<u>**ORIGINAL ARTICLE**</u>

THE RONSU SCALE: UNVEILING A ROBUST TOOL FOR ASSESSING RECOVERY-ORIENTED NURSING SERVICES UTILIZATION AMONG PEOPLE WITH SCHIZOPHRENIA

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ABSTRACT

Recovery-oriented nursing services (RONS) have emerged as a significant paradigm in the treatment of schizophrenia. Nevertheless, the number of validated instruments available to assess patient utilization of these services is insufficient. This study aimed to develop and validate the Recovery-Oriented Nursing Services Utilization (RONSU) scale. A cross-sectional study was conducted to develop the scale for adults aged 18 and older who older residing in the community who have schizophrenia, between March and May 2023. Participants from six hospitals had participated in outpatient mental health nursing for at least eighteen months following discharge. The scale development followed the seven-step process outlined by DeVellis and Thorpe. An exploratory factor analysis conducted on 110 samples identified a four-factor structure, comprising the following components: social skill training, indirect nursing care management, therapeutic nurse–patient relationships, and coping skill training. With the assistance of 231 participants and confirmatory factor analysis, the RONSU was refined to 32 items across the four dimensions. The construct's validity and reliability were confirmed, as the fit indices and composite reliability fell within acceptable bounds. The RONSU scale contributes in both scholarly and clinical spheres, enhancing the understanding and application of recovery-oriented nursing services for individuals with schizophrenia.

Keywords: *Outpatients; psychiatric nursing; recovery-oriented services; scale development; schizophrenia;*

BACKGROUND

Schizophrenia is a complex and often debilitating mental health condition, with a global prevalence rate of approximately 1%. Its impact extends beyond those diagnosed, affecting their familial and social circles (Owen et al., 2016). An integrated approach to care is necessary due to the intricate nature of schizophrenia; it should not only focus on symptom management but also incorporate social integration, empowerment, and personal recovery (Mubin et al., 2023). The aforementioned concerns have prompted a significant paradigm shift in the provision of care: rather than primarily emphasizing on symptom management, a more comprehensive framework has been implemented that prioritizes the recovery process (Moxham et al., 2018; Ørjasæter & Almvik, 2022).

The Unity Model of Recovery (UMR) is a crucial framework utilized in recovery-oriented approaches. This healing method integrates various elements, merging personal feelings of recovery with clinical and functional outcomes. Individuals often seek personal meaning, develop their sense of identity, and gain a sense of control over their lives through this model. Additionally, it emphasizes the significance of clinical indicators and functional skills as essential considerations in the recovery process (Song, 2017; Thongsalab et al., 2024). Recovery-oriented nursing services (RONS) have become a vital element of this framework, emphasizing patient-centered, individualized care that fosters resilience, empowerment, and community integration (Le Boutillier et al., 2015).

Nonetheless, despite the growing recognition of RONS in the treatment of schizophrenia, there is a paucity of standardized methods, especially those designed to assess the usage and efficacy of these therapies. The Recovery-Oriented Nursing Services Utilization (RONSU) scale aims to bridge an existing knowledge gap. The design and validation of the RONSU scale presented in this work represent significant academic contribution to the field. This instrument offers mental health nurses and researchers a comprehensive approach to assessing the adoption of recovery-oriented behaviors in the nursing care of individuals diagnosed with schizophrenia.

METHOD

The current study used a cross-sectional descriptive research approach to develop a new scale called the 'RONSU'. The study reporting vision adhered to COSMIN (Consensus-based Standards for the Selection of Health Measurement Instruments) guidelines, ensuring comprehensive and transparent documentation of the measurement properties of the RONSU scale (Gagnier et al., 2021). This scale was particularly designed for people aged 18 years and older who have schizophrenia and reside in the community. Furthermore, individuals with schizophrenia were required to have psychotic symptom screening scores of less than 36 on the Brief Psychiatric Rating Scale, indicating relatively mild psychosis and excluding those with severe psychiatric conditions. Participants were selected from six general and psychiatric hospitals using a multi-random selection method, focusing on individuals who had used mental health nursing services in the outpatient department for at least 18 months following discharge.

Ethical approval was granted by the Ethics Committee of a top university, and written permission was obtained from six Institutional Review Board hospital committees. Participants provided written informed consent, indicating their voluntary decision. A self-reported questionnaire was utilized to collect data from March to May 2023. According to DeVellis and Thorpe (2021), the study's seven-step process involved creating and testing the RONSU scale while adhering to ethical guidelines throughout the whole process (DeVellis & Thorpe, 2021).

