Assessment in Psychosis

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The term psychosis is used clinically as a generic term to refer to the positive symptoms of psychotic disorders, namely unusual beliefs (delusions) and anomalous experiences (hallucinations and other perceptual abnormalities), as well as disturbances of thought and language. Recent years have seen a growing and fruitful debate on the merits of using a symptom-based approach to psychosis instead of the traditional, diagnostic categories favoured by the medical profession (Bentall, 1990, 2003; Boyle, 2002; van Os et al., 1999). Another topical issue is whether there is a qualitative difference between those that are considered mentally ill and those that are considered "healthy", or whether psychosis can be conceptualised as being on a continuum of normal individual variation (Claridge, 1985, 1997). Assessment tools in psychosis reflect these developments in the academic literature, as well as the recent mushrooming of cognitive-behavioural interventions for individuals with distressing psychotic experiences. In this paper (see also Kuipers et al., 2006; Peters et al., in press) the assessment of psychosis will be considered in terms of:

- the more traditional psychiatric measures, which tend to concentrate on diagnostic criteria and insight
- 2 symptom-based measures, with an emphasis on hallucinations and delusions
- 3 "at-risk mental states" measures, which vary in terms of their focus in assessing presence of subclinical symptoms versus placing the respondent on the psychosis continuum
- 4 important areas of assessment in cognitive-behavioural therapy for psychosis. Two different assessment approaches will then be illustrated with two case studies.

Psychiatric Measures

The main psychiatric assessments of psychosis tend to measure the severity and/or frequency of the main clinical features. They are invariably interview-based rather than self-report, since lack of insight is traditionally seen to be central to the disorder (David, 1990). Most include both items rated from the information elicited from the respondent, and others rated on the basis of observation during the interview. Their administration can range from 20 minutes to several hours, depending on how symptomatic the individual is. The most widely used measures include the Present State Examination (PSE; Wing et al., 1974), now incorporated in the Schedules for Clinical Assessment in Neuropsychiatry (SCAN; WHO, 1992); the Brief Psychiatric Rating Scale (BPRS; Overall & Gorham, 1962); the Scales for the Assessment of Positive Symptoms (SAPS; Andreasen, 1984a) and for the Assessment of Negative Symptoms (SANS; Andreasen, 1984b); the Positive and Negative Symptom Scale (PANSS; Kay et al., 1987, 1988, 1989), the Krawiecka Scale (also known as the Manchester Scale and the KGV; Hyde 1989; Krawiecka et al., 1977), and the Comprehensive Psychiatric Rating Scale (CPRS; Asberg et al., 1978; Jacobsson et al., 1978).

Each of these scales has advantages and disadvantages, and the appropriateness of their use will depend on the purpose of the assessment (see Barnes & Nelson, 1994). For instance, the PSE will enable a reliable classification of syndromes, but is not useful to look at change over time. The BPRS, which contains 16 subscales each rated on a seven-point scale, is better for the detection of change, but reliability and validity are poorer. The PANSS, which contains seven items on positive symptoms, seven items on negative symptoms, and 16 items on general psychopathology, is used extensively in research, but the interview is time-consuming and not user-friendly for clinical purposes. The SAPS and SANS are the most thorough in terms of positive and negative symptoms, but do not include other areas of psychopathology which may be relevant clinically, such as disorganisation or emotional problems. The KGV combines brevity with a wide range of symptomatology (eight symptoms are recorded, falling into three main categories: affective (depression and anxiety), positive (delusions, hallucinations, and incoherence and irrelevance of speech), and negative (poverty of speech, flattened incongruous affect, and psychomotor retardation)), but there is only one item each for rating delusions and hallucinations.

A large number of scales have also been devised to measure insight, since illness perceptions have been found to influence outcome (e.g. Lobban et al., 2004). Insight is best considered as three distinct, overlapping dimensions, namely recognition that one has a mental health problem, recognition of the need to take medication, and ability to label unusual mental events as pathological (David, 1990). Most scales measure only the first two dimensions, but more recently some attempts have been made to assess the third dimension. The most commonly used, at least in research, consist of the Schedule for the Assessment of Insight (SAI; David, 1990) and its expanded version (SAI-E, Kemp & David, 1997), the Scale to assess Unawareness of Mental Disorder (SUMD; Amador et al., 1993), and the Birchwood Insight Scale (Birchwood et al., 1994). The latter is a brief self-report questionnaire, while the other two are interview-based, with the SUMD including an extra component of retrospective versus current insight. Other, less well-known scales include the Insight and Treatment Attitudes Questionnaire (ITAQ; McEvoy et al., 1989), the Markova & Berrios Insight Scale (Markova & Berrios, 1992), and the Self-Appraisal of Illness Questionnaire (SAIQ; Marks et al., 2000).

