



Yetişkinlerde Geleneksel ve Tamamlayıcı Tıp İnançları Ölçeği: Metodolojik Bir Çalışma

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ÖZET

Araştırma yetişkin bireylerin tamamlayıcı tıp uygulamalarına yönelik inançlarını ölçmek için kullanılan Tamamlayıcı ve Alternatif Tıp İnançları Ölçeğinin Türk diline uyarlanması amacıyla metodolojik tasarımda yapılmıştır. Araştırmanın evrenini Ankara ilinde bulunan bir aile sağlığı merkezine kayıtlı yetişkin bireyler oluşturmuştur. Örneklem grubunu ise 354 yetişkin birey oluşturmaktadır. Araştırma verilerini değerlendirirken tanımlayıcı istatistiklerin yanı sıra açıklayıcı faktör analizi, doğrulayıcı faktör analizi, madde-toplam korelasyonu, madde analizi, Cronbach alpha değeri ve Test-tekrar test korelasyonu analizleri yapılmıştır. Açıklayıcı faktör analizine göre özdeğeri 1'in üzerinde olan ve toplam varyansın %73,11'ini açıklayan tek faktörlü bir yapı ortaya çıkmıştır. Doğrulayıcı faktör analizinde ise uyum indekslerinden χ^2/df Uyum indeksi 3.214, İyilik Uyum İndeksi 0.901, Düzeltilmiş Uyum İyiliği İndeksi 0.854 ve Yaklaşık Hataların Ortalama Karekökü 0.079 olarak hesaplanmıştır. Ölçeğin araştırmamızda elde edilen Cronbach α değeri de 0,97'dir.

Ölçeğin, 16 maddelik Türkçe versiyonunun geçerli ve güvenilir bir ölçme aracı olduğu sonucuna varılmıştır. Ayrıca hemşirelerin, yetişkin bireylerin geleneksel ve tamamlayıcı tıp (GETAT) yöntemlerine karşı olan inançlarını değerlendirirken kullanılabileceği bir ölçüm aracıdır.

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ABSTRACT

The study was conducted in a methodological design to adapt the Complementary and Alternative Medicine Beliefs Inventory (CAMBI), which is used to measure adult individuals' beliefs about complementary medicine practices, into the Turkish language. The population of the study consisted of adult individuals registered to a family health center in Ankara. The sample group consists of 354 adult individuals. In addition to descriptive statistics, descriptive factor analysis, confirmatory factor analysis, item-total correlation, item analysis, Cronbach alpha value and test-retest correlation analyses were performed. According to the exploratory factor analysis, a one-factor structure with an eigenvalue above 1 and explaining 73.11% of the total variance emerged. In confirmatory factor analysis, χ^2/df fit index was 3.214, Goodness of Fit Index was 0.901, Corrected Goodness of Fit Index was 0.854 and Root Mean Square Error of Approximation was 0.079. The Cronbach α value of the scale obtained in our study was 0.97.

It was concluded that the 16-item Turkish version of the scale is a valid and reliable measurement tool. In addition, it is a measurement tool that can be used by nurses when evaluating the beliefs of adult individuals towards traditional and complementary medicine (T&CM) methods.

INTRODUCTION

Traditional and Complementary Medicine (T&CM) methods are practices that have been used worldwide for centuries and are defined as "The sum of knowledge, skills and practices based on theories, beliefs and experiences specific to different cultures, whether or not they can be explained, used to prevent, diagnose, cure or treat physical and mental illnesses as well as to protect health" (Adeniyi et al., 2021; WHO Global Report on Traditional and Complementary Medicine, 2019).). Parallel to the changes and advancements in healthcare systems globally and in our country, T&CM methods are influenced by these developments, and the use of these treatment approaches is steadily increasing (Bilge et al., 2018). Reasons such as the increase in chronic and malignant diseases, prolonged treatment of these diseases, lack of complete recovery despite treatment, dissatisfaction with modern medical methods, and the inability of healthcare professionals to allocate sufficient time to patients also increase the use of T&CM methods. Furthermore, other factors contributing to the increasing use of traditional and complementary medicine (T&CM) methods worldwide include the fear arising from the side effects of pharmaceutical drugs in modern medicine, patients' desire to minimize the intake of medications whenever possible, alignment with the cultural context of societies, cost-effectiveness, and ease of accessibility, as well as the preference for less invasive procedures (Çakmak & Nural, 2017; Ünal & Dağdeviren, 2019; Karahancı et al., 2015; Biçer & Balçık, 2019; Demirağ, 2019; Eardley et al., 2012).

With this growing orientation towards T&CM, public health nurses, who provide health services to all segments of society with the primary goal of improving community health, should inquire about individuals' use of T&CM methods. It is crucial for them to provide information about the benefits and potential side effects of these methods. In addition, they have roles and responsibilities in the process of obtaining information about the attitudes, behaviors, and beliefs of individuals towards T&CM methods, implementing CAM methods, and conducting research on practices (Aktaş, 2017; Kökten, 2017). These roles encompass functions such