

Motivation for healing scale in patients with cancer: Turkish validity and reliability study

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Abstract

Objective The present study was conducted to translate and culturally adapt the Motivation for Healing Scale (MHS) for individuals diagnosed with cancer in Türkiye and to examine whether the adapted version demonstrates satisfactory validity and reliability.

Methods This methodological study was conducted through face-to-face interviews. The study was carried out in the oncology clinic of a university hospital located in eastern Türkiye. The sample consisted of 202 patients receiving cancer treatment at the oncology clinic. The primary outcomes were the validity and reliability properties of the Turkish version of the Motivation for Healing Scale (MHS), including content validity, construct validity, internal consistency, and test–retest reliability. Secondary outcomes included confirmation of the original factor structure and evaluation of model fit indices.

Results The content validity assessment showed that item-level validity scores ranged between 0.80 and 1.00, while the overall scale validity score was calculated as 0.96. Results from confirmatory factor analysis verified the original 25-item structure consisting of five dimensions. Good model fit was observed based on the fit index values. Reliability analysis demonstrated that Cronbach's alpha coefficients for the subdimensions fell between 0.778 and 0.909. The reliability coefficient for the complete scale was 0.918, whereas McDonald's omega was determined to be 0.911. Findings from repeated measurement analysis also indicated that the scale maintained consistency over time.

Conclusion The adapted Turkish form of the Motivation for Healing Scale appears to be a dependable and valid measurement instrument for assessing healing motivation among cancer patients. The scale may support health-care providers in recognizing patients' motivational status and designing more individualized care strategies accordingly.

Keywords Cancer · Healing motivation · Validity · Reliability · Scale adaptation

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Introduction

Globally, cancer is one of the diseases with high morbidity and mortality rates, significantly affecting individuals' life expectancy and quality of life. Each year, millions of individuals receive a cancer diagnosis. The disease process affects not only physical health but also the individual's psychological condition, social relationships, family life, economic status, and daily life routines in multiple dimensions [1, 2]. The long, uncertain, and often challenging nature of the diagnosis, treatment, and follow-up processes directly influences how patients with cancer cope with the disease and their care needs [3, 4].

One of the important concepts affecting individuals' capacity to cope with the disease during the cancer process is motivation. Motivation is defined as the combination of internal and external forces that direct individuals toward a specific goal, enable them to make efforts toward this goal, and sustain their behaviors in the face of difficulties [5]. In patients with cancer, motivation is considered an important psychosocial determinant in terms of active participation in the treatment process, adherence to treatment recommendations, maintenance of health-promoting behaviors, and preservation of quality of life [6, 7].

In this context, healing motivation is regarded as a multidimensional structure that enables individuals diagnosed with cancer to initiate and maintain healing-related behaviors and actively participate in the treatment process. Healing motivation is nourished by both internal and external resources, such as the individual's desire to live, belief in recovery, positive thinking ability, trust in treatment, and perceived support from family and the social environment. However, pain, fatigue, mobility limitations, anxiety, depressive symptoms, fear of disease recurrence, financial difficulties, and problems related to access to healthcare services may negatively affect healing motivation [8–14]. Therefore, healing motivation in patients with cancer should be evaluated not merely as an individual characteristic but as a holistic construct influenced by physical, psychological, social, and environmental factors.

Assessing the healing motivation levels of patients with cancer using valid and reliable measurement tools is important for identifying psychosocial needs, supporting treatment adherence, and increasing participation in rehabilitation programs. Particularly in oncology nursing, evaluating not only the patient's physical symptoms but also willingness toward recovery, coping capacity, hope level, and active participation in the care process is one of the fundamental components of holistic care. In this respect, the systematic assessment of healing motivation may enable nurses to identify patients experiencing motivational decline at an early stage, determine at-risk individuals, and plan patient-specific supportive care interventions [15, 16]. In line with this need, the Motivation for Healing Scale (MHS) in Patients with Cancer was developed by Hossieni et al. to evaluate healing motivation in patients with cancer. The scale enables a multidimensional evaluation of healing motivation through the subdimensions of sense of belonging and responsibility, belief in God/higher power, desire to live, ability to think positively, and trust in treatment. The limited number of culturally adapted measurement tools for evaluating healing motivation among patients with cancer in Türkiye indicates an important need for oncology nursing practice and research. Accordingly, evaluating the validity and reliability of the Turkish version of the MHS in patients with cancer will contribute to the scientific, systematic, and culturally sensitive assessment of healing motivation among patients with cancer in Türkiye. Introducing the scale into the Turkish literature may allow for a more objective examination of variables affecting patients' participation in the healing process in both clinical oncology nursing practice and nursing research. Therefore, the aim of this study was to evaluate the validity and reliability of the Turkish version of the MHS in patients with cancer.

