



## Original Article

# Turkish validity and reliability study of the recovery process inventory in individuals with mental illness

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### Abstract

**Objectives:** The aim of this study was to determine the validity and reliability of the Turkish version of the Recovery Process Inventory (RPI), developed by Jerrell et al., in assessing the recovery process of individuals with mental illnesses receiving treatment in psychiatric clinics and community mental health centers.

**Methods:** The research data were collected using a Demographic Information Form, RPI, and Recovery Assessment Scale. The study data were gathered through face-to-face interviews with 250 individuals who consented to participate and were receiving treatment at a psychiatric clinic and a community mental health center between August 01, 2019, and July 31, 2020. The participants had an average age of  $40.99 \pm 13.063$  with a standard deviation. Regarding the participants' gender, 36% were female and 64% were male. As for marital status, 30.8% were married, 54% were single, 12.8% were divorced, and 2.4% were widowed. The validity and reliability assessment of the scale encompassed analyses of language, content, face validity, construct validity, and reliability.

**Results:** The analysis results indicated that the RPI consisted of six factors, with eigenvalues above 1. The identified six factors were found to collectively account for a significant portion of the total variance and variance related to the scale items. The inventory was considered valid. The internal consistency coefficient (Cronbach's alpha) of the RPI was calculated as 0.828, indicating a reliable level of measurement.

**Conclusion:** The Turkish adaptation of the RPI, consisting of 26 items and six subscales, was determined to be a valid and reliable inventory. The inventory can be utilized to assess the recovery processes of psychiatric patients.

**Keywords:** Mental illness; recovery process; reliability and validity.

In the past, some mental illnesses could persist throughout a person's life. Therefore, it focused primarily on the use of drugs in treating mental illnesses and reducing symptoms.<sup>[1]</sup> The idea of recovery from the current mental illness emerged from the experiences of individuals who were diagnosed with mental illness in the 1980s and did not experience any disease prognosis after discharge.<sup>[2]</sup>

Mental illnesses involve a personal journey of recovery, which entails embracing change and accepting one's condition. This transformative process revolves around finding

meaning in relation to the challenges faced and acquiring the ability to effectively manage oneself.<sup>[3]</sup>

The definition of personal recovery emphasizes the subjective and personal nature of the recovery journey. It recognizes that the path to recovery will differ for each individual, as it involves reshaping various aspects of one's life in a way that aligns with their own values, aspirations, and abilities. It goes beyond the reduction of symptoms or reliance on medical interventions, focusing instead on broader aspects of well-being and personal growth.<sup>[2]</sup>

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Out of challenges in the late 1970s and the experiences of those diagnosed in the 1980s, the recovery movement and the idea of recovering from current mental illnesses emerged. This movement subsequently influenced mental health policies and practices in the United States, the United Kingdom, Australia, and New Zealand. According to Davidson, the impact of this movement on individuals' ability to derive meaning and productivity from their life experiences, both independently and with the support of mental health services, within their respective societies. To support this claim, longitudinal data show that people with serious mental illnesses can improve when the right conditions are considered.<sup>[4]</sup>

The subjective experiences of individuals with mental illness and their experiences play a very important role in the individual recovery process. Recovery should be deemed a process and a satisfactory way to live one's life rather than being defined result or situation to be achieved.<sup>[5]</sup>

While empowerment, hope, responsibility, peer support, advocacy, and quality of life became dominant concepts in the recovery process, there was no evaluation from the patient's perspective. Individuals with mental illness, which is accepted as the primary factor in the recovery process, have been reported to use individual and social resources to lead a satisfactory life.<sup>[6]</sup>

Therefore, the recovery of mental illnesses is the guiding vision of mental health policy in many countries. The goal at the heart of mental health policy in the US, Canada, New Zealand, Australia, Ireland, Scotland, and England and Wales is to support recovery. Therefore, interest in personal recovery by occupational groups such as mental health professionals and mental health nurses has also improved.

