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Development and Psychometric Properties of the Therapeutic Relationship Assessment Scale–Patient (TRAS-Patient)

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ABSTRACT

The therapeutic relationship plays a crucial role in nursing care for people with mental illness. Adopting a systemic and person-centred approach that considers the individual experiences and needs of the person is paramount. However, no instruments were found in the literature designed to evaluate the nurse–patient therapeutic relationship from the perspective of a person with mental illness. This study aimed to develop and evaluate the psychometric properties of an instrument for assessing the quality of the nurse–patient therapeutic relationship from the patient's perspective. An e-Delphi study was conducted to develop the assessment tool, and a psychometric study was carried out to examine its psychometric properties. The sample comprised 240 adults with mental illness. Internal consistency was assessed using Cronbach's alpha and the Omega coefficient. The final structure of the assessment instrument included 24 items distributed across two factors, explaining 64.2% of the variance. Cronbach's alpha was 0.94, and the Omega coefficient was 0.96. The intraclass correlation coefficient was 0.84 (95% CI: 0.66–0.92). The therapeutic relationship assessment scale (TRAS-Patient) shows good psychometric properties. This is a relevant tool for assessing the quality of the nurse–patient therapeutic relationship from the patient's perspective, thus promoting a patient-centred approach and responding to the patient's needs. Mental health nurses can access a tool for evaluating the nurse–patient therapeutic relationship centred on disciplinary knowledge. This enables patient involvement in care, enhanced care and person-centred practice.

1 | Introduction

The therapeutic relationship (TR) is vital in mental health nursing clinical practice (El-Abidi et al. 2024). Interpersonal skills are

fundamental for nurses in delivering care that promotes the recovery of health and well-being (Peplau 1997). Establishing a strong and appropriate nurse–patient relationship is particularly pertinent to increasing the effectiveness of nursing interventions for

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people with mental illness (Tolosa-Merlos et al. 2023). The quality of the care provided and the recovery of the person with mental illness are closely related to the quality of the established therapeutic relationship (Hartley et al. 2020). The literature consistently shows that a good therapeutic relationship favours clinical improvement, reduces hospitalisation and readmission periods and increases satisfaction with care (Bolsinger et al. 2020).

Interpersonal relations theory offers a guiding principle for mental health nursing clinical practice (Wasaya et al. 2021) since clinical practice informed by a theoretical framework tends to enhance the quality of care provided (Younas and Quennell 2019). This theory was developed by Hildegard E. Peplau in 1952 (Peplau 1952, 1997). It values the nurse–patient therapeutic relationship, considering that this relationship enables nurses to better understand patient's needs, acknowledging the autonomy of the patient and their ability to manage the health/illness process (McCarthy and Aquino-Russell 2009).

The therapeutic relationship is based on essential attributes such as empathy, authenticity, respect and communication (Allande-Cussó, Fernández-García, and Porcel-Gálvez 2022). Empathy is one of the main components of the nurse–patient therapeutic relationship (Moreno-Poyato and Rodríguez-Nogueira 2021).

Trust and honesty are also fundamental characteristics (Zou et al. 2021). It is a collaborative relationship involving a mutual effort to achieve specific therapeutic goals (Bolsinger et al. 2020).

Considering that the therapeutic relationship is key to mental health nursing clinical practice (Romeu-Labayen et al. 2022) and a mandatory prerequisite for the implementation of psychotherapeutic interventions (Sampaio, Sequeira, and Lluch Canut 2017), it is crucial to utilise tools assessing the quality of this relationship, particularly from the patient's perspective.

A preliminary review of the literature found several measuring instruments focusing on this construct: (a) the Vanderbilt Psychotherapy Process Scale and the Vanderbilt Therapeutic, which assesses positive and negative aspects of the therapist's and patient's behaviour and attitudes that impact on the relationship and the success of the therapy (Suh et al. 1989); (b) *California Psychotherapy Alliance Scale*, which assesses the involvement of both parties in the therapeutic process, process and also has a version to be used in the context of group therapy (Gaston 1991); (c) *Helping Alliance Questionnaire*, which allows the patient to assess the relevance of the therapist and the therapy (Luborsky et al. 1996); (d) *Agnew Relationship Measure*, a self-report instrument that assesses the patient–therapist therapeutic alliance (Agnew-Davies et al. 1998); (e) *Relationship Inventory*, developed by Barrett-Lennard, based on Carl Rogers' person-centred approach (Barrett-Lennard 1986); and (f) *Working Alliance Inventory* (Horvath and Greenberg 1986, 1989) and *Working Alliance Inventory–Short Revised* (Munder et al. 2010), which are among the most widely used instruments for assessing the quality of the therapeutic alliance in research, following Bordin's model of the therapeutic alliance.

Despite the usefulness of these instruments, their attributes do not accurately capture the nurse–patient therapeutic relationship. For example, (a) none of the instruments were developed

based on specific knowledge of the nursing discipline, and (b) all the instruments focus on the relationship between the 'therapist' and the patient, typically with the therapist being a psychologist or psychiatrist; therefore, the nurse–patient relationship is not represented; and (c) the context in which the therapeutic relationship occurs focuses on therapy/psychotherapy. Finally, there is only one version for some of the instruments, hindering a comprehensive assessment of the quality of the therapeutic relationship from both the nurse's and the person's perspectives.

To combat these limitations, Coelho et al. developed an instrument in 2021 to assess the quality of the nurse–patient therapeutic relationship from the nurse's perspective (Therapeutic Relationship Assessment Scale–Nurse [TRAS–Nurse]) based on disciplinary knowledge of nursing and the unique characteristics of the relationship with this healthcare professional (Coelho et al. 2021).