Methods

Design

This study is a methodological study.

Participants and sample

Patients with cancer who were admitted to the oncology inpatient and outpatient clinics of a state university hospital between August 2025 and March 2026 constituted the study population. A consecutive sampling approach was used, and all patients who met the eligibility criteria during the study period were invited to participate. Eligible participants were those who had a confirmed diagnosis of cancer, were aged 18 years or older, were able to communicate in Turkish, were cognitively able to complete the study questionnaires, and provided written informed consent. Patients with severe cognitive impairment, communication difficulties, or psychiatric disorders that could interfere with questionnaire completion were excluded. A total of 450 patients were assessed for eligibility, and 48 were excluded because they did not meet the inclusion criteria. Of the remaining 402 eligible patients, 200 declined to participate, resulting in a participation rate of 50.2%. The final sample consisted of 202 patients who voluntarily agreed to participate in the study and provided written informed consent.

Data were collected through face-to-face interviews conducted by the researchers. During these interviews, the researchers verbally administered all study instruments and entered participants' responses directly into Google Forms using a mobile device. Google Forms was used solely as an electronic data entry platform to facilitate accurate and secure data recording; participants did not complete the questionnaires independently online. The average administration time for each participant was approximately 10 min.

In determining the sample size, an item-based approach commonly used in scale development and adaptation studies was employed. According to the literature, the recommended sample size should be at least 2 to 10 times the number of items in the scale [17]. Therefore, the recommended sample size for the 25-item MHS was between 50 and 250 participants. The final sample of 202 participants was considered adequate for factor analysis and for the validity and reliability analyses, as it fell within the recommended range.

Data collection tools

The data were collected using the "Personal Information Form" and the "MHS".

Personal information form

The form included questions regarding the participants' age, gender, marital status, and employment status.

Motivation for healing scale (MHS)

This scale was developed by Hossieni et al. (2024) to determine the level of healing motivation in patients with cancer. The measurement tool consists of 25 items and is a 5-point Likert-type scale, with response options ranging from "strongly disagree" (1) to "strongly agree" (5). The scale consists of five subdimensions: *Willingness to Live* (6 items), *Positive Thinking Ability* (4 items), *Trust in Superior Powers* (4 items), *Trust in the Treatment* (6 items), and *Sense of Belonging and Responsibility* (5 items). There are no reverse-scored elements on the scale, and the overall score received from it falls between 25 and 125. Higher overall ratings show that cancer patients are more motivated to recover [15].

Adaptation process

Language and content validity

A methodical translation procedure known as “forward translation, expert review, back translation, pilot testing, and final version” was used in this investigation [18]. After being translated into Turkish by two language specialists, the MHS was sent to five academics who were subject matter experts for assessment of its content and scope validity. The Content Validity Index (CVI), which is based on the Davis approach, was used to examine expert views [19]. The CVI was determined by calculating the percentage of items that received a rating of 3 or 4 on a scale of 1 to 4 for consistency and comprehensibility. The items were changed as needed in accordance with professional advice. The scale was then authorized by the original developer after being back-translated into English by a third translation. In order to verify the scale’s comprehensibility, a group of 30 cancer patients participated in a pilot test in the final stage. The collected data were excluded from the analysis.

Structural validity

Establishing construct validity requires assessing the validity of scale structures. Confirmatory Factor Analysis (CFA) was used in this research to verify the correctness of the scale’s original factor structure in investigations of cultural adaptation once linguistic and content validity had been established. CFA is a technique used to provide evidence of validity in cross-cultural adaptations and to ascertain if the factors’ constituent items have enough correlations with the relevant variables [20]. The Kaiser-Meyer-Olkin (KMO) test was used to assess sample adequacy prior to analysis, and Bartlett’s test of sphericity was used to ascertain if the data were appropriate for factor analysis. According to the literature, the data are sufficient and suitable for factor analysis if the KMO value is more than 0.60 and Bartlett’s Test of Sphericity is statistically significant [20, 21]. CMIN/DF, RMSEA, CFI, TLI, SRMR, and RMR were among the fit indices used to assess model fit during the CFA process [20, 21]. The items were supposed to have factor loadings of at least 0.30; values between 0.30 and 0.59 were considered moderate, while values of 0.60 and above were considered high [22]. Additionally, discriminant validity was assessed within the framework of construct validity by looking at the correlation coefficients between the subdimensions [23]. In addition to CFA, convergent and discriminant validity were assessed to provide further evidence for construct validity.

