Psychotherapist competency in chronic disease management: Arabic version validity and reliability indicators.

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KEYWORDS

Psychometric properties, chronically ill, psychotherapist competence, psychotherapists

ABSTRACT

Background The Psychotherapist Competence Scale for People with Chronic Illnesses' psychometric features assess psychotherapists' capacity to support chronically sick patients**. Objectives** This study sought to This study examined the psychometric characteristics, validity, and reliability of the Arabic Psychotherapist Competence Scale for Chronic Illnesses. To fit the research context, scale items were translated into Arabic**. Methods**: The Psychotherapist Competence Scale developed Cox et al. (2019)On a sample of (329) respondents from psychologists who work with sensitive groups in the community. **Results**: An exploratory component analysis identified four characteristics of the psychotherapist's competence scale for chronic disease patients: relational competence, therapeutic competence, communication efficacy, and diagnostic skills. Factor 1 has the highest dimensions (0.835), (0.688), (0.543), showing significant shared consistency. Factor 2 associated (0.734), (0.673), (0.613) shows a psychological aspect. Factor 3 had an abnormally high loading (1.014), while factor 4 was (0.778), (0.578), (0.563). The four components accounted 39.1% of the variance, with factor 1 explaining 12.37%, factor 2 11.16%, factor 3 9.28%, and factor 4 6.28%, suggesting model improvement. Overall, the model fit was good, with RMSEA = 0.0655 (90% CI: 0.0565 - 0.0749), TLI = 0.830, and CFI = 0.823. However, TLI < 0.90 shows room for improvement. The Kaiser-Meyer-Olkin (KMO) value of 0.816 validated sample adequacy, whereas Bartlett's test (χ^2 = 1970, df = 210, $p < 0.001$) supported factor analysis. The connections between components 1, 2, and 3 were moderate, but factor 4 was mostly independent. The reliability analysis showed good internal consistency, with Cronbach's alpha 0.678–0.798 and McDonald's Omega-3 0.895. The scale is valid and dependable, according to the results. **Conclusion**: Psychometric features make the Therapist competency Scale for People with Chronic Illness reliable and relevant for assessing therapist competency. This improves psychosocial interventions and chronic illness care.

Introduction

Recent research have developed and evaluated criteria to assess therapist skill and confidence in treating distinct populations. The psychosis cognitive treatment scale (CTS-Psy) Residents' CBT quality assessments for psychosis patients are reliable and valid. (Haddock et al., 2001). Similarly, the Treatment Confidence Scale - Intellectual Disabilities (TCS-ID) Good psychometric properties in measuring therapists' confidence when working with individuals with intellectual disabilities (HADDOCK, 2008; Rollinson et al., 2008) The Mental Health Scale showed positivity (PMH-scale) one-dimensional, standard stability and good viability across diverse populations (Lukat et al., 2016) These scales help advance the discipline and improve patient outcomes by adding to the study on typical psychological characteristics of mental health measures (Gordon, 2006)

Many research have examined the psychometric qualities of Arabic health-related quality of life instruments. Show that FACIT-Fatigue Arab FACT-G is reliable and valid for cancer patients' fatigue and quality of life. (Al Maqbali et al., 2020)Similarly, the Arabic version of the Self-Efficacy Scale for the Management of Chronic Diseases showed acceptable validity and reliability in arthritis patients. Rheumatoid (Sarhan et al., 2022) The Health Partners Scale has been successfully adapted and validated in Arabic, proving to be valid and reliable for measuring self-management in chronically ill patients (Almutary, 2024). Chronically ill people often experience psychological distress, emotional stress, and poor quality of life, making psychotherapists essential. Given the rising frequency of chronic diseases worldwide, psychotherapists must be qualified to help. (Figley, 2002) Psychotherapist competence must be assessed using accurate, reliable measures for varied populations, including Arabic-speaking communities..

