Schizophrenia Research 159 (2014) 144–150

Contents lists available at ScienceDirect

Schizophrenia Research

journal homepage: www.elsevier.com/locate/schres

The Specific Level of Functioning Scale: Construct validity, internal consistency and factor structure in a large Italian sample of people with schizophrenia living in the community

Armida Mucci [a], Paola Rucci [b], Paola Rocca [c], Paola Bucci [a], Dino Gibertoni [b], Eleonora Merlotti [a], Silvana Galderisi [a,*], Mario Maj [a], Italian Network for Research on Psychoses [1]

[a] Department of Psychiatry, University of Naples SUN, Naples, Italy
[b] Department of Biomedical and Neuromotor Sciences, University of Bologna, Bologna, Italy
[c] Department of Neuroscience, University of Turin, Turin, Italy

A R T I C L E I N F O

Article history:
Received 23 December 2013
Received in revised form 18 July 2014
Accepted 19 July 2014
Available online 30 August 2014

Keywords:
Schizophrenia
Real-life functioning
Specific Level of Functioning Scale
Personal and Social Performance Scale
Validation
Factor structure

A B S T R A C T

Background: The study aimed to assess the construct validity, internal consistency and factor structure of the Specific Levels of Functioning Scale (SLOF), a multidimensional instrument assessing real life functioning.
Methods: The study was carried out in 895 Italian people with schizophrenia, all living in the community and attending the outpatient units of 26 university psychiatric clinics and/or community mental health departments. The construct validity of the SLOF was analyzed by means of the multitrait–multimethod approach, using the Personal and Social Performance (PSP) Scale as the gold standard. The factor structure of the SLOF was examined using both an exploratory principal component analysis and a confirmatory factor analysis.
Results: The six factors identified using exploratory principal component analysis explained 57.1% of the item variance. The examination of the multitrait–multimethod matrix revealed that the SLOF factors had high correlations with PSP factors measuring the same constructs and low correlations with PSP factors measuring different constructs. The confirmatory factor analysis (CFA) corroborated the 6-factor structure reported in the original validation study. Loadings were all significant and ranged from a minimum of 0.299 to a maximum of 0.803. The CFA model was adequately powered and had satisfactory goodness of fit indices (comparative fit index = 0.927, Tucker–Lewis index = 0.920 and root mean square error of approximation = 0.047, 95% CI 0.045–0.049).
Conclusion: The present study confirms, in a large sample of Italian people with schizophrenia living in the community, that the SLOF is a reliable and valid instrument for the assessment of social functioning. It has good construct validity and internal consistency, and a well-defined factor structure.
© 2014 Elsevier B.V. All rights reserved.

1. Introduction

Individuals with schizophrenia are often impaired in their performance of everyday functional skills, including the ability to initiate and maintain social relationships, enter and remain in paid jobs, live independently in the community, and manage their own basic self- and health-care.

It is increasingly acknowledged that the alleviation of schizophrenia symptoms obtained with available treatments is not accompanied by a parallel improvement of patients' functional impairments (e.g., San et al., 2007; Lambert et al., 2010). The relationship between symptoms and functioning is modest: individuals with relatively severe symptoms may function moderately well, while patients with mild symptoms may not function adequately in their daily activities (Bromley and Brekke, 2010). As a matter of fact, from 30% to 70% of people with schizophrenia do achieve symptom remission, but the percentage of patients showing adequate functioning in real life is remarkably lower, even in early

* Corresponding author at: Department of Psychiatry, University of Naples (SUN), Largo Madonna delle Grazie, 80138 Naples, Italy.
E-mail address: silvana.galderisi@gmail.com (S. Galderisi).