Historically, the treatment of depression and other mental illnesses has focused on reducing symptoms and negative experiences of mental illness. However, there has been an increasing recognition of the importance of including a treatment model in both treatment and research. Recovery models focus on increasing positive experiences and helping patients lead a meaningful life rather than focusing on reducing their symptoms.<sup>[7]</sup> However, psychometrically reliable recovery scales are necessary to be able to focus more on recovery.<sup>[8]</sup>

For the concept of recovery in the field of mental health services to be proof, it must transform from an abstract state to a measurable result state.<sup>[9]</sup> In the literature, two basic approaches are mentioned for evaluating recovery. The first is the traditional evaluation method, which equates recovery with treatment and defines it as the disappearance of the symptoms of the disease or the return to functionality before the illness. The second is the current evaluation, which evaluates a satisfying life with ongoing disease symptoms.<sup>[10]</sup>

Drake et al.<sup>[10]</sup> (2015) state that the evaluation of recovery with the traditional method does not include the current recovery defined

#### What is presently known on this subject?

- During the recovery process, concepts such as empowerment, hope, responsibility, peer support, advocacy, and quality of life become predominant, while patients' perspectives on their own recovery processes have been overlooked.

#### What does this article add to the existing knowledge?

- Recovery models focus on increasing positive experiences and helping patients lead meaningful lives rather than merely reducing their symptoms. However, to better focus on recovery, psychometrically reliable recovery scales are necessary.

#### What are the implications for practice?

- To demonstrate the outcomes of a mental health system, it has become crucial to use brief, easily applicable, and psychometrically reliable tools encompassing psychosocial functioning, symptomatology, satisfaction, and recovery in the mental health system.

by individuals with mental illness, and thus, the results and processes that are meaningful for patients are ignored. In this sense, it is important to measure the results and processes that are meaningful to them by including their patients instead of measuring the recovery processes using traditional measurement methods.

Studies on recovery are common in the international literature and there are many measurement tools that evaluate recovery.<sup>[11]</sup> In the literature, reviews conducted during the planning process of the study, only one study was found to have been conducted with outpatient clinic patients in Türkiye, and no measurement tool was found in which patients with a psychiatric diagnosis in Türkiye could evaluate their own recovery process and results from their own perspective. The recovery processes of individuals diagnosed with mental illness in Türkiye are typically evaluated according to the traditional method. In order for individuals diagnosed with mental illness to evaluate their recovery processes based on evidence, a scale that evaluates recovery is needed.

It has become important in the mental health system to use short, easily applicable, psychometrically reliable tools that include psychosocial functioning, symptomatology, satisfaction, and recovery to demonstrate the results of a mental health system.

The Recovery Process Inventory (RPI) is a tool designed to assess and measure the progress and experiences of individuals diagnosed with mental illness during their recovery journey. This scale is useful for evaluating various aspects of recovery, including physical, emotional, and social well-being, providing valuable insights into the effectiveness of interventions and treatment plans.

The aim of the study is to examine the validity and reliability of the Turkish form of the RPI developed for patients with mental disorders.

## Materials and Method

The research was methodologically planned to determine the validity and reliability of the Turkish version of the "RPI,"

which was developed to evaluate the recovery processes of individuals diagnosed with mental illness.

## Sampling

In the determination of the sample in the scale studies, the number of individuals constituting the sample should be 5–10 times the number of items in the scale.<sup>[12,13]</sup> The research data were collected through a face-to-face interview in the form of an introductory information form, the RPI, and the Recovery Assessment Scale (RAS), as well as questions and answers with 250 patients who met the inclusion criteria and accepted to take part in the research. The data were collected in three hospitals between August 01, 2019, and July 31, 2020.

The inclusion criteria included agreeing to participate in the study, both inpatient and outpatient individuals who had been diagnosed with a mental illness, being able to communicate verbally, and being older than 18 years of age.

## Data Collection Tools

### Introductory Information Form

The introductory information form includes demographic data such as the participant's age, place of birth, gender, marital status, educational status, occupation, income level, and status of having children. In addition, the form includes the diagnosis of mental illness, the presence of a physical disease other than the diagnosis of mental illness, and the duration of treatment due to mental illness.

