

Sinhala translation, cultural adaptation and validation of Recovery Assessment Scale-24 in a Sri Lankan population

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Abstract

Background

The concept of recovery in schizophrenia has shifted from a purely clinical focus to a broader, person-centred perspective encompassing multiple dimensions. Despite growing global interest, research on personal recovery in Sri Lanka remains limited. The lack of culturally adapted and validated tools has constrained systematic evaluation in local settings. The Recovery Assessment Scale (RAS-24) is widely used to measure personal recovery, but its applicability in Sri Lanka has not yet been established.

Aims

The study aimed to translate, culturally adapt, and validate the Sinhala version of the Recovery Assessment Scale (RAS-S 24).

Methods

This study translated, culturally adapted, and validated the RAS-24 for Sinhala-speaking patients with schizophrenia. It comprised forward-backward translation, expert panel review, content validation, and pilot testing with 20 patients to assess clarity, relevance, and cultural acceptability. The Sinhala RAS-24 (RAS-24-S) was administered to 50 randomly

selected patients attending a follow-up psychiatry clinic at the National Hospital of Sri Lanka to assess internal consistency and construct validity.

Results

RAS-24-S demonstrated strong cultural acceptability and psychometric performance. Content validity was excellent, with an S-CVI/Ave of 0.93. The total scale showed excellent internal consistency, while domain reliability ranged from acceptable to excellent. Exploratory factor analysis supported a four-factor structure that explained 79.2% of the variance. Recovery level was significantly associated with relapse frequency, insight, alcohol use, cannabis use, psychiatric comorbidity, medical illness, and family history.

Conclusion

RAS-24-S is a valid, reliable, and culturally appropriate tool for assessing recovery among patients with schizophrenia in Sri Lanka.

Keywords: Schizophrenia, Recovery Assessment Scale (RAS-24), mental health recovery, psychometrics, validation study

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Introduction

With advances in pharmacological and psychological treatments for schizophrenia, it is now widely acknowledged that the lives of service users extend beyond merely coping with symptoms. The concept of “recovery” has therefore emerged as an important and desirable outcome, recognising a personal journey towards hope, security, and a sense of self, and an empowered life enriched by supportive relationships, coping skills, social inclusion, and personal meaning (1,2).

Over time, multiple attempts have been made to define recovery. Certain definitions emphasise the importance of being at least partially symptom-free. Some have viewed recovery as periods of remission interspersed with symptom exacerbation, highlighting the need to consider symptom variability when defining recovery (3).

More recently, there has been a gradual shift in focus from clinical (service-based) recovery to personal (consumer-based) recovery (4).

A widely cited definition captures this perspective by describing recovery as “a deeply personal, unique process of changing one’s attitudes, values, feelings, goals, skills and/or roles. It is a way of living a satisfying, hopeful, and contributing life even within the limitations caused by illness” (1).

A systematic review with a modified narrative synthesis has further explored this concept and proposed a framework for understanding personal recovery. It describes recovery as a journey comprising processes and stages. Central to this journey are five key elements: Connectedness, Hope and optimism about the future, Identity, Meaning in life, and Empowerment-collectively summarised by the acronym CHIME (5).

Several instruments have been developed to assess recovery among individuals with mental illness. Among the more widely used are the Recovery Assessment Scale (RAS), the Stages of Recovery Instrument (STORI), the Illness Management and Recovery (IMR) Scales, and the Recovery Process Inventory (RPI) (6).

The Recovery Assessment Scale, which focuses on personal recovery, is available in two versions: a longer 41-item form and a shorter 24-item version. The RAS-24 has been translated into several languages and is used in the USA, the United Kingdom, Australia, Spain, Portugal, Israel, Sweden, and Japan (7,8).

In the present study, the Recovery Assessment Scale-24 is used to assess personal recovery among patients in a Sri Lankan setting, addressing an area that has received relatively little attention to date.

In many parts of the world, including Sri Lanka, recovery from schizophrenia remains underexplored. Although some studies from other Asian countries have examined outcomes, data specifically addressing recovery rates remain limited (9).

Within Sri Lanka, only a small number of studies have examined outcomes of schizophrenia.

Mental health services in Sri Lanka have traditionally focused on clinical improvement. However, the system has evolved considerably – from institutional care in asylums to more decentralised, community-based services with a broader, more optimistic outlook grounded in scientific evidence.