Psychotherapists' ability to treat chronic disorders is crucial, especially in Arabic-speaking areas where culturally acceptable and reliable diagnostic tools are needed. ‹Measurement of psychotherapist competency and the necessity for accurate and valid Arabic instruments are discussed in this introduction (Kollbrunner & Seifert, 2017) where The Arabic psychotherapist competence measure must be developed and validated to provide cultural relevance and psychometric reliability. Cross-cultural adaptability and standardized evaluation criteria are crucial to the usefulness of such technologies, according to study (Rosen et al., 2018) This study examines Arab adaption of the psychotherapist competency scale and health indicators to improve psychological assessment for chronic disease practitioners

A psychotherapist's competency, "the extent to which the therapist has the knowledge and skill to deliver treatment to the standards necessary to achieve its expected effects," is essential for treating chronically ill patients.. (Umarov, 2024) This competence does not include the therapist's knowledge of specific treatments. Just, It also includes its ability to implement them effectively, taking into account the unique challenges posed by chronic diseases. (Al Maqbali et al., 2020). Psychotherapists help manage chronic diseases' emotional and psychological effects. Patients learn to cope, manage discomfort, and improve their quality of life. (Purgato et al., 2018) Diseases are rising in Arabic-speaking countries, making professional therapists essential. chronic, Mental health support is becoming vital to comprehensive care. Valid, trustworthy, culturally acceptable, and linguistically accurate therapist competence measurements are essential for high-quality psychological therapies. Thus, Arabic competency evaluation techniques must be developed and validated. Translations of these tools are inappropriate. To be effective in Arabic-speaking contexts, they must be culturally adapted. Recent efforts to translate and validate health measurements into Arabic show the growing demand for this. Arabic version of General Drug Compliance Scale (GYMNASIUM) for Saudi chronic disease patients (Naqvi et al., 2020) Similarly, the Arabic version of the functional assessment of cancer treatment

fatigue (FACIT-Fatigue) Good reliability and validity in assessing fatigue and quality of life in Arabic-speaking cancer patients (Purgato et al., 2018)

These advances enable the development and validation of more specialized instruments, such as psychotherapist chronic illness competence assessments. Ensuring the validity and reliability of such instruments helps healthcare providers assess and improve the abilities of therapists treating chronically ill Arabic-speaking patients, enhancing patient outcomes and care(Barber et al., 2007)

Recent research have developed and validated competence metrics for diverse therapy techniques and mental health disorders. The provider's competency in cognitive behavioral therapy can be assessed using a summary measure of self-report called cognitive behavioral treatment efficiency (CCS)(Rodriguez-Quintana et al., 2021) Similarly, the measure of cognitive therapy adherence and efficiency (CTACS) to evaluate the therapist's competence in cognitive therapy for various disorders (Brown et al., 2018).

Recent studies have studied psychotherapist efficiency assessment scale psychometric features. The German cognitive therapy scale's session format and general treatment competence subscales were psychometrically sound (Weck et al., 2010) Factor analysis showed a single psychosis confidence and safety factor with acceptable sample adequacy (KMO = 0.787) (Ivanova & Kalendgieva, 2021)These studies provide valuable tools for assessing a psychotherapist's competence in treating mental illness.

Several recent research have examined mental health psychotherapist competency measures' psychometric characteristics. A study by Finsrud et al. (2022) The mental health therapist efficiency score had Cronbach alpha 0.87, indicating strong internal reliability. The model explained 62% of the Contrast, indicating its good structure, and the scale had strong retest reliability (t = 0.82) over three months. Wake up (Mettert et al., 2020) A 2020 comprehensive evaluation of implementation outcome measures found that the Competency and Skills Assessment Scale had the highest psychological rating, with an ICC of 0.91. This classifies the scale as dependable in all mental health professions and applicable in varied settings. Also, a review of (Frank et al., 2020) with improvements in measuring processor efficiency, with many studies shifting towards direct observation of processor behaviors, enhancing the validity of efficiency measures. A study by (Cox et al., 2019) Psychotherapeutic study on treatment safety notes that evaluating therapist efficiency is crucial to assure treatment accuracy. Competency assessments were substantially linked (t = 0.75) with client results, confirming the prediction. A study by Wampold and Flückiger (2023)on the importance of the therapeutic alliance in competency assessments, reporting that therapists with higher competency scores had a 45% higher client retention rate. The study focused (Guo et al., 2024) Integrate open surveys, interviews, and literature analysis to create a competency questionnaire for ethnic higher education psychological counselors. The questionnaire was tested with 450 college and university psychological counselors using entrance and exploratory factor analysis. It was then applied to 570 psychological counselors for confirmatory component analysis and experimental validity internal consistency reliability tests. 230 counselors were retested after three months. Validity tests use the IRC-C and JAS. A study was shown. (Rodriguez-Quintana et al., 2021) Create and validate a summary self-report measure of cognitive behavioral therapy efficiency (CCS) to evaluate providers' skills. 387 Michigan school mental health professionals (SMHPs) worked with students. The scale has CCS. Non-behavioral skills, behavioral skills, perspectives, and knowledge were adopted from four cognitive behavioral therapy efficiency aspects spanning 33 components. Show scale CCS High internal consistency and construction-based she ability. A study was made (Zhou et al., 2021) Psychotherapeutic style scale. A thorough psychometric development procedure yielded a three-factor psychotherapy strategy. Exploratory and confirmatory criteria showed the psychotherapeutic method's multifaceted structure and feasibility. Alpha Cronbach indicated the scale's reliability. Correlations

between the standard and its validity standards showed that its validity was adequate. The psychotherapeutic method may help clients choose therapists with the right behavioral traits.