### RPI

The inventory was developed by Jerrell et al.<sup>[14]</sup> in 2006. It is a 5-point Likert-type scale scored as "1=strongly agree", "2=agree", "3=not sure", "4=disagree", and "5=strongly disagree." It has six factors: anguish, connected to others, confidence or purpose, care or help for others, living situation, and being hopeful or cares for self. A low score obtained from the anguish subdimension indicates that the improvement is bad or negative, while a low score obtained from the other subdimensions indicates that the improvement is better or positive. According to the results of the original study, Cronbach's alpha coefficients for all subscales ranged from 0.71 to 0.81, with the exception of the "Others Care" subscale. These findings indicate a high level of internal consistency.

### RAS

The RAS was developed by Corrigan et al.<sup>[15]</sup> (1999) as 41 items and revised by Corrigan et al.<sup>[16]</sup> (2004) as 5 subscales and 24 items in total. It is a 5-point Likert-type scale scored as "1=strongly disagree", "2=disagree", "3=not sure", "4=agree", and "5=strongly agree". It was developed to measure various subdimensions of recovery from the perspective of individuals diagnosed with mental illness. A high total score obtained

from the scale indicates that the improvement is high. Cronbach's alpha values for the scale subdimensions were found to be between 0.74 and 0.87. According to the results of the factor analysis, the scale yielded results with five factors. (Comparative Fit Index [CFI]=0.93; Normed Fit Index [NFI]=0.92; NNFI=0.91). The factors were determined as "self-confidence and hope", "seeking help behavior", "orientation to goals and success", "trust in the environment", and "coping with symptoms". In the Turkish form of the RAS, the Cronbach's alpha coefficient was found to be 0.90. Cronbach's alpha values for its subdimensions were found to be between 0.74 and 0.89.<sup>[17]</sup>

## Validity and Reliability Analysis

### Language Validity

The translation-back translation method was used to ensure language equivalence in the RPI. It was translated into Turkish by two different sworn translators who can use both languages fluently. The Turkish version of the scale was directed to experts for the most appropriate expressions and content validity. In line with the expert opinions received, the scale was revised, and a pilot study was conducted. Following the pilot study evaluations, the scale was retranslated into English by a translation agency. The scale statements were compared, and the final version of the scale was established. The revised scale was presented to the original researcher for guidance.

### Scope/content Validity

Content validity was carried out by consulting experts who had knowledge about the concept of the scale to be validated in Turkish and about its validity and reliability. The original English version of the scale and its translated Turkish version were sent to ten experts in the fields of psychiatry and psychology to assess content validity. Their opinions were sought, and they were asked to evaluate the scale items. For each expert evaluation, the Content Validity Index (CVI) was employed. The CVI for the RPI ranged between 0.80 and 1.00, with a total CVI of 0.93.

### Face Validity

For face validity, the scale is applied to a small research group not included in the sample. In this type of validity, the scale is evaluated in terms of logic and meaning rather than numerical and statistical findings. As a preliminary application, 15 individuals who were not included in the study were taken into consideration.

### Construct Validity

Construct validity was evaluated with the results of exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). While evaluating the EFA, each factor load of the scale was evaluated, considering that it was at least "0.3".<sup>[18]</sup>

## Reliability of Scale

While calculating the internal consistency coefficient, item analyses and Cronbach's alpha reliability coefficient were calculated. The Cronbach's alpha value of a scale with internal consistency should be  $>0.7$ .<sup>[12]</sup>

## Statistical Assessment of Data

The SPSS 22.0 statistical software was used for statistical analysis of the study, and the LISREL 8.7 software was used for CFA and EFA. The translation-back translation method, content validity, correlation coefficient, CFA, EFA, and Cronbach's alpha coefficient statistics were used to evaluate the study data.

## Ethical Aspects of the Research

To use the scale, permission was obtained from the researchers who developed the scale through email. During the implementation phase, written permission was obtained from the participants.