Following this endeavour, there is a crescent need to develop a version of this tool considering the patient's perspective. The therapeutic relationship is central to mental health nursing (Ghosh et al. 2022). Moreover, the literature relates this therapeutic relationship to various outcomes, such as adherence to treatment by people with mental health problems (Wienke Totura, Fields, and Karver 2018). Therefore, recognising the patient's assessment of the therapeutic relationship is crucial for increasing the effectiveness of treatment and tailoring interventions to meet individual needs and expectations (Igra et al. 2020). The person's perspective on the established therapeutic relationship is essential for positive therapeutic outcomes (Seewald and Rief 2023).

Therefore, this study is of noteworthy importance since it aims to develop an instrument to assess the quality of the nurse–patient therapeutic relationship from the patient's perspective, centred on nursing disciplinary knowledge, thus addressing a gap in the literature.

2 | Aim

This study aimed to develop and evaluate the psychometric properties of the Therapeutic Relationship Assessment Scale–Patient (TRAS–Patient), an instrument designed to assess the quality of the nurse–patient therapeutic relationship from the patient's perspective.

3 | Methods

3.1 | Design

This study was conducted in two phases: (1) the development of the TRAS–Patient and (2) the assessment of its psychometric properties, following the assumptions of Roldán-Merino et al. (2019).

3.2 | Phase 1: Development of the TRAS–Patient

The development phase of the TRAS–Patient consisted of three stages, each employing distinct methodological approaches:

3.3 | First Stage

Firstly, a focus group study was conducted to explore the perspectives of adult patients with mental illness regarding their relationship with nurses (Coelho et al. 2024). The findings of this study identified key aspects for patients in their therapeutic relationships with nurses. These aspects were considered by patients as indicators of the quality of the therapeutic relationship, classifying them as either positive or negative. Consequently, these findings served as the foundation for formulating potential evaluation items to be included in the TRAS-Patient.

3.4 | Second Stage

An analysis was performed on instruments available in the literature that assessed the therapeutic relationship from the patient's perspective. Emphasis was given to the Therapeutic Relationship Assessment Scale–Nurse (TRAS-Nurse) (Coelho et al. 2021) since this study aimed to create an assessment tool that could be used in parallel with the TRAS-Nurse.

3.5 | Third Stage

A list of 35 items was initially formulated and subsequently evaluated by a panel of experts using an e-Delphi method. This panel consisted of 30 nurse specialists in mental health nursing to facilitate the development of an assessment tool focused on the nurse–patient therapeutic relationship construct. The experts were recruited from Portugal and Spain to incorporate diverse cultural perspectives. The panel comprised 15 nurses working in clinical practice and 15 nursing teachers. The inclusion criteria for selecting nurses working in clinical practice were as follows: (a) currently providing care, (b) having a minimum of 5 years of clinical experience and (c) holding the title of nurse specialist in mental health nursing. Regarding the nursing teachers, the inclusion criteria were as follows: (a) having a Ph.D. and (b) holding the title of nurse specialist in mental health nursing.

An online questionnaire was developed using Google Forms to assess the content validity of each item in evaluating the ‘nurse–patient therapeutic relationship’ construct. The questionnaire was divided into two parts: the first part included sociodemographic characterisation questions, and the second part contained items for assessing the therapeutic relationship. Each expert was asked to rate each item on a 4-point Likert scale (1 = not relevant, 4 = extremely relevant). Content validity for each item was calculated based on the percentage of experts who rated the item as either 3 or 4. The first questionnaire was distributed on 10 June 2023, with a 2-week response period. A reminder email was sent after 7 days to encourage participation. According to Lynn (1986), only items with a content validity index (CVI) of 0.80 or higher should be included in the final evaluation instrument. Therefore, of the 35 items analysed in the first part, only 22 were included in the final instrument.

According to these results, five new items were suggested by the experts in the first round, which were then subjected to a second round of evaluation. The method used was the same as in the first round. The experts were invited to respond to the online questionnaire on 3 July 2023 and were given 2 weeks to complete the questionnaire, with a reminder sent after 7 days. The response rate for both rounds was 76.67%, which is in line with the recommendation by Steckler et al. (2001), suggesting a minimum response rate of 40%–50% for this type of study per round.

Of the five items analysed by the experts in the second round, only two were included in the final instrument.

Table 1 shows the sociodemographic characteristics of the experts.

The final instrument comprised 24 items and was pretested with 10 adults with mental illness. This step evaluated the clarity of the questions, the time required to complete the instrument and to identify any necessary adjustments, according to Grimm's (2010) recommendations. After the pretest, no changes to the instrument were deemed necessary, and the completion time ranged from 6 to 8 min.

TABLE 1 | Characteristics of the experts.

	<i>n</i> (%)	
	Ronda 1	Ronda 2
Gender		
Male	10 (43.5)	8 (34.8)
Female	13 (56.5)	15 (65.2)
Age		
Mean	43.91 (SD = 13.44)	42.52 (SD = 10.22)
Min	27	27
Max	66	66
Academic degree		
Bachelor/Licentiate	3 (13)	3 (13)
Master's	9 (39.1)	11 (47.8)
Ph.D.	11 (47.8)	9 (39.1)
Country		
Portugal	18 (78.3)	18 (78.3)
Spain	5 (21.7)	5 (21.7)
Years of experience as specialist nurse in mental health nursing		
Mean	14.78	12.13
Max	40	35
Min	5	5

Abbreviation: SD, standard deviation.