Reliability analyses

To evaluate the reliability of the Turkish adaptation of the scale, several statistical indicators were examined, including internal consistency, item–total correlation coefficients, test–retest correlations, and the Intraclass Correlation Coefficient (ICC). Reliability was considered acceptable when the overall Cronbach’s alpha exceeded 0.70, item–total correlation values were above 0.30, and test–retest correlation coefficients measured over a two-week interval were greater than 0.70 [24, 25]. Values approaching 1 were interpreted as reflecting stronger reliability.

Internal consistency analysis was used to determine whether the scale items consistently assessed the same underlying construct and how strongly each item contributed to the total scale score. In addition to Cronbach’s alpha, McDonald’s omega was calculated as an additional indicator of reliability, with coefficients above 0.70 considered acceptable [17, 26, 27]. The relationship between individual items and the overall measurement tool was assessed through item–total correlation analysis, where coefficients exceeding 0.30 were regarded as satisfactory [28]. Stability over time was evaluated using the test–retest method, which is commonly applied to determine the consistency of a measurement instrument across repeated administrations. Correlation coefficients of at least 0.70 were considered evidence of adequate temporal stability, while values closer to 1 indicated stronger consistency [29]. Additionally, the Intraclass Correlation Coefficient (ICC) was computed as part of the

test–retest reliability assessment. Since ICC values range from 0 to 1, higher values were interpreted as demonstrating greater measurement consistency and reliability [30].

Research ethics

Ethical approval was obtained from the relevant University Ethics Committee prior to the study (approval number: 2025/06–32). Written permission was obtained via email from the original developer of the Motivation for Healing Scale in Patients with Cancer for its Turkish adaptation. The study was conducted in accordance with the Declaration of Helsinki and its ethical principles for research involving human participants. All participants provided informed consent electronically after being fully informed about the purpose and procedures of the study.

Statistical analysis

The data collected during face-to-face interviews were entered directly into Google Forms by the researchers and subsequently exported to Microsoft Excel for organization before statistical processing. Statistical analyses were performed using SPSS version 27 and LISREL software. Internal consistency of the scale was evaluated using Cronbach's alpha coefficients and item–total correlation analysis. The suitability of the dataset for factor analysis was assessed using the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's test of sphericity. Construct validity was examined using confirmatory factor analysis (CFA) in LISREL, and model fit was evaluated based on the CMIN/DF, RMSEA, CFI, TLI, SRMR, RMR, and GFI indices. Acceptable model fit was defined as CMIN/DF < 5.0, RMSEA < 0.08, CFI and TLI > 0.90, and SRMR and RMR < 0.08 [17, 31–33]. Reliability was further assessed using Cronbach's alpha and McDonald's omega coefficients. Convergent validity was evaluated using Composite Reliability (CR) and Average Variance Extracted (AVE). CR values ≥ 0.70 and AVE values ≥ 0.50 were considered indicative of adequate convergent validity. Discriminant validity was assessed using the Fornell–Larcker criterion by comparing the square root of the AVE for each construct with the inter-factor correlations. Discriminant validity was considered acceptable when the square root of the AVE exceeded the corresponding inter-factor correlations [34]. Test–retest reliability was evaluated using paired-samples t-tests and the intraclass correlation coefficient (ICC). ICCs were calculated using a two-way random-effects model with a consistency definition (single measures), and 95% confidence intervals (95% CIs) were reported to assess the temporal stability of the scale and its subdimensions [17].

Findings

Lung cancer was the most common cancer type (27.7%). Of the participants, 54.5% were female, 90.6% were married, and 45.0% had completed primary school education. The mean age of the participants was 56.02 ± 12.89 years (range: 18–87), and the mean time since diagnosis was 2.96 ± 3.29 years (range: 1–20) (Table 1).

Validity findings

Content validity

Based on expert evaluation of content validity, the I-CVI values were found to vary between 0.80 and 1.00. The S-CVI was calculated as 0.96. These findings suggest that the instrument demonstrates a high level of adequacy in terms of both individual item relevance and overall content representation.

