



Validation of the dimensions of psychosis instrument in Mexican patients with schizophrenia spectrum disorders

Pablo León-Ortiz ^a, Ana Fresán ^b, Sylvana Stephano ^c, Camilo de la Fuente-Sandoval ^{a,c,*}

^a Experimental Psychiatry Laboratory, Instituto Nacional de Neurología y Neurocirugía, Mexico City, Mexico

^b Clinical Research Division, Instituto Nacional de Psiquiatría, Mexico City, Mexico

^c Neuropsychiatry Department, Instituto Nacional de Neurología y Neurocirugía, Mexico City, Mexico

ARTICLE INFO

Article history:

Received 27 May 2011

Received in revised form 6 July 2011

Accepted 13 July 2011

Available online 2 August 2011

Keywords:

Schizophrenia

DIPI

Validity

Factor structure

ABSTRACT

The objective was to determine the psychometric properties of the Dimensions of Psychosis Instrument (DIPI) in Mexican patients with schizophrenia spectrum disorders. One-hundred patients were recruited. Convergent and divergent validity were determined with the positive and negative scores of the Positive and Negative Syndrome Scale; a forced five-factor exploratory principal-components analysis with varimax rotation was developed. Total DIPI score shows an adequate convergent validity. The rotated principal component matrix accounted for 82.1% of the variance. Our study gives further support of the adequacy of the DIPI for the assessment of the five most common subjective experiences related to psychosis.

© 2011 Elsevier B.V. All rights reserved.

1. Introduction

There is a widespread recognition that adequate models of schizophrenia symptoms need to go beyond the positive–negative domains. Although numerous factor analytic studies have generated several models (White et al., 1997), especially in favor of five domains (Lindenmayer et al., 1995; Lancon et al., 1998; Lykouras et al., 2000; Emsley et al., 2003; Fresan et al., 2005), the positive and negative factors are always present as unitary-independent dimensions. In contrast to negative symptoms, positive symptoms reflect pathology of content of thought and perception (Lindenmayer et al., 1995) and are now the subject of controversy in terms of its unidimensional construct (Peralta et al., 1995).

Modern psychiatry has compromised the understanding of the psychotic syndrome by excluding the subjective experience of psychosis (SEP) (Parnas et al., 2002; Andreasen, 2007). The categorical approach and assessment by means of standardized instruments sacrifice the understanding of how human experience

relates to the disease's expression. It's possible to allege that psychiatry has lacked of a suitable theoretical framework to address human experience (Parnas, 2005).

Strauss (1969) appears to be the first one to point out that hallucinations and delusions can be characterized by several dimensions that are independent of their content. The multidimensional representation of the SEP has been supported by several authors (Strauss, 1969; Garety and Freeman, 1999). Nevertheless, its assessment with consistent definitions and instruments with adequate psychometric properties are difficult as different numbers of dimensions have been found among studies.

The Dimensions of Psychosis Instrument (DIPI) is a 10-item clinician-administered semi-structured instrument developed with the goal of assessing the five most common dimensions of the SEP reported in the literature (Mizrahi et al., 2006). Conviction(CO) is defined as the certainty about the symptom and includes the existence of evidence that might persuade the patient of its falsity (Appelbaum et al., 1999); Cognitive preoccupation(CP) refers to the extent to which the patient reports that his/her thoughts focus exclusively on the symptom (Kendler et al., 1983; Brett-Jones et al., 1987; Garety and Hemsley, 1987; Wessely et al., 1993; Eisen et al., 1998; Appelbaum et al., 1999; Haddock et al., 1999; Peters et al., 1999); Behavioral impact(BI) refers to the extent that the patient's actions are motivated by the symptom (Brett-Jones et al., 1987; Garety and Hemsley, 1987; Wessely et al., 1993; Appelbaum et al., 1999; Haddock et al., 1999); Emotional involvement(EI) addresses the affective states caused by the psychotic experience (Wessely et al., 1993; Oulis et al., 1996; Appelbaum et al., 1999; Haddock et al., 1999); and External perspective(EP) reflects the patient's thoughts about

Abbreviations: DIPI, Dimensions of Psychosis Instrument; PANSS, Positive and Negative Syndrome Scale; INNN, National Institute of Neurology and Neurosurgery of Mexico; SEP, subjective experience of psychosis; BI, Behavioral impact of the experience; CP, cognitive preoccupation with the psychotic experience; CO, conviction of the psychotic experience; EI, emotional involvement; EP, external perspective about the experience.

* Corresponding author at: Experimental Psychiatry Laboratory, Instituto Nacional de Neurología y Neurocirugía, Insurgentes Sur 3877, La Fama, Tlalpan, 14269 Mexico City, Mexico. Tel.: +52 55 5606 3822x5030; fax: +52 55 5171 6456.

E-mail address: cdelafuente@innn.edu.mx (C. de la Fuente-Sandoval).

what others may think about the symptoms (Brett-Jones et al., 1987; Wessely et al., 1993; Oulis et al., 1996; Appelbaum et al., 1999).

Before DIPI administration, the clinician needs to explore the details of the patient's psychotic experience to determine the main symptom complex (i.e., main perceptual experience) and examine the DIPI items in relation to this. Responses for items are scored in a 4-point Likert scale (ranging from 0 to 3), 3 being the maximum severity.

