

# Psychometric properties of the Turkish version of the therapeutic relationship assessment scale for nurses

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## Abstract

**Background:** It is essential for nurses who care for individuals diagnosed with mental illness to establish a therapeutic relationship. There is no measurement tool available in Türkiye to assess the therapeutic relationship between patient and nurse.

**Aim:** The objective of this study is to perform a validity and reliability study of the Turkish version of a scale that enables the evaluation of the quality of the therapeutic relationship established between nurses and patients.

**Methods:** 140 nurses were included in this study. The data were analysed using the exploratory and confirmatory analyses.

**Results:** The scale consists of 25 items and four sub-dimensions. In confirmatory factor analysis (CFA), all factor loads were  $>0.30$ . As a result of CFA, all fit indices were  $>0.85$  and the root mean square approximation was  $<0.080$ . Cronbach alpha was 0.93 for the whole scale.

**Conclusion:** The Turkish version of the TRAS-Nurse scale and its original version were compatible with each other and gave similar results. This scale can be used to determine the therapeutic relationship of nurses who care for psychiatric patients in Türkiye and can be a useful measurement tool when evaluating the factors that may be effective in improving the therapeutic relationship.

## Keywords

mental health, nursing practice, psychiatric nurses, reliability and validity, scale, therapeutic relationship

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## Introduction

A therapeutic relationship is the basis for creating an effective and efficient nursing practice. (Steuber and Pollard, 2018). The therapeutic relationship between patient and provider is considered a central component of patient-centred care and patient involvement. (Miciak et al., 2018). It is accepted that the therapeutic relationship improves person-centred care and shared decision making and is a fundamental component of mental health nursing (Moreno-Poyato et al., 2021b). For this reason, it is important for nurses who care for individuals diagnosed with mental illness to establish a therapeutic relationship. A tool that measures the therapeutic relationship will be of guidance in this respect.

## Background

Nursing is at the core of the care professions and at the centre of their role is the development of effective relationships with the individuals they support (Hartley et al., 2020). A therapeutic relationship is the basis for establishing effective and efficient nursing practice (Steuber and Pollard, 2018). Important components involved in establishing therapeutic nurse–client relationships are: trust, genuine concern, acceptance, positive respect, self-awareness, and therapeutic use of the self (Videbeck, 2020). The therapeutic relationship between the nurse and the patient is of extraordinary importance in the field of mental health, and the results of the interventions made by nurses are more positive thanks to the relationship they establish with their patients (Aznar-Huerta et al., 2021).

The therapeutic relationship concept has emerged with the development and professionalisation of psychiatric nursing and has become the cornerstone of the nursing practice. The rational structure of psychiatric nursing was developed by Peplau, who conceptualised the therapeutic link in the patient–nurse relationship (Roviralta-Vilella et al., 2019). Peplau (1952) defined nursing as an important, therapeutic, interpersonal process (Peplau, 1991). The definition of therapeutic relationship was made by Peplau, who stated that it consists of three basic stages: orientation, study, and termination. In the orientation phase, the individual perceives that he/she needs help and seeks professional help. At this stage, the nurse assists the patient in recognising, understanding, and evaluating the problem/situation. Thereafter, the study phase corresponds to most of the nurse's time with the patient, facilitating the nurse's exploration of emotions to help the patient cope with the illness and move on to the final phase. The final stage marks the satisfaction of needs and the emergence of new needs that are necessary to be met (Moreno-Poyato et al., 2021b).

In the literature, the importance of the therapeutic nurse–patient relationship is emphasised in order to improve the physical, emotional, social and mental well-being of patients and to increase the quality of nursing care (Rasheed et al., 2019). There is a strong correlation between therapeutic relationships and the perception of quality of care (Coffey et al., 2019). The relationship between the patient and the clinician significantly affects healing outcomes (Gerace et al., 2018). Establishing the therapeutic relationship improves patient health outcomes (Moreno-Poyato et al., 2021a). The therapeutic communication and interpersonal communication courses are included in the undergraduate nursing education curriculum in Türkiye (Kavgaoğlu and Elkin, 2019). In addition, it is known that these courses are included in the graduate education of psychiatric nursing in some universities. Nurses who care for psychiatric patients are given training on this subject. Employment of postgraduate/doctorate graduates in psychiatry services in some hospitals, especially in psychiatric nursing, improves this

relationship. Specialist psychiatric nurses use therapeutic communication techniques and develop the therapeutic relationship while giving care to their patients in the clinic. However, there is no scale that can evaluate the patient–nurse relationship in psychiatry wards. By using this scale in clinics where psychiatric patients are cared for, the level of therapeutic communication between patient and nurse will be determined.