Methodology

Research design

The current study used a descriptive (comparative) technique to predict cancer patients' psychological care quality from psychologists' perspectives. The study used the scale of communication skills with patients and the scale of psychotherapist competence to predict the quality of psychological services from a psychologist's perspective and identify differences in these services according to a number of demographic variables without long-term follow-up, which may delay the study.

Participants

The study randomly selected psychologists from schools, psychological clinics, counseling and psychological services centers, and hospitals to answer the study tool electronically via Google form. The study tools were distributed to the target group, and 381 psychologists responded to the four study tools. The study's participants met these criteria: 1. To join the research. 2. Specialize in psychological sciences and provide services in study centers. 3. Review study objectives and instructions. The sample was evenly split between men and women, with 48.9% (161 participants) being men and 51.1% (168 participants) being women. Participants worked in different environments: Psychological clinics employed 39.8% (131 individuals), hospitals 32.2% (106 participants), and schools and rehabilitation institutes 28.0% (92 participants). The participants were divided by specialty: 54.1% of 178 participants were clinical psychologists. psychological counseling (75 participants) 22.8%. 23.1% mental health (76 participants). 49.8% (164 participants) had less than 5 years of experience. 21.0% (69 participants) had 5–10 years of experience. 29.2% (96 participants) had over 10 years of experience. Most participants (62.9%, 207) had bachelor's degrees, while 37.1% had postgraduate degrees.(122)

Table 1

Characteristics of Study Sample

Category	Frequencies	Percentage
Gender		
Male	161	48،9
Females	168	51،1
Workplace		
Psychiatric Clinic	131	39،8
Hospital	106	32،2
School and Rehabilitation Centers	92	28،0
Specialization		
Clinical Psychology	178	54،1
Psychological Counseling	75	22،8
Mental Health	76	23،1
Experience		
Less than 5 years	164	49،8
5 to 10 years	69	21،0
More than 10 years	96	29،2
Academic degree		
Bachelor	207	،962
Postgraduate	122	،137

instrument

The study tools consist of several sections, each targeting different aspects:

1. Demographic information: This section collects basic information about the respondent, such as: gender, workplace, specialization, years of experience, degree
2. **Self-processor efficiency scale Prepared** by Gori et al. (2022) It is a self-report questionnaire designed to measure the professional self-efficacy of a mental health therapist. Consists of 21 elements Distributed in six dimensions: Communicative effectiveness, clinical competence, psychological competence, relational competence, influence regulation, and diagnostic skills. Degree calculated T-SES Comprehensive by collecting item scores, and the tool is corrected On a 5-point Likert scale, ranging from 1 (not on Launch) to 5 (a lot).

Data analysis

After obtaining formal consent and asking participants to review the study instructions, SPSS 27 was used to enter the survey data and analyze and interpret the results, and non-laboratory tests were used to answer the study questions.

Results

1. **Validity indicators for an Arabic version of the Psychotherapist Competence Scale for People with Chronic Illness**

Statistical methods were used to verify the scale's truthfulness indicators, construct validity, factor analysis, and internal consistency coefficients (person), as well as paragraph drafting and expert arbitration to prove the scale's items' content veracity. Techniques for scale validation.

First: Face & Translation Validity: Counseling, psychotherapy, measuring, and evaluation specialists translated the scale's terms into Arabic and then into English to find the most accurate and relevant vocabulary and phrases. Five PhD-holding academic members at the College of Languages and Su received the two photos (translated Arabic, original foreign). Specialized arbitrators and translators who saw the scale agreed by 80%, so an Arabized version of (21) professional self-efficacy in psychological therapies was created.

Second: Content validity: Present the statements to six arbitrators (n = 8) from psychology, measurement, and evaluation faculty to verify their sincerity, clarity, link to the study dimensions, absence of ambiguous paragraphs, and suitability for the study environment (Kingdom of Saudi Arabia) and target sample. After arbitrators' comments and 80% agreement, many paragraphs were amended only in language, but the scale retained 21 paragraphs and proofread few sentences.

