowledge, behavioural intentions and attitudes. Data analysis revealed no significant main effect of either age or gender on any of the questionnaire subscales. Mental health knowledge was found to significantly predict behavioural intentions and attitudes, but intergroup contact was not. The results of this study suggest that this age group may be am appropriate audience for the delivery of anti-stigma interventions. Furthermore, these results have potential implications for the development of said interventions.

## d. Title: Can Knowledge, Attitudes and Behaviour of Primary School Children towards Mental Health be Positively Shaped by Stories Based on Extended Contact?

#### Student: Kim Jamieson, University of Sussex Supervisors: Professor Rupert Brown and Dr. Kathy Greenwood, University of Sussex

#### Abstract

The present research evaluated an intervention based on extended contact theory followed by a theoretically based, educative discussion about mental health which aimed at positively shaping children's knowledge, attitude, behaviour and intergroup anxiety towards people with mental illness. A randomised-between-groups-experimental design was used, participants (n = 42) aged 7-8 years old were either read a friendship story derived from extended contact theory followed by a discussion about mental health, or received a control story and discussion with references to mental illness omitted. Knowledge, attitude and behaviour were significantly more positive in the experimental condition compared to the control, and scores on the attitude and behaviour scales were mediated by scores on the knowledge scale. Intergroup anxiety in the experimental group was significantly lower that the control group. The Implications for theoretically based interventions and educative discussions for positively shaping attitudes, knowledge and behaviour and reducing intergroup anxiety are discussed.

## e. Title: Exploring understandings of mental ill health and the emergence of stigma in primary school aged children.

#### Student: Tracy Johnstone, University of Surrey Supervisors: Dr. Mary John, University of Surrey and Dr. Kathryn Greenwood, University of Sussex

#### Abstract

Objectives: Stigma and discrimination against people with mental health difficulties has not improved significantly over the past decade. This is despite numerous statutory national level strategies and interventions aimed at changing already held stigma in adults and adolescents. Investigation into the development of stigma at primary school age may provide information for more effective strategy and interventions to augment stigma before it develops. There is a lack of local, current and methodologically sound research in primary aged children. Therefore, this study had two broad aims: To explore children's attitudes towards and their understandings of, mental health difficulties.

Design: Qualitative data was collected, using semi-structured interviews, from six focus groups depicting health with children who viewed four vignettes mental diagnoses. Participants: 33 children in school years 3-6 from two separate primary schools in an urban town on the south coast of England.

Method of Analysis: Focus group transcripts were analysed using Thematic Analysis. Results: Four main themes emerged from the data. These were: consideration of friendship, making sense of others, attitudes, and desire for certainty. A link between aspects of two of the main themes was identified as well as the influence of labelling and language. Conclusion: Children of primary school age have not yet fully developed mental health schema and possess both critical and sympathetic attitudes. A link was found between understanding and sympathetic attitudes. This, coupled with children actively searching for meaning and a desire for certainty, suggests the development of an intervention program at this age group.

## f. Title: A Pilot Randomised Control Trial of the Feasibility and Effects of Written Emotional Disclosure on the Well-being of Carers of People Experiencing Psychosis

#### Student: Elizabeth Clark, University of Sussex Supervisor: Dr. Mark Hayward, University of Sussex

#### Abstract

Although care-givers often report stress, existing interventions promoting well-being are impractical and rarely offered and completed. Consequently the feasibility and effectiveness of a potentially beneficial accessible, low-intensity written emotional disclosure (WED) intervention was piloted in parental carers of people experiencing psychosis. Fifteen of forty-seven approached carers participated. Eight were randomly assigned to receive WED and seven to a control writing tasks. Baseline and four-week follow-up measures of well-being were ascertained. Fourteen participants completed and adhered to the writing, with one further WED participant dropping-out before follow-up. Control participants experienced a significant increase in symptoms of anxiety and depression from baseline to follow-up and experienced a significant increase in anxiety and depression symptoms compared to the WED group. Other measures of well-being did not change in the groups. Despite low recruitment, the feasibility of WED was found when considering compliance and retention. However, the small sample and limited follow-up means results were interpreted cautiously; extended follow-ups and a larger pilot sample are required.

