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Measuring common responses to psychosis: Assessing the psychometric properties of a new measure

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ABSTRACT

Responses to psychotic experiences are central to cognitive models of psychosis. The current study aimed to develop and validate a self-report measure of common responses to the experience of psychosis. This measure is needed as cognitive and behavioural responses are implicated in the maintenance of psychosis, but there is currently no measure that comprehensively assesses these maintaining factors. The Measure of Common Responses to psychosis (MCR) was developed and utilised in a sample of 487 participants who met criteria for treatment-resistant schizophrenia. Principal components analysis using data from 287 participants reduced the initial item pool of 31 items to 15 items with a three component structure. The components represented social control and reassurance seeking, threat monitoring and avoidance and conscious self-regulation attempts. Confirmatory factor analysis using data from the remaining 200 participants generally supported this three factor structure. The three subscales were found to have good internal consistency and convergent validity. The MCR, therefore, appears to be a useful tool to identify and monitor response styles, and could be utilised in further research to increase our understanding of the complex relationships between responses, symptoms and distress. It can also be used in clinical practice to elicit information that will be helpful in the psychological formulation and treatment of psychosis.

1. Introduction

Ways of responding to psychotic experiences are central to psychological models of the maintenance of distressing psychosis (e.g. Garety et al., 2001; Morrison, 2001). These experiences can be responded to using a range of strategies. Safety-seeking behaviours are considered to be unhelpful strategies used to manage the distress arising from a catastrophic misinterpretation of a situation (Salkovskis, 1991). Safety-seeking behaviours are thought to be unhelpful due to the fact they do not allow for such threat appraisals to be evaluated (Salkovskis, 1991). In contrast, coping responses are defined as cognitive and behavioural strategies employed to manage stressful situations (Lazarus and Folkman, 1984). Such responses are thought to be helpful because they are intended to manage the distress alone and not a faulty threat appraisal (Salkovskis, 1991).

There are problems with this conceptualisation, however, as it does not allow for situations where there is a real threat or for ineffective use of coping, even in the absence of a misinterpretation of threat. Some studies have also shown that safety-seeking behaviours can be carefully used during exposure therapy without having a counterproductive impact (Milosevic and Radomsky, 2008). Further, differentiating between safety seeking and coping can be difficult as responses may appear behaviourally to be the same, and it is only the appraisal driving the behaviour that differs.

There are several measures to assess other parts of the cognitive model; for example, appraisals can be assessed by The Beliefs about Paranoia Scale (BAPS, Morrison et al., 2005) and distress using the Calgary Depression Scale for Schizophrenia (CDSS, Addington et al., 1992). However, there is no existing measure to comprehensively assess cognitive and behavioural responses to psychosis.

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As responses are considered a key aspect of the cognitive model, a measure is needed to aid in the assessment and monitoring of this. One measure has been developed to assess safety-seeking behaviour in people with psychosis. An interview measure, the safety behaviour questionnaire (SBQ), has been developed in samples of people experiencing persecutory beliefs (Freeman et al., 2001). It has been found to be reliable and valid overall; however, there were some issues with reliability of some of the sub-scales (Freeman et al., 2001). Further, the SBQ has not been factor analysed and, therefore, its construct validity is unknown. It also cannot be administered by self-report. A self-report measure of responses specific to paranoia has been developed; however, this was developed in a non-clinical sample and the responses include emotional and physical reactions, so is not a specific measure of cognitive and behavioural responses (Lincoln et al., 2010).

A self-report measure has been developed for use with voice hearers (Chadwick and Birchwood, 1995). However, this only captures two behavioural response styles, resistance and engagement, and is specific to voice hearing.

There are numerous measures that are used to assess coping; however, these have generally been designed and validated in non-clinical samples (e.g. The COPE, Carver et al., 1989). Despite this, they have been used effectively in research using samples with a schizophrenia diagnosis (e.g. MacAulay and Cohen, 2013). The Ways of Coping Questionnaire (WCQ) has been adapted for use with psychosis samples specifically and has been found to be a reliable and valid measure (Lysaker et al., 2004). However, as this was an adaptation of the exisiting measure, the subscales were decided upon a priori, rather than through exploration of the data (Lysaker et al., 2004).