Third: Construct Validity: Some studies verified the study tool's data before verifying the structural model's validity. When this analysis matches a value, the model is accepted and moral tests are performed to clarify the relationship between variables and their measures and confirm the model's variables' honesty and validity.

1. **Factorial Analysis:** The occupational variables' honesty and validity were verified using factor analysis. Essential components were employed for confirmatory factor analysis. Calculating the (KMO) (KAISER-MEYER-OKIN MEASURE OF SAMPLING ADEQUACY) to test sample size before examining the essential components assessed data appropriateness.

Table 2 Exploratory factor analysis of the psychotherapist's competence scale for dealing with people with chronic diseases

Factor Loadings

	Factor				
	1	**2**	**3**	**4**	**Uniqueness**
a16	0.835				0.460
a13	0.688				0.577
a14	0.543				0.645
a15	0.534				0.670
a18	0.451				0.786
a17	0.444				0.756
a11	0.419				0.779
a12	0.329				0.709
a3		0.734			0.485
a4		0.673			0.577
a1		0.613			0.623
a2		0.575			0.612
a6		0.441			0.615
a5	0.314	0.341			0.754
a8			1.014		0.134
a7			0.466		0.557
a9			0.388		0.654
a10			0.316		0.690
a21				0.778	0.389
a19				0.578	0.641
a20				0.563	0.679

Note. 'Minimum residual' extraction method was used in combination with a 'promax' rotation

Table 2 illustrates MRE with Promax rotation factor loadings of items (a1–a21) of four factors. Understanding the measurement instrument's factor structure and how each item relates to it is needed for this study. The following are factors: (Factor 1) has the largest loadings on a16 (0.835), a13 (0.688), and a14 (0.543), indicating a strong shared concept. (Factor 2) exhibits strong loadings on a3 (0.734), a4 (0.673), and a1 (0.613), reflecting a different psychological light than the first factor. (Factor 3) has a special loading on a8 (1.014), suggesting a strong interaction or an analytical error. The components a21 (0.778), a19 (0.578), and a20 (0.563) imply another Ferrari.

Table 3 summarizes elements affecting the psychotherapist's chronic disease competence.

Factor	SS Loadings	% of Variance	Cumulative %
1	2.60	12.37	12.4
2	2.34	11.16	23.5
3	1.95	9.28	32.8
4	1.32	6.28	39.1

Table 3 summarizes the factor analysis, giving the eigenvalues (SS loadings), % variance, and cumulative variance. The first component explains 12.37% of the variance, the second 11.16%, and the third 9.28% and the fourth 6.28%. Total variance explained by the four

factors was 39.1%, indicating that a considerable proportion of variance is not explained, which may necessitate adding another dimension or reconsidering the factor analysis model.

Table 4 shows the extent of the correlation between the four extracted factors.

	1	2	3	4
1	—	0.530	0.507	-0.0192
2		—	0.559	0.0612
3			—	0.0226
4				—

Table 4 demonstrates that factor 1 and 2 (0.530), 1 and 3 (0.507), and 2 and 3 (0.559) interact moderately, showing that this factor shares invasive notions. Factor 4 has a weak or extended connection with the other factors, which may suggest it reflects itself differently and independently. This implies that the components are partially connected rather than fully overlapping, validating Newton's oblique rotation factor analysis.

Table 5 shows the goodness of fit of the model

Model Fit Measures

	RMSEA 90% CI				Model Test		
RMSEA	Lower	Upper	TLI	BIC	χ^2	df	p
0.0655	0.0565	0.0749	0.830	-446	319	132	<.001

Table 5 displays model fit measures. RMSEA (0.0655) with 90% confidence interval (0.0565-0.0749): excellent fit, with values between 0.05 and 0.08 suitable for exploration. TLI (0.830): participants fit poorly; values above 0.90 imply better fit. BIC (-446): comparison to change models shows decent annual value. The Chi-square test ($\chi^2 = 319$, df = 132, $p < 0.001$) shows that the model is inconsistent with real data, although its reliability is limited by sample size. Statistical significance was found in Bartlett's Test of Sphericity for the factor analysis correlation matrix, Chi-square degree ($\chi^2 = 1970$), and degree of freedom (df = 210). Rejecting the probability value ($p < 0.001$) indicates significant correlations between Oman, validating factor analysis.