3.6 | Phase 2: Assessment of the TRAS-Patient Reliability and Construct Validity

3.6.1 | Participants and Setting

Nonprobabilistic convenience sampling was utilised for participant selection. The following inclusion criteria were established for participants: (a) aged 18 or over, (b) diagnosed with a mental illness and (c) willingness to participate in the research by providing informed consent. The exclusion criteria were as follows: (a) presence of psychomotor agitation, (b) significant communication impairments, (c) heightened delusional and/or hallucinatory ideation and (d) illiteracy. All participants were followed up in a Psychiatry and Mental Health Department by a multidisciplinary health team composed of nurses, psychiatrists, clinical psychologists, occupational therapists and social workers. The participants could be either inpatients or outpatients, including those receiving ambulatory care.

Regarding sample size, 10 participants were considered for each item in the instrument (Streiner, Norman, and Cairney 2015). Additionally, a minimum sample size of 100 participants was defined to enable exploratory factor analysis (EFA) (de Winter, Dodou, and Wieringa 2009; Kline 1994).

3.6.2 | Variables and Information Source

Participants were asked to complete a questionnaire consisting of two parts: (a) sociodemographic characterisation, which included questions about age, gender, education and psychiatric diagnosis; and (b) the Therapeutic Relationship Assessment Scale–Patient, comprising 24 items. Each item on the scale corresponded to a statement, scored using a 5-point Likert scale (1 = never; 2 = rarely; 3 = sometimes; 4 = often; 5 = always), identical to the TRAS-Nurse and in accordance with Kusmaryono, Wijayanti, and Maharani's (2022) recommendations.

Data collection occurred between September 2023 and January 2024.

3.7 | Statistical Analysis

The statistical analysis was conducted using IBM SPSS version 29 and the FACTOR Analysis software (Ferrando and Lorenzo-Seva 2017). Descriptive statistics were employed to examine the characteristics of the sample, and the results were presented in the format n (%).

Exploratory factor analysis (EFA) was performed to determine the number of items and the factorial structure of the questionnaire. The adequacy of the analysis was confirmed using the Kaiser–Meyer–Olkin (KMO) test and Bartlett's test of sphericity, yielding values of 0.92 and $\chi^2 = 2649.9$; $df = 276$; $p < 0.001$, respectively. Multiple criteria were applied for factor extraction, including the Kaiser rule and inspection of the scree plot (Field 2018). Additionally, the optimal implementation of parallel analysis (PA) technique was used

(Timmerman and Lorenzo-Seva 2011). The items were considered ordered categorical variables and were fitted to the EFA using the polychoric correlation matrix between items (Ferrando and Lorenzo-Seva 2013). The commonalities and coefficients in the item matrix were examined, considering coefficients above 0.40 significant. The selected fit function was unweighted least squares, with factor rotation using the Robust Promin rotation (Lorenzo-Seva and Ferrando 2019a, 2019b).

A comprehensive reliability analysis was conducted, utilising Cronbach's alpha and Omega coefficients to assess internal consistency. Additionally, composite reliability was calculated to gain a complete understanding of the instrument. These calculations were performed for the total instrument score and each constituent factor, providing a detailed reliability assessment at different levels (Clark and Watson 2015). Furthermore, a test–retest reliability examination was conducted within 2 weeks, using the intraclass correlation coefficient in a sample of 30 patients, offering insight into the temporal stability of measurements.

3.8 | Ethics Statement

The study was approved by the Ethics Committee of the Vila Nova de Gaia/Espinho Hospital Centre (CES: 60_2022). The collected data were coded to ensure confidentiality. The information gathered was used solely for the purposes of the study. All interactions occurred in an office, ensuring and respecting participants' privacy. Participants were informed of their right to withdraw from the study without penalty at any time. The principal investigator's email address and telephone number were provided to address any issues or questions. Additionally, all study participants signed an informed consent form.

4 | Results

4.1 | Respondents' Characteristics

The final sample comprised 240 adults with mental illness. The average age of the participants was 47.27 years (standard deviation: 12.94), and 55% were male. On average, participants had 9.87 years of schooling (standard deviation: 3.45). Approximately 59.2% of the participants had a diagnosis of psychotic disorder. Table 2 presents the sociodemographic characterisation of the participants.

4.2 | Scale Validity (EFA)

In the exploratory factor analysis, all items exhibited loadings greater than 0.40. Through parallel analysis, two factors were identified. These factors accounted for 64.2% of the total variance.

The two factors were defined as follows: F1—Empathy and involvement of the person in health decision-making and F2—Attitudes and clinical communication. Factors were defined following (a) a review of the literature regarding the most

TABLE 2 | Sociodemographic characteristics of the sample.

Variables		<i>n</i> = 240	(%)
Gender	Male	132	55
	Female	108	45
Age	Mean	47.27 (SD = 12.94)	
	Min	19	
	Max	87	
Academic degree	Basic education	116	48.3
	Upper education	100	41.7
	Higher education	24	10
Psychiatric diagnostic	Psychotic disorder	142	59.2
	Mood disorder	65	27.1
	Personality disorder	10	4.2
	Anxiety disorder	6	2.5
	Substance use disorder	17	7.1

Abbreviation: SD, standard deviation.

relevant domains within the nurse–patient therapeutic relationship, and (b) analysis and discussion among the members of the research team.

Table 3 details the variables comprising each factor and the percentage of explained variance for each factor. Goodness-of-fit indices for the two-factor model are presented in Table 4.