Nevertheless, such interventions are rarely guided by national policies or by structured frameworks explicitly focused on recovery. This may reflect limited awareness of the concept’s importance and a lack of locally generated research evidence. It is therefore important to examine current recovery rates to inform discussion and guide future developments.

The absence of a culturally adapted and validated tool for assessing recovery may have contributed to the limited research in this area. This study seeks to address this gap by adapting and validating the Recovery Assessment Scale (RAS) for local use. Originally developed as a 41-item instrument, the RAS also has a shorter 24-item version and has been translated into multiple languages. The Australian Mental Health Outcomes and Classification Network (AMHOCN) has reviewed 22 recovery measures and identified the RAS as one of the most robust instruments available (6).

The RAS-24-S is expected to be useful for clinicians, mental health professionals, and policymakers working to improve mental health outcomes. The study will also provide insight into the current state of recovery and identify key variables that may inform targeted interventions. Importantly, discussions about recovery can help patients and their families recognise that meaningful improvement in quality of life is achievable.

Methodology

This study involved translating, validating, and culturally adapting the Recovery Assessment Scale (RAS-24). A descriptive cross-sectional study was carried out to assess recovery rates and explore relationships between recovery and various factors, using a sample of patients with schizophrenia attending follow-up appointments at the National Hospital of Sri Lanka, and data were used to inform the psychometric testing.

The translation and cultural adaptation of the Recovery Assessment Scale-24 (RAS-24) into Sinhala followed established guidelines, including those from the World Health Organisation and Beaton et al.’s framework for cross-cultural adaptation.

The original English RAS-24 was translated into Sinhala by a bilingual expert. The translated version was then backtranslated into English by another independent bilingual translator with no prior knowledge of the original scale. This process ensured that the translated scale retained the original meaning and concepts. To assess content validity, an expert panel, including a psychiatrist, a clinical psychologist, a community psychiatry nurse, an occupational therapist, and a psychiatric social worker, reviewed all versions of the scale. They assessed semantic and conceptual equivalence, cultural relevance, and item clarity and appropriateness.

Each item was rated for relevance on a 4-point Likert scale, and the Content Validity Index (CVI) was calculated to assess each item’s validity. Items with an I-CVI ≥ 0.78 were deemed acceptable, and those below this threshold were revised based on expert feedback.

Face validity was evaluated by the expert panel and a small group of patients to ensure the items were culturally appropriate, easy to understand, and relevant to the local context. The cultural adaptation process ensured that the concept of recovery, as represented in the RAS-24, was meaningful and applicable within the Sri Lankan context. This was informed by a literature review, expert opinions, and feedback from the target population. The pre-final version of the Sinhala RAS-24 was pilot-tested with 20 patients with schizophrenia from a setting different from the study site to assess psychometric properties. Cognitive debriefing interviews assessed participants' understanding of the items, and necessary adjustments were made based on their feedback.

Operational equivalence was evaluated by examining the format, instructions, and administration methods, informed by expert consultations and pilot testing to ensure practicality in the local clinical setting.

The final version of the Sinhala RAS-24 was approved by the expert panel and used in the cross-sectional study to assess its psychometric properties. The RAS-24 is not copyrighted, and its use in this research was permitted.

The descriptive cross-sectional study was conducted among a sample of 50 randomly selected patients attending an outpatient psychiatry follow-up clinic at the National Hospital of Sri Lanka. Systematic random sampling was used to select participants based on their clinic registration numbers. Those who agreed to participate were assessed using the Sinhala version of the Recovery Assessment Scale (RAS-S), along with a general questionnaire and clinical interviews. Information was supplemented by data from clinic records, with the patient's written consent. Data collection occurred after their follow-up consultations.

Patients who were diagnosed with schizophrenia according to ICD-10 criteria for at least two years, aged 20-60 years (as schizophrenia typically manifests in late adolescence or early adulthood, and cognitive decline becomes more common after age 60, which could affect recovery measurements), whose first language is Sinhala, and who were able to give consent, as determined clinically, were selected for the study.

Patients who were diagnosed with intellectual disabilities, dementia, or severe comorbid medical conditions, and those who were experiencing a psychotic or affective relapse, as identified in clinic records and during the clinical interview, were excluded.

Data were collected using the instruments mentioned above. The principal investigator administered the interviews, reading the questions aloud to patients who were unable to complete the self-administered scales

independently. All instruments were anonymised, and each patient was assigned a serial number for identification.