Step 1: Clarifying and defining the concept: Utilization of Recovery-Oriented Services (UMR) as described by Song and Shih (2009) was used to assess the role of recovery-oriented service utilization on personal recovery. A key finding of the study was that the use of recovery-oriented services was a significant variable, particularly regarding the extent and frequency of mental health recovery-oriented services tailored to fostering personal recovery. Thongsalab et al. (2023) presented an integrative literature review that revealed the effectiveness of mental health nurses in delivering recovery-oriented services, encapsulating therapeutic relationships, psychoeducation, coping training, and others. (Thongsalab et al., 2023a; Thongsalab et al., 2023b). Building on this understanding, the researcher devised an operational definition of RONSU as the perceived extent of comprehensive mental health nursing services provided to patients with schizophrenia following hospital discharge. These services bolster independent living, instill hope, promote self-care, enhance and foster social skills. Community education and empowerment concerning schizophrenia are also crucial aspects.

Step 2: Generate an item pool: Based on the literature review and the operational definition of RONSU, four primary RONSU categories were established, comprising a total of 40

items: therapeutic nurse–patient relationship (10 items), coping skill training (10 items), social skill training (10 items), and indirect nursing care management (10 items). For the initial draft of RONSU, each item was succinctly articulated, conveying a single idea tailored to reflect recovery-oriented nursing services for residents with schizophrenia in the Thai community. This draft underwent refinement based on feedback from two experts in mental health and personal recovery for patients with the schizophrenia community patients, ensuring its clarity, relevance, precision, and readability (DeVellis & Thorpe, 2021). The entire development process, including item generation and expert reviews, was conducted in Thai to ensure cultural appropriateness and ease of understanding for the target population. Additionally, the scale was administered to participants in the same language (Thai) in which it was developed, thereby avoiding potential discrepancies and translation issues in the assessment process.

Step 3: Determining the format for measurement: In this study, the RONSU utilized a four-point Likert scale to assess attitudes, a method commonly used in instruments measuring opinions and beliefs. The scale was designed to reflect the perceptions of individuals with schizophrenia regarding the extent of recovery-oriented nursing services provided in the community. The responses were weighted as follows: no = 0, seldom = 1, sometimes = 2, often = 3, allowing for a nuanced understanding of the variety and frequency of these services in aiding recovery.

Step 4: Requesting expert review of the initial item pool: Content validity was examined using the guidelines established by Almanasreh et al. (2019) following the drafting of the RONSU items. Eight reviewers were selected based on their academic credentials, professional experience, and research contributions (Almanasreh et al., 2019). This panel consisted of one psychiatrist, three nurse educators specializing in mental health nursing and scale development, and four mental health nurses who provide recovery-oriented services for Thai patients with schizophrenia. Each item was rated on a four-point Likert scale, ranging from 1 (not relevant) to 4 (very relevant), as recommended by DeVellis and Thorpe (2021).

Feedback from these experts resulted in significant revisions, including changing the sub-dimension from "care management" to "indirect nursing care management" and modifying item phrasing to facilitate self-reporting. For instance, the item "Nurse provides one-on-one counseling to you with a definite appointment" was revised to "Patients receive individual counseling from a nurse at a scheduled appointment." This rephrasing shifted the focus from the nurse's actions to the patient's experience.

Content validity was assessed using the Content Validity Index (I-CVI) and the Scale-Level Content Validity Index, Averaged (S-CVI/Ave). Items with an I-CVI score of .70 or an S-CVI/Ave of .80 were maintained. I-CVI values below .78 were reviewed but not necessarily deleted, as the aim was to refine rather than reduce the item pool. (DeVellis & Thorpe, 2021; Polit & Beck, 2017). As a result, the number of items remained at 40 after these modifications, reflecting both the depth and breadth necessary for accurately capturing the intended constructs. This step reported strong validity, with an I-CVI between .88 and 1, an S-CVI/Ave of .98, and a Scale-Level Content Validity Index (S-CVI/UA) of .83.