Table 1 Sociodemographic characteristics of the participants (n = 202)

Characteristics	Number (n=202)	%
Gender		
Female	110	54.5
Male	92	45.5
Marital status		
Single	19	9.4
Married	183	90.6
Educational Status		
Illiterate	41	20.3
Primary School	91	45
High School	50	24.8
Bachelor's Degree	20	9.9
Type of Cancer		
Lung cancer	56	27.7
Breast cancer	27	13.4
Colon cancer	43	21.3
Liver cancer	13	6.4
Pancreatic cancer	11	5.4
Lymphoma	12	5.9
Uterine cancer	9	4.5
Stomach cancer	7	3.5
Bladder cancer	6	3
Other	18	8.9
Other (N = 18): Soft Tissue Cancer (N = 3), Pharyngeal Cancer (N = 2), Skin Cancer (N = 1), Intestinal Cancer (N = 5), Prostate Cancer (N = 2), Rectal Cancer (N = 5)	Mean±SD	Min-Max
Age (yr)	56.02± 12.89	18-87
Year of Diagnosis	2.96± 3.29	Jan-20

Construct validity

Preliminary analyses confirmed that the dataset was appropriate for factor analysis, as indicated by the KMO value of 0.865 and a statistically significant Bartlett's test result ($\chi^2 = 3677.320$, $p < 0.001$). Since the scale structure had already been theoretically established, CFA was directly applied rather than EFA. Factor loadings ranging from 0.410 to 0.970 supported the validity of the original 25-item model composed of five dimensions (Table 2).

Confirmatory factor analysis

Fit indices were calculated following the CFA to evaluate the compatibility between the proposed model and the observed data. The analysis showed that the chi-square/degrees of freedom ratio was 2.31 ($\chi^2 = 605.390$, $df = 261$, $p < 0.05$). Overall, the model demonstrated an acceptable fit. Although the RMSEA value (0.081) was slightly above the conventional cutoff of 0.08, it remained very close to the acceptable threshold and was interpreted in conjunction with the remaining model fit indices rather than as an isolated criterion. The remaining fit indices (CFI=0.95, TLI=0.94, SRMR=0.067, RMR=0.030, and AIC=752.61) supported the adequacy of the proposed measurement mode [21, 32]. (Table 3). Figure 1 presents the path diagram of the final model.

The correlations between the subdimensions in Table 4 ranged from 0.181 to 0.821 and were all positive ($p < 0.01$). CR values ranged from 0.812 to 0.914, indicating satisfactory internal consistency. AVE values ranged from 0.432 to 0.712. Although the AVE value for F1 was slightly below the recommended threshold of 0.50, its CR exceeded 0.70, supporting acceptable convergent validity. Furthermore, the square roots of the AVE values exceeded the inter-factor correlations for all constructs, satisfying the Fornell–Larcker criterion and supporting discriminant validity (Table 4).

Table 2 Mean item correlation coefficients and CFA factor loadings results

Scale Items	Mean±SD	Corrected Item-Total Correlation	Factor Loadings Results				
			F1	F2	F3	F4	F5
Item1	4.13±0.55	0.591	0.740				
Item2	4.09±0.60	0.476	0.690				
Item3	4.16±0.53	0.617	0.790				
Item4	3.79±0.82	0.340	0.460				
Item5	3.41±1.08	0.292	0.410				
Item6	4.21±0.56	0.578	0.750				
Item7	4.19±0.65	0.649		0.830			
Item8	4.23±0.76	0.732		0.890			
Item9	4.12±0.71	0.677		0.830			
Item10	3.98±0.65	0.569		0.690			
Item11	4.03±0.71	0.632		0.860			
Item12	4.09±0.65	0.584		0.680			
Item13	4.68±0.48	0.589			0.920		
Item14	4.65±0.51	0.514			0.860		
Item15	4.70±0.47	0.510			0.870		
Item16	4.58±0.61	0.446			0.710		
Item17	4.25±0.73	0.582				0.600	
Item18	4.38±0.57	0.678				0.970	
Item19	4.25±0.67	0.611				0.860	
Item20	4.39±0.64	0.519				0.770	
Item21	4.57±0.52	0.548					0.760
Item22	4.58±0.58	0.667					0.890
Item23	4.41±0.72	0.279					0.490
Item24	4.56±0.61	0.694					0.920
Item25	4.43±0.60	0.502					0.730