Prior to data collection, informed written consent was obtained from each participant. Consent forms and information leaflets were available in Sinhala, English, and Tamil. Throughout the process, participant privacy and confidentiality were strictly maintained.

Data was entered into IBM SPSS Statistics for Windows, Version 31.0, for analysis. Descriptive Statistics, including socio-demographic, socio-economic, clinical, and substance use data, were described using frequencies and percentages. Continuous variables, such as age of onset, were summarised as means and standard deviations.

RAS-24-S scores were calculated using standard procedures, with higher scores indicating better recovery. Chi-square tests were used to assess associations between recovery and categorical variables, and a p-value <0.05 was considered statistically significant.

Results

This study focused on translating, culturally adapting, and validating the Recovery Assessment Scale-24 (RAS-24) into Sinhala, and on conducting psychometric testing among a cohort of patients with schizophrenia attending a tertiary care psychiatric clinic in Sri Lanka.

The cross-cultural adaptation of the RAS-24 into Sinhala was completed, with agreement reached through an expert panel (10) (Table 1). The pre-final Sinhala version was then pilot tested with 20 patients with schizophrenia recruited from a different setting than the main study group. Based on their feedback, several refinements were made to improve the tool's clarity, interpretability, and overall acceptability (10). Translated scale was then administered to a randomly selected larger sample of patients with schizophrenia attending the psychiatry clinic at the National Hospital of Sri Lanka (n=50). The data were used to evaluate the psychometric properties of the translated scale, including internal consistency and construct validity (7, 11).

Forward and backward translation of the RAS-24-S was carried out by a bilingual expert to ensure semantic and conceptual equivalence. The component focused on cultural adaptation and the feasibility of the RAS-24-S.

Content validity

Content validity was assessed by a panel of five mental health professionals. Each item was rated on a 4-point scale (1 = not relevant, 4 = highly relevant). The Item-level Content Validity Index (I-CVI) ranged from 0.80 to 1.00 for most items. One item had an I-CVI of 0.60 and

was revised in response to expert feedback. The Scale-level Content Validity Index (S-CVI/Ave) was 0.93, indicating excellent overall content validity.

Face validity

Face validity of the RAS-24-S was assessed by both the expert panel (n=5) and a group of patients with schizophrenia (n=20) during the pilot testing phase. Participants were asked to comment on item clarity, relevance, comprehensibility, and cultural appropriateness. Overall, all items were considered clear and understandable. Based on participant feedback, minor wording adjustments were made to improve clarity and cultural relevance. No items were identified as confusing, inappropriate, or offensive. Patients reported that the

items were easy to understand and relevant to their lived experiences of recovery, indicating good acceptability of the scale in the local context.

Cultural adaptation

Cultural adaptation led to minor to moderate changes in some items to improve clarity and cultural relevance. Certain terms were adjusted to better reflect locally understood expressions of recovery and social functioning. (Table 1) The expert panel agreed that the concept of recovery, as captured by the scale, was applicable in the Sri Lankan context. Feedback from the pilot group indicated good acceptability, and no items were considered inappropriate or offensive.

Table 1. The final version of the RAS-S after cultural adaptation and making changes to improve clarity and understanding