Step 5: Doing basic tests on the items: Ten people from the community diagnosed with schizophrenia participated in

a preliminary assessment of the RONSU scale to evaluate its readability, difficulty, and relevance. This assessment took place at the outpatient mental health center of Surin Hospital is where this occurred. Subsequently, 30 additional patients with schizophrenia were included in a trial study at the Somdet Choapraya Institute of Psychiatry. The consistency of the scale was analyzed to determine its reliability. Reliability shows how repeatable and consistent a tool is. The average relationship between test items is measured by Cronbach's alpha, which is also known as "internal consistency." The objective of the test study was to determine whether the tool could be applied on a larger scale and to evaluate its comprehensibility, scoring accuracy, and logistical feasibility. Participants completed the paper-based form independently while the researcher observed their responses and interactions with the items and physical documents. Consequently, the time to finish the assessment ranged from 10 to 12 minutes, depending on participants' ages. Based on the feedback received, it was suggested to change the wording in the form from "You" to "I" so that people could better relate to and understand themselves. Ultimately, the RONSU showed a Cronbach's alpha value of .761, indicating good internal consistency, as a value of .70 is considered acceptable for newly developed (Polit & Beck, 2020).

Step 6: Carrying out questionnaire tests: A Two-factor analysis was used to improve the organization and validity of the scale. Initially, exploratory factor analysis (EFA) using SPSS version 29.0 was used to test the initial construct validity of the 40-item RONSU with with a sample of 110 participants. his study aimed to reduce the extensive number of items into a more manageable set of categories or factors based on how the items clustered together. For this step, the sample size was based on a rule of thumb suggesting a minimum of 100 participants (Ekowati & Mulyono, 2023; Gunawan et al., 2021). To account for potential dropouts, an extra 10% was added, resulting in a total of 110 participants. This process is depicted in Figure 1. In this analysis, the factor loading cutoff value was set at .55. Items #8, #9, and #30 were excluded from the analysis because their factor loading was less than .55. The final EFA produced four factors with 37 items, as illustrated in Table 1.

In the second stage, LISREL 8.72 was used for confirmatory factor analysis (CFA) to determine whether the factor structure suggested by EFA was correct and to determine whether the factors were consistent and reliable. For this step, the sample size was based on 5 to 10 participants per instrument item (DeVellis & Thorpe, 2021), resulting in a total of 222 samples for the 37-item RONSU scale derived from the EFA phase. An additional 25% was added for potential dropouts, bringing the total to 231 samples. Significantly, participants in this phase met the same inclusion criteria as those in the EFA phase. Nonetheless, the participants in the CFA phase were completely distinct from those in the EFA phase, guaranteeing no overlap between the two groups and

maintaining the integrity of the validation process. This separation is critical for the autonomous validation of the factor structure, as illustrated in Figure 1.

Prior to evaluating the construct validity of the RONSU using CFA, the assumptions of normality, linearity, and multicollinearity were assessed. The initial dimensions of social skills training and coping skills training exhibited elevated multicollinearity (r = .90). Subsequently, four items (#21, #22, #23, and #27) from the social skills training dimension and one item (#12) from the coping skills training dimension were removed. Consequently, the RONSU included four dimensions with a total of 32 items.

Step 7 Developing the scoring system and interpretation guidelines for the test scores: The 32-item RONSU scale, as perceived by individuals with schizophrenia, ranged from 0 to 96 points. It is scored as follows: no (0 points), seldom (1 point), sometimes (2 points), or often (3 points). To determine the total scores, we used the minimum and maximum scores of the RONSU scale. The scores were then split into three levels: 0.00-32.00 (low utilization), 32.01-64.00 (moderate utilization), and 64.01-96.00 (high utilization). Higher scores indicated indicate a greater use recovery-oriented nursing services were used (Polit & Beck, 2020).

RESULT
Factorial structure: EFA with a validation sample
Exploratory Factor Analysis (EFA) was conducted using the data from 110 samples to determine factors that describe the utilization of recovery-oriented nursing services among people with schizophrenia. An Item analysis of the 40-item RONSU revealed skewness values ranging from -0.304 to 0.620 and kurtosis values between -0.991 and -1.629. In line with Kline's criteria, these values suggest a normal distribution for the RONSU (Kline, 2023). The RONSU demonstrated robust internal consistency with item-to-total correlations ranged from 0.748 to 0.941, significantly exceeding Streiner's recommended threshold of .30 (Streiner et al., 2024). Furthermore, the Cronbach's alpha for each dimension surpassed .70, aligning with guidelines for new instruments (Aungsuroch et al., 2024; Polit & Beck, 2020).