Table 6 shows the quality of the explained variance of the tool

KMO Measure of Sampling Adequacy

N	MSA	N	MSA
Overall	0.816	a12	0.835
a1	0.809	a13	0.865
a2	0.839	a14	0.811
a3	0.864	a15	0.861
a4	0.858	a16	0.801
a5	0.745	a17	0.800
a6	0.892	a18	0.773

a7	0.821	a19	0.622
a8	0.792	a20	0.631
a9	0.890	a21	0.567
a10	0.818	a12	0.835
a11	0.866		

Table 6 displays the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy, which is 0.816, suggesting that the sample is good for factor analysis. Most commercial properties can be analyzed since their item values are above 0.7. Minor scores like a21 (0.567), a20 (0.631), and a19 (0.622) indicate that these elements are less related to the underlying causes and may need to be altered or improved. Due of high old values, factors support factor analysis.

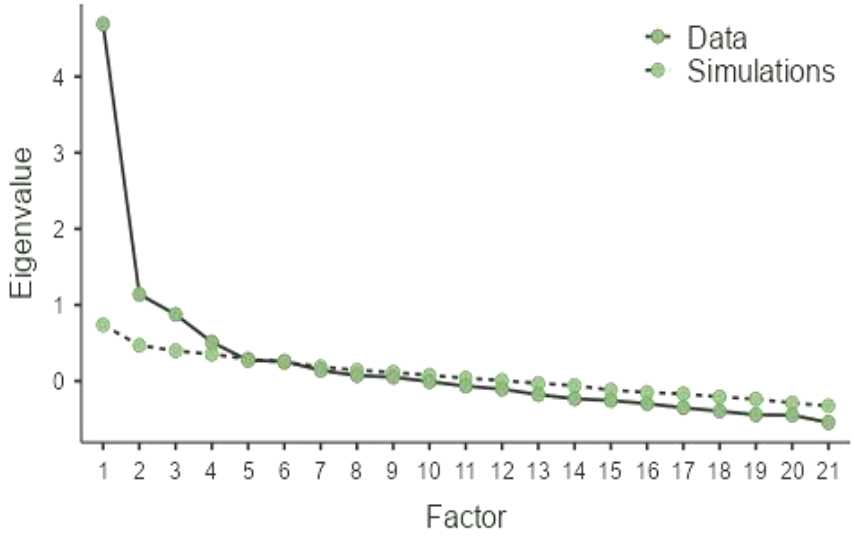

Figure (1) shows Screen plot for factor analysis with horizontal axis (factor) and vertical axis (eigenvalue).

For relative importance comparison, green points (data) are selected from the data and partial points (simulation) are randomly selected. After the initial treatment, it descends abruptly, then somewhat, until the essential elbow is at standing level. The likelihood of the eigenvalues after the second or third factor indicates that the number of similar factors between 2 and 3 is distinct. The remaining components explain little data variance because they are close to zero. Two or three parts make up the elbow point model. This is possible with Parallel Analysis or **RMSEA**. Lastly, choose the factor. Four significant scale factors emerged via factor analysis.

Table 7 presents the confirmatory factor analysis of the chronic disease psychotherapist competency scale.

Factor Loadings

				95% Confidence Interval				
Factor	**Indicator**	**Estimate**	**SE**	**Lower**	**Upper**	**Z**	**p**	**Stand. Estimate**
	a11	1.000[a]						0.460
	a12	1.069	0.1742	0.727	1.410	6.14	<.001	0.504
Factor 1 Relational competence	a13	1.451	0.2103	1.039	1.863	6.90	<.001	0.625
	a14	1.290	0.1913	0.915	1.665	6.74	<.001	0.604
	a15	1.265	0.1928	0.887	1.643	6.56	<.001	0.580
	a16	0.888	0.1262	0.641	1.136	7.04	<.001	0.648
	a17	0.976	0.1642	0.654	1.298	5.94	<.001	0.471
	a18	0.847	0.1477	0.557	1.136	5.73	<.001	0.443
Factor 2	a1	1.000[a]						0.564
Clinical competence	a2	1.032	0.1261	0.785	1.279	8.18	<.001	0.609
	a3	1.325	0.1558	1.019	1.630	8.50	<.001	0.685
	a4	1.283	0.1559	0.977	1.589	8.23	<.001	0.627
	a5	0.925	0.1477	0.636	1.215	6.26	<.001	0.431
	a6	1.166	0.1409	0.890	1.442	8.27	<.001	0.632
Factor 3	a7	1.000[a]						0.700
Communicative effectiveness	a8	1.038	0.0942	0.854	1.223	11.03	<.001	0.730
	a9	0.716	0.0763	0.567	0.866	9.39	<.001	0.622
	a10	0.705	0.0829	0.543	0.868	8.50	<.001	0.570
Factor 4Diagnostic skills	a19	1.000[a]						0.617
	a20	1.083	0.1608	0.768	1.398	6.74	<.001	0.553
	a21	1.317	0.2128	0.899	1.734	6.19	<.001	0.741