[1] Italian Network for Research on Psychoses, module for the assessment of real life functioning: Marcello Chieffi, Mario Luciano, Giuseppe Piegari, Ernesta Plaitano and Gaia Sampogna (University of Naples (SUN), Naples); Alessandro Bertolino (University of Bari); Raffaele Salfi (University of Bologna); Luca Gheda (University of Brescia); Federica Pinna (University of Cagliari); Maria Signorelli (University of Catania); Tiziano Acciavatti (University of Chieti-Pescara); Carlo Faravelli and Stefano Pallanti (University of Florence); Mario Altamura (University of Foggia); Pietro Calcagno (University of Genoa); Gabriella Di Emidio and Rita Roncone (University of L'Aquila); Lucio Oldani (University of Milan); Andrea De Bartolomeis (University of Naples Federico II); Carla Gramaglia (University of Eastern Piedmont, Novara); Elena Tenconi (University of Padua); Carlo Marchesi (University of Parma); Claudio Cargioli and Liliana Dell'Osso (University of Pisa); Fabio Di Fabio and Paolo Girardi (Sapienza University of Rome); Giorgio Di Lorenzo (Tor Vergata University of Rome); Palmiero Monteleone (University of Salerno); Simone Bolognesi (University of Siena); and Cristiana Montemagni (University of Turin).

http://dx.doi.org/10.1016/j.schres.2014.07.044
0920-9964/© 2014 Elsevier B.V. All rights reserved.

stages of the illness (San et al., 2007; Bodén et al., 2009; Henry et al., 2010), suggesting that symptomatic remission contributes to improved functioning in real life, but is not sufficient to attain it. As a consequence, the goal of schizophrenia treatment has gradually shifted from symptom reduction and relapse prevention to improving real life functioning.

Evidence has been provided that some degree of recovery of normal functioning in real life is possible for people with schizophrenia, despite the presence of residual symptoms. With appropriate care and support, people with schizophrenia may recover and live fulfilled lives in the community, with up to 50% of individuals potentially having a good outcome (Lieberman et al., 2008; Warner, 2009; Zipursky et al., 2013; Fleischhacker et al., 2014). The movement that emphasizes the importance of recovery as the aim of schizophrenia treatment is increasingly influential and has led to widespread acceptance that recovery involves a process of personal growth focusing on attainment of a fulfilled and valued life, rather than on elimination of symptoms alone (Roe et al., 2007; Bromley and Brekke, 2010; Remington et al., 2010; Shrivastava et al., 2010; Slade et al., 2014).

In this context, the assessment of real life functioning as a relevant indicator of treatment outcome, independent of psychopathology, has become an urgent need to be met and has stimulated the development of instruments to be used in both research and clinical settings.

Functioning in real life is a complex construct, difficult to define and to measure (Harvey and Strassnig, 2012). The ability of currently available functional outcome assessment instruments to reflect patients' real life performance is still unclear (Bromley and Brekke, 2010). A wide variety of instruments is actually available: they are either generic or disease specific; they cover few or several areas of functioning; and they are either self-rated or rated by caregivers. As a matter of fact, the choice of the source of information and the domains to be investigated, as well as the degree of complexity of the instrument, which has to provide a comprehensive assessment while being acceptable in clinical contexts, represents highly controversial issues.

As to the source of information, self-reports are influenced by the patient's psychopathological conditions (e.g., lack of insight, disorganized thinking, cognitive deficits or depression), and show poor convergence with case manager reports, even for objective outcomes such as living situation and time spent working in the past week (Bowie et al., 2007; Leifker et al., 2011). Clinician-rated instruments may show poor correlation with patients' functioning in real life. Instruments rated by relatives might be influenced by different behavioral standards and/or hindered by the lack of a key reliable relative (Harvey et al., 2011; Sabbag et al., 2011).

Nonetheless, this research field is rapidly expanding and studies assessing reliability of various instruments rated by different informants are being carried out (e.g., Klin et al., 2007; Peuskens et al., 2012; Zaidi et al., 2014). A thorough description of currently available instruments is beyond the scope of this paper, in which we focus on the Specific Levels of Functioning Scale (SLOF, Schneider and Struening, 1983), an instrument measuring social, vocational, and everyday living outcomes, that was endorsed by the panel of experts involved in the Validation of Everyday Real-World Outcomes (VALERO) initiative as a suitable measure to index ability-relevant real life functioning (Harvey et al., 2011; Leifker et al., 2011).