Most insight scales are couched within a medical model context, and can therefore be limited in their ability to examine people's subjective understanding of their problems and experiences (Phillips et al., 2007). A number of measures have attempted to assess this further, such as the Personal Beliefs about Illness Questionnaire (PBIQ; Birchwood et al., 1993), a self-report measure assessing patients' beliefs in five domains, namely loss, humiliation, shame, attribution of behaviour to self or to illness, and entrapment in psychosis. Lobban et al. (2005) recently adapted the Illness Perception Questionnaire Revised (IPQR; Moss-Morris et al., 2001) for specific use with schizophrenia (IPQS). The IPQS consists of seven subscales, including individuals' attributions about their psychotic experiences, and their perceptions about timeline, consequences, personal control and belief in treatment.

The Recovery Style Questionnaire (Drayton et al., 1998) is a self-report version of McGlashan (1976)s observer-ra-ted Integration/Sealing Over Scale (ISOS), and can be useful to assess psychological adjustment to psychosis. It measures the two recovery styles originally described by McGlashan (1987) following a psychotic episode, namely "integration" (accepting the psychosis and building it into one's life) and "sealing-over" (denial of the importance of the experience and seeing it as alien to oneself and one's life). Lastly the Beck Cognitive Insight Scale (BCIS; Beck et al., 2004) assesses the ability to evaluate and correct distorted appraisals rather than clinical insight. It is a self-

report measure consisting of two components, namely self-reflectiveness and self-certainty, and is useful in assessments for cognitive-behavioural therapy for psychosis.

Symptom Measures

The recent symptom approach has led to the emergence of a number of self-report scales and interviews concentrating on single symptom dimensions. The most widely used currently is the Psychotic Symptom Rating Scales (PSYRATS; Haddock et al., 1999), which is a semi-structured interview measuring psychological dimensions, rather than categorical types, of delusions and hallucinations. The auditory hallucinations subscale has 11 items (including frequency, intensity, duration, disruption and beliefs about origin and control), and the delusion subscale has 6 items (including conviction, preoccupation, disruption to functioning, and distress). All items are rated by the interviewer on a five-point ordinal scale. The Personal Questionnaires (PQs; Brett-Jones et al., 1987) also assess psychological dimensions such as conviction, preoccupation and distress for delusions, and frequency, intensity and distress for hallucinations. PQs differ from other questionnaire forms in that they are devised for each individual, using that person's words to describe their beliefs, experiences or feelings.

Delusions-Specific Measures

In addition to the PSYRATS, measures to assess delusions specifically include the Maudsley Assessment of Delusions Schedule (MADS; Buchanan et al., 1993), the Delusions-Symptoms-States Inventory – Revised (DSSI-R; Foulds & Bedford, 1975), the Brown Assessment of Beliefs Scale (BABS; Eisen et al., 1998), and the Conviction of Delusional Beliefs Scale (CDBS; Combs et al., 2006), each focusing on different aspects of delusions.

The MADS is an in-depth interview covering various aspects of delusional phenomenology and action, including conviction, belief maintenance factors, affect related to beliefs, action, preoccupation, systematisation, and insight. Although it is a lengthy interview, particular sections can be used in isolation. The two most important aspects for psychological intervention purposes are "reaction to hypothetical contradiction", and "accommodation", which assess potential or actual impact of information incompatible with the person's delusion.

The DSSI-R is a self-report inventory based on Foulds and Bedford's (1975) four hierarchical classes of personal illness (with dysthymic states at the bottom of the hierarchy, followed by neurotic symptoms, integrated delusions, and delusions of disintegration). The integrated delusions consist of items on delusions of persecution, grandeur, and contrition, and the delusions of disintegration stand alone at the top of the hierarchy (seven items for each type of delusion). They are scored in terms of True–False responses with an added conviction rating. This scale is not widely used in clinical practice, and individuals with delusions other than the four types included in the scale would not score on it. However, it can be useful as a general psychopathology scale for individuals who have difficulties in verbal communication.