Note: F=Factor; F1=Williness to Live; F2=Positive Thinking Ability; F3=Trust in Superior Powers; F4=Trust in the Treatment; F5=Sense of Belonging and Responsibility

Table 3 CFA results

Fit criteria	Found	Appropriate	Acceptable	Results
χ^2/df (CMIN/DF)	2.31	<2	<5	Acceptable fit
RMSEA	0.081	<0.05	<0.08	Slightly above the acceptable threshold
CFI	0.95	>0.95	>0.90	Acceptable fit
SRMR	0.067	<0.05	<0.08	Acceptable fit
RMR	0.030	<0.05	<0.1	Excellent fit
TLI	0.94	>0.95	>0.90	Acceptable fit
AIC	752.61			

CFI: Comparative Fit Index; RMSEA: Root Mean Square Error of Approximation; RMR: Root Mean Square Residual; SRMR: Standardized Root Mean Square Residual; TLI: Tucker Lewis Index; AIC: Akaike Information Criterion

Reliability findings

The reliability assessment demonstrated strong internal consistency of the scale. Cronbach's alpha values for the subdimensions ranged between 0.778 and 0.909, while McDonald's omega coefficients varied from 0.771 to 0.909. For the overall instrument, Cronbach's alpha was calculated as 0.918 and McDonald's omega as 0.911, indicating satisfactory to high reliability across both the total scale and its subcomponents (Table 4). Corrected item-total correlation coefficients ranged from 0.279 to 0.732 (Table 2). Although Items 5 and 23 had corrected item-total correlations slightly below the commonly recommended threshold of 0.30, the remaining items

