Available online at www.sciencedirect.com
ScienceDirect
Schizophrenia Research 93 (2007) 211 – 220
SCHIZOPHRENIA RESEARCH
www.elsevier.com/locate/schres

Relevant dimensions of delusions: Continuing the continuum versus category debate

Tania M. Lincoln *

Section for Clinical Psychology and Psychotherapy, Faculty of Psychology, Philipps-Universität Marburg, Gutenbergstr. 18, 35032 Marburg, Germany

Received 8 September 2006; received in revised form 12 February 2007; accepted 16 February 2007
Available online 29 March 2007

Abstract

Delusions and hallucinations are common among healthy individuals but may differ from the symptoms experienced by persons with schizophrenia. It is hypothesized that specific dimensions of delusions, such as the distress associated with them, preoccupation, conviction or their content might be more relevant in distinguishing persons with from persons without schizophrenia than the mere presence of delusional beliefs. Second, it is investigated whether delusional beliefs are as closely linked to hallucinations in a non-clinical population as in persons with schizophrenia. The Peters et al. Delusions Inventory and the Launay Slade Hallucination Scale — Revised were used to assess delusional ideation and hallucinatory experiences in a population sample that reflects the general population in age, education and gender ($n=359$) and in persons diagnosed with life-time schizophrenia in varying stages of remission ($n=53$). There was a strong association of delusional ideation and hallucinatory experiences in both groups. Stepwise discriminant function revealed the distress associated with delusions as well as beliefs involving persecution and loss of control to be the most relevant aspects in distinguishing persons with from persons without schizophrenia. It is concluded that delusions should be assessed multi-dimensionally, laying particular emphasis on distress and content of beliefs.

Keywords: Delusions; Hallucinations; Continuum; Dimensional assessment; Distress

1. Introduction

1.1. The continuum approach to delusions

Delusions are defined in the DSM-IV™ Guidebook as fixed, false beliefs that are not widely held in the context of the individual's cultural or religious group, are impervious to compelling evidence of their implausibility and are held with total conviction (Frances et al., 2005). The classic distinction between presence and absence of delusions is categorical, differentiating between presence and absence of severe mental disorder and arguing that there is a distinct mechanism for the formation and fixation of delusions in contrast to normal or overvalued ideas (Jaspers, 1946). The categorical classification has been criticized for several reasons: First, it has been acknowledged that delusions involve other aspects than the mere presence of an odd belief.

* Tel.: +49 6421 2823647; fax: +49 6421 2828904.
E-mail address: lincoln@staff.uni-marburg.de.

0920-9964/$ - see front matter © 2007 Elsevier B.V. All rights reserved.
doi:10.1016/j.schres.2007.02.013

These include distress associated with the belief, the preoccupation with it and the level of conviction (e.g. Appelbaum et al., 1999; Peters et al., 1999b). Second, in spite of having been defined as fixed, delusions are not unchangeable (Appelbaum et al., 2004; Sharp et al., 1996; Kuipers et al., 1997). Third, the high co-morbidity of schizophrenia with other DSM-IV diagnoses (Sirius, 1991; Fenton, 2001; Hanssen et al., 2003) suggests the presence of common pathologies (Widinger and Samuel, 2005). Finally, multiple findings indicate that delusions and hallucinations are commonplace in healthy populations, with prevalences up to approximately 25% depending on the definitional criteria (Gallup and Newport, 1991; Eaton et al., 1991; Peters et al., 1999b, 2004; Freeman et al., 2005; Tien, 1991). This provides support for continuum models of psychotic symptoms (Strauss, 1969; Claridge, 1987; Johns and van Os, 2001; McGovern and Turkington, 2001), which postulate that schizophrenia is not a discrete illness entity, but that psychotic symptoms differ in quantitative ways from normal experiences and behaviors.

1.2. Questions that follow from the continuum assumption of psychosis

Schizophrenia is an obviously severe mental disorder characterized in most cases by extreme emotional distress, long-term impairment of functioning and need of professional care. If delusional beliefs, as one of the core symptoms of schizophrenia (Andreasen and Flaum, 1991), are common in the general population, why do not more people suffer comparable distress? If it is not the mere presence of delusional beliefs that is responsible for extreme distress, what is it then? Is there a difference between the delusional beliefs held by persons diagnosed with schizophrenia and those without schizophrenia?

In this paper it is hypothesized that some dimensions of delusions might be more helpful in distinguishing persons with psychosis from persons without psychosis than others. In spite of considerable overlap in the mere presence or number of delusional beliefs, patients with psychosis might still be better distinguished from non-patients by the distress associated with a belief, and possibly also by the preoccupation and conviction or the content of beliefs. In comparison to someone holding delusional or bizarre ideas, but not in need of professional help a person with psychosis might hold beliefs that are more threatening, feel more convinced that the beliefs are true, spend more time thinking about the beliefs and thus experience beliefs as far more distressing. It seems likely that it is not so much the delusional belief per se but rather the conviction, the preoccupation and in particular the distress associated with it that causes the high amount of emotional impairment and the severity of the disorder in schizophrenia. It follows that there might be less overlap in these dimensions than has been found for the mere presence of delusional beliefs. Some support for this has been provided by Peters et al. (1999b, 2004) in their validation studies of the Peters et al. Delusions Inventory (PDI), who found that the majority of delusional ideas were not only endorsed significantly more often but were also rated higher on distress, preoccupation and conviction by psychiatric patients with delusions compared to non-psychotic participants. However, the authors did not quantify the role of the additional dimensions in separating patients from the general population. Also, although helpful for the validation of the PDI, the comparison group of diagnostically heterogeneous inpatients with delusions above a certain cut-off point is not optimal for investigating the overlap of delusions between persons with and without psychosis, as a cut-off produces an extreme group, which does not reflect the heterogeneity of symptoms in representative patient samples. An additional concern is that the "healthy" samples were possibly not representative of the general population as large parts were recruited from student summer universities.

Another reason for the high impairment in persons with delusions in schizophrenia is the fact that different upsetting symptoms co-occur and might be enhancing each others' effect on emotional distress. In particular, delusions have been found to co-occur with hallucinations (Liddle, 1987; Peralta et al., 1992). It seems reasonable to assume that an association of symptoms will also be present in non-clinical populations, although possibly less clearly than in patient samples. Although Larøi and van der Linden (2005) have found hallucinations and delusions to correlate in a non-clinical sample and some studies in the area of schizotypy research have found positive symptoms to cluster together in healthy individuals (Bentall et al., 1989) there has been little research to date on the continuum of the co-occurrence of symptoms using detailed symptom measures and no study has directly compared the strength of the association between delusional beliefs and hallucinations in persons with and without schizophrenia.

1.3. Hypotheses

The aim of the present study is to further investigate the continuum of delusions and hallucinations by comparing persons with schizophrenia with a non-clinical sample.