The BABS is a clinician-administered scale designed to assess delusionality of beliefs across a wide range of psychiatric disorders, for instance obsessive compulsive disorder, body dysmorphia, mood disorders with psychotic features, anorexia nervosa, etc. The dominant belief (obsession, concern, idea, worry, or delusion) is first elicited, and seven items related to the belief are assessed by specific probes and scored on a five-point scale ranging from non-delusional/least pathological to delusional/most pathological. The seven items consist of conviction, perception of others' views of beliefs, explanation

of differing views, fixity of ideas, attempt to disprove beliefs, insight, and ideas/delusions of reference. Lastly the CDBS assesses the dimension of delusional conviction specifically, incorporating cognitive, emotional, and behavioural items.

A number of other scales were designed to measure delusional ideation and paranoia in the general population. The Peters et al. Delusions Inventory (40-item PDI; Peters et al., 1999b; 21-item PDI; Peters et al., 2004) is based on the PSE (Wing et al., 1974), and also assesses levels of distress, preoccupation and conviction on a five-point scale for each item endorsed. The Paranoia Scale (Fenigstein & Vanable, 1992) was designed to measure paranoia in college students, although some of the items are not persecutory, and relate more to the self-consciousness typical of neurotic disorders. The Paranoia Checklist (Freeman et al., 2005) is a new scale designed to investigate paranoid thoughts of a more clinical nature than the Paranoia Scale, and to provide a multidimensional assessment of paranoid ideation. All items are rated on a five-point scale for frequency, conviction, and distress. From a slightly different perspective, Morrison et al. (2005) developed a self-report measure to assess metacognitive beliefs about paranoia, which includes four factors: negative beliefs about paranoia, beliefs about paranoia as a survival strategy, general positive beliefs, and normalising beliefs.

Hallucinations-Specific Measures

In addition to the PSYRATS, measures to assess hallucinations specifically include the Auditory Hallucinations Record Form (AHRF; Slade, 1972) and Self-Report Form (Hustig & Hafner, 1990), the Mental Health Research Institute Unusual Perceptions Schedule (MUPS; Carter et al., 1995), and the Structured Interview for Assessing Perceptual Anomalies (SIAPA; Bunney et al., 1999).

The AHRF was designed to identify triggers to voices, and needs to be completed over a period of a few weeks. The patient records on the form, at pre-determined times, the presence/absence of voices, their intensity, a series of subjectively assessed environmental variables (e.g. noise, people, activity), mood state and 15 semantic differential scales to assess the "quality" of the voices. Hustig and Hafner's Self-Report Form assesses dimensions of hallucinatory experience on visual analogue scales, and includes loudness, clarity, distress and distractibility of the voices, and mood and delusional conviction are also self-rated.

The MUPS is a comprehensive instrument developed to record people's experiences of auditory hallucinations as completely as possible. The schedule comprises a semi-structured interview and docu-ments the physical characteristics of auditory hallucinations such as their onset and course, number, volume, tone, location, as well as other phenomena associated with them such as delusions. In addition, other aspects of hallucinations, such as coping strategies, contributing factors and patients' personal views and reactions are also explored. It is too lengthy to be used in routine clinical practice, but sub-sections can be used independently.

The SIAPA is a structured interview to assess subtle perceptual and attentional anomalies distinct from hallucinations across sensory modalities (auditory, visual, tactile, olfactory, and gustatory). It is useful for research purposes, but the five point rating scale is problematic (jumps from never, rarely, to half the time, often and always). A more useful scale for assessing anomalous perceptions in all modalities, and designed for use in the general population, is the Cardiff Anomalous Perceptions Scale (CAPS; Bell et al., 2006). The CAPS is the hallucinations version of the PDI, and includes subscales measuring distress, intrusiveness, and frequency.