Table 7 shows the factor loadings analysis for the domain of indicators (items) with each factor, (factor 1) 13 (1.451) 14 (1.290), which means that the second factor (factor 2) has 3 (1.325) 4 (1.283), and (factors 3) and (factor 4) contain items with reasonable loadings, but

less than the first factors. All Z statistic values are high and the probability values (p) are less than 0.001, indicating that all loadings are high. As shown by the matching model,

Table 8 The matching model shows the significant indicators of the model

				RMSEA 90% CI			
CFI	**TLI**	**SRMR**	**RMSEA**	**Lower**	**Upper**	**AIC**	**BIC**
0.823	0.797	0.0615	0.0730	0.0655	0.0807	19558	19820

Table 8 displays the Model Fit model, requiring a counter model based on fit quality indicators (chi-square = 504, freedom of movement df = 183, p-value < 0.001). Rapid reaction rate = 0.0615: good fit quality, CFI = 0.823 and **TLI = 0.797: 0.90, moderate but not novel. RMSEA = 0.0730 with (0.0655 - 0.0807): within limits but not great. Both AIC and BIC criterion Using AIC = 19558, BIC = 19820, the model meets strong weak fit requirements (CFI & TLI > 0.90, RMSEA < 0.06).

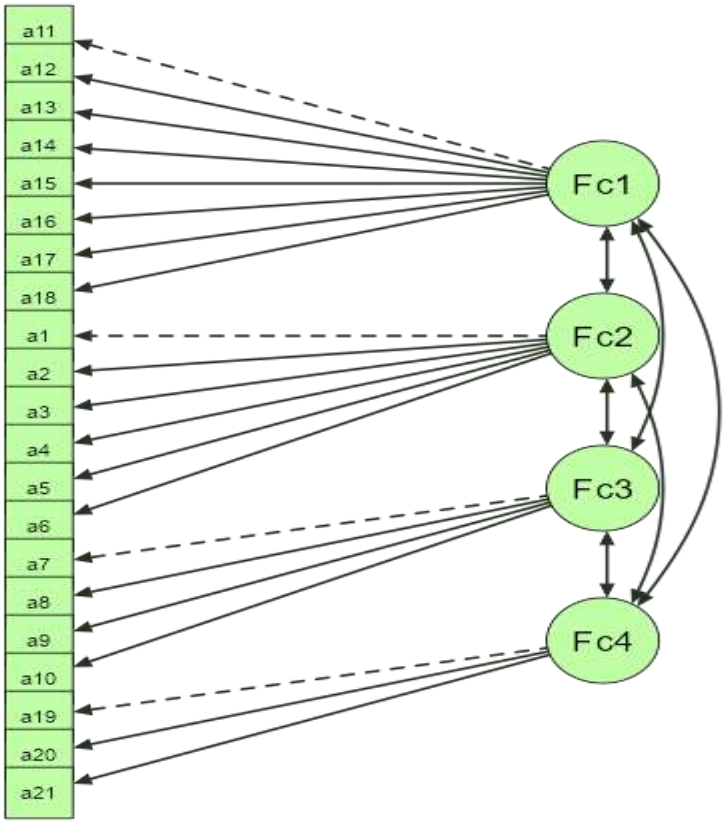

Figure (2) shows the confirmatory factor analysis (CFA) model for the four-factor structure of the psychotherapist competence scale.

2. Pearson correlation

Calculating the Pearson correlation coefficient (person) between each item score and the scale score confirmed the professional self-efficacy in psychological therapies measure. Resolution and items score correlation coefficients were determined and shown in the table.