The study started to be applied after the approval of the Gazi University Assessment and Evaluation Ethics Sub-Work Group (dated June 13, 2019, 91610558-302.08.01). Permission letters from the hospitals applied for the study were obtained. The application was made by obtaining the informed consent of the participants in the research. The study was conducted in accordance with the Declaration of Helsinki.

## Results

### Characteristics of Participants

The participants had a mean age and standard deviation of  $40.99 \pm 13.063$ . Their characteristics were determined as follows: 64% men, 54% single, regarding their educational status, 46.8% are in high school. As for the father's profession, 37.2% retired. As regard the mother's profession, mothers are 57.2% housewives. Of the participants, 59.6% were unemployed. Of them, 64.4% did not have children. Regarding their income level, 14.8% were good, 17.2% were bad, and 73.6% lived with the family.

Considering the variables related to the mental and physical illness characteristics of the participants, the diagnosis of mental disease was determined as follows: 50.8% schizophrenia, 14.4% psychosis, 14% bipolar, 10.8% depression, 4.8% anxiety, 1.6% OCD, 1.6% alcohol use, 0.8% PTSD, 0.8% substance addiction, and 0.4% adaptation disorder. Regarding the duration of the treatment, 10.8% was 0–1 year, 20.1% was 1–5 years, 21.7% was 6–10 years, 16.1% was 11–15 years, and 31.3% was 16 years and more.

### Validity of the RPI

To evaluate the validity of the scope, the CVI was calculated. The CVI of the RPI ranged between 0.8 and 1.00, and the total CVI was determined to be 0.93.

**Table 1. Kaiser–Meyer–Olkin and Bartlett sphericity test analysis of RPI**

n=250	Conclusions
Kaiser–Meyer–Olkin sample adequacy measure	0.891
Bartlett's sphericity test	
$\chi^2$	4972.290
Df	325
p	0.000

RPI: Recovery process inventory; df: Degrees of freedom,  $\chi^2$ : chi-square value, p: p-value

Kaiser-Meyer-Olkin and Bartlett sphericity test analyses were used for the adequacy of the sample size in the research. The KMO value was 0.891, and the Bartlett's sphericity test value was  $\chi^2=4972.290$ ,  $p<0.000$  (Table 1).

According to the results of the research, the RPI scale consists of 33 different statements. Factor analysis was performed twice on the dimensions related to the expressions. As a result of the factor analysis, the RPI scale was examined in six sub-dimensions with core values above 1. As a result of the first factor analysis, the statements in questions 3, 8, 14, 21, 22, 25, and 27, which have a factor weight below 0.30, were excluded from the study. In this case, factor analysis was performed again for the dimensions of the remaining expressions.

As a result of the analyses, factor loads are well divided into dimensions since they are above 0.30. Anguish, confidence/purpose, defining/knowing the disease, hopeful/cares for self, connected to others, and living situation subdimensions total variance explanation rate was obtained as 69.026%. The six factors determined in the analysis together explained a significant part of the total variance in the items and the variance related to the scale (Table 2).

CFA was performed for the construct validity of the RPI. In the RPI, standardized coefficient values (0.68–0.96) are among the values, and all items are significant ( $p<0.01$ ). On the other hand, the determination coefficients (R<sup>2</sup>) calculated for each question were between 0.42 and 0.92, and the explanation rates of each item regarding the factor were examined (Table 3).

CFA fit index values: Chi-square/df (cmin/df) (1.92), GFI (0.99), CFI (0.98), NFI (0.96), and AGFI (0.98) values have "excellent" fit, while RMSEA (0.068) and SRMR (0.068) values are within "acceptable" fit limits. In this case, the CFA model is valid (Table 4).