A model with an approach from the standpoint of the patient may provide new ways for the understanding of the psychotic phenomena. The multidimensional approach of the DIPI and its transcultural validity requires further evaluation. The main objective of the present study was to determine the psychometric properties of the DIPI in Mexican patients with schizophrenia spectrum disorders.

2. Materials and methods

2.1. Subjects

The study was approved by the Ethics and Scientific Committees of the National Institute of Neurology and Neurosurgery of Mexico (INNN). All subjects gave written informed consent after receiving a comprehensive explanation of the nature of the study. Patients were consecutively recruited at the neuropsychiatry services of the INNN. Patients were included if they were between 15 and 65 years old and met the DSM-IV criteria for schizophrenia, schizophreniform or schizoaffective disorder (APA, 2000).

2.2. Measurement instruments and procedure

Diagnoses were made using the structured clinical interview for DSM-IV (First et al., 1997) and confirmed by clinical consensus. The Positive and Negative Syndrome Scale (PANSS) was used to evaluate symptom severity (Kay and Sevy, 1990).

The procedure for translation of the DIPI was based upon recommendations of the U.S. Census Advisory Committee (Census Bureau Guideline; http://www.census.gov/cac/2010_census_advisory_committee/language_translation_guidelines.html). The instrument was translated from English into Spanish by two independent translators and reviewed by one of the authors (AF) and by two independent mental health professionals to identify discrepancies and reach a final consensus for language adequacy. The study recruitment began after the translation procedure was completed.

After the patient has given their informed consent, the PANSS was rated by an experienced psychiatrist (CdIF-S or PL-O). On the same day, the DIPI was performed by an experienced clinician (SS) who was blind to the PANSS' scores.

2.3. Statistical analyses

Kolmogorov–Smirnov test was used in order to test normal distribution of the DIPI. Convergent and divergent validity of the DIPI were determined with the positive and negative scores of the PANSS using the Pearson correlation coefficient. Reliability of the DIPI total score was estimated with the Cronbach's alpha coefficient. Finally, a forced five-factor exploratory principal-components analysis with varimax rotation was developed.

3. Results

3.1. Sample description

Sample comprised 100 patients; males account for 68% of the sample. Most of the patients were single (85%) and unemployed (70%) with a mean age of 32.6 ± 12.1 years. Age of illness onset was 23.7 ± 7.1 years. Diagnoses were as follows: paranoid schizophrenia

(66%), disorganized schizophrenia (13%), schizoaffective (12%) and schizophreniform disorders (5%) and undifferentiated schizophrenia (4%). At the time of the study, 51% of the patients were receiving second-generation antipsychotics, 28% first-generation antipsychotics and 21% were not on antipsychotics.

3.2. Reliability and validity of the DIPI

Kolmogorov–Smirnov test showed normal distribution of the DIPI score ($p = 0.34$). The dimensions of the DIPI showed moderate to high reliability as measured by Cronbach's alpha coefficient (Table 1). Internal consistency of the total score was $\alpha = 0.79$. Convergent and divergent validity values are shown in Fig. 1.

3.3. Factor structure of the DIPI

The rotated matrix of the five-factors of the DIPI accounted for 82.1% of the variance. All items loaded on clearly defined factors and none of them loaded on more than one factor (Table 1). The five-factor solution fit better theoretically and statistically after the one-factor and three-factor solutions were tested.

4. Discussion

Our results support the validity of pentagonal model proposed for the DIPI which also showed an adequate reliability for its use in Mexican patients.

The BI factor contributes prominently to the total variance explained by the instrument and is the most consistently reported dimension in the literature (Appelbaum et al., 1999; Haddock et al., 1999). Its high reliability may indicate a direct congruence between the clinical observation of altered behavior and how the patient perceives these dysfunctions.

CP was the second in order of importance reflecting that patients may be able to recognize the impact of symptoms on their own mental activity, as the highest impairment is shown when the patient is

Table 1
Factor loadings of the DIPI items in the five factor model – Varimax.

Items	Factors				
	BI	CO	CP	EI	EP
9 In the past week, have you done anything in particular because of X?	0.838				
10 In the past week, has X stopped you from doing anything?	0.920				
1 How sure are you about X, any doubts about it? Are you certain it is true?		0.848			
2 Do you sometimes think X is true but then think it is part of an illness?		0.903			
5 In the past week, how often have you thought about X?			0.873		
6 Is X at the front of your mind or on the back burner? Do you find it hard to put X out of your mind? Do you find yourself distracted by X when you are trying to do something else?			0.830		
7 Does X make you feel sad, depressed, angry, frightened, worried or happy? How much?				0.870	
8 Is X emotionally significant for you? Does X affect how you feel?				0.811	
3 Do your relatives or friends consider X strange or unusual?					0.918
4 If we told other people your story, do you think they would believe you?					0.600
Eigenvalue	3.73	1.59	1.13	0.90	0.83
Variance (%)	37.38	15.90	11.35	9.07	8.38
Cronbach's alpha	0.84	0.80	0.76	0.75	0.50

Download English Version:

<https://daneshyari.com/en/article/6827452>

Download Persian Version:

<https://daneshyari.com/article/6827452>

[Daneshyari.com](https://daneshyari.com)