Table 9 **values** of correlation coefficients between the items of each domain with its domain and the (total) tool of the professional self-efficacy in psychological interventions scale

N	Items	Correlation (R)	N	Items	Correlation (R)
1	Be welcoming	,485**	11	Respect the therapeutic contract	,450**
2	Express verbal interventions effectively	,541**	12	Understand psychopathological signs	,547**
3	Stimulate insight processes	,602**	13	Repair fractures in the relationship	,551**
4	Promote therapeutic alliance	,564**	14	Tolerate negative emotions	,562**
5	Facilitate self-expression	,488**	15	Use clinical reasoning	,534**
6	Properly manage emotions	,599**	16	Understand transference	,513**
7	Choose the correct moment to speak	,626**	17	Activate the diagnostic process	,475**
8	Pick up nonverbal signals	,609**	18	Use clinical sensitivity	,401**
9	Overcome setbacks in the relationship	,581**	19	Understand countertransference	,190**
10	Understand the deeper meaning of narrativesI know the professional environment in which I can work.	,556**	20	Encourage mentalizing	,181**
			21	Understand vicious circles	,487**

Table 9 It is clear that all Items were statistically significant at the level of (0.01), and the values of the correlation coefficients ranged between (0.**181-0.**626), which are significant values and indicate the correlation of all Item's with the tool as a whole, Indications of stability for an Arabized version of the professional self-efficacy in psychological interventions scale

.2. Reliability indicators for an Arabic version of the Psychotherapist Efficiency Scale for People with Chronic Illnesses

To calculate Cronbach's alpha reliability: The scale was found to be stable using Cronbach's alpha reliability coefficient, half-test reliability, and McDonald's omega reliability coefficient.

	Mean	SD	Cronbach's α	McDonald's ω
scale	24.8	4.23	0.759	0.895

Table 10 provides trustworthy statistics for determining the study's internal consistency (Cronbach's α) and McDonald's omega coefficient (ω). The official evaluation mean was 24.8 and SD was 4.23, indicating the answer distribution. Although recent, assessments above 0.70 indicate reliability, and the internal consistency coefficient was (0.759).

McDonald's omega coefficient (0.895) indicates great reliability, surpassing Cronbach's ω in some circumstances.

Item Reliability Statistics of Therapist Self-Efficacy Scale (T-SES)

				If item dropped	
Dimensions	**Mean**	**SD**	**Item-rest correlation**	**Cronbach's α**	**McDonald's ω**
Relational competence	14.0	3.13	0.803	0.691	0.868
Clinical competence	11.1	2.95	0.688	0.717	0.896
Communicative effectiveness	11.4	2.07	0.627	0.750	0.903
Diagnostic skills	18.9	3.57	0.792	0.678	0.875
Therapist Self-Efficacy Scale (T-SES)	68.8	11.85	0.982	0.798	0.810

The reliability of the scale was determined by calculating item-rest correlation, where general items were reliably eliminated, using Cronbach's alpha (Cronbach's α) and McDonald's omega (McDonald's). All items obtained correlations (>0.60), showing their connection to the scale. Overall scale reliability had the strongest correlation (0.982), meaning it was related to start with the rest of the items. When the items were omitted, Cronbach's partly remained within the range (0.678 - 0.798).

Correlation Heatmap

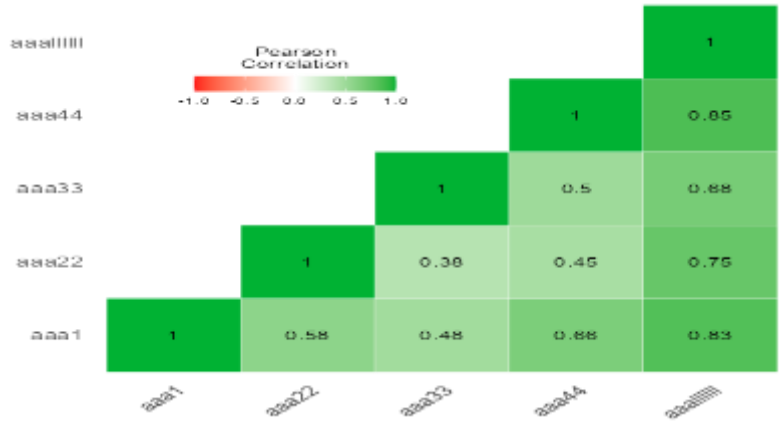

Figure (3) shows the correlation matrix between the dimensions of the scale of the psychotherapist's competence in dealing with people with chronic diseases

The correlation matrix shows that aaa44 and the scale's overall score (0.85) are strongly correlated, indicating that the two variables are reliant. Medium correlations in the second and third dimensions (0.38) suggest an empty relationship. First dimension has good relationships with tourism continuation (0.58–0.83), therefore it continues.