It is known that establishing and maintaining interpersonal relationships in mental health nursing is a very important therapeutic intervention and a basic nursing competence (Gordon and Kenney, 2018). In the literature, the scales related to the evaluation of the therapeutic relationship focus on the relationship between the therapist and the patient and do not focus on the nurse–patient relationship. In addition, these scales include therapy-oriented questions, and it was stated that the scales were completed by the patients. Therefore, this study has an effective and important place in determining the therapeutic relationship between patient and nurse (Coelho et al., 2021). Bringing this scale into our language will eliminate an important deficiency.

## Methods

### *Study design and tool development phases*

This is a descriptive, methodological and cross-sectional study conducted to determine the validity and reliability of the TRAS-Nurse Scale. Data were collected between 24 March and 30 June 2022.

This research was carried out between March and June with the participation of nurses working with psychiatric patients. It was stated that the number of samples for factor analysis should be at least 100 (DeVellis and Thorpe, 2022). For this reason, it was decided to include 125 nurses for 25 items in the sampling scale, and the study was completed with 140 nurses.

The criteria for inclusion in the research are as follows:

- Being between the ages of 18–65
- Working in a unit that cares for psychiatric patients
- Voluntarily agreeing to participate in the study.

### *Instruments*

The sociodemographic information form, TRAS-Nurse form was used to collect the data.

*Sociodemographic information form.* The sociodemographic information form consists of questions to determine the demographic characteristics of nurses. The form includes six questions about age, gender, educational status, marital status and which unit they work in.

*TRAS-Nurse form.* The scale, originally developed by Coelho et al. (2021), is a valid tool for evaluating the quality of therapeutic rehabilitation established between nurses and patients in terms of mental health nurses. The scale is a five-point Likert-type and consists of 25 items. It enables nurses to self-evaluate the quality of the therapeutic rehabilitation they have established with their patients. It was stated that the scale could be used in a single-dimensional TRAS-Nurse, 25-item (minimum 25, maximum 125) or four-factor structure (F1 – empathy, with 5 items; F2 – self-knowledge, with 6 items; F3 – participation, with 8 items and F4 – orientation, with 6 items]. Coelho et al. (2021) were found whole scales' Cronbach's alpha 0.93. They found the cumulative variance explained in a four-factor structure to be 71.12%.

## Procedures

### *Translation of the TRAS-Nurse scale*

Necessary official permission was received by e-mail from Coelho, who developed the original form of the scale, in order to start the study and to translate the TRAS-Nurse scale from English to Turkish.

Translation of the scale from English to Turkish was done by five experienced academicians who are experts in the field. These translations were converted into a single Turkish form consisting of items that were reviewed and agreed upon by the researcher. Then, the compliance of the scale items with the rules of Turkish linguistics was checked by an academician in the field of linguistics and the necessary approval was obtained from him in terms of the clarity of the scale. The Turkish form, which was prepared in the last stage, was translated back into English by two academicians whose mother tongue is English and second language is Turkish. Since there was no significant difference between the original and the reverse translation of the scale, the scale became verified for use as it is.

### *Data collection process and ethical considerations*

In addition, written permission was obtained from a Mental Health and Neurological Diseases Training and Research Hospital. Nurses participating in the study were informed about anonymity and confidentiality according to the Declaration of Helsinki, and their written/verbal consent was obtained. It took about 5–10 minutes for each staff member to fill out the scale.

### *Statistical analysis*

The statistical processes of the research were carried out using the SPSS package (version 25.0, SPSS Inc., Chicago, IL, USA) program. All the obtained results were tested bilaterally and the level of significance was accepted as at least 0.05. As a result of the statistical evaluation, primarily, the frequency and percentage distributions of the data related to the questionnaire applied to the sample group were found.