An important dimension of hallucinations consists of the beliefs people hold about their voices (Chadwick & Birchwood, 1994), and the Beliefs about Voices Questionnaire – Revised (BAVQ–R; Chadwick et al., 2000), and the Cognitive Assessment of Voices Interview Schedule (CAVIS; Chadwick

et al., 1996) assess this dimension specifically. The BAVQ–R consists of 35 items with five subscales relating to voices' identity (malevolence/benevolence), power (omnipotence), and consequences of obedience (engagement/resistance), rated on a four-point scale. The CAVIS enquires about the voice, the individual's feelings and behaviour in relation to the voice, and his or her beliefs about the voice's identity, power, purpose or meaning, and about the likely consequences of obedience and disobedience. The CAVIS can be useful to use as a guideline for the clinical assessment of an individual hearing voices. Morrison et al. (2002) have also designed a scale to measure interpretations of voices, for use in non-clinical populations, the Interpretations of Voices Inventory (IVI). It has three subscales relating to positive beliefs about voices, meta-physical beliefs about voices, and interpretations of loss of control.

The "Interview with a person who hears voices" (Romme & Escher, 2000) is a clinical tool based on the "empowerment" model of Romme and Escher (1993) and the Hearing Voices Network. The interview is comprehensive, but can be used in parts. Although it has a high utility factor to guide the assessment process within a clinical context, there are no data available on reliability or other psychometric properties. Sub-sections include the nature of the experience; characteristics of the voices; personal history of hearing voices; triggers; content of voices; beliefs re origin of voices; impact of voices on quality of life; relationship with voices; coping strategies; childhood experiences; treatment history; and social network.

One other measure, the La Trobe University "Coping with Auditory Hallucinations" Interview Schedule (Farhall & Gehrke, 1997), is worth mentioning, although it has not been used particularly widely since its publication. It consist of a rather lengthy structured interview concentrating on how patients cope with their hallucinations, based on the Lazarus and Folkman (1984) theoretical framework of stress and coping.

Thought-Disorder Specific Measures

Thought disorder has not received as much attention as delusions and hallucinations in the research literature, and this is reflected by the smaller number of scales available. The only widely used scales consist of the Scale for the Assessment of Thought, Language and Communication (Andreasen, 1986), where ratings are made during a psychiatric interview, and the Comprehensive Index of Positive Thought Disorder (Marengo et al., 1986), which uses the comprehension subtest of the WAIS-R and a proverbs test to elucidate bizarre thinking.

Negative Symptoms Specific Scales

Similarly, apart from the general psychiatric measures mentioned above such as the SANS and the PANSS, there are few specific negative symptoms scales. One notable exception includes the Subjective Experience of Negative Symptoms Scale (SENS; Selten et al., 1993), which is a self-rating scale based on the SANS items, and measures the severity and related distress of negative symptoms as perceived by the person. It requires respondents to compare themselves with others of their own age on a number of indices of motivation, enthusiasm and social function, and to rate their distress with their perceived level of function. Otherwise, clinical researchers have used assessment tools measuring social functioning and quality of life, both related to negative symptoms.

Single scores can be obtained from the Global Assessment of Functioning Scale (GAF; DSM-III-R, APA, 1987), and an adapted version of the GAF, the Social and Occupational Functioning Assessment Scale (SOFAS; Goldman et al., 1992). The Social Behaviour Scale (Wykes & Sturt, 1986) covers 21 items that measure the behavioural consequences of symptoms, chosen because they were

identified as providing a barrier to successful resettlement in the community. The items are rated from information provided by a key informant, on a five-point scale. The scale can be used to provide an overall score by adding up all items that are rated 2 or more, or it can be used to monitor change using the individual five-point scale ratings. The Social Functioning Scale (Birchwood et al., 1990) measures social performance in a number of areas. It can be completed by the client, a carer, or a key worker (different forms are available), and norms are given for comparable samples (e.g. the unemployed).

Quality of life scales are numerous, but tend to be too lengthy for use with psychotic populations. One exception is the Manchester Short Assessment of Quality of Life (MANSA; Priebe et al., 1999), which assesses satisfaction in areas such as employment, finances, leisure, friends, relationships, accommodation and physical and mental health.

Assessing "At-Risk" Mental States

There is an increasing emphasis on detecting psychosis early, to reduce the length of time individuals are left with an untreated psychosis (the so-called "duration of untreated psychosis" or DUP) and to accelerate access to care (McGorry, 1998). As a result, a number of assessment tools have been devised to identify prodromal patients, or individuals with an "at-risk mental state" (ARMS). The most well known include the Comprehensive Assessment of At Risk Mental States (CAARMS; Yung et al., 2004), the Structured Interview for Prodromal Syndromes (SIPS; Miller et al., 1999; 2002), the Bonn Scale for the Assessment of Basic Symptoms (Gross et al., 1987; Klosterkutter et al., 2001), and the Wisconsin Manual for Assessing Psychotic-like Experiences (Kwapil et al., 1999).