4.3 | Reliability

Regarding reliability, a Cronbach's alpha coefficient of 0.94 was observed for the entire questionnaire, with values above 0.88 in all individual factors. Additionally, the Omega coefficient (ω) for all items reached a value of 0.96, while the overall composite reliability was 0.97. The total intraclass correlation coefficient (ICC) was 0.84 (95% CI: 0.66–0.92) (Table 5).

5 | Discussion

In this study, more than 50% of the adult participants with mental illness were male. Additionally, psychotic disorders were the most observed, followed by mood disorders. Psychotic disorders are serious illnesses, and their prevalence in Portugal is estimated to be between 3% and 4% (Coentre and Levy 2020). Concerning schizophrenia, it is estimated that around 48 000 individuals are affected by this illness, corresponding to a prevalence rate of 0.57% (Gomes and Fernandes 2021). Regarding mood disorders, particularly depression, its prevalence in Portugal ranges between 7% and 8% (Observatório Nacional Luta Contra a Pobreza 2021).

Regarding the educational level of the sample, 48.3% completed basic education, which is in line with the data for the Portuguese

population (47.8%) (PORDATA Statistics on Portugal and Europe 2021).

Considering these data, it is essential to focus on the pathological conditions observed, particularly considering that psychotic disorders are not among the most prevalent pathologies in the Portuguese population. This discrepancy can be attributed to the context in which the data were collected, as many study participants were monitored in an outpatient setting for the administration of prolonged-release medications. In addition, most patients receiving this therapy suffer from psychotic disorders.

This study sample comprised 240 adults with mental illness. EFA was performed following the recommendations in the literature (Kline 1994; Kyriazos 2018). A minimum of 10 participants per item was considered necessary (Bujang et al. 2012).

The psychometric properties of the TRAS-Patient suggest that this instrument is an appropriate tool for assessing the quality of the nurse–patient therapeutic relationship. As we found no self-rated instruments in the literature that precisely assess the same construct as the TRAS-Patient, comparisons with previous studies are tentative, as those studies did not analyse the psychometric properties of instruments specifically assessing the nurse–patient therapeutic relationship from the patient's perspective. The total Cronbach's alpha was 0.94, with values ranging from 0.88 to 0.92 for factors F1 and F2, respectively. According to the literature, this total Cronbach's alpha value is considered excellent (Taber 2018), higher than 0.93 reached by the TRAS-Nurse (Coelho et al. 2021). Since the literature lacks studies on evaluation instruments specifically focused on this construct, it is not possible to compare this result. However, for reflective purposes and using an instrument similar to this present construct, the adaptation of

TABLE 3 | Loading matrix related to the exploratory factor analysis solution—TRAS-Patient ($n = 240$).

Items	Description	F1	F2
1	The nurse presents themselves by stating their name.	0.86	
2	The nurse asks me about my preferred name.	0.80	
3	The nurse encourages me to express my thoughts and feelings.	0.52	
4	I feel confident in trusting the nurse.		0.75
5	The nurse respects my privacy.		0.72
6	The nurse demonstrates understanding towards me.	0.41	0.45
7	The nurse accepts me for who I am.	0.44	
8	The nurse acknowledges me and my problems.	0.59	
9	The nurse asks me how I want/wish to solve my problems.	0.94	
10	The nurse asks for my opinion before proceeding with any interventions.	0.88	
11	The nurse makes me feel engaged in my treatment plan.	0.93	
12	The nurse guides me on the most suitable care for my situation.	0.90	
13	The nurse maintains a calm and reassuring attitude.		0.95
14	The nurse talks to me in an appropriate tone.		0.97
15	The nurse talks to me at a pace I find comfortable.		1.01
16	The nurse worries about me.		0.76
17	The nurse is genuine when talking to me.		0.82
18	I feel secure in the care provided to me.		0.84
19	The nurse keeps professional boundaries while performing their job.	0.78	
20	The nurse maintains a professional relationship with me.	0.42	
21	The nurse helps me attain my goals.	0.51	

(Continues)

TABLE 3 | (Continued)

Items	Description	F1	F2
22	The nurse is considerate of me.		0.91
23	The nurse is emphatic to me so that they can offer better care.	0.57	
24	I get help and support from the nurse.		0.67

TABLE 4 | Goodness-of-fit indexes for the two-dimensional model TRAS-Patient ($n = 240$).

Index	Value	95% confidence interval
NNFI	0.99	0.98–0.99
CFI	0.99	0.98–0.99
GFI	0.99	0.97–0.99
AGFI	0.98	0.96–0.99
RMSEA	0.04	0.04–0.05
Goodness-of-fit test	$\chi^2 = 342.78$; $gl = 229$; $p = 0.000010$	
Reason for fit	$\chi^2/gl = 1.49$	

Abbreviations: AGFI, adjusted goodness-of-fit index; CFI, comparative fit index; GFI, goodness-of-fit index; NNFI, non-normed fit index; RMSEA, root mean standard error of approximation.

the California Psychotherapy Alliance Scale, patient version, for the Portuguese population, revealed Cronbach's alpha values for its four subscales ranging from 0.43 to 0.73, which are lower than those found in this study (Paixão and Nunes 2008). In addition, the Alliance Negotiation Scale, an assessment tool emphasising the construct of negotiation in the therapeutic relationship, revealed lower internal consistency (0.82) (Galvão, Da Silva, and Vasco 2019). However, other similar instruments, such as the Vanderbilt Psychotherapy Process Scale (VPPS) and the Vanderbilt Therapeutic Alliance Scale (VTAS), presented internal consistency values of approximately 0.93 and 0.95, respectively, which align with the findings of our study (Cecero et al. 2001).