### Reliability and Correlation Analysis Results of the Recovery Process Inventory

According to the reliability analysis results of the scale's sub-dimensions, the Cronbach's alpha value of the internal consistency coefficient of the RPI was 0.828. The Cronbach's alpha values for the subdimensions were obtained as follows: anguish (0.913), connected to others (0.902), confidence/

**Table 2. RPI factor loads**

Factor loads							
Substances	Anguish	Confidence/ purpose	Defining/ knowing the disease	Hopeful/ cares for self	Connected to others	Living situation	Factor description
RPI 5	0.711						18.581%
RPI 7	0.702						
RPI 9	0.628						
RPI 18	0.781						
RPI 23	0.695						
RPI 28	0.82						
RPI 32	0.790						
RPI 33	0.725						
RPI 10					0.555		15.428%
RPI 15					0.598		
RPI 29					0.729		
RPI 11		0.751					13.343%
RPI 16		0.652					
RPI 17		0.739					
RPI 24		0.811					
RPI 26		0.772					
RPI 13						0.862	8.378%
RPI 19						0.803	
RPI 20				0.728			7.167%
RPI 30				0.767			
RPI 31				0.781			
RPI 1			0.783				6.128%
RPI 2			0.813				
RPI 6			0.765				
RPI 12			0.790				
RPI 4			0.494				
Total variance							69.026%

RPI: Recovery process inventory

purpose (0.928), living situation (0.844), hopeful/cares for self (0.904), and defining/knowing the disease (0.881). These values are highly reliable. In this case, both the scale and its sub-dimensions were reliable (Table 5).

### Criteria Related Validity in the Recovery Process Inventory

For criterion validity, the relationship between the RPI and the RAS was evaluated using correlation coefficients. The correlation coefficient between them was found to be significant, and the scale measured made a valid measurement. In our study, there was a moderate correlation between the RAS and the RPI (Table 6).

### Discussion

To use this scale, Prof. Dr. Jerrell JM was contacted by e-mail. He sent the scale and the scoring system to be applied after

a positive return. When the scale was examined, there were 33 items in total. The scale had 22 items in the published article.[14] When we asked its reason, they stated that 33 items were applied there, and the patients did not want to reply to the questions about the institution, operation, and disease of the remaining 11 items to be published. Therefore, it was published as 22 items and six subfactors. In our research, all items were added, and the scale was applied as 33 items.

### Examination of Validity Results of the Recovery Process Inventory

For the Kaiser–Meyer–Olkin Measure of Sampling Adequacy (KMO-Sampling Adequacy) coefficient used to evaluate the suitability of the sample for factor analysis, a value between 0.90 and 1.00 is very good, a value between 0.80 and 0.89 is good, 0.70–0.79 is accepted as moderate, between 0.60 and 0.69 as bad, and between 0.50 and 0.59 as very bad. If the



**Table 3. CFA results regarding the data on the RPI**

Factor	Factor item	B	Standardized B	Standard failure	t	R <sup>2</sup>
Anguish	RPI 5	0.98	0.71	0.065	15.09**	0.51
	RPI 7	0.99	0.84	0.034	29.67**	0.70
	RPI 9	1.32	0.76	0.079	16.77**	0.58
	RPI 18	1.26	0.89	0.031	41.00**	0.80
	RPI 23	0.93	0.84	0.038	24.33**	0.71
	RPI 28	1.38	0.86	0.053	26.20**	0.74
	RPI 32	0.78	0.76	0.043	17.92**	0.58
	RPI 33	0.68	0.68	0.057	12.01**	0.46
Connected to others	RPI 10	1.12	0.94	0.026	43.48**	0.89
	RPI 15	0.73	0.82	0.039	18.58**	0.67
	RPI 29	0.87	0.92	0.019	47.25**	0.85
Confidence/Purpose	RPI 11	0.96	0.91	0.024	39.17**	0.83
	RPI 16	0.85	0.81	0.045	18.95**	0.65
	RPI 17	0.85	0.85	0.029	29.40**	0.72
	RPI 24	1.16	0.92	0.021	55.32**	0.85
	RPI 26	1.06	0.90	0.022	48.71**	0.81
Living situation	RPI 13	0.75	0.83	0.082	9.23**	0.68
	RPI 19	1.07	0.92	0.1	10.29**	0.85
Hopeful/cares for self	RPI 20	0.91	0.95	0.024	38.15**	0.91
	RPI 30	1.06	0.96	0.025	42.62**	0.92
	RPI 31	0.71	0.80	0.047	15.27**	0.64
Defining/Knowing the disease	RPI 1	0.78	0.79	0.037	20.95**	0.62
	RPI 2	1.01	0.86	0.031	32.46**	0.74
	RPI 6	0.87	0.89	0.027	32.16**	0.78
	RPI 12	0.96	0.82	0.043	22.04**	0.68
	RPI 4	0.62	0.68	0.046	13.54**	0.47