A recent measure, developed by Brett and colleagues (Brett et al., in press) assesses appraisals, contextual and response variables associated with anomalous experiences in addition to a range of anomalies of a psychotic nature (the Appraisals of Anomalous Experiences interview; AANEX). The AANEX interview can be used to generate both quantitative and qualitative data, and was designed to elicit and capture information from an individual's narrative about their anomalous experiences. It can also be useful as a clinical tool to explore and rate clients' experiences before and after an intervention. The first section of the interview comprises an inventory that assesses 40 anomalous experiences associated with psychosis, and generates two sets of scores ("Lifetime" and "State"). The second section includes the context of the experiences (e.g. situational context at onset of experiences; perceived social understanding, controllability); categories (e.g. "normalising", "other people", "spiritual") and dimensions (e.g. "externality", "dangerousness") of appraisals about the experiences; emotional response; and cognitive and behavioural responses.

In addition, a couple of measures have been developed for use in epidemiological studies looking at the incidence of psychosis in the general population. The Psychosis Screening Questionnaire (PSQ; Bebbington & Nayani, 1995) is a very brief screening interview to ascertain the presence of hypomania, thought insertion, paranoia, strange experiences, and hallucinations. The Community Assessment of Psychic Experiences (CAPE; Stefanis et al., 2002) is a 40-item self-report instrument based on the PDI (Peters et al., 1999b; 2004), but with added questions on hallucinations, negative symptoms and depression. Each item assesses both frequency of the experience and associated distress.

Cognitive-Behaviour Therapy for Psychosis

The two most important areas to identify when working psychologically with psychotic individuals consist of what distressing experiences they bring to the therapy, and what sense they make of them,

i.e. what "model" or perspective they have about their experiences. From the start of the assessment it is vital to use the person's own terminology for their psychotic experiences, rather than using psychiatric jargon such as "voices" or "delusions": for instance, the person may not recognise that they are "hearing voices" if what they are hearing is their father talking to them, or are hearing spirits accompanied by their visual appearance. Words such as "schizophrenia" or "mental illness" may be offensive to the person and should not be used unless the person is happy with a medical model explanation.

Throughout the assessment it is crucial to remember that the ultimate goal of the therapist is to try to understand, rather than to try to make the person change their mind by challenging the reality of their voices and delusions. Rather than challenging, empathy with the distress caused by the experiences is an important therapeutic tool in early stages of assessment and engagement.

The "funnel" method of assessment is a useful model to follow. In the first instance an overview assessment of distressing experiences is carried out, which might include positive symptoms, negative symptoms, as well as emotional disorders and general quality of life. Once specific problems have been identified, they can then be assessed in more depth.

For hallucinations, a useful place to start is by identifying the physical characteristics of the voices (although note that hallucinations in other modalities are also common: visions, somatic and tactile hallucinations). Important factors include the frequency of the voices, duration, loudness, number, location, and type. The content of the voices should be identified, although some clients may not be ready to disclose this until trust in the therapist has been established, for instance if the content of the voices is shaming or dangerous. The PSYRATS (Haddock et al., 1999) or Romme and Escher's (2000) "Interview with a person who hears voices" can be useful guides for this part of the assessment. An ABC assessment will also be helpful, i.e. identifying antecedents or triggers, and consequences. Triggers can be both environmental (where, when, etc.), and internal or emotional (e.g. anxiety). Consequences to look out for should be both behavioural and emotional, as well as the general impact on functioning. The extent to which people resist or comply with their voices, especially in the case of command hallucinations, is an important factor to identity. Voices diaries can be useful to identify the ABCs outside of the sessions.

It is also crucial to assess the beliefs people hold about their voices (Chadwick & Birchwood, 1994), since much of the psychological work will attempt to modify those beliefs to reduce emotional distress and enhance feelings of control, rather than reducing the frequency of hallucinations per se. Crucial dimensions include the identity (Who are they? Are they beneficial or harmful?), the perceived cause (What causes them?), their power (How powerful are they?), and control (How much control do they have over the voices? How much control do the voices have over them?). The type of relationship the person has with his or her voices is also a key feature (Birchwood et al., 2000, 2004). Again, useful guides for the cognitive and interpersonal aspects of voices include Romme and Escher's (2000) "Interview with a person who hears voices" and the PSYRATS, as well as Chadwick et al.'s (1996) Cognitive Assessment of Voices Interview Schedule.