A measure of coping that has been developed specifically in a psychosis sample is the Maastricht Assessment of Coping Strategies (MACS, Bak et al., 2001). It is composed of five factors, active problem solving, passive and active problem avoiding, passive illness behaviour and symptomatic behaviour (Bak et al., 2001). This interview based measure allows the participant to freely report their own idiosyncratic coping strategies, and so makes comparison between participants difficult.

Since there is no self-report measure that comprehesively assesses cognitive and behavioural responses to psychosis, which are an important component of cognitive models, we aimed to decvelop and validate a self-report measure that incorporates both safety-seeking behaviours and coping responses specific to distressing psychotic experiences in a clinical population.

2. Method

2.1. Participants

Participants were 487 individuals recruited as part of a separate clinical trial looking at the effectiveness of Cognitive Behavioural Therapy (CBT) for clozapine resistant schizophrenia (The FOCUS Trial). Participants were eligible to take part if they were considered to have had an inadequate response to clozapine, specifically treatment of clozapine at a stable dose of 400 mg or more (unless limited by tolerability) for at least twelve weeks, or if currently augmented with a second antipsychotic that this had been given for at least twelve weeks, without remission of psychotic symptoms. Alternatively, participants could have discontinued clozapine in the past two years.

Participants were required to score a minimum total score of 58 on the Positive and Negative Syndrome Scale (PANSS) as well as 4 or more for either delusions or hallucinations or 5 or more for suspiciousness or grandiosity. They all had an identified care coordinator or consultant Psychiatrist and had not received CBT in the past twelve months. Exclusion criteria were a primary diagnosis of substance or alcohol dependence, diagnosis of developmental disability, organic impairment and non-English speaking. Participants were recruited from five sites across the UK (Manchester, Southampton, Newcastle, Glasgow and Edinburgh).

The sample characteristics can be seen in Table 1.

2.2. Measures

The PANSS (Kay et al., 1987) is a 30-item semi-structured interview to assess the severity of psychotic symptoms. Seven items assess positive symptoms, seven items assess negative symptoms and 16 items assess general psychopathology. All items are scored between 1 (absent) and 7 (extreme).

The Psychotic Symptom Rating Scale (The PSYRATS, Haddock et al., 1999) is a semi-structured interview with twelve items assessing aspects of voice hearing such as frequency, volume, distress and disruption, and six items assessing aspects of unusual beliefs such as preoccupation, distress and disruption. All items are scored from 0 to 4.

The Anxious Thoughts Inventory (*The AnTI*, *Wells*, 1994) is a 22-item self-report questionnaire designed to measure aspects of worry. Each question is scored from 1 (almost never) to 4 (almost always). This study used only the 7 item meta-worry scale.

The Measure of Common Responses to Unusual Experiences (*MCR*): This measure was developed for this study. A large item pool was developed and refined through reference to the existing literature and through consultation with specialists in the field of interest (Bowling, 2014; Rattray and Jones, 2007). Measures already available in this area such as the Safety Behaviour Questionnaire (Freeman et al., 2001), the Fear questionnaire (Marks and Mathews, 1979), the Thought Control Questionnaire (Wells and Davies, 1994) and other measures of anxiety (Wells, 1997) were reviewed for key themes covered. Items were not taken directly from these but were generated on the basis of these

Table 1
Sample characteristics.

Age (N = 487)	
Mean (SD)	42.47 (10.56)
Range	19–73
Gender (N = 487)	
Male	349
Female	138
Ethnicity (N = 487)	
White British	421
White Irish	2
White other	21
Asian Indian	5
Asian Pakistani	5
Asian Bangladeshi	2
Asian other	1
Black African	1
Black Caribbean	4
Black other	3
Mixed - White and Asian	1
Mixed – White and Black African	2
Mixed – White and Black Caribbean	7
Mixed - other	6
Other ethnic group	5
Prefer not to answer	1
Diagnosis (N = 487)	
Schizophrenia	241
Paranoid schizophrenia	186
Schizoaffective disorder	48
Delusional disorder	7
Drug induced psychosis	1
Polymorphic psychosis	1
Unspecified non-organic psychosis	1
Missing	2
Years in Education (N = 452)	
Mean (SD)	12.49 (2.90)
Range	0–27
Duration of Untreated Psychosis (months, N = 397)	
Mean (SD)	35.40 (57.45)
Duration of Illness (months, N = 458)	
Mean (SD)	229.17 (125.00)

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