Moreover, in the context of internal consistency, the Omega coefficient was calculated at 0.96, matching the value found in TRAS-Nurse (Coelho et al. 2021), which is also considered an excellent result according to the literature (Kline 2016).

In the second stage of this study, the questionnaire was completed again by 30 adults with mental illness, 7 days after the first assessment, scoring a total ICC of 0.84 (95% CI: 0.66–0.92), which is considered a good reliability (Koo and Li 2016). This finding supports the evidence of the quality of the psychometric properties of the TRAS-Patient regarding reliability. An exploratory factor analysis was performed to examine construct validity, which indicated that this instrument comprised a two-factor structure.

TABLE 5 | Cronbach's alpha coefficient, omega coefficient and ICC test–retest ($n = 30$).

Factor	Cronbach's alpha	Omega (ω)	Composite reliability	ICC (CI 95%)
F1	0.88	0.93	0.93	0.71 (0.63–0.77)
F2	0.92	0.95	0.95	0.94 (0.88–0.97)
Total	0.94	0.96	0.97	0.84 (0.66–0.92)

Abbreviations: CI, confidence interval; ICC, intraclass correlation coefficient.

The cumulative variance explained by the scale in a two-factor structure was acceptable (64.20%) since, according to the literature, values above 60% are satisfactory (Hair et al. 2010).

All the items in the assessment instrument showed factor loadings of more than 0.40, so no item was eliminated. Item 6—I feel that the nurse understands me—had a factor loading higher than 0.40 for both factors; however, due to its semantic and conceptual analysis and a higher factor loading, it was allocated to factor F2.

Further statistical analyses are recommended in the literature, such as calculating fit indices like the root mean standard error of approximation (RMSEA), comparative fit index (CFI), goodness-of-fit index (GFI) and adjusted goodness-of-fit index (AGFI) (Lorenzo-Seva and Ferrando 2019a).

It is important to note that although the statistical results are positive and attest to the reliability of this instrument, this construct of the nurse–patient therapeutic relationship includes a more subjective domain, encompassing personal values, culture, beliefs, previous experiences and future expectations, as described in Peplau's theory of interpersonal relationships (Peplau 1997b), which can impact the quality of the relationship from the patient's perspective.

TRAS-Patient can be considered an important tool for enhancing the involvement of people with mental illness in nursing care by incorporating their opinions, decision-making and autonomy. Including the person throughout the care process is not only a requirement for the quality of care but also for the fulfilment of ethical assumptions (Ventura et al. 2020). This tool can also be useful for nurses specialising in mental health to develop opportunities for improvement in how they establish therapeutic relationships with patients.

The findings from this research make an innovative contribution to mental health nursing, addressing a gap in the literature given the absence of instruments that evaluate the therapeutic relationship between the nurse and the patient from the patient's perspective. Furthermore, one of the major strengths of this study was the inclusion and emphasis on the opinions and points of view of a frequently stigmatised population. By valuing the needs and perspectives of patients with mental health disorders in therapeutic settings, it provides valuable insights. As a pioneering study, it lays the groundwork for future research in this area. While the novelty of the study presents challenges in comparing findings with previous research, it also positions this study as a foundational work upon which future studies can be developed.

5.1 | Limitations

The first potential limitation of the study is that the TRAS-Patient is a self-report instrument, which can create some bias. It is important to note that past experiences can impact on the patient's assessment of the therapeutic relationship.

On the other hand, the sampling technique can also be a limitation, hindering the generalisability of results. It should also be noted that different locations for data collection could have been selected, such as primary/community healthcare settings. This would provide insight into the therapeutic relationships in these contexts and reveal other information.

Finally, concurrent validity was not assessed, which can also be seen as a potential limitation of this study. However, as previously described, no instruments in the literature assess the same construct as the TRAS-Patient.

5.2 | Implications for Nursing Practice

This study presents compelling findings for the nursing profession and discipline. The psychometric properties of the TRAS-Patient are robust, supporting its recommended use in clinical settings to assess the nurse–patient therapeutic relationship from the patient's perspective. This assessment tool was designed to assess the perception of patients with mental illness of their relationship with nurses. Furthermore, it is grounded solely in nursing disciplinary knowledge, highlighting the importance of the patient's role in the therapeutic relationship and the value of scientific nursing knowledge. This underscores the profound impact of the therapeutic relationship on the quality of care provided.

Moreover, the TRAS-Patient is a unique instrument from those found in the literature, offering a novel approach. While the TRAS-Nurse allows for the assessment of the nurse–patient therapeutic relationship from the nurse's perspective, this study addresses a gap in the literature by developing an instrument that evaluates the same construct from the patient's perspective.

6 | Conclusion

The development of this study emphasised the importance of the nurse–patient therapeutic relationship from the patient's perspective. Additionally, it highlighted the significance of the opinions and involvement of the person with mental illness,

underscoring the necessity for their active participation in this relationship.

The TRAS-Patient is an instrument with good psychometric properties for assessing various components of the nurse–patient therapeutic relationship from the patient’s perspective. Importantly, this is a valuable tool for identifying less positive aspects of the therapeutic relationship and creating opportunities for improvement. Additionally, it incorporates the patient’s perspective into the care process, thus promoting a more person-centred approach.