It is important to view delusions as lying on more than one dimension rather than being all-or-nothing false beliefs (Garety & Hemsley, 1987; Peters et al., 1999a). Once the content and number of delusions have been identified, the crucial dimensions to assess consist of conviction (How much to they believe it?), preoccupation (How much time do they think about it?), distress (How upsetting are the beliefs?), and disability (What impact does it have on their lives?). The PSYRATS covers these dimensions, or, alternatively, patients can be asked to rate conviction, preoccupation, and distress on 0–100 % or any kind of Likert scale on a session-by-session basis.

Similarly to voices, delusions are often inextricably linked with emotional factors (Freeman & Garety, 2003), and potential maintaining factors such as safety behaviours should also be identified. Delusions, especially those of a persecutory or grandiose nature, can also be linked with self-esteem, and such associations should be explored before attempting to reframe the beliefs. The links may either be direct (i.e. reflecting low self-esteem, Freeman et al., 1998) or indirect (i.e. protecting against low self-esteem; Bentall et al., 2001). Lastly, it can be useful to assess cognitive flexibility about delusions (i.e. the extent to which the client is willing to entertain the idea that there may be an alternative explanation, even if alternative explanations are not actually available to the client), since there is some preliminary evidence that flexibility is associated with good outcome in cognitive-behavioural therapy (Garety et al., 1997).

In clinical practice there are no clear-cut distinctions between engagement, assessment, and intervention in psychological interventions for psychosis, with engagement and assessment remaining key therapeutic factors throughout therapy. In terms of evaluating the outcome of therapy, the PSYRATS is the most useful scale to measure psychotic symptom change. However, additional areas should also be evaluated, such as emotional problems, functioning, and quality of life, as well as satisfaction with therapy. A recent measure, CHOICE (CHoice of Outcome In Cognitive behavioural therapy for the psychosEs (Greenwood et al., 2007), has been developed specifically to cover a wider area of outcomes than merely symptom change. It was designed in consultation with service-users, with the aim of deriving a new service-user focused outcome measure that more closely reflects the priorities of service-users and the aims of cognitive-behavioural therapy for psychosis. It includes 28 potential outcome items, rated on a ten-point scale on (i) how much of a problem the items are (best-worst), (ii) how satisfied they are with the item, and (iii) the items' relative importance to them. Outcome items include "The ability to approach problems in a variety of ways"; "Knowing I am not the only person who has unusual experiences"; "The ability to step back from overwhelming experiences (e.g. thoughts or voices)"; "The ability to question the way I look at things"; "Facing my own upsetting thoughts and feelings"; "Understanding myself and my past"; "A positive purpose and direction in life"; and also includes space for two individual goals of therapy (see Table 1).

Table 1. Summary of areas of assessment for cognitivebehavioural therapy for psychosis

Delusion-specific

- content
- conviction, preoccupation, distress
- behavioural impact
- initial formation (e.g. life events)
- day to day examples
- triggers and consequences (ABCs)

- coping strategies
- clarify thoughts/beliefs/emotions/behaviours (within context of internal/external events, what is psychotic and what is normal)
- maintenance factors (including other psychotic symptoms, emotional processes, safety behaviours, environment, drug and alcohol abuse)
- change over time (including adaptation to symptoms)
- meaning of belief (for self and others)
- view of self without delusions (e.g. being persecuted may be better than being mad)
- develop hierarchy of distressing beliefs (if necessary)

Voice-specific

- triggers: environmental (where, when, etc.) and internal or emotional (e.g. anxiety)
- consequences: behavioural and emotional., as well as general impact on functioning
- frequency
- content
- number
- location
- type
- resistance vs. compliance with the voices
- coping strategies
- beliefs about voices:
- identity (who are they? Are they beneficial or harmful?)
- cause/origin (what causes them? Where do they come from?)
- power (how powerful are they?)
- control (how much control do they have over the voices?)