In this study, content validity and construct validity were used to ensure the validity of the Turkish form of the scale. The content validity index (CVI) was used to evaluate the coherence between expert decisions (Polit and Beck, 2006) (Table 2).

Confirmatory factor analysis (CFA) was used to determine whether the items and subscales explained the original scale structure. Model validation of the comparative fit index (CFI) was performed on the basis of Chi-square test, degrees of freedom, Approximate Root Mean Square Error (RMSEA), goodness of fit index (GFI) and normal fit index (NFI) (Çapık et al., 2018).

In order to examine the reliability levels of the scale, Cronbach Alpha internal consistency coefficients were calculated based on the variance of each item.

In addition, item reliability of the scale was demonstrated with Hotelling's T-Squared and item-total score correlation coefficients. Collectability was made with Türkiye's Nonadditivity.

## Results

### *Sample characteristics*

The mean age of the participants is between  $33.72 \pm 8.15$ , and 76.4% ( $n = 107$ ) of them are women. 61.4% of the participants are at baccalaureate degree or below education level and 58.6% are

**Table 1.** Characteristics of the participants (n: 140).

Sociodemographic characteristics	Arithmetic mean (SD)
Age of the nurses	33.72 (8.15)
	f (%)
Gender	
Women	107 (76.4)
Men	33 (23.6)
Educational status	
Baccalaureate degree and lower level	86 (61.4)
Master's and a doctorate degree	54 (38.6)
Marital status	
Married	58 (41.4)
Single	82 (58.6)
Psychiatric service units	
Acute inpatient unit	83 (59.3)
Chronic inpatient unit	22 (15.7)
Community mental health centres	22 (15.7)
Addiction treatment centres	13 (9.3)
Duration of working with psychiatric patients	
1–5 years	82 (58.6)
5–10 years	20 (14.3)
11 years or more	38 (27.1)
Total	140 (100)

single. 59.3% of them work in an acute inpatient unit and 58.6% of them have been giving care to psychiatric patients for 1–5 years. This sample group represents the population for which the scale can be used (Table 1).

### *Content validity of TRAS-Nurse*

As stated by Polit and Beck (2006), the CVI developed by Waltz and Bausell (1981) was used to evaluate content validity. According to this index, the experts evaluated each item with scores ranging from “1” to “4” (1=Not suitable, 2=The item needs to be adapted, 3=Appropriate, but needs minor changes, 4=Very appropriate). Expert panel consists of 10 nurse academicians in the field of psychiatry, one of whom is a specialist psychiatric nurse. The experts who carried out the translation had no prior acquaintance or mutual communication with each other. Therefore, there was no possibility for them to influence each other. The measurement degree of each item, in other words, the CVI value, was evaluated by the method of dividing the number of experts who marked the third and fourth options by the total number of experts. The CVI for the scale was calculated as 0.98 by summing the CVI value of each item and dividing it by the number of items in the scale. A CVI score above 90% indicates perfect coherence (Polit and Beck, 2018).

### *Construct validity*

Kaiser-Meyer-Olkin (KMO) and Bartlett tests were applied before the principal component analysis was performed in order to obtain more accurate results and to determine the sample adequacy

**Table 2.** Content validity index of the TRAS-Nurse scale.

Items	Experts										Number on agreement	Item-Content Validity Index
	1	2	3	4	5	6	7	8	9	10		
1.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
2.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
3.	✓	✓	...	✓	✓	✓	✓	✓	✓	✓	9	0.9
4.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
5.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
6.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
7.	✓	...	✓	✓	✓	✓	✓	✓	✓	✓	9	0.9
8.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
9.	✓	✓	✓	...	✓	✓	✓	✓	✓	✓	9	0.9
10.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
11.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
12.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
13.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
14.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
15.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
16.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
17.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
18.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
19.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
20.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
21.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
22.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
23.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
24.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
25.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10	1
Proportion relevant	1	0.93	0.93	0.93	1	1	1	1	1	1	Values of the Items: 0.88	Mean Item-Content Validity Index: 0.98

TRAS: therapeutic relationship assessment scale; CVI: content validity index.

and the suitability of the data for factor analysis. The KMO value was determined as 0.883 and the principal components were found suitable for analysis. Bartlett's test results ( $\chi^2=1898.300$ ,  $p < 0.001$ ) showed that the data were suitable for factor analysis.