Further studies using the TRAS-Patient with other populations, such as adults without mental illness, should be conducted.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

- Agnew-Davies, R., W. B. Stiles, G. E. Hardy, M. Barkham, and D. A. Shapiro. 1998. “Alliance Structure Assessed by the Agnew Relationship Measure (ARM).” *British Journal of Clinical Psychology* 37, no. 2: 155–172. <https://doi.org/10.1111/J.2044-8260.1998.TB01291.X>.
- Allande-Cussó, R., E. Fernández-García, and A. M. Porcel-Gálvez. 2022. “Defining and Characterising the Nurse–Patient Relationship: A Concept Analysis.” *Nursing Ethics* 29, no. 2: 462–484. <https://doi.org/10.1177/09697330211046651>.
- Barrett-Lennard, G. T. 1986. “The Relationship Inventory Now: Issues and Advances in Theory, Method, and Use.” In *The Psychotherapeutic Process: A Research Handbook*, edited by L. S. Greenberg and W. M. Pinsof, 439–476. New York, NY: Guilford Press.
- Bolsinger, J., M. Jaeger, P. Hoff, and A. Theodoridou. 2020. “Challenges and Opportunities in Building and Maintaining a Good Therapeutic Relationship in Acute Psychiatric Settings: A Narrative Review.” *Frontiers in Psychiatry* 10: 965. <https://doi.org/10.3389/FPSYT.2019.00965/FULL>.
- Bujang, M. A., P. A. Ghani, S. A. Soelar, and N. A. Zulkifli. 2012. “Sample Size Guideline for Exploratory Factor Analysis When Using Small Sample: Taking Into Considerations of Different Measurement Scales.” In *ICSSBE 2012—Proceedings, 2012 International Conference on Statistics in Science, Business and Engineering: “Empowering Decision Making With Statistical Sciences,”* 447–451. Shah Alam, Malaysia: Universiti Teknologi MARA. <https://doi.org/10.1109/ICSSBE.2012.6396605>.
- Cecero, J., L. Fenton, T. Frankforter, C. Nich, and K. Carroll. 2001. “Focus on Therapeutic Alliance: The Psychometric Properties of Six Measures Across Three Treatments.” *Psychotherapy: Theory, Research, Practice, Training* 38, no. 1: 1–11. <https://doi.org/10.1037/0033-3204.38.1.1>.
- Clark, L. A., and D. Watson. 2015. “Constructing Validity: Basic Issues in Objective Scale Development.” In *Methodological Issues and Strategies in Clinical Research, 4th ed*, edited by American Psychological Association, 187–203. Washington, DC: American Psychological Association.

- Coelho, J., A. Moreno Poyato, J. Roldán Merino, C. Sequeira, and F. Sampaio. 2024. “Perspectives of Adult Patients With Mental Health Disorders on the Relationship With Nurses: A Focus Group Study.” *BMC Nursing* 23, no. 1: 1–10. <https://doi.org/10.1186/S12912-023-01663-5/TABLES/2>.
- Coelho, J. C. F., F. M. C. Sampaio, M. J. C. Nogueira, C. A. D. C. Sequeira, M. D. M. Lleixà Fortuño, and J. Roldán Merino. 2021. “Development and Psychometric Properties of the Therapeutic Relationship Assessment Scale-Nurse.” *Journal of Psychiatric and Mental Health Nursing* 28, no. 6: 981–994. <https://doi.org/10.1111/jpm.12796>.
- Coentre, R., and P. Levy. 2020. “Early Intervention in Psychosis in Portugal: Where Are We?” *Acta Médica Portuguesa* 33, no. 9: 540–542. <https://doi.org/10.20344/AMP.13472>.
- de Winter, J. C. F., D. Dodou, and P. A. Wieringa. 2009. “Exploratory Factor Analysis With Small Sample Sizes.” *Multivariate Behavioral Research* 44, no. 2: 147–181. <https://doi.org/10.1080/00273170902794206>.
- El-Abidi, K., A. R. Moreno-Poyato, M. Cañabate-Ros, et al. 2024. “The Therapeutic Relationship From the Perspective of Patients and Nurses in the First Days of Admission: A Cross-Sectional Study in Acute Mental Health Units.” *International Journal of Mental Health Nursing* 33, no. 1: 134–142. <https://doi.org/10.1111/INM.13227>.
- Ferrando, P. J., and U. Lorenzo-Seva. 2013. “Unrestricted Item Factor Analysis and Some Relations With Item Response Theory.” Technical Report. Department of Psychology, Universitat Rovira i Virgili.
- Ferrando, P. J., and U. Lorenzo-Seva. 2017. “Program FACTOR at 10: Origins, Development and Future Directions.” *Psicothema* 29, no. 2: 236–240. <https://doi.org/10.7334/PSICOTHEMA2016.304>.
- Field, A. 2018. *Discovering Statistics Using IBM SPSS Statistics*. 5th ed. London: SAGE Publications.
- Galvão, M. I., A. N. Da Silva, and A. B. Vasco. 2019. “The Alliance Negotiation Scale: Portuguese Adaptation.” *Research in Psychotherapy: Psychopathology, Process, and Outcome* 22, no. 2: 224–232. <https://doi.org/10.4081/RIPPO.2019.349>.
- Gaston, L. 1991. “Reliability and Criterion-Related Validity of the California Psychotherapy Alliance Scales—Patient Version.” *Journal of Psychological Assessment* 3: 68–74.
- Ghosh, A., T. Mahintamani, K. Sharma, et al. 2022. “The Therapeutic Relationships, Empathy, and Satisfaction in Teleconsultation for Substance Use Disorders: Better or Worse Than in-Person Consultation?” *Indian Journal of Psychiatry* 64, no. 5: 457–465. https://doi.org/10.4103/INDIANJPSYCHIATRY.INDIANJPSYCHIATRY_704_21.
- Gomes, M., and N. Fernandes. 2021. “Terapias de Terceira Geração Nas Perturbações Psíquicas.” *Revista Portuguesa de Psiquiatria e Saúde Mental* 7, no. 4: 58–65. <https://doi.org/10.51338/rppsm.319>.
- Grimm, P. 2010. “Pretesting a Questionnaire.” In *Wiley International Encyclopedia of Marketing*, edited by N. Jagdish and M. Sheth, 1. Hoboken, NJ: John Wiley & Sons. <https://doi.org/10.1002/9781444316568.wiem02051>.
- Hair, J., W. Black, B. Babin, and R. Anderson. 2010. *Multivariate Data Analysis*. 7th ed. Hoboken, NJ: Pearson Prentice.
- Hartley, S., J. Raphael, K. Lovell, and K. Berry. 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. <https://doi.org/10.1016/J.IJNURSTU.2019.103490>.
- Horvath, A., and L. Greenberg. 1986. “The Development of the Working Alliance Inventory.” In *The Psychotherapeutic Process: A Research Handbook*, edited by W. M. P. L. S. Greenberg, 529–556. New York, NY: Guilford Press.
- Horvath, A. O., and L. S. Greenberg. 1989. “Development and Validation of the Working Alliance Inventory.” *Journal of Counseling Psychology* 36, no. 2: 223–233. <https://doi.org/10.1037/0022-0167.36.2.223>.