Preliminary assessments of factorability indicated a Kaiser–Meyer–Olkin (KMO) measure of .919 and a significant Bartlett's test (χ^2 = 6,514.99, p < .001), confirming the adequacy of sample for the EFA. The correlation coefficient was more than .02, suggesting that the varimax rotation method was properly used for the principal axis factoring extraction method. Using a varimax rotation with principal axis factoring, four distinct factors emerged from the data. The sample size consisted of 110 participants,, and the cutoff point for factor loading was established at .55 (Polit & Beck, 2020). Therefore, for factor loadings below the .55 threshold, items #8, #9, and #30 were excluded, as shown in Table 1.
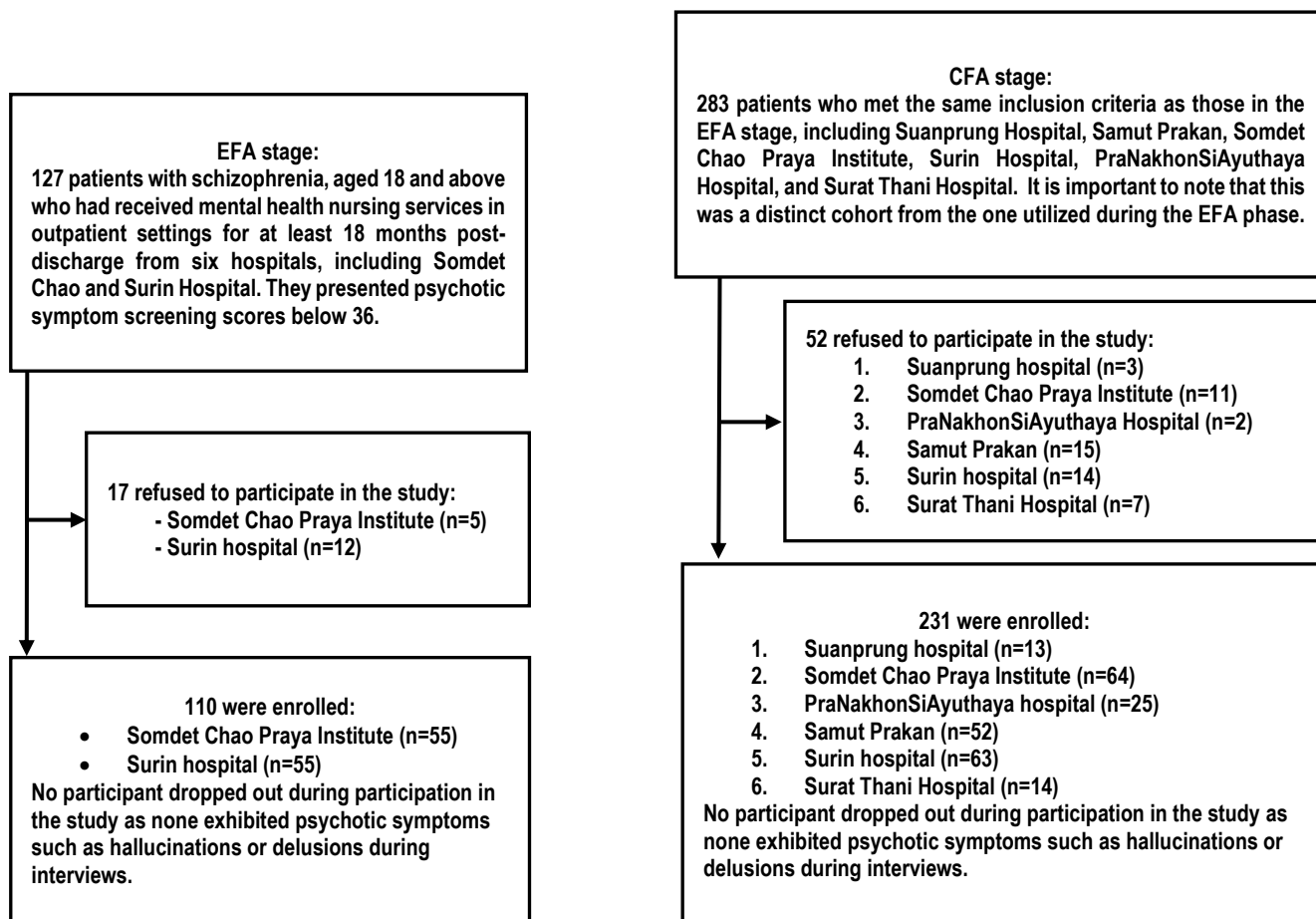
EFA stage:
127 patients with schizophrenia, aged 18 and above who had received mental health nursing services in outpatient settings for at least 18 months post-discharge from six hospitals, including Somdet Chao and Surin Hospital. They presented psychotic symptom screening scores below 36.