The SLOF is a 43-item interview-based multidimensional assessment instrument which does not include items relevant to psychiatric symptomatology or cognitive dysfunctions, but measures observable behaviors by focusing on person's skills, assets, and abilities (Schneider and Struening, 1983). It is administered to the caseworker or caregiver of the person with schizophrenia, selected on the basis of his/her familiarity with that person.

In the context of a multicentre study of the Italian Network for Research on Psychoses, we explored the construct validity, internal consistency and factor structure of the Italian version of the SLOF. The Personal and Social Performance Scale (PSP, Morosini et al., 2000), a largely used interview-based measure of patients' functioning developed in Italy, was used as gold standard, as it is validated in Italian, shows good inter-rater and test–retest reliability and has also previously been included into a number of trials in patients with schizophrenia (e.g., Gigantesco et al., 2006; Apiquian et al., 2009; Biancosino et al., 2009; Nicholl et al., 2010; Lindenmayer et al., 2013).

2. Methods

2.1. Instruments

2.1.1. Specific Level of Functioning Scale (SLOF)

The SLOF includes 43 items (see Appendix 1), grouped into six subscales: Physical functioning; Personal care skills; Interpersonal relationships; Social acceptability; Activities of community living; and Work skills. Each of the questions in the above subscales is rated on a 5-point Likert scale (1 = poorest function, 5 = best function) with anchors describing the frequency of the behavior and/or patient's level of independence. The higher the total score, the better the overall functioning of the subject. According to the original version of the scale, the time frame covered by the survey is the past week. The SLOF also includes an open-ended question asking the informant if there is any other area of functioning not covered by the instrument that may be important in assessing the patient's functioning. The informant is also asked to rank how well she/he knows the patient on a 5-point Likert scale ranging from 'not well at all' to 'very well'.

According to the method proposed by Herdman et al. (1998), the instrument was translated in Italian (two independent translations of the scale were made by two psychiatrists, PR and AM, experienced in this area, fluent in English and able to identify the concept covered by each of the original items) and then back-translated. A formal assessment of semantic equivalence, a debriefing with a conventional sample, and a final review by experts were carried out. The operational equivalence was taken into account, which preserves the original features. For this purpose, we kept the same number of fields, the same statements, and the same option of scoring and qualification.

2.1.2. The Personal and Social Performance (PSP) scale

The PSP (Morosini et al., 2000) is a 0–100 single-item rating scale. The ratings are based on an interview administered to the patient by the clinician to assess functioning in the last month in four main areas: Socially useful activities; Personal and social relationships; Self-care; and Disturbing and aggressive behaviors. Each of the four domains is rated according to six degrees of severity (absent, mild, manifest, marked, severe, very severe). The scale was developed as an enhancement of the Global Assessment of Functioning (GAF) and the Social and Occupational Functioning Assessment Scale (SOFAS), to offer a validated and feasible instrument to describe the course of treatment of patients with schizophrenia in the short, medium and long terms. It has a good inter-rater reliability (Morosini et al., 2000).

2.2. Training

The training involved 29 researchers, one per site (with the exception of two sites for which two and three researchers participated, respectively).

In the PSP training, the scale was read aloud by a researcher expert in its use and discussed by all participants; a case vignette was used as training material; trainees were then invited to give an independent rating of three other case vignettes to assess the inter-rater reliability. An excellent agreement was observed among raters (Cohen's kappa = 0.91; intraclass correlation coefficient, ICC = 0.98). We also calculated the ICC for each of the four areas of PSP: an excellent agreement among raters was observed for all areas (ICC = 0.92–1.00), except for

Download English Version:

https://daneshyari.com/en/article/10307730

Download Persian Version:

https://daneshyari.com/article/10307730

Daneshyari.com