Original Scale Items (RAS-24)	Translated scale items	Culturally adapted final scale items
1 I have a desire to succeed.	සාර්ථකත්වය ළඟා කර ගැනීමට ආශාවක් මා තුළ ඇත.	මගේ ජීවිතය සාර්ථක කරගන්න මට ආශාවක් තියනවා.
2 I have my own plan for how to stay or become well.	රෝගයෙන් සුවපත් වීමට හා එම සුවය පවත්වා ගැනීමට මා හට මගේම සැලැස්මක් ඇත.	නිරෝගී වීමටත් ඒ නිරෝගී සුවය පවත්වා ගැනීමටත් අනුගමනය කළ යුතු මගේම වැඩපිළිවෙලක් මට තියනවා.
3 I have goals in life that I want to reach.	මා ළඟා වීමට බලාපොරොත්තු වන ජීවන ඉලක්ක මොනවාදැයි මා දනිමි.	ජීවිතයේ මා ළඟා කර ගත යුතු ඉලක්ක මට තියෙනවා.
4 I believe I can meet my current personal goals.	මගේ පෞද්ගලික ඉලක්ක කරා ළඟා වීමට මට හැකි වේ යැයි මම විස්වාස කරමි.	ඒ ඉලක්ක ළඟා කරගැනීමට මට පුළුවන් කියා මම විශ්වාස කරනවා.
5 I have a purpose in life.	මගේ ජීවිතයට ප්‍රධාන අරමුණක් ඇත.	මට ජීවිතයේ ප්‍රධාන අරමුණක් තියෙනවා.
6 Even when I don't care about myself, other people do.	මම මා ගැන නොසලකා හරින අවස්ථාවලදී වුවද අන් අය මා ගැන සැලකිල්ලෙන් සොයා බලති.	මම මාව නොසලකා හරින අවස්ථාවලදී වුණත් මා ගැන සැලකිලිමත් වන අය මට ඉන්නවා.
7 Fear doesn't stop me from living the way I want to.	මට අවශ්‍ය ආකාරයට ජීවිතය ගෙනයාම සඳහා මම බිය නොවෙමි.	මම මට ඕනෑ විදියට ජීවත් වෙන එක වළක්වන්න බිය ගෙන දෙන සිතුවිලිවලට බැහැ.
8 I can handle what happens in my life.	මගේ ජීවිතයේ සිදු වන හොඳින් සිදුවීම්වලට මුහුණ දීමේ හැකියාව මට තිබේ.	මගේ ජීවිතයේ සිදුවන සිදුවීම්වලට හොඳින් මුහුණ දෙන්න මට පුළුවන්.
9 I like myself.	මා පිළිබඳව මට හොඳ හැඟීමක් කැමැත්තක් ඇත.	මට මා පිළිබඳව තියෙන්නෙ හොඳ හැඟීමක් සහ කැමැත්තක්.

(Continued)

Original Scale Items (RAS-24)	Translated scale items	Culturally adapted final scale items
10 If people really knew me, they would like me.	මා කවුද කියා අනෙක් පුද්ගලයන් හොඳින් තේරුම් ගතහොත් ඔවුන් මට කැමති වනු ඇතැයි මට සිතේ.	මම ඇත්තටම මොන වගේ කෙනෙක්ද කියලා දන්නව නම් අනිත් අය මට කැමති වෙයි කියලා මට හිතෙනවා.
11 I have an idea of who I want to become	මට කුමන පුද්ගලයකු වීමට අවශ්‍යදැයි මම දනිමි.	මට මොන වගේ කෙනෙක් වෙන්න ඕනෑද කියලා මම දන්නවා.
12 Something good will eventually happen.	ඉදිරියේදී කුමන හෝ ආකාරයකට මා හට යහපත් දෙයක් සිදු වනු ඇතැයි මට සිතේ.	ඉදිරියේදී කොහොමහරි හැමදේම හොඳින් සිදු වේවි කියලා මට හිතෙනවා.
13 I'm hopeful about my future.	මගේ අනාගතය පිළිබඳ මා කළ යහපත් බලාපොරොත්තු ඇත.	මගේ අනාගතය දිනා බලාපොරොත්තු සහගතව බලන්න මට පුළුවන්.
14 I continue to have new interests.	මම අලුත් අලුත් දෑ කිරීමට හා අත්හදා බැලීමට කැමතියි.	මම තව කරන්න ආස කරන දේවල් මගේ ජීවිතයේ තියනවා.
15 Coping with my mental illness is no longer the main focus of my life.	මානසික රෝගය සමඟ සටන් කිරීම තවදුරටත් මගේ ජීවිතයේ ප්‍රධාන ඉලක්කය නොවේ. එයින් එහා ගිය ජීවිත අරමුණු මට තිබේ.	මානසික රෝගය සමඟ සටන් කිරීමට වඩා එහා ගිය වැදගත් දේවල් මගේ ජීවිතයේ තියනවා.
16 My symptoms interfere less and less with my life	දැන් මගේ රෝග ලක්ෂණ පෙර පරිදි මගේ ජීවිතයට බලපෑම් ඇති නොකරයි.	මානසික රෝගයේ රෝග ලක්ෂණවලින් මගේ ජීවිතයට ඇති බලපෑම දැන් එන්න එන්නම අඩුයි.
17 My symptoms seem to be a problem for shorter periods of time each time they occur.	එය දැන් මා රෝගී වන අවස්ථාවලදී එම රෝග ලක්ෂණ පවතින්නේ පෙර තිබුණාට වඩා සුළු කාලයකි.	මානසික රෝගය උත්සන්න වන විට දැන් දැන් එය ඉස්සර තරම් දිගු කාලයක් පවතින්නේ නැහැ.
18 I know when to ask for help.	මගේ රෝගය සඳහා මා උදව් ලබා ගත යුත්තේ මොන අවස්ථාවලදීද කියා මම දනිමි.	මානසික රෝගය සඳහා ප්‍රතිකාර හෝ උදව් අවශ්‍ය කුමන වේලාවලදීද කියා මට හඳුනාගන්න පුළුවන්.
19 I am willing to ask for help.	එවන් අවස්ථාවලදී අවශ්‍ය උදව් ලබා ගැනීමට මම කැමැත්තෙමි.	එවැනි වෙලාවකදී එම උදව් හෝ ප්‍රතිකාර ලබා ගැනීමට මම කැමතියි.
20 I ask for help when I need it.	මට අවශ්‍ය වන එවන් අවස්ථාවලදී මම උදව් ලබා ගනිමි.	මට උදව් හෝ ප්‍රතිකාර අවශ්‍ය එවැනි වෙලාවට මම උදව් ලබාගන්නවා.
21 I can handle stress.	මට ආතතිය දරා ගැනීමට හා ඊට මුහුණ දීමට හැකියාව ඇත.	මානසික පීඩනයන් ඇතිවන විට ඒවා දරාගැනීමට මට හැකියාව තියනවා.
22 I have people I can count on.	අවශ්‍ය වූ විට මට උදව් කිරීමට කැමති අය මගේ ජීවිතයේ සිටිති.	මට ඕනෑ වෙලාවට උදව් කිරීමට සූදානම් පුද්ගලයන් මගේ ජීවිතයේ මට ඉන්නවා.
23 Even when I don't believe in myself, other people do	මගේ හැකියාවන් පිළිබඳව මටත් වඩා විශ්වාස කරන අය මා වටා සිටිති.	මටත් වඩා මා ගැන සහ මගේ හැකියාවන් ගැන විශ්වාසය තබන අය මට ඉන්නවා.
24 It is important to have a variety of friends.	විවිධාකාරයේ හිත මිතුරන් සිටීම වැදගත්ය.	විවිධ වර්ගයේ පුද්ගලයන්, මිතුරන් ආශ්‍රය කිරීම වැදගත් කියලා මම හිතනවා.