### Confirmatory factor analysis

According to the CFA result, factor loading values were found to vary between 0.41 and 0.72. The factor loads of the sub-dimensions vary between 0.54 and 0.63 for the empathy sub-dimension, 0.52 and 0.74 for the self-knowledge sub-dimension, 0.52 and 0.72 for the involvement sub-dimension, and between 0.41 and 0.56 for the orientation (Table 3).

As for the model fit indices, Root Mean Square Error of Approximation (RMSEA) was 0.065. Another parameter for model fit is calculated by dividing  $\chi^2$  by degrees of freedom ( $\chi^2/df$ ). If the result is less than 5, the model fit is considered satisfactory (Şencan, 2005). The result of this calculation was  $< 5$  ( $\chi^2/df=1.53$ ). Other indices were found as follows: GFI, 0.90; CFI, 0.93; IFI, 0.92 and RFI, 0.91.

**Table 3.** Factor loads, means and standard deviations of TRAS-Nurse scale items.

Factor	Item number	Factor loads of TRAS-Nurse scale items	Corrected item total correlations	Means	Std. deviations
Factor 4. Orientation	1. I introduce myself to the patient	0.448	0.485	4.49	0.665
	2. I ask the patient what I should call him/her	0.419	0.478	3.28	1.061
	3. I inform the patient about his/her role and that of the nurse in the relationship	0.477	0.516	4.13	0.745
	4. I encourage the patient to speak openly	0.637	0.665	4.34	0.693
	5. I act in such a way that I gain the trust of the patient	0.577	0.602	4.62	0.533
	6. I apply the ethical and deontological principles inherent to a therapeutic relationship	0.569	0.597	4.46	0.602
Factor 1. Empathy	7. I understand and accept the patient, regardless of his/her verbalisations	0.633	0.660	4.17	0.656
	8. I support the patient in the same way, regardless of his/her current and/or past verbalisations	0.587	0.626	4.02	0.864
	9. I understand and accept the patient, regardless of his/ her behaviour	0.606	0.635	4.19	0.675
	10. I support the patient in the same way, regardless of his/her current and/or past behaviours	0.548	0.587	4.00	0.816
	11. I can understand the patient's feelings	0.543	0.570	4.02	0.563
Factor 2. Self-knowledge	12. I do not let my problems interfere with the relationship with the patient	0.582	0.611	4.34	0.633
	13. I accept the feelings I experience in the relationship with the patient	0.489	0.521	4.08	0.612
	14. I recognise my thoughts, feelings, and behaviours	0.553	0.580	4.23	0.566
	15. I reflect on the potential impact of my thoughts, feelings, behaviours on the relationship with the patient	0.703	0.729	4.00	0.756
	16. I reflect on and identify my relational skills	0.752	0.736	3.94	0.780
	17. I reflect on and identify my relational limitations	0.709	0.747	3.83	0.808

*(Continued)*

**Table 3.** (Continued)

Factor	Item number	Factor loads of TRAS-Nurse scale items	Corrected item total correlations	Means	Std. deviations
Factor 3. Involvement	18. I guarantee the identification, along with the patient, of his/her needs, expectations, and potential	0.721	0.749	4.13	0.647
	19. I help the patient to identify his/her problem	0.728	0.687	4.26	0.580
	20. I help the patient to identify strategies to deal with/solve the problem	0.665	0.692	4.19	0.627
	21. I help the patient identify the factors that are at the base of his/her inability to solve the problem	0.631	0.656	4.17	0.618
	22. I negotiate with the patient the goals to be reached	0.699	0.726	4.03	0.766
	23. I negotiate with the patient the contours of the intervention	0.613	0.643	4.08	0.686
	24. I dedicate to the patient the time he/she needs	0.538	0.572	4.05	0.700
	25. I dedicate to the patient the attention he/she needs	0.524	0.554	4.11	0.620

**Table 4.** Goodness-of-fit indexes for the TRAS-Nurse scale ( $n = 140$ ).

Four-factor	$\chi^2/df$	RMSEA	GFI	CFI	IFI	RFI
In this study	1.531	0.065	0.90	0.93	0.92	0.91
In original study Coelho et al. (2021)	1.29	0.04	0.99	0.99	—	—

RMSEA: root-mean-square error of approximation; GFI: goodness of fit index; CFI: comparative fit index; IFI: incremental fit index; RFI: relative fit index.