- Igra, L., M. Lavidor, D. Atzil-Slonim, N. Arnon-Ribinfeld, S. de Jong, and I. Hasson-Ohayon. 2020. "A Meta-Analysis of Client-Therapist Perspectives on the Therapeutic Alliance: Examining the Moderating Role of Type of Measurement and Diagnosis." *European Psychiatry* 63, no. 1: e67. <https://doi.org/10.1192/J.EURPSY.2020.67>.
- Kline, P. 1994. *An Easy Guide to Factor Analysis*. London: Routledge.
- Kline, R. B. 2016. *Principles and Practice of Structural Equation Modeling*. 4th ed. New York, NY: Guilford Press.
- Koo, T. K., and M. Y. Li. 2016. "A Guideline of Selecting and Reporting Intraclass Correlation Coefficients for Reliability Research." *Journal of Chiropractic Medicine* 15, no. 2: 155–163. <https://doi.org/10.1016/J.JCM.2016.02.012>.
- Kusmaryono, I., D. Wijayanti, and H. R. Maharani. 2022. "Number of Response Options, Reliability, Validity, and Potential Bias in the Use of the Likert Scale Education and Social Science Research: A Literature Review." *International Journal of Educational Methodology* 8, no. 4: 625–637. <https://doi.org/10.12973/IJEM.8.4.625>.
- Kyriazos, T. A. 2018. "Applied Psychometrics: Sample Size and Sample Power Considerations in Factor Analysis (EFA, CFA) and SEM in General." *Psychology* 09, no. 8: 2207–2230. <https://doi.org/10.4236/PSYCH.2018.98126>.
- Lorenzo-Seva, U., and P. J. Ferrando. 2019a. "A General Approach for Fitting Pure Exploratory Bifactor Models." *Multivariate Behavioral Research* 54, no. 1: 15–30. <https://doi.org/10.1080/00273171.2018.1484339>.
- Lorenzo-Seva, U., and P. J. Ferrando. 2019b. "Robust Promin: A Method for Diagonally Weighted Factor Rotation." *LIBERABIT: Revista Peruana de Psicología* 25, no. 1: 99–106. <https://doi.org/10.24265/LIBERABIT.2019.V25N1.08>.
- Luborsky, L., J. Barber, L. Siqueland, et al. 1996. "The Revised Helping Alliance Questionnaire (HAQ-II): Psychometric Properties." *Journal of Psychotherapy Practice and Research* 5, no. 3: 260–271.
- Lynn, M. R. 1986. "Determination and Quantification of Content Validity." *Nursing Research* 35, no. 6: 382–385.
- McCarthy, C. T., and C. Aquino-Russell. 2009. "A Comparison of Two Nursing Theories in Practice: Peplau and Parse." *Nursing Science Quarterly* 22, no. 1: 34–40. <https://doi.org/10.1177/0894318408329339>.
- Moreno-Poyato, A. R., and Ó. Rodríguez-Nogueira. 2021. "The Association Between Empathy and the Nurse–Patient Therapeutic Relationship in Mental Health Units: A Cross-Sectional Study." *Journal of Psychiatric and Mental Health Nursing* 28, no. 3: 335–343. <https://doi.org/10.1111/JPM.12675>.
- Munder, T., F. Wilmers, R. Leonhart, H. W. Linster, and J. Barth. 2010. "Working Alliance Inventory-Short Revised (WAI-SR): Psychometric Properties in Outpatients and Inpatients." *Clinical Psychology & Psychotherapy* 17, no. 3: 231–239. <https://doi.org/10.1002/CPP.658>.
- Observatório Nacional Luta Contra a Pobreza. 2021. "A Saúde Mental em Portugal: Um Breve Retrato Epidemiológico e Social." <https://On.Eapn.Pt/Wp-Content/Uploads/Boletim-7-A-Sa%C3%BAde-Mental-Em-Portugal-Um-Breve-Retrato-Epidemiol%C3%B3gico-1.Pdf>.
- Paixão, R., and J. Nunes. 2008. "Adaptação Portuguesa da Escala de Aliança Psicoterapêutica da Califórnia (versão do paciente)." *Revista Toxicodependências* 14, no. 2: 75–78.
- Peplau, H. 1952. *Interpersonal Relations in Nursing*. New York, NY: Putnam.
- Peplau, H. E. 1997. "Peplau's Theory of Interpersonal Relations." *Nursing Science Quarterly* 10, no. 4: 162–167. <https://doi.org/10.1177/089431849701000407>.
- PORDATA Estatísticas sobre Portugal e Europa. 2021. *Escolaridade da População*. <https://www.Pordata.Pt/Subtema/Portugal/Escolaridade+da+populacao-45>.