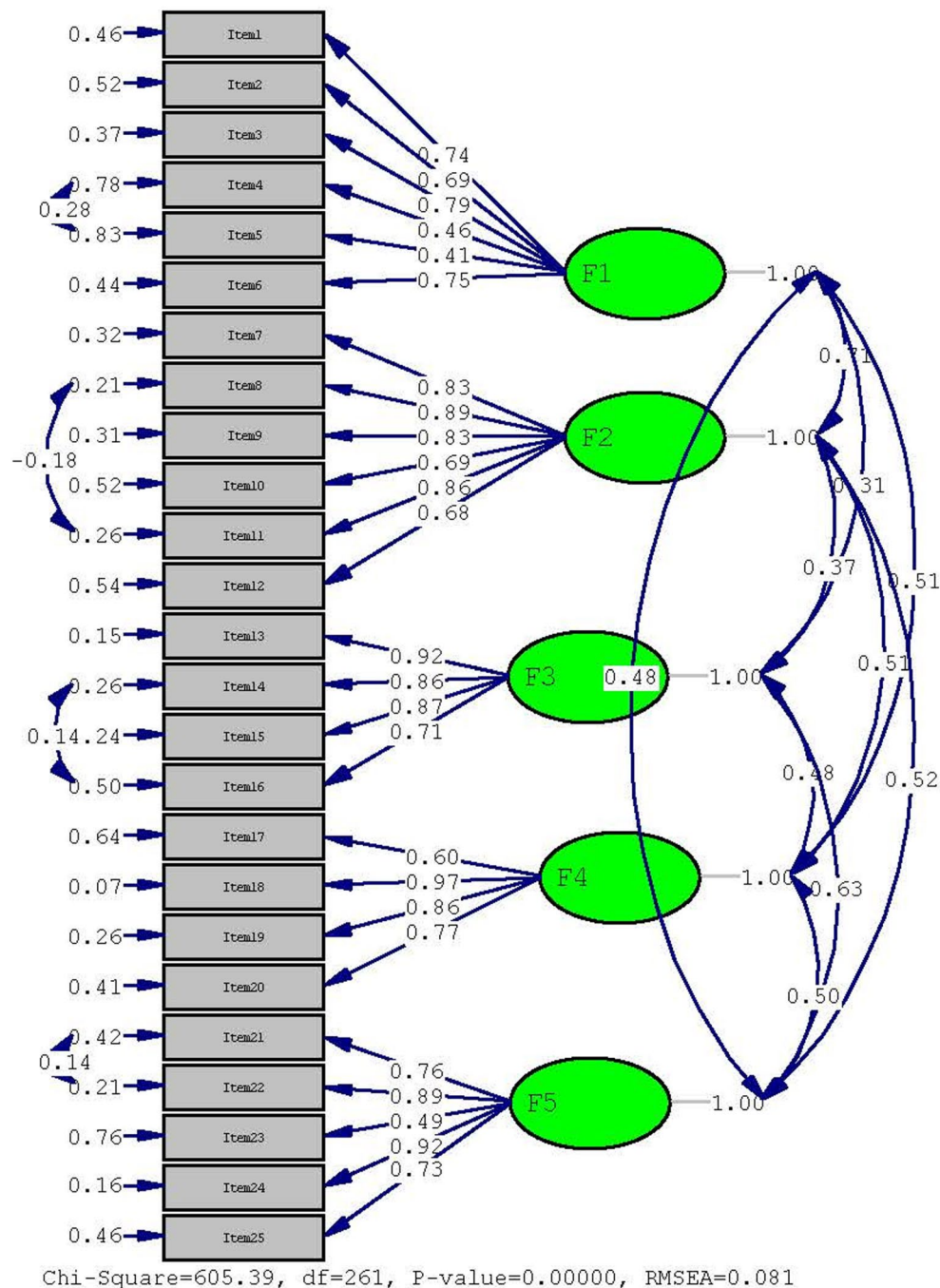


Fig. 1 PATH diagram regarding the factor structure of the scale

exceeded this criterion. Standardized factor loadings ranged from 0.410 to 0.970, with Items 5 and 23 showing acceptable loadings of 0.41 and 0.49, respectively.

To examine temporal stability, a test-retest procedure was conducted with 30 participants over a 15-day interval, and the corresponding findings are presented in Table 5. Comparison of the first and second administrations indicated similar mean scores. Pearson correlation coefficients for all subdimensions as well as the total scale score were statistically significant ($p < 0.01$), with values ranging from 0.665 to 0.974. Results from the paired-samples t-test demonstrated no statistically significant difference between the two measurement points ($p > 0.05$).

Table 4 Correlation and reliability values

Scale and sub-dimensions	F1	F2	F3	F4	F5	AVE	CR	α	Ω
F1	0.780					0.432	0.812	0.778	0.771
F2	0.557**	0.820				0.641	0.914	0.904	0.904
F3	0.181**	0.337**	0.760			0.712	0.907	0.909	0.909
F4	0.425**	0.537**	0.417**	0.810		0.659	0.882	0.858	0.863
F5	0.258**	0.386**	0.559**	0.456**	0.790	0.598	0.877	0.873	0.872
MHS	0.715**	0.821**	0.620**	0.760**	0.700**			0.918	0.911
Total									

Note: Correlations are significant at the 0.01 level (2-tailed). Diagonal values (shown in bold) represent the square root of the Average Variance Extracted ($\sqrt{\text{AVE}}$) for each construct. F=Factor; AVE=Average Variance Extracted; CR=Composite Reliability; α =Cronbach's alpha; Ω =McDonald's omega; F1=Willingness to Live; F2=Positive Thinking Ability; F3=Trust in Superior Powers; F4=Trust in the Treatment; F5=Sense of Belonging and Responsibility; MHS=Motivation for Healing Scale

Table 5 Test–Retest results and mean scores ($n=30$)

Scale and sub-dimensions	Scale Score Means		Analysis Results				ICC 95% CI:
	First Implementation X $\pm$ SD	Second Implementation X $\pm$ SD	r	p	t	p	
F1	24.23 $\pm$ 2.68	24.03 $\pm$ 2.77	0.920	0.000	-1.000	0.326	0.920(0.838–0.961)
F2	25.43 $\pm$ 3.20	25.30 $\pm$ 3.08	0.974	0.000	1.000	0.326	0.973(0.944–0.987)
F3	18.73 $\pm$ 0.68	18.70 $\pm$ 1.74	0.886	0.000	0.205	0.839	0.865(0.736–0.933)
F4	17.03 $\pm$ 1.93	16.50 $\pm$ 1.94	0.665	0.000	1.787	0.084	0.645(0.377–0.814)
F5	21.10 $\pm$ 1.84	21.23 $\pm$ 1.83	0.921	0.000	-1.000	0.326	0.921(0.841–0.962)
MHS Total	106.53 $\pm$ 9.13	105.76 $\pm$ 8.28	0.936	0.000	1.303	0.203	0.932(0.862–0.967)

Note: Correlation is significant at the 0.01 level (2-tailed). F=Factor; F1=Willingness to Live; F2=Positive Thinking Ability; F3=Trust in Superior Powers; F4=Trust in the Treatment; F5=Sense of Belonging and Responsibility; MHS=Motivation for Healing Scale in Cancer; ICC=Intraclass Correlation Coefficient

In addition, test–retest reliability was evaluated using the ICC. The ICC values for the subdimensions ranged from 0.645 to 0.973, while the total scale demonstrated an ICC of 0.932 (95% CI: 0.862–0.967), indicating excellent temporal stability across repeated measurements (Table 5).