### Reliability analyses

Hotelling's T-square test was used to determine whether the scale had response bias. Hotelling's T-square was 483.819,  $F = 416.479$  ( $p < 0.01$ ). Therefore, there was no response bias in the scale. The Cronbach's alpha coefficient of the whole scale is 0.93. The Cronbach's alpha values of the sub-dimensions are 0.81 for empathy, 0.86 for self-knowledge, 0.89 for involvement, and 0.76 for orientation, respectively. The scale is additive according to Tukey's nonadditivity test (Table 4).

### Discussion

In this study, it was aimed to adapt the Turkish version of TRAS-Nurse, which is used to evaluate the therapeutic relationship level of nurses who care for psychiatric patients, and to measure the reliability and validity of the study.



This scale was developed because there is no scale to determine the therapeutic relationships between psychiatric patient care nurses and their patients in Türkiye. The first thing to do in scaling studies is to translate the original scale, taking into account the culture of the society to which the scale will be adapted. Translation-back translation method, which is the most widely used translation method, was used to realise the language adaptation of TRAS-Nurse (Çapık et al., 2018). In this method, the scale is translated from its original language to the target language and then back to the original language for semantic evaluation (Çapık et al., 2018). After the implementation of the translation-back translation method, it was decided that the Turkish version of TRAS-Nurse is a suitable measurement tool in terms of language validity. After the back translation, the final version of the scale was evaluated by 10 academicians and clinicians who are experts in the field of psychiatric nursing. The Turkish version of TRAS-Nurse has a CVI value of 0.93, indicating good content validity. The results of this study showed that the scale can evaluate the therapeutic relationship between a patient and a nurse who cares for a patient diagnosed with a psychiatric disorder in a Turkish sample.

In the second stage of the scale adaptation study, the scale was applied to 140 nurses and factor analysis was performed based on the data obtained for construct validity. The KMO procedure was applied to determine the suitability of the research sample size for factor analysis. KMO value is considered excellent between 0.80 and 1.00, good between 0.70 and 0.79, mediocre between 0.60 and 0.69, poor between 0.50 and 0.59, and unacceptable when it is  $<0.50$ . KMO value should be 60 and/or higher for good factor analysis (Chan and Idris, 2017). The KMO value of this study was calculated as 0.88, indicating that the sample size was suitable for factor analysis. Additionally, according to Bartlett's test of sphericity, it should be significant at  $\alpha < 0.05$  (Chan and Idris, 2017). In this study, this value was determined as  $p < 0.001$  and showed that the data were suitable for factor analysis.

The original TRAS-Nurse consists of 25 items (Coelho et al., 2021). It has been reported that the scale can be used in one dimension as well as in four sub-dimensions (Empathy, Self-knowledge, Involvement, Orientation). Generally, the variance explained on multidimensional scales should be greater than 40%, and the higher the total variance, the stronger the construct validity is considered to be (Carpenter, 2018). The Turkish version is based on the explanatory factor analysis (EFA) consisting of four subscales and the total variance of the subscales is 52.44%. Furthermore, the factor loading ratio of the scale varies between 0.419 and 0.728. In order for an item to be included in a sub-dimension, the factor load must be at least 0.30 (Yaşlıoğlu, 2017). As a result of EFA, it was seen that the Turkish version of the scale preserved its original structure and had a strong factor structure for the Turkish sample. In the study of Coelho et al. (2021), all 25 items had a factor load of at least 0.30 in the sub-dimension.

Regarding model fit, the values are considered as follows;  $\chi^2/df < 3$  perfect fit, RMSEA 0.08 and below good fit, CFI 0.90 and above good fit, NFI and CFI 0.95 and above perfect fit, IFI 0.90 and above good fit, GFI 0.90 and above good fit (Bahar and Cal, 2022). Coelho et al. (2021) reported the following fit indices for the original scale: GFI=0.96, CFI=0.98 and RMSEA=0.08. In this study, fit indices RMSEA and GFI showed that the model fit was acceptable. Considering the model fit indices and factor loadings of the scale items, the four-dimensional structure of the 25-item TRAS-Nurse scale was confirmed and it was seen that the model had acceptable fit indices.