Reliability

Internal consistency of the RAS-24-S was assessed using Cronbach's alpha (Table 2). The total scale showed excellent reliability ($\alpha=0.959$), indicating strong internal consistency. Although this high value suggests coherence, it may also reflect item overlap or redundancy, as reported in earlier studies. However, this does not detract from its overall reliability as a measure of recovery. Domain-specific alpha values ranged from 0.755 to 0.907, indicating acceptable to excellent reliability across domains. According to commonly accepted thresholds ($\alpha \geq .70$ acceptable, ≥ 0.80 good, ≥ 0.90 excellent), all domains met the required standards.

Construct validity

Significant associations were observed between recovery levels and multiple clinical variables.

Chi-square analysis showed that relapse frequency, insight, alcohol use, cannabis use, psychiatric comorbidity, medical illness, and family history were all significantly associated with recovery (all $p < 0.001$; Table 3).

Factor analysis

Exploratory factor analysis using principal component analysis with varimax rotation identified a four-factor structure (Table 4). Together, the four factors explained 79.2% of the total variance, with the first component alone accounting for 52.8%.

Table 2. Internal consistency reliability of the RAS-S 24 scale and its domains, demonstrating acceptable to excellent Cronbach's α coefficients across all subscales

Domain	No. of items	Cronbach's α
Confidence and hope	7	0.846
Help-seeking	4	0.755
Goal and success orientation	5	0.907
Reliance on others	4	0.804
Not dominated by symptoms	4	0.871
Total RAS-S 24 Scale	20	0.959

Table 3. Association between clinical variables and recovery status using chi-square analysis, demonstrating significant relationships for most variables, with particularly strong associations observed for insight and medical illness

Variable	χ^2	df	p-value	Interpretation
Relapse frequency	22.52	2	<0.001	Significant
Insight	106.35	4	<0.001	Strong association
Alcohol use	14.31	2	<0.001	Significant
Nicotine use	5.38	2	0.068	Not significant
Cannabis use	27.88	2	<0.001	Significant
Psychiatric comorbidity	28.66	2	<0.001	Significant
Medical illness	68.60	2	<0.001	Strong association
Family history	37.50	2	<0.001	Significant

