Measuring stages of recovery from psychosis

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Abstract

Background: Mental health consumers invite us to abandon the pathology model, which is tied to pessimism, and instead to embrace a model of personal recovery that goes beyond being free from symptoms, and involves self-management of the illness. The Stages of Recovery Instrument (STORI) is a measure developed from the perspective of consumers according to a conceptual five-stage model of recovery.
Aims: The main aim of this work was to study the psychometric properties of the STORI, but we also set out to compare the stages of recovery in our sample with the five-stage model in the sample with which the scale was developed.
Methods: Our sample consisted of 95 people diagnosed with schizophrenia-spectrum psychoses, with a mean age of 34.74 (*SD* = 9.25).
Results: The STORI scores showed adequate psychometric properties in this sample. Cluster analysis indicated that the three-cluster model fitted the data better than the five-cluster model. Internal consistency of the STORI scores ranged between .83 and .87. STORI stages were associated with Recovery Styles Questionnaire scores.
Discussion: The results provide empirical validation of the STORI in other countries. Empirical evidence revealed that the stages of recovery found in our own and other clinical samples differ from those found in the samples with which the scale was developed.
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1. Introduction

In the last decade, interest in the concept of recovery from psychosis and in policies related to recovery has increased internationally [1]. Recovery from a psychosis episode can be understood either as an outcome or as a process. When considered as an outcome (also known as *clinical recovery*), it involves a binary (present or absent) concept, which is invariant across people, usually involving a reduction or absence of symptoms and a significant improvement in occupational and social functioning. In contrast, *personal recovery* is a process that individuals go through in order to live a satisfying life. It involves learning to self-manage the illness, regardless of the presence of recurring symptoms, and building a fulfilling life, which varies across individuals.

While criteria for establishing clinical recovery are operational and useful for epidemiological prevalence studies, the concept of personal recovery has emerged from consumer narratives, and entails much more than bringing symptoms under control. Personal recovery mainly refers to the establishment of a meaningful life and a positive sense of identity, founded on hopefulness and self-determination [2].

Diverse assessment instruments have been created to appraise the process of recovery from psychosis [3–5].

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These include (1) the Recovery Assessment Scale (RAS) [6], which consists of 41 items rated on a 5-point Likert scale that are used to form five subscales (personal confidence and hope, willingness to ask for help, goal and success orientation, reliance on others, and no domination by symptoms); (2) the client version of the Illness Management and Recovery (IMR) Scales [7], consisting of 15 items rated on a 5-point Likert scale with varying anchor descriptions, where a higher total score indicates a greater level of recovery; (3) the integration/sealing over scale (ISOS) [8], an observer-reported measure of recovery style from psychosis made up of 13 items; (4) the Recovery Styles Questionnaire (RSQ) [9], developed as a brief self-report form of the ISOS and consisting of 39 dichotomous items used to measure 13 concepts found to distinguish individuals with an integration recovery style from those with a sealing over-recovery style; and (5) the Mental Health Recovery Measure (MHRM) [10], comprising 30 items, rated on a 5-point Likert scale and grouped in seven subscales (overcoming stuckness, self-empowerment, learning and self-redefinition, basic functioning, overall well-being, new potentials, and advocacy/enrichment). In a recent review, Cavelti et al. [11] found that there are several useful tools for assessing personal recovery with adequate psychometric properties. However, further research on specific measures is needed—for example, research exploring the internal structure of the measures and the internal consistency of the scores.

Although the experience of recovery from psychosis is a process unique to each individual, there are some common factors as regards the psychological process. According to Andresen et al. [2], these common factors involve four key processes: (i) finding and maintaining hope; (ii) taking responsibility for life and well-being; (iii) redefining self and identity; and (iv) finding meaning and purpose in life. These processes take place over five stages of recovery. In the suggested five-stage model, stage 1 (moratorium) is characterized by denial, confusion, hopelessness, deprived sense of one's life, loss of purpose in life, and self-protective withdrawal. Stage 2 (awareness) marks the turning point in the recovery process, with the advent of hope and a sense of personal agency for taking responsibility for recovery and purpose in life. Stage 3 (preparation) provides the foundation for building a meaningful life, taking stock of internal and external resources, and setting new goals. Stage 4 (rebuilding) involves an active pursuit of personal goals, building a more positive sense of self, taking risks in order to take control of one's life, and overcoming failure and setbacks to build resilience in the face of future obstacles. Finally, stage 5 (growth) is the culmination of the effort that has taken place in the preceding stages, seeking personal growth and self-actualization, and is characterized by hopefulness and a positive outlook towards the future.

As a means of identifying a person's current stage of recovery, Andresen, Caputi, and Oades [12] developed the Stages of Recovery Instrument (STORI), and more recently a short form of this instrument [13], utilizing the 30 best-performing items of the original, while retaining the theoretical stages of the model and the elements of recovery important to consumers. An important difference with respect to the aforementioned measures of recovery from psychosis is that both the STORI and its short version (the STORI-30) are based on a sequential model of recovery. Initial testing in Australia provided preliminary evidence of construct validity, with the internal consistency of the stage subscales yielding alpha coefficients ranging from 0.88 to 0.94, and concurrent validity with the Recovery Assessment Scale [6], the Psychological Well-Being Scales [14], the Adult State Hope Scale, the Connor-Davidson Resilience Scale [15] and the Mental Health Inventory [16]. Moreover, the pattern of correlations found among the STORI subscales provided support for the validity of the ordinal stages of the model, the proximal stages being positively correlated; the distal stages showed weak associations, and the most distal stages were negatively correlated [12,17].

Weeks, Slade, and Hayward [18] in the United Kingdom provided further evidence of the concurrent validity of the STORI, finding significant correlations with the Recovery Assessment Scale [6] and a similar pattern of correlations among the stage subscales. Weeks et al. also found satisfactory face validity and feasibility, and preliminary evidence of test–retest reliability. However, while conceptually the five-stage model is the basis for the design of the STORI, empirical evidence from cluster analyses of the instrument's items points to three clusters as the most psychometrically interpretable solution. In the study by Andresen et al. [12], the first cluster comprised stage 1 items; the second cluster consisted of stage 2 and 3 items, as well as four stage 4 items; and the third cluster consisted of the stage 5 items and six stage 4 items. Weeks et al. [18] also found a three-cluster solution for the items of the STORI: the first cluster consisted of 7 items from stage 1; the second cluster contained 23 items (3 from stage 1, 9 from stage 2, 8 from stage 3, and 3 from stage 4); and the third cluster contained 20 items (1 from stage 2, 2 from stage 3, 7 from stage 4, and 10 from stage 5).

Cavelty et al. [11] stress that the assessment of the various stages of recovery is an aspect of the STORI that is not achieved by the RAS or by any of the other measures; however, they also point out that it currently has some weaknesses with regard to construct validity and internal consistency.

Given the current state of this issue and the lack of measurement instruments for assessing recovery styles, there is an emerging need to adapt and validate the STORI for Spanish in a clinical sample, and also to test the supposed five-stage model of recovery; in particular, it will be important to compare the recovery stages in our sample with the five-stage model in the sample with which the scale was developed.

2. Method

2.1. Participants

The sample was made up of 95 patients, 67 (70.5%) of them male, clients of the public mental health system.