Psychosis-specific

• cognitive biases (jump-to-conclusions, theory of mind deficits, attributional biases (personal, externalising bias), but also normal biases in belief formation)

- cognitive deficits (difficulties in concentration, memory, planning, ability to manage complex information)
- illness model
- attitude towards medication
- risk (for instance, of complying with voices, of acting on delusions)

Person-specific

- personal beliefs (e.g. religion)
- relationship with services
- social support and social relationships
- short- and long-term goals and plans
- core-beliefs, dysfunctional assumptions and schemas (sometimes)
- life history (sometimes)
- daily activities

Secondary disturbances

- other emotional problems (low mood, anxiety, worry, intrusive thoughts)
- cognitive distortions (as found in depression and anxiety)
- substance use

Look out for

- Reaction to hypothetical contradiction (some flexibility about delusions potential predictor of good outcome)
- Accommodation (i.e. incorporation of experiences into delusion)

Cognitive flexibility

Case Examples

The first example below is an assessment report illustrating how a combination of standardised scales can be used to assess overall presentation in a number of areas, giving some indication of specific difficulties that can then be followed up with a more thorough cognitive-behavioural treatment assessment. Such an assessment can be carried out by an assistant clinical psychologist, and provides a useful combination of qualitative and quantitative data that can be easily communicated to referrers or other members of the multidisciplinary team. A repeat assessment at the end of therapy allows for an objective evaluation of the outcome of therapy.

The second example does not involve the use of standardised assessments, and illustrates a thorough cognitive-behavioural treatment assessment of auditory hallucinations.

Case Example 1. General Assessment Using a Variety of Standardised Measures

Thank you for referring X. This report summarises the findings of the initial assessment, which confirm that he is suitable for cognitive-behavioural therapy for psychosis.

X engaged cooperatively with the assessment process, and maintained good eye contact and concentration. However, he clearly found talking about his experiences distressing, and became tearful on a number of occasions.

The PSYRATS – Beliefs questionnaire (total score = 19) revealed that X believes that people are plotting against him. He fears that people are "playing with his mind" and talk in codes, with their conversations with him being peppered with "hidden meanings". He rated his conviction as 50 %, in the sense that at times he is able to refer to these events as "distressing thoughts", while at other times he believes them with 100 % absolute conviction, depending on what is happening and how he is feeling. Although the thoughts are always there in the background, he has varying amounts of control over them. When the thoughts "come to the surface" he feels guilty and believes he deserves to be punished. When they occur they last for hours or days at a time, are extremely distressing, and cause a moderate amount of disruption to his life. For instance he reports not answering the telephone because he feels people are using the phone to play with his mind, and isolating himself from friends and family to try not to trigger the onset of the thoughts. He is currently on sick leave from work, although with the support of his wife he feels he is able to manage in the community.

X did not describe any experiences of voices so the PSYRATS-Voices questionnaire was not administered.

In terms of general distress, X scored 39 on the Beck Depression Inventory and 49 on the Beck Anxiety Inventory, placing him in the severe range for both depression and anxiety.

His responses on the Beck Depression Inventory indicated that he has feelings of guilt and of being punished, as well as blaming himself for everything bad that happens. Although he has felt suicidal in the past, he is not considering suicide at the moment. On the Beck Anxiety Inventory X reported suffering from panic attacks (with two attacks in the last month), being unable to relax, and fearing the worst happening. His responses on the Beck Cognitive Insight Scale indicated that he recognises that sometimes he jumps to conclusions too fast, and is willing to consider other perspectives on his problems.

On the SENS X described feeling little motivation to do things and having low energy levels, although he still manages to keep busy during the day. He reported needing little contact with other people, because he feels people play with his mind, but needing lots of contact with his wife.

The MANSA revealed that overall he has mixed feelings about his life. He is dissatisfied with his employment and friendships, as he has become very isolated from his friends. He is very dissatisfied with his mental health, but is satisfied with his physical health. He is satisfied with his relationship with his wife and his accommodation.

X is keen to engage in therapy. On the CHOICE questionnaire he identified a number of goals for therapy, specifically getting rid of his distressing thoughts, reducing his isolation, and regaining his strength and confidence.