\*:  $p < 0.05$  ( $t > 1.96$ ); \*\*:  $p < 0.01$  ( $t > 2.58$ ); CFA: Confirmatory factor analysis; RPI: Recovery process inventory

**Table 4. CFA fit indices of the RPI**

Index	Perfect satisfaction scale	Acceptable satisfaction scale	Research find	Conclusion
$\chi^2/SD$	0–3	3–5	1.92	Excellent
RMSEA	$0.00 \leq RMSEA \leq 0.05$	$0.05 \leq RMSEA \leq 0.08$	0.061	Acceptable
SRMR	$0.00 \leq SRMR \leq 0.05$	$0.05 \leq SRMR \leq 0.08$	0.068	Acceptable
GFI	$0.95 \leq GFI \leq 1.00$	$0.90 \leq GFI \leq 0.95$	0.99	Excellent
CFI	$0.95 \leq CFI \leq 1.00$	$0.90 \leq CFI \leq 0.95$	0.98	Excellent
NFI	$0.95 \leq NFI \leq 1.00$	$0.90 \leq NFI \leq 0.95$	0.96	Excellent
AGFI	$0.90 \leq AGFI \leq 1.00$	$0.85 \leq AGFI \leq 0.90$	0.98	Excellent

CFA: Confirmatory factor analysis; RPI: Recovery process inventory; SD: Standard deviation; RMSEA: Root mean square error of approximation; SRMR: Standardized root mean square residual; GFI: Goodness-of-fit index; CFI: Comparative fit index; NFI: Normed fit index; AGFI: Adjusted goodness of fit index.

KMO is above 0.60, it is generally accepted that the sample is sufficient.<sup>[11]</sup> In our study, it was found to be 0.891. To explain the factor structure, Alpar (2020) defines factor loads between 0.30 and 0.40 as the lowest acceptable loads, load values of 0.50 and above as those with application significance, and loads of 0.70 and above as loads that can explain the structure well.

The RPI consists of 33 different statements. Factor analysis was performed twice on the dimensions related to the expressions. As a result of the factor analysis, RPI eigenvalues were examined in six subdimensions and found to be above 1. As a result of the first factor analysis, the statements in questions 3, 8, 14, 21, 22, 25, and 27, which have a factor weight below 0.30, were excluded from the study. In this

**Table 5. Reliability analysis results for the RPI**

Factor	Number of items	Cronbach's Alpha
Anguish	8	0.913
Connected to others	3	0.902
Confidence/purpose	5	0.928
Living situation	2	0.844
Hopeful/cares for self	3	0.904
Defining/knowing the disease	5	0.881
RPI	26	0.828

RPI: Recovery process inventory.

case, factor analysis was performed again on the dimensions of the remaining expressions. As a result of the analyses, the KMO value was found to be 0.891, and according to the Bartlett sphericity test result, it was obtained as  $\chi^2=4972.290$  ( $p<0.000$ ). According to these values, the variables were suitable for factor analysis. In addition, factor loads are well divided into dimensions since they are above 0.30. Anguish, confidence/purpose, defining/knowing the disease, hopeful/cares for self, connected to others, and living situation subdimensions total variance explanation rate were obtained as 69.026%. The six factors determined in the analysis together explained a significant part of the total variance in the items and the variance related to the scale. The fact that the explained variance exceeds 50% of the total variance is a crucial criterion in factor analysis.

In the original article of the scale, there are six factors: Anguish, connected to others, confidence or purpose, care or help from others, living situation, and being hopeful or caring for self. In our study, eigenvalues were examined in six subdimensions with values above 1. Anguish, confidence or purpose, defining or knowing the disease, being hopeful or caring for self, connected to others, and living situation subdimensions were found. In our study, the care/assistance subdimension of others with a factor load below 0.30 was not added. The subdimension of defining or knowing the disease was not on the original scale but was in our study.