#### g. Title: Early Intervention in Psychosis Audit Project: An Exploration of Vocational Outcomes

#### Student: Caroline Haig Supervisor: Dr. Becki Whitfield, Sussex Partnership NHS Foundation Trust

#### Abstract

Research and guidelines increasingly suggest that vocation needs to be a distinct priority within Early Intervention in Psychosis Services (EIPSs). This project involved the 5 EIPSs across Sussex. 87 participants were included. The project had various aims related to vocation. The first was to compare vocational status at entry to an EIPS to vocational status after 18 months of input. A further aim was to consider whether any factors predicted vocational status (for instance, sex, ethnicity, age, EIPS locality). The third was to compare vocational outcomes between services. Data was gathered from the Trust's database, by examining referral files and by liaising with care coordinators. Data was analysed using descriptive statistics. Results showed that input from EIPSs improved vocational status after 18 months. No other factors predicted vocational status. Significant differences were found between teams in terms of their affect on vocational status at 18 months. However, given that numbers are small these results should be viewed with caution. Strengths, limitations, possibilities for future projects and recommendations for the EIPSs are discussed.

#### h. Title: Recovery from Hearing Voices: Service User Perspectives Following First Episode Psychosis

Student: Leila Hughes, University of Sussex

#### Supervisor: Dr. Clara Strauss, University of Surrey

#### Abstract

The recovery movement has created a shift in focus within current healthcare provisions towards a more person centred approach to recovery. Despite this there is still little research into what is important to service users in recovery from hearing voices, particularly those experiencing first episode psychosis, and no accurate way to assess this. Four participants who were distressed by hearing voices were recruited through local Early Intervention for Psychosis services. Three participants attending a focus group and one an interview were asked to discuss what would be different if things were better in relation to hearing voices. A thematic analysis was conducted on transcripts and themes within the data were identified. Five themes were identified as important in recovery from hearing voices; improved functioning, changes in voices, changes in identity, improved feelings and improved relationships. The results support findings from previous studies into recovery from other mental health problems; recovery is holistic but includes many factors centred on obtaining a good quality of life, and is less focused on symptom alleviation.

#### i. Title: Effect of different Duration of Untreated Psychosis on Outcome of First Episode Psychosis

#### Student: Hadeer Rezq, University of Sussex Supervisor: Dr. Kathryn Greenwood, University of Sussex

#### Abstract

The Duration of Untreated Psychosis (DUP) has been found to be a good predictor of outcome for patients suffering from their first psychotic episode. Early Intervention Services for psychosis have focused on reducing the DUP with the aim of achieving better long-term outcomes for patients. However, there is no concise definition for DUP. Neurotoxicty theory defines DUP as the time between the onset of the first psychotic episode and the first treatment with antipsychotic medication. Other theories like the Critical Period Hypothesis define DUP as the time between the onset of the psychotic episode and the initiation of psychosocial interventions. This research investigates which definition of DUP is a better predictor of outcome (as measured by CGI and GAF scores) in patients in the Brighton and Hove Early Intervention for Psychosis Centre. Regression analyses were run on the different DUP measures to predict outcome. The results show that all DUP measures are highly correlated and can all significantly predict outcome. However, DUP (medication) may seem as the most significant predictor. While this may support the neurotoxicity theory, there are other explanations and factors that may limit this conclusion.

For more information about ongoing and upcoming SPRiG research, please visit <u>www.sussex.ac.uk/spriglab</u>

For more information or to request individual researcher's contact details, please contact Clio Berry (<u>c.berry@sussex.ac.uk</u>) or Dr. Kathryn Greenwood (<u>k.e.greenwood@sussex.ac.uk</u>).