Discussion

This research examined the validity and reliability of the Turkish version of the MHS among patients diagnosed with cancer. The analysis demonstrated that the adapted scale can be used as a dependable and appropriate tool to measure motivation for healing. Overall, the findings demonstrated that the Turkish version of the MHS possesses satisfactory psychometric properties, supporting its validity, reliability, and applicability among Turkish patients with cancer.

Content validity of the Turkish version of the MHS was first evaluated. The overall scale-level content validity index (S-CVI) was 0.96, while item-level content validity indices (I-CVI) ranged from 0.80 to 1.00. These findings are consistent with those reported in the original scale development study, which also demonstrated excellent content validity based on expert evaluations [15]. The comparable results suggest that the conceptual meaning and cultural relevance of the scale items were successfully preserved during the adaptation process, supporting the applicability of the healing motivation construct across different cultural contexts.

The original MHS was developed as a 25-item instrument with a five-factor structure comprising desire to live, positive thinking ability, trust in treatment, trust in superior powers, and a sense of belonging and responsibility [15]. Because this factor structure had already been established through exploratory and confirmatory

factor analyses in the original study, only CFA was performed in the present study to examine whether the same structure could be replicated in a Turkish sample. Prior to CFA, the adequacy of the data for factor analysis was confirmed by a KMO value of 0.865 and a statistically significant Bartlett's test. Standardized factor loadings ranged from 0.410 to 0.970, indicating satisfactory relationships between the items and their corresponding latent constructs. Furthermore, the CFA findings confirmed that the original five-factor structure was retained in the Turkish version, supporting the construct validity of the adapted scale.

Acceptable to excellent model fit was demonstrated for the Turkish version, with fit indices of CMIN/DF=2.31, CFI=0.95, TLI=0.94, SRMR=0.067, and RMR=0.030. Although the RMSEA value (0.081) was slightly above the conventional cutoff of 0.08, it remained very close to the acceptable threshold and may reflect minor model variations commonly observed in cross-cultural adaptation studies. These differences from the original study may be attributable to variations in sample characteristics, the distribution of cancer types, language and cultural adaptation, and the direct application of CFA without conducting EFA. Moreover, model fit should be interpreted based on the overall pattern of fit indices rather than relying on a single index [15, 21, 35]. Therefore, the satisfactory values obtained for CFI, TLI, SRMR, and RMR support the adequacy of the original five-factor structure in the Turkish sample. In addition to construct validity, convergent and discriminant validity were also evaluated. The CR values of all subdimensions exceeded the recommended threshold of 0.70, indicating satisfactory internal consistency. Although the AVE value for the "Willingness to Live" subdimension (0.432) was slightly below the recommended value of 0.50, its CR value was above 0.70, suggesting that convergent validity remained acceptable. Previous methodological studies have indicated that AVE values below 0.50 may be considered acceptable when composite reliability exceeds 0.70. Furthermore, discriminant validity was supported according to the Fornell–Larcker criterion, as the square roots of the AVE values for all constructs exceeded their inter-factor correlations, indicating that each subdimension measured a distinct construct [34, 36].

The study's internal consistency coefficients show a high degree of agreement with the original scale. The 25-item scale's Cronbach's alpha coefficient was found to be 0.912 in the original research. McDonald's omega was 0.911 and Cronbach's alpha for the whole scale was 0.918 in the current research, suggesting that the Turkish version has high and comparable internal consistency to the original scale. Cronbach's alpha values at the subdimension level, which range from 0.778 to 0.909, further show that every subscale is dependable. Similar high internal consistency values were recorded for various subdimensions in the original research, and the "positive thinking ability" and "trust in superior powers" subdimensions in the current study had very high reliability coefficients. These results show that the Turkish version of the scale has psychometric properties similar to the original instrument and reliably evaluates healing motivation in cancer patients. Although Items 5 and 23 yielded corrected item–total correlations slightly below the commonly recommended threshold of 0.30 (0.292 and 0.279, respectively), both items demonstrated acceptable standardized factor loadings in the confirmatory factor analysis (0.41 and 0.49, respectively). Therefore, these items were retained to preserve the conceptual integrity and the original five-factor structure of the Motivation for Healing Scale, as item retention should be based on both theoretical considerations and multiple psychometric indicators rather than on a single statistical criterion [36, 37].