- Roldán-Merino, J., N. Roca-Capara, D. Miguel-Ruiz, and O. Rodrigo-Pedrosa. 2019. "Development and Psychometric Properties of the Assessment Questionnaire for the Process of the Tutorial Action Plan." *Nurse Education Today* 76: 109–117. <https://doi.org/10.1016/j.nedt.2019.02.002>.
- Romeu-Labayen, M., G. Tort-Nasarre, M. A. Rigol Cuadra, R. Giralt Palou, and P. Galbany-Estragués. 2022. "The Attitudes of Mental Health Nurses That Support a Positive Therapeutic Relationship: The Perspective of People Diagnosed With BPD." *Journal of Psychiatric and Mental Health Nursing* 29, no. 2: 317–326. <https://doi.org/10.1111/JPM.12766>.
- Sampaio, F. M. C., C. Sequeira, and T. Lluch Canut. 2017. "Content Validity of a Psychotherapeutic Intervention Model in Nursing: A Modified e-Delphi Study." *Archives of Psychiatric Nursing* 31, no. 2: 147–156. <https://doi.org/10.1016/J.APNU.2016.09.007>.
- Seewald, A., and W. Rief. 2023. "How to Change Negative Outcome Expectations in Psychotherapy? The Role of the Therapist's Warmth and Competence." *Clinical Psychological Science* 11, no. 1: 149–163. https://doi.org/10.1177/21677026221094331/ASSET/IMAGES/LARGE/10.1177_21677026221094331-FIG4.JPEG.
- Steckler, A., A. Farel, J. B. Bontempi, K. Umble, B. Polhamus, and A. Trester. 2001. "Online Research to Guide Knowledge Management Planning." *Health Education Research* 16, no. 6: 747–763. <https://doi.org/10.1093/HER/16.6.747>.
- Streiner, D., G. Norman, and J. Cairney. 2015. *Health Measurement Scales: A Practical Guide to Their Development and Use*. 5th ed. Oxford: Oxford University Press.
- Suh, C. S., S. S. O'Malley, H. H. Strupp, and M. E. Johnson. 1989. "The Vanderbilt Psychotherapy Process Scale (VPPS)." *Journal of Cognitive Psychotherapy* 3, no. 2: 123–154.
- Taber, K. S. 2018. "The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education." *Research in Science Education* 48, no. 6: 1273–1296. <https://doi.org/10.1007/S11165-016-9602-2/TABLES/1>.
- Timmerman, M. E., and U. Lorenzo-Seva. 2011. "Dimensionality Assessment of Ordered Polytomous Items With Parallel Analysis." *Psychological Methods* 16, no. 2: 209–220. <https://doi.org/10.1037/A0023353>.
- Tolosa-Merlos, D., A. R. Moreno-Poyato, F. González-Palau, A. Pérez-Toribio, G. Casanova-Garrigós, and P. Delgado-Hito. 2023. "Exploring the Therapeutic Relationship Through the Reflective Practice of Nurses in Acute Mental Health Units: A Qualitative Study." *Journal of Clinical Nursing* 32, no. 1–2: 253–263. <https://doi.org/10.1111/JOCN.16223>.
- Ventura, C. A. A., W. Austin, B. S. Carrara, and E. S. de Brito. 2020. "Nursing Care in Mental Health: Human Rights and Ethical Issues." *Nursing Ethics* 28, no. 4: 463–480. <https://doi.org/10.1177/0969733020952102>.
- Wasaya, F., Q. Shah, A. Shaheen, and K. Carroll. 2021. "Peplau's Theory of Interpersonal Relations: A Case Study." *Nursing Science Quarterly* 34, no. 4: 368–371. <https://doi.org/10.1177/08943184211031573>.
- Wienke Totura, C. M., S. A. Fields, and M. S. Karver. 2018. "The Role of the Therapeutic Relationship in Psychopharmacological Treatment Outcomes: A Meta-Analytic Review." *Psychiatric Services* 69, no. 1: 41–47. <https://doi.org/10.1176/APPI.PS.201700114/ASSET/IMAGES/LARGE/APPI.PS.201700114F2.JPEG>.
- Younas, A., and S. Quennell. 2019. "Usefulness of Nursing Theory-Guided Practice: An Integrative Review." *Scandinavian Journal of Caring Sciences* 33, no. 3: 540–555. <https://doi.org/10.1111/SCS.12670>.
- Zou, P., Y. Luo, K. Krolak, et al. 2021. "Student's Experiences on Learning Therapeutic Relationship: A Narrative Inquiry." *Canadian Journal of Nursing Research* 53, no. 1: 78–87. https://doi.org/10.1177/0844562119873760/ASSET/IMAGES/LARGE/10.1177_0844562119873760-FIG2.JPEG.