Discussion

The current study verified psychometric qualities and indications of honesty and stability to codify the psychotherapist's efficacy in treating chronic diseases in the Arab context. The behavioral traits therapists use in psychotherapy have been measured correctly. Final scale had 21 Element four Factors: relational, clinical, diagnostic, and communication skills. Psychotherapists' effectiveness in treating chronic disorders was shown by current outcomes. Its functioning structure and psychological traits are good. Using a scale can enhance clinical competency of therapists understand their behavioral traits in treatment and help clients choose therapists who match their preferences and expectations. Several studies support these conclusions(Chen & Ahmad, 2018; Chong Guan et al., 2016; Cox et al., 2019; Zhou et al., 2021)

By researching relevant literature, considering theoretical viewpoints, and analyzing interviewees' descriptions of their style, the Psychotherapist Competency Scale (T-SES) was established. Results supported the three-dimensional treatment technique paradigm. T-SES dimension scores correlated positively with standard validation scale scores. The results showed that the therapy technique is closely related to the therapist's personality, and the T-SES score standard was valid. Cronbach's α values for the three sub-scale scores exceeded the homogeneity threshold (>0.70), indicating great reliability.

Recent psychological examinations verified the therapist efficiency scale positive factor structure. Psychological has four aspects on 21 items. Confirmatory factor analysis (CFA) shows that these four dimensions explain 62%–68.9% of gross variation, indicating a strong and cohesive structure (Jarva et al., 2023) . The internal consistency of the scale was verified by Cronbach alpha coefficients, with values ranging from 0.81 to 0.91, confirming a high degree of reliability and stability. (Gori et al., 2022) These findings are consistent with previous research suggesting that a well-organized psychotherapist competency scale should maintain internal cohesion while effectively distinguishing between different dimensions of therapist competence. (Rodríguez-Nogueira et al., 2020)

Higher efficiency ratings on the scale improve treatment outcomes and satisfaction, according to additional verification investigations. Client This emphasizes therapist assessment reliability. A study by he et al. (2019) confirmed that the reliability of the retest of the psychotherapist's competency scale remained high over a three-month period (t = 0.82(He et al., 2019). The validity of the scale has been enhanced by its strong correlation (t = 0.75) with patient progression and clinical efficacy (Taheri et al., 2020) These findings show that the 21-element four-dimensional scale is a thorough and psychologically sound tool for measuring therapist competency, making it useful for mental health professionals. The Working Alliance Scale (WAI) and Vanderbilt therapeutic alliance scale have psychometric properties. These indicators show internal consistency and good reliability, supporting infrastructure health. (Ardito & Rabellino, 2011) The findings are consistent with research that emphasizes the importance of therapist qualities such as empathy and interpersonal skills in predicting positive therapeutic outcomes. These qualities are often an integral part of measures of effective psychotherapy. (Lauritzen et al., 2023) The Therapist Efficacy Scale's favorable structure, strong reliability measures, and consistency with validated instruments prove its utility in assessing therapist efficacy. These findings aid psychotherapy research psychometric instrument improvement. The scale's high Cronbach's alpha coefficient indicates good internal consistency. This shows that items within each dimension are dependably connected and coherently contribute to the measured concept. Exploratory and confirmatory component analysis identified the scale's four dimensions, ensuring multidimensionality. These analyses showed that the scale's design accurately reflected therapist efficacy's different and linked elements.

Conclusion

The study highlights the validity and reliability of the Arabic version of the Psychotherapist Competence Scale for Patients with Chronic Illness, ensuring its effectiveness in assessing therapist skills. The results confirm that the scale provides consistent and accurate assessments, supporting its application in clinical and research settings. Further studies could enhance its adaptability across diverse populations.

Difficulties, Challenges, and Limitations

The Psychotherapist Competence Scale for Chronic Illness in Arabic has many problems in its creation and validation. Direct translations may not fully represent psychological notions' conceptual meaning, therefore linguistic and cultural equivalency is crucial. The results may also be limited by the difficulty of selecting a broad and representative sample of psychotherapists from different therapeutic settings. To confirm the scale's validity and reliability in Arabic, comprehensive psychometric testing is needed.

Challenges and restrictions complicate the study. Therapists may give socially desired answers instead of objective self-assessments, causing response bias. Arabic-speaking countries' training programs, clinical procedures, and health care organizations may also alter the scale's usefulness. Study sample size, regional focus, and professional diversity may limit instrument uptake.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

The author will make the raw data supporting this article's conclusions available upon request.

Conflicts of Interest: The author declares no conflicts of interest.

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