Table 4. Exploratory factor analysis of the RAS-S 24 items (Rotated Component Matrix (loadings ≥ 0.40))

Item	Factor 1	Factor 2	Factor 3	Factor 4
Goals in life	0.700			
Meet personal goals	0.827			
Purpose in life	0.826			
Idea of who I want to become	0.849			
New interests	0.811			
Like myself		0.869		
Willing to ask for help		0.874		
Know when to ask for help		0.822		
Others care about me			0.668	
Something good will happen			0.680	
Hopeful about future		0.598	0.516	
Fear doesn't stop me				0.767
Handle life		0.582		0.674
Symptoms interfere less	0.460		0.489	0.406

Items related to personal confidence, goal orientation and recovery identity loaded on the first factor, while self-efficacy and help-seeking behaviours loaded on the second. Hope, optimism and perceived social support loaded on the third factor. Symptom control and resilience loaded on the fourth factor.

Supporting the concept of the interconnected nature of recovery, some items showed cross-loadings across factors. Overall, the factor structure aligned well with the multidimensional notion of recovery and was consistent with previously reported RAS-24 domains.

Overall, the RAS-24-S demonstrated strong psychometric properties. The content and face validity demonstrated were excellent, confirming cultural relevance and clarity. Internal consistency was high across the scale, which supports reliable measurement.

Construct validity was also well supported by significant associations found between clinical variables and recovery, including insight, relapse frequency and comorbid conditions. Factor analysis found a clear four-factor structure which included items falling into the categories of personal confidence, self-efficacy, social

support and symptom control. This reflects the well-known concept of recovery's multidimensional nature.

These findings support the validity, reliability and cultural appropriateness of RAS-S 24 as a tool, which can be utilised to assess recovery in individuals with mental illness.

Discussion

This study aimed to translate the Recovery Assessment Scale (RAS-24) into Sinhala and to evaluate its cultural suitability and psychometric validity in a Sri Lankan population.

The psychometric performance of the Sinhala version of the RAS-24 (RAS-S 24) in this study is broadly consistent with findings from international validation studies. The excellent internal consistency of the total scale ($\alpha = 0.959$) falls within the range reported in both Western and non-Western populations, where Cronbach's alpha typically ranges from 0.93 to 0.97 (7, 12, 11). While this reflects strong reliability, it may also indicate some item redundancy, a limitation noted in earlier work on the RAS (12).

The four-factor structure identified in this study is comparable, though not identical, to those reported elsewhere. Many studies have described a five-factor model, including domains such as personal confidence, help-seeking, goal orientation, reliance on others, and freedom from symptom dominance (7, 11). Differences in factor structures are likely due to cultural variations in how recovery is understood and to differences in analytical approaches.

The presence of cross-loadings in this study supports the idea that recovery domains are not entirely distinct but overlapping, reinforcing the concept of recovery as a multidimensional and interconnected construct (13).

Construct validity findings also align with international evidence. Strong associations between recovery and factors such as insight, relapse frequency, and comorbid conditions have been widely reported, with improved insight and fewer relapses linked to better recovery outcomes (14, 15). Similarly, the observed effects of substance use and psychiatric comorbidity are consistent with findings from both Western and Asian contexts, highlighting the influence of clinical complexity on recovery pathways (16, 15).

The cultural adaptation process was successful, with high content validity and good acceptability among participants. This aligns with findings from other adaptation studies, which show that although the concept of recovery is broadly applicable across cultures, careful linguistic and contextual adjustments are necessary to ensure relevance (10, 17).

Overall, these results support the cross-cultural applicability of the RAS framework while also highlighting subtle differences shaped by local cultural and clinical contexts.

Strengths and limitations

Our study used a well-validated recovery measure (RAS-24), and this is the first work to translate a recovery assessment tool into Sinhala, culturally adapt it, and validate it. The methodology is strengthened through forward and backward translation, expert panel review, and pilot testing, thereby improving its semantic and cultural accuracy.

However, there are also limitations. The sample size used for the psychometric assessment is limited to 50, which is small for a factor analysis of a 24-item scale. Therefore, the factor analysis should be interpreted as exploratory rather than confirmatory.

This is a single-centre study conducted in a tertiary-care follow-up clinic, which might limit generalisability.

Additionally, recovery is assessed using a self-report scale, so responses may be affected by insight, recall, level of understanding and social desirability bias.