The reliability coefficient Cronbach's  $\alpha$  is used to evaluate internal consistency. A measurement tool is considered relatively reliable when Cronbach's  $\alpha$  ranges from 0.60 to 0.79, and highly reliable when it ranges from 0.80 to 1 (Bujang et al., 2018). In the studies of Coelho et al. (2021), Cronbach's alpha value was found to be 0.93 for the internal reliability of all items; 0.86 for the Empathy sub-dimension; 0.85 for Self-Knowledge; 0.88 for Involvement; and 0.78 for the

Orientation sub-dimension. In this study, the total Cronbach's alpha value was found to be 0.93. The internal consistency of Turkish TRAS-Nurse is therefore considered satisfactory. The findings of the current study show that cultural differences are effective in the reliability of the scale and it is appropriate to use the scale with different cultures.

### *Limitations of the study*

Similar studies in the future should evaluate the validity of this version of the TRAS-Nurse scale with a larger group of nurses in Türkiye. Conducting the study in a larger population may result in higher fit index values.

### **Conclusion**

Our study showed that the Turkish version of the TRAS-Nurse scale is a suitable tool to be used in evaluating the therapeutic relationship of psychiatric patient care nurses with their patients. The results of this scale will guide nurses who provide patient care. It is thought that, especially by increasing nurses' awareness of therapeutic communication skills, it can enable them to improve themselves. The routine use of this scale in clinics may improve the quality of care.

### **Implications for nursing practice**

The Turkish version of TRAS-Nurse is a valid tool for evaluating the quality of therapeutic relationship established between nurse and patient in the context of mental health nurses.

The use of measurement tools (questionnaires) to assess the quality of nurse-patient therapeutic relationship facilitates the identification of the relationship itself and the gaps in the relationship that can serve as a basis for the delivery of nursing care.

#### **Key points for policy, practice and/or research**

- This article confirms the Turkish validity and reliability of a tool that evaluates the therapeutic communication skills of nurses caring for psychiatric patients.
- The questionnaire, created with the statistical methods described here, met the criteria for validity and reliability. The scale has a structure with four sub-factors: empathy, self-knowledge, participation, orientation.
- This tool will be effective in improving the communication skills with the patient in terms of nursing care.

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### **Author contributions**

Conceptualisation: SD and SP; Methodology: SD and SP; Formal analysis: SD; Investigation: SD and SP; Resources: SD and SP; Data curation: SD and SP; Writing – original draft preparation: SD and SP; Writing – review and editing: SD and SP; visualisation: SD and SP; supervision: SD; Project administration: SD and SP. All authors have read and agreed to the published version of the manuscript.

## Declaration of conflicting interests

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## Ethical approval

The research was approved by the İzmir Demokrasi University Non-Invasive Research Ethics Committee (Date: 25.05.2022; Issue: 2022/06-08). In addition, written permission was obtained from a Mental Health and Neurological Diseases Training and Research Hospital. Nurses participating in the study were informed about anonymity and confidentiality according to the Declaration of Helsinki, and their written consent was obtained.

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## Supplemental material

Supplemental material for this article is available online.