The results of the current investigation agree with those of the first study in terms of temporal stability [15]. In the present study, conducted with a 15-day interval, the total scale demonstrated an ICC of 0.932, indicating excellent temporal stability. The ICC values for the subdimensions ranged from 0.645 to 0.973, reflecting acceptable to excellent stability across repeated measurements. Furthermore, no statistically significant differences were observed between the first and second administrations, providing additional evidence for the temporal stability of the Turkish version of the scale. These findings indicate that the Turkish version of the Motivation for Healing Scale yields stable and reproducible measurements over time and is suitable for use in both clinical practice and research settings.

The original study emphasized the need for a specific instrument to assess the motivation for healing among patients with cancer [15]. The present study demonstrated that the Turkish version of the Motivation for Healing Scale is a valid and reliable instrument for assessing motivation for healing in Turkish patients with cancer.

Therefore, the scale may serve as a useful tool for identifying patients' motivational resources, planning individualized psychological and supportive care interventions, and evaluating the effectiveness of these interventions in both clinical practice and research.

Limitations of the study

This study has several limitations. First, it was conducted at a single state university hospital and included a relatively small sample of patients with cancer recruited over a limited period (August 2025 to March 2026), which may limit the generalizability of the findings to other settings and patient populations. Second, the findings were based on self-reported data, which may be subject to response bias influenced by participants' psychological status, illness perceptions, and emotional condition at the time of assessment. In addition, patients with different cancer types, disease stages, and treatment modalities may have interpreted and responded to the scale items differently. Furthermore, approximately half of the eligible patients declined to participate (participation rate: 50.2%); therefore, the possibility of nonresponse bias cannot be excluded, and the findings should be interpreted with appropriate caution. Finally, although the present study demonstrated satisfactory validity and reliability, the responsiveness of the Turkish version of the Motivation for Healing Scale was not evaluated. In addition, convergent and discriminant validity should be further confirmed in larger and more heterogeneous cancer populations. Future multicenter studies with larger and more diverse samples are recommended to further examine the psychometric properties and broader applicability of the scale.

Implications for nursing practice

The MHS in patients with cancer in Turkish offers oncology nurses a robust and accurate instrument for methodically and culturally properly evaluating patients' motivation for recovery. The use of this scale may assist nurses in identifying patients who have low motivation or are at risk of disengaging from the treatment and recovery process since healing motivation is directly linked to treatment adherence, care engagement, coping ability, level of hope, and psychological well-being. Early detection of these patients may provide timely nursing treatments, including motivational counseling, emotional support, tailored education, and referral to suitable psychosocial resources.

This measure might help create patient-centered, comprehensive nursing care plans in clinical settings. Nurses may get a better understanding of each patient's unique requirements and motivational resources by evaluating many aspects of healing motivation, such as desire to live, optimistic thinking, trust in treatment, sense of belonging and responsibility, and trust in superior powers. Given that a substantial proportion of the participants had a primary school education or lower, the successful administration of the 25-item MHS suggests that it is a practical and accessible instrument for use among patients with varying educational and health literacy levels. The scale's results may help oncology nurses improve communication, encourage self-management practices, increase patients' active involvement in treatment, and improve the general standard of care given to cancer patients.

Conclusion

The Turkish version of the MHS demonstrated adequate validity and reliability among patients with cancer. Findings related to content and construct validity, internal consistency, and test–retest analysis supported the usefulness of the scale in measuring healing motivation in Turkish cancer patients.

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Data availability The data supporting this study’s findings are available from the corresponding author upon reasonable request.

Declarations

Ethical approval Ethical approval for this study was obtained from the Firat University Non-Interventional Research Ethics Committee (Approval no: 2025/06–32). The study was conducted in full accordance with the principles of the Declaration of Helsinki.

Consent for publication Not applicable.

Consent to participate Written informed consent was obtained from all participants prior to their inclusion in the study. Participants were informed about the purpose of the study, procedures, potential risks and benefits, and their right to withdraw at any time without any consequences.

Competing interests The authors declare no competing interests.

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