Implications and future directions

The RAS-24-S can be used as a culturally appropriate tool to assess recovery in individuals with schizophrenia who speak Sinhala as their first language. It can help professionals focus their care beyond symptom control and address the elements of hope, goal setting, confidence, help-seeking, and social support. This tool may also facilitate future studies of recovery assessment in Sri Lanka and inform novel models of service provision.

Such research can be carried out with larger, more diverse samples to improve generalisability. Conducting a confirmatory factor analysis in an adequately powered sample, assessing test-retest reliability, and sensitivity to change can be the next steps. Translating and validating the scale to Tamil can improve wider national acceptability.

Longitudinal studies can be conducted to examine how recovery changes over time and in response to interventions.

Conclusion

The Sinhala version of the RAS-24 demonstrated excellent content and face validity, strong psychometric properties and good cultural relevance for assessing recovery in individuals with schizophrenia in the Sri Lankan setting. Its use may support more recovery-oriented care and future research; further validation in more diverse, larger samples is recommended.

Ethical considerations

This study did not involve any invasive procedures or treatments. All participants received information about the study and provided written informed consent. Participation was voluntary, and patients were assured that refusal would not affect their standard care.

Ethical clearance was obtained from the Ethics Review Committee of the National Institute of Mental Health, and permission was granted by the directors of both the National Institute of Mental Health and the National Hospital of Sri Lanka.

Conflicts of interest and funding

There were no conflicts of interest.

All the expenses of the study were borne by the investigators.

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References

1. Anthony WA. Recovery from mental illness: the guiding vision of the mental health service system in the 1990s. *Psychosoc Rehabil J*. 1993; 16(4): 11-23.
2. Slade M. Personal recovery and mental illness. Cambridge: Cambridge University Press; 2009.
3. Bellack AS. Scientific and consumer models of recovery in schizophrenia. *Schizophr Bull*. 2006; 32(3): 432-42.
4. Corrigan PW, Giffort D, Rashid F, Leary M, Okeke I. Recovery as a psychological construct. *Community Ment Health J*. 1999; 35(3): 231-39.
5. Leamy M, Bird V, Le Boutillier C, Williams J, Slade M. Conceptual framework for personal recovery in mental health: systematic review and narrative synthesis. *Br J Psychiatry*. 2011; 199(6): 445-52.
6. Shanks V, Williams J, Leamy M, et al. Measures of personal recovery: systematic review. *Psychiatr Serv*. 2013; 64(10): 974-80.
7. Corrigan PW, Salzer M, Ralph RO, Sangster Y. The Recovery Assessment Scale (RAS): development and reliability. *Psychiatr Rehabil J*. 2004; 27(3): 307-14.
8. Chiba R, Miyamoto Y, Kawakami N. Reliability and validity of the Japanese version of the Recovery Assessment Scale. *Int J Ment Health Nurs*. 2010; 19(5): 314-22.
9. Waxler NE. Is outcome for schizophrenia better in nonindustrial societies? *J Nerv Ment Dis*. 1979; 167(3): 144-58.
10. Beaton DE, Bombardier C, Guillemin F, Ferraz MB. Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*. 2000; 25(24): 3186-91.
11. Salzer MS, Brusilovskiy E. Advancing recovery science: RAS validity. *Psychiatr Serv*. 2014; 65(4): 442-53.
12. McNaught M, Caputi P, Oades LG, Deane FP. Testing the validity of the Recovery Assessment Scale using an Australian sample. *Aust N Z J Psychiatry*. 2007; 41(5): 450-7.
13. van Gestel-Timmermans H, et al. Recovery Assessment Scale: validation study. *BMC Psychiatry*. 2012; 12: 204.
14. Higashi K, Medic G, Littlewood KJ, et al. Medication adherence in schizophrenia. *Neuropsychiatr Dis Treat*. 2013; 9: 1163-72.
15. Robinson DG, Woerner MG, Alvir JM, et al. Predictors of relapse following first episode schizophrenia. *Arch Gen Psychiatry*. 1999; 56(3): 241-7.
16. Hunt GE, Large MM, Cleary M, Lai HMX, Saunders JB. Prevalence of comorbid substance use in schizophrenia spectrum disorders. *JAMA Psychiatry*. 2018;75(9):889-898.
17. Slade M, Amering M, Oades L. Recovery: an international perspective. *Epidemiol Psychiatr Soc*. 2008;17(2):128-137.