## References

- Aznar-Huerta A, Cardó-vila G, Vives-Abril T, et al. (2021) Unconditional acceptance in the nurse-patient therapeutic relationship as a whole: An exploratory qualitative study in the context of mental health services. *Revista Española de Enfermería de Salud Mental* 14: 22–29.
- Bahar Z and Cal A (2022) A study on the adaptation of the HIV/AIDS – related Stigma Scale into Turkish. *Perspectives in Psychiatric Care* 58: 509–517.
- Bujang MA, Omar ED and Baharum NA (2018) A review on sample size determination for Cronbach's alpha test: A simple guide for researchers. *The Malaysian Journal of Medical Sciences* 25: 85–99.
- Çapık C, Gözüm S and Aksayan S (2018) Kültürlerarası ölçek uyarlama aşamaları, dil ve kültür uyarlaması: güncellenmiş rehber. *Florence Nightingale Journal of Nursing* 26: 199–210.
- Carpenter S (2018) Ten steps in scale development and reporting: A guide for researchers ten steps in scale development and reporting: A guide for researchers. *Communication Methods and Measures* 12: 25–44.
- Chan LL and Idris N (2017) Validity and reliability of the instrument using exploratory factor analysis and Cronbach's alpha. *International Journal of Academic Research in Business and Social Sciences* 7: 400–410.
- Coelho J, Sampaio F, Nogueira M, et al. (2021) Development and psychometric properties of the therapeutic relationship assessment scale-nurse. *Journal of Psychiatric and Mental Health Nursing* 28: 981–994.
- Coffey M, Hannigan B, Barlow S, et al. (2019) Recovery-focused mental health care planning and co-ordination in acute inpatient mental health settings: a cross national comparative mixed methods study. *BMC Psychiatry* 19: 1–18.
- DeVellis RF and Thorpe CT (2022) Scale development: Theory and applications. pp.181–182, Sage publications.
- Gerace A, Oster C, O'Kane D, et al. (2018) Empathic processes during nurse–consumer conflict situations in psychiatric inpatient units: A qualitative study. *International Journal of Mental Health Nursing* 27: 92–105.
- Gordon E and Kenney M (2018) Group work in psychiatric/mental health nursing: The case for psychoeducation as a means to therapeutic ends. In: Charnay-Sonnek F (ed.) *European Psychiatric/Mental Health Nursing in the 21st Century*. Berlin, Germany: Springer, pp. 255–269.
- Hartley S, Raphael J, Lovell K, et al. (2020) Effective nurse – patient relationships in mental health care: A systematic review of interventions to improve the therapeutic alliance. *International Journal of Nursing Studies* 102:103490.
- Kavgaoğlu D and Elkin N (2019) Hemşirelik bölümü kişilerarası ilişkiler ve terapötik iletişim dersi öğretim programının değerlendirilmesi. *İstanbul Gelişim Üniversitesi Sağlık Bilimleri Dergisi* 7: 670–696.
- Kim J and Shin S (2022) Development of the nursing practice readiness scale for new graduate nurses: A methodological study. *Nurse Education in Practice* 59: 103298.
- Miciak M, Mayan M, Brown C, et al. (2018) The necessary conditions of engagement for the therapeutic relationship in physiotherapy: An interpretive description study. *Archives of Physiotherapy* 8: 3.
- Moreno-Poyato A, Casanova-Garrigos G, Roldan-Merino J, et al. (2021a) Examining the association between evidence-based practice and the nurse-patient therapeutic relationship in mental health units: A cross-sectional study. *Journal of Advanced Nursing* 77: 1762–1771.
- Moreno-Poyato A, Rodriguez-Nogueira O and MİRTCİME.CAT working group (2021b) The association between empathy and the nurse–patient therapeutic relationship in mental health units: A cross-sectional study. *Journal of Psychiatric Mental Health Nursing* 28: 335–343.

- Peplau HE (1991) *Interpersonal relations: a conceptual frame of reference for psychodynamic nursing practice*. Chapter 1, pp. 16, New York.
- Polit DF and Beck CT (2006) The content validity index: are you sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health* 29: 489–97.
- Polit DF and Beck CT (2018) *Measurement statistics in essentials of nursing research: appraising evidence for nursing practice*. pp. 355, Lippincott Williams & Wilkins.
- Rasheed SP, Younas A and Sundus A (2019) Self awareness in nursing: A scoping review. *Journal of Clinical Nursing* 28: 762–774.
- Roviralta-Vilella M, Moreno-Poyato A, Rodriguez-Nogueira O, et al. (2019) Relationship between the nursing practice environment and the therapeutic relationship in acute mental health units: A cross-sectional study. *International Journal of Mental Health and Nursing* 28: 1338–1346.
- Şencan H (2005) *Reliability and validity in social and behavioral measurements*. Ankara: Seçkin Publishing.
- Steuber P and Pollard C (2018) Building a therapeutic relationship: How much is too much self-disclosure? *International Journal of Caring Sciences* 11: 651–657.
- Videbeck S (2020) *Psychiatric mental health nursing*. pp. 195, Wolters-Kluwer, China.
- Yaşlıoğlu MM (2017) Sosyal bilimlerde faktör Analizi ve Geçerlilik: Keşfedici ve doğrulayıcı faktör analizlerinin kullanılması. *Istanbul University Journal of the School of Business* 46: 74–85.

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