CFA stage:
283 patients who met the same inclusion criteria as those in the EFA stage, including Suanprung Hospital, Samut Prakan, Somdet Chao Praya Institute, Surin Hospital, PraNakhonSiAyuthaya Hospital, and Surat Thani Hospital. It is important to note that this was a distinct cohort from the one utilized during the EFA phase.

17 refused to participate in the study:
- Somdet Chao Praya Institute (n=5)
- Surin hospital (n=12)

52 refused to participate in the study:
1. Suanprung hospital (n=3)
2. Somdet Chao Praya Institute (n=11)
3. PraNakhonSiAyuthaya Hospital (n=2)
4. Samut Prakan (n=15)
5. Surin hospital (n=14)
6. Surat Thani Hospital (n=7)

110 were enrolled:
- Somdet Chao Praya Institute (n=55)
- Surin hospital (n=55)
No participant dropped out during participation in the study as none exhibited psychotic symptoms such as hallucinations or delusions during interviews.

231 were enrolled:
1. Suanprung hospital (n=13)
2. Somdet Chao Praya Institute (n=64)
3. PraNakhonSiAyuthaya hospital (n=25)
4. Samut Prakan (n=52)
5. Surin hospital (n=63)
6. Surat Thani Hospital (n=14)
No participant dropped out during participation in the study as none exhibited psychotic symptoms such as hallucinations or delusions during interviews.

Figure 1. Flow chart of the sampling strategy

Table 1. Factor loadings from EFA of the RONSU scale (N = 110)

Item	Factor loading				Mean	SD
	1	2	3	4		
Social skill training						
ITEM 23	.781				1.52	1.11
ITEM 22	.772				1.69	1.09
ITEM 21	.748				1.64	1.09
ITEM 25	.744				1.87	1.16
ITEM 28	.652				1.71	1.09
ITEM 26	.630				1.71	1.10
ITEM 29	.615				1.69	1.09
ITEM 24	.604				1.83	1.09
ITEM 6	.603				1.86	1.05
ITEM 27	.594				1.65	1.08
ITEM 7	.559				1.74	1.08
Indirect care management						
ITEM 37		.793			1.51	1.10
ITEM 39		.792			1.42	1.10
ITEM 32		.762			1.40	1.10
ITEM 36		.758			1.64	1.09
ITEM 38		.756			1.42	1.10
ITEM 31		.651			1.52	1.11
ITEM 40		.610			1.61	1.11
ITEM 19		.590			1.48	1.08
Therapeutic nurse–patient relationship						
ITEM 3			.770		1.64	1.10
ITEM 2			.751		1.55	1.12
ITEM 4			.744		1.69	1.09
ITEM 5			.688		1.72	1.06
ITEM 18			.664		1.55	1.09
ITEM 20			.637		1.71	1.07

Item	Factor loading				Mean	SD
	1	**2**	**3**	**4**		
ITEM 17			.628		1.48	1.07
ITEM 16			.596		1.65	1.08
ITEM 1			.555		1.80	1.14
Coping skill training						
ITEM 34				.711	1.42	1.10
ITEM 33				.704	1.46	1.11
ITEM 14				.687	1.53	1.09
ITEM 15				.640	1.54	1.06
ITEM 11				.603	1.65	1.06
ITEM 13				.588	1.60	1.09
ITEM 35				.570	1.39	1.09
ITEM 10				.553	1.60	1.13
ITEM 12				.552	1.65	1.08

The results of the Exploratory Factor Analysis result consisted of 37 items with eigenvalues ranging from 1.34 to 26.93, distributed across four factors: social skills training, indirect nursing care management, therapeutic nurse–patient relationships, and coping skills training. These factors collectively accounted for 79.25% of the variance, with factor loadings ranging from 0.552 to 0.793. The detailed item distribution and factor loadings from the EFA are presented in Table 2 below, which summarizes how each dimension contributes to the overall scale and supports the internal consistency of the factor structure derived from the EFA analysis.

Table 2. Results of Exploratory Factor Analysis of the 37-item RONSU Scale (N = 110)

Dimensions	Eigenvalue	Percent of variance explained	Number of Items	Cronbach's alpha after EFA	Item to total correlation after EFA
1. Social skill training	26.93	67.32	11	.97	.78 - .92
2. Indirect Care management	2.00	5.00	8	.96	.79 - .88
3. Therapeutic nurse-patient relationship	1.44	3.59	9	.96	.77 - .90
4. Coping skill training	1.34	3.34	9	.96	.74 - .89
Overall the RONSU	31.70	79.25	37	.99	.66 - .87

Factorial structure: CFA with a replication sample
Prior to conducting the CFA, tests were performed to assess the assumptions of normality, linearity, and multicollinearity as follows. **Normality:** **The 37 items of the RONSU exhibited skewness values between -0.30 and 0.62 and kurtosis values ranging from -0.99 to -1.63, suggesting no significant deviation from a normal distribution (Pituch & Stevens, 2015). **Linearity:** **Scatterplots confirmed a linear relationship among the variables, thereby satisfying the linearity assumption. **Multicollinearity:** **The initial analysis indicated potential multicollinearity between the dimensions of social skill training and coping skill training ($r = .90$). To address this, adjustment were made by removing four items (#21, #22, #23, and #27) from the social skills training dimension and one item (#12) from the coping skill training dimension, ensuring no violations of this assumption (Hair et al., 2019; Kline, 2023).

A confirmatory factor analysis (CFA) was conducted to check the stability of the four-factor structure identified in the EFA using data from 231 participants. Multiple fit indices were employed to investigate the goodness-of-fit indices following the criteria established by Hair et al. (2019): goodness-of-fit index (GFI) > 0.90, comparative fit index (CFI) > 0.90, standardized root mean square residual (SRMR) ≤ 0.08, and root mean square error of approximation (RMSEA) ≤ 0.07. Additionally, factor loadings were required to exceed 0.3, with

a significant T value greater than 1.96 serving as the cutoff. The refined RONSU consisted of 32 items distributed across four dimensions. The fit indices confirmed its suitability: $χ^2 = 220.43$, df = 356, CFI = 1, GFI = 1, AGFI = 1, RMSEA = 0. Detailed item metrics, including factor loadings and squared multiple correlations, are presented in Figure 2.

Following the confirmatory factor analysis (CFA), the reliability and validity of the refined RONSU scale dimensions were examined. Table 3. presents a detailed summary of the composite reliability and average variance extracted (AVE) for each dimension, which are critical indicators of the scale's internal consistency and the proportion of variance explained by the latent variables.

The results demonstrate that the RONSU dimensions exhibited composite reliabilities ranging from .94 to .97, significantly exceeding the recommended threshold of .6 (Padilla & Divers, 2016). Among these dimensions, the indirect care management dimension displayed the highest construct reliability (pc = .97). Additionally, the average variance extracted (AVE) values ranged from .72 to .77, indicating substantial explained variance for each latent variable (Hair et al., 2019). These metrics are essential for assessing the scale's applicability and reliability in measuring recovery-oriented nursing service utilization among individuals with schizophrenia.
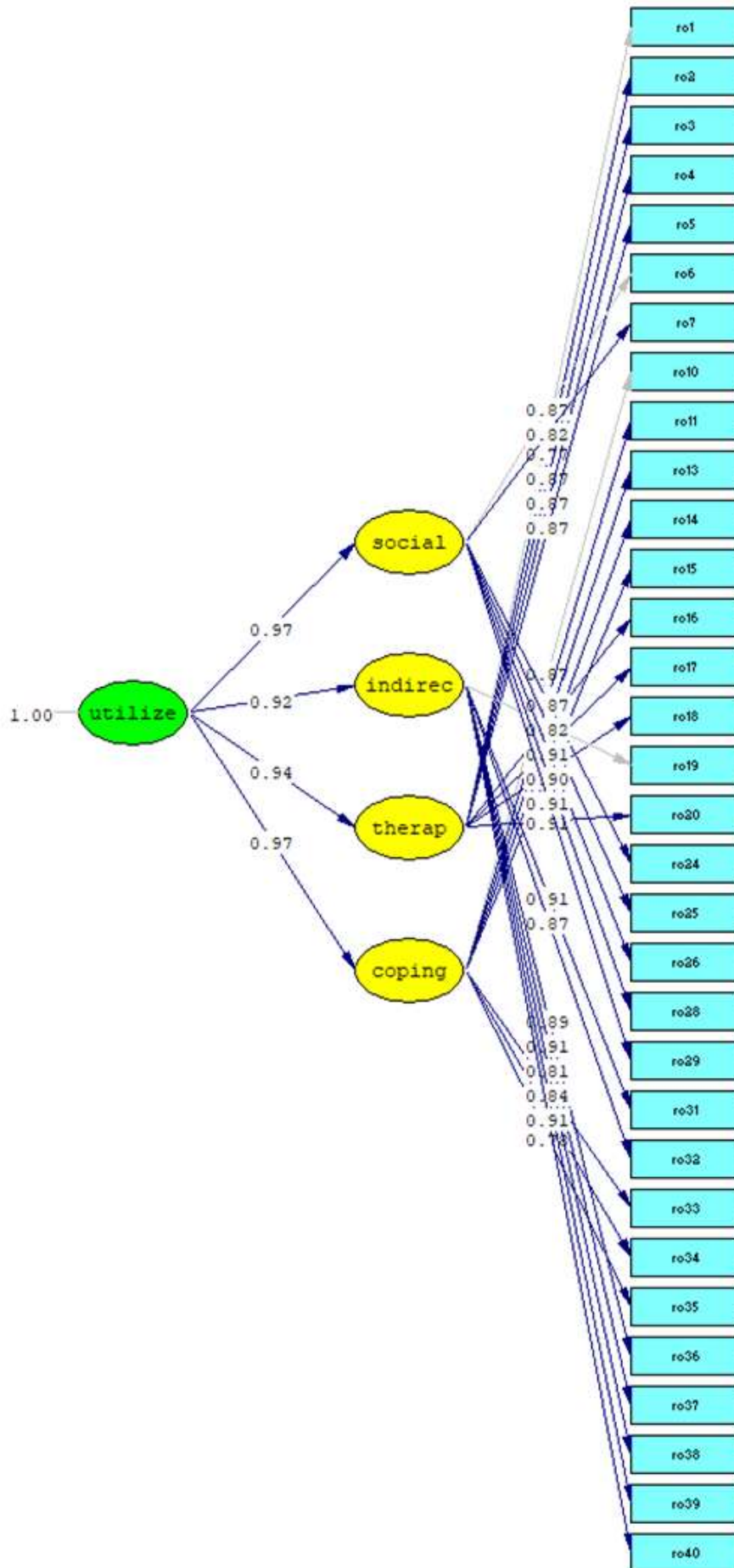
Figure 2. Measurement model and goodness-of-fit statistics for recovery-oriented nursing service utilization

Table 3. Results of Confirmatory Factor Analysis for the 32-item RONSU Scale (N= 231)

Latent variables	Items	Composite reliability (pc)	The average variance extracted (AVE)	Cronbach's alpha	Item to total correlation
1. Therapeutic nurse-patient relationship	9	.96	.73	.96	.82 - .89
2. Social skill training	7	.94	.75	.96	.80 - .88
3. Coping skill training	8	.96	.72	.96	.77 - .90
4. Indirect care management	8	.97	.77	.97	.80 - .90
Overall	**32**			**.99**	**.77 - .87**

DISCUSSION

The principal aim of this research was to develop a metric for quantifying the utilization of recovery-oriented nursing services among individuals diagnosed with schizophrenia. The findings of this study not only provide evidence for the factorial design of the RONSU scale but also establish its validity and reliability in measuring the frequency and scope of recovery-oriented mental health nursing services offered to patients with schizophrenia following their discharge from the hospital. In a replication sample, the results of the EFA and CFA provide novel insights into recovery-oriented practices in mental health nursing:

The EFA data (Tables 1 and 2) show four important parts of the RONSU scale. Collectively, these four variables account for 79.25% of the total variation, indicating that the RONSU scale is both reliable and comprehensive in describing the landscapes of recovery-oriented nursing.

The Social Skills Training: The EFA data reveal that the 'Social Skills Training' dimension, which possess the highest eigenvalue of 26.93, accounts for a substantial 67.32% of the total variance. This aspect is one of the most crucial parts of the RONSU. The 11 items that scored highly on this factor underscore the importance of social skills in recovery-oriented nursing. This finding reinforces the necessity for training modules that focus on improving communication and interpersonal efficiency. By prioritizing on social skills, mental health nurses are reminded of their responsibility not only to treat the illness but also to equip patients with the tools they need to reintegrate into society. This result fits with a prior study that highlighted the significance of social skills are in improving patients' ability to interact with others, which, in turn, facilitates their recovery and reintegration into the community (Killaspy et al., 2022).