Case Example 2. A Cognitive Behavioural Therapy Assessment of Auditory Hallucinations

- 1) Physical characteristics: X's voices consist of men, women and children, some of whom she recognises (e.g., parents, sister), and some she does not. One particular female voice is predominant, and they feel "familiar" to her although she does not know them "face to face". They tend to be fairly loud, and she can communicate back to them with her brain. They also sometimes speak to other people (e.g., her Mum and Dad), although she recognises that they do not hear them.
- (2) Content: The voices are invariably nasty, and say things such as "She's having us on"; "We'd be pleased to get rid of her"; "She's showing off". Sometimes they threaten her with physical violence e.g., "We'll beat you up", or threaten to harm others e.g., her parents. They also sometimes tell her to do things, usually trivial such as not watching television. Their most common theme of abuse concerns her continuing unemployment, which she feels ashamed about, and seems to be a large contributor to her low self-worth. She does report them being somewhat nicer since her inpatient admission.
- (3) Antecedents: X found it difficult to identify any potential antecedents involved in triggering the voices, since she hears them almost continuously. However, they are worse when she is at home, and although they get better if she goes out they will be even worse on her return, so most of the time she will avoid going out. When going to new places they

also tend to get better, although they usually come back after a while, so that she worries constantly about getting them back even if she does not hear them.

They also seem to be influenced by her emotional states, inasmuch as she describes that they can react to the way she is feeling, e.g., if she is in a depressed state they will say "We'd be pleased to get rid of her", while if she is in a happy state they will say "She's showing off".

- (4) Emotional impact: X describes how they put her in a "funny frame of mind", that she becomes "depressed" (e.g., sometimes tearful, sometimes angry), that they "just wear her down" and cause "mental strain". She also describes how they make her "a not nice person", both because they do not like her being nice, and because they put her in a funny frame of mind, which in turn leads to her not being a nice person. She is also genuinely scared of them, describing how she sometimes locks all windows and doors because they say they are going to get her. Overall they give her no peace of mind: everyday is a struggle.
- (5) Behavioural impact: Her voices appear to be the main reason for her isolation. She does act on them, but usually only trivial things such as not watching TV. She also tends to go to bed early to get rest from her voices.

She has in the past confronted her neighbours, as she felt it may be them saying things to her rather than voices. She also feels that her voices lead to her checking (X also has an obsessive compulsive disorder problem), inasmuch as she has to constantly be "on guard" and feel her "mind is clear" (which she achieves through checking), otherwise the voices get worse.

(6) Beliefs about voices: X is confused about the voices' origin. On the one hand her beliefs about demons and Satan (she is a Jehovah's Witness) would accommodate the voices being demons, however she has never done anything which would have summoned them (such as doing a Weegee board), so she cannot reconcile herself to them being actual demons. On the other hand, although she is willing to say that "there is probably something wrong with her brain", this is more because that is what other people have told her rather than her own belief.

She does believe that they have power over her ("They are stronger than I am"), and have malevolent intentions towards her. She does not feel there is anything she can do to control them. They are omniscient in the sense that they react to how she thinks, and although she at times resists them she believes that if she does not obey them they will just get worse and worse. She describes how they feel so real it is hard to believe other people do not hear them.

(7) Coping strategies: It was difficult to elicit any coping strategies since she reports there is nothing she can do as her voices are so overwhelming. She finds going to bed helpful, and going to her sister's, but as mentioned above they get worse when she returns. She also finds that she hardly hears them when on holidays, although again she spends her time worrying about them coming back (and developing new ones) on her return. Nevertheless she does still go to her sister's and on holidays for a "mind rest", but avoids all other types of going out. She also described how seeing a psychologist previously gave her "mind rest" at least for the

hour that she spent in the session. She finds it impossible to distract herself from them, and things like listening to music on headphones makes them worse. Getting angry and shouting back at them also makes them worse.

(8) Goals: X could not envisage how therapy would help with the voices. However, she would like to use therapy to increase her confidence and self-esteem, with the ultimate goal of getting a job and "just having a normal life".

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Key publications

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Recent years have seen a growing and fruitful debate on the merits of using a symptom-based approach to psychosis instead of traditional, diagnostic categories. Another topical issue is whether psychosis can be conceptualised as being on a continuum of normal individual variation. Assessment tools in psy-chosis reflect these developments, as well as the recent mushrooming of cognitive-behavioural interventions (CBT) for individuals with distressing psychotic experiences. In this paper the assessment of psychosis is considered in terms of traditional psychiatric measures; symptom-based measures, with an emphasis on hallucinations and delusions; "at-risk mental states" measures; and important areas of assessment in CBT for psychosis. Two different assessment approaches are illustrated with two case studies.

Keywords: psychosis, assessment, cognitive-behavioural therapy, scales, questionnaires