### Examination of Reliability Results of Recovery Process Inventory

According to the results of the reliability analysis of the scale and its subdimensions, the Cronbach's alpha value of the internal consistency coefficient of the RPI was 0.828. The Cronbach's alpha values for the subdimensions of the scale were obtained as follows: Anguish (0.913), connected to others (0.902), confidence/purpose (0.928), living situation (0.844), hopeful/cares for self (0.904), and defining/knowing the disease (0.881). These values are highly reliable. In this case, the subdimensions and the scale are reliable.<sup>[12,18]</sup>

**Table 6. Relationship between the RPI and the RAS**

Correlations	RAS_Total	RPI_Total
Spearman's rho		
RAS_Total		
Correlation coefficient	1.000	-0.336**
Sig. (2-tailed)		0.000
N	250	250
RPI_Total		
Correlation coefficient	-0.336**	1.000
Sig. (2-tailed)	0.000	<0.01
N	250	250

\*\* $p<0.01$ . RPI: Recovery process inventory; RAS: Recovery assessment scale; Sig.: Significance

In the original article of the scale, the Cronbach's alpha values for the scale subdimensions were anguish (0.78), connected to others (0.73), confidence/purpose (0.77), living situation (0.71), hopeful/cares for self (0.81), and others' care help (0.56). In addition, these items were removed because the others' care help (0.56) subdimension was not well separated and not significant in our study.

In the study conducted in Switzerland, the Cronbach's alpha value of the internal consistency coefficient of the RPI was found to be 0.84. The Cronbach's alpha values for the subdimensions of the scale were found to be similar to our study by taking the lowest coefficient as anguish (0.71), connected to others (0.47), confidence/purpose (0.66), living situation (0.53), hopeful/cares for self (0.78), others' care help (0.28), respectively.<sup>[19]</sup>

There is also a validity and reliability study conducted by Yalçiner et al.<sup>[20]</sup> on patients admitted to the psychiatry outpatient clinic in Türkiye. The study was applied to 22 items, and the internal consistency coefficient of the RPI was determined as Cronbach's alpha value, with a total RPI score of 0.601. The scores were found as follows: Anguish (0.655), connected to others (0.545), recovery/self-esteem (0.727), living situation (0.671), hopeful/cares for self (0.210), others' care help (0.540). The study conducted on outpatients showed differences from our study. In the study, only patients receiving treatment in the outpatient clinic were included in the sampling. In contrast, our study included patients who were undergoing treatment in a psychiatric clinic or receiving ongoing treatment at community mental health centers. Given that the scale assesses the recovery process, it yielded more reliable results for these patients.

While the cultural structure is handled together with the symptoms of mental illnesses, it also shows its effect on the recovery process of these illnesses, described as individuals' living with mental illnesses, coping with the difficulties of diseases, self-governance capacity, and seeking and finding meaning in life.

As another difference, the Cronbach's alpha value (0.881) was determined as the defining or knowing the disease subdimension, which was not included in the original article of our study. It is important to know and define the disease in Turkish culture.

### Limitations of the Study

The fact that the study was conducted in a single city and in three psychiatric hospitals limited the generalizability of the results.

### Conclusion

The RPI consisted of 22 items and six subdimensions. According to the results of the analysis, the Turkish form, consisting of 26 items and six subdimensions, was found to be appropriate, valid, and reliable for Turkish culture. It can be used to evaluate the healing process of psychiatric patients. RPI can be used in treatment processes because it is easy to use and an easy scale to administer in both inpatient and outpatient follow-ups. Individuals who indicate symptoms of mental illnesses in the healing process can live with mental illnesses, cope with the difficulties of diseases, have the capacity to manage themselves, and seek and find meaning in life. Therefore, it is recommended for use in evaluating patients and results. The RPI can be administered to groups with different mental illnesses and to more sample groups to check whether the results of the current analysis have changed.

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