Indirect Care Management: Represented by eight items, the 'Indirect Care Management' dimension explains 5.00% of the variance. This dimension illustrates that mental health care is complex and extend beyond direct conversations with patients after their discharge from the hospital. These factors are important for a patient's overall healing but are often overlooked. The significance of management, planning, documentation, and the behind-the-scenes care that facilitates recovery cannot be overstated (Kwame & Petrucka, 2021).

Therapeutic Nurse–Patient Relationships: this dimension comprising nine items, this dimension accounts for 3.59% of the variance. A crucial aspect of mental health nursing is the healing bond between the nurse and the patient (Hartley et al., 2020). This presence, along with its associated elements, help s us understand the depth, trust, and connection that are so important for patient recovery. Mental health nurses can build trust and improve their communication skills by using tools such as RONSU, which demonstrate the significance of these qualities.

Coping Skills Training: The 'Coping Skills Training' dimension, including nine items, contributes to 3.34% of the total variance. Developing effective coping strategies is crucial for people who have mental health problems (Hennekam et al., 2020). This aspect emphasizes the importance of nursing in providing people with the necessary tools to handle and to address their illnesses. This section should cover focus on promoting resilience, adaptability, and self-management.

Excellent goodness-of-fit figures were confirmed through the CFA. Factually, the nonsignificant chi-square result (p = 1.00) indicates the model's appropriateness (Goretzko et al., 2024). The model also has a robust fit, as evidenced by the high values of the CFI, GFI, Adjusted Goodness-of-Fit Index (AGFI), and Normed Fit Index (NFI) values, all of which are 1 (Hair et al., 2019). Other fit indices, such as the Root Mean Square Error of Approximation (RMSEA) and Root Mean Square Residual (RMR), which approach zero, further affirm the model's suitability (Hair et al., 2019). The RONSU scale demonstrates a very high level of internal consistency, with a Cronbach's alpha value of .99. This exceeds the .70 threshold suggested by Hair et al. (2019) as acceptable for a new scale. Additionally, the Cronbach's alpha values for each part of the RONSU scale are between .94 and .97, indicating strong internal consistency across all subscales (Hair et al., 2019). The item-to-total correlations for each dimension also surpass the general guideline of 0.30, further attesting to the scale's reliability. These robust correlations ensure that each item on the RONSU scale makes a real difference in its own dimension. Additionally, the AVE values, all exceeding the .50 level, show that the construct adequately capture the variance (Fornell & Larcker, 1981). Overall, these measures show that the RONSU scale is a reliable instrument for mental health nursing studies.

Nevertheless, it appears that the research is confined to a particular cultural milieu (recovery-oriented nursing service for residents of the Thai schizophrenia community). While the RONSU scale is currently regarded as a reliable instrument, its applicability across diverse cultural contexts and its capacity to accommodate a variety of mental health disorders require careful scrutiny. Furthermore, the categorization of scores as low, moderate, or high utilization may exhibit a degree of arbitrariness. Although these divisions are straightforward and easy to navigate, they may unintentionally simplify the complex dynamics and subtleties associated with the utilization of recovery-oriented nursing services.

CONCLUSION AND RECOMMENDATION

The RONSU scale is a well-verified tool that will be highly beneficial for mental health nursing. From developing therapeutic relationships to enabling vital skills, its well-defined features reflect the subtleties of recovery-oriented nursing. Mental health practitioners should utilize this scale as a framework to guide interventions and service delivery toward a recovery-oriented paradigm, should utilize as an

evaluation tool. In the field of mental health, person-centered treatment and rehabilitation are becoming increasingly important. The RONSU scale serve as a beacon to illuminate the path forward for mental health nursing.

The RONSU scale provides a comprehensive and validated tool for mental health practitioners to assess the utilization of recovery-oriented nursing services among individuals with schizophrenia. This scale facilitates the evaluation of patient-centered care practices, empowering practitioners' ability to tailor interventions and promote holistic recovery. As a result, it improves patient empowerment, resilience, and community integration.

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CONFLICT OF INTEREST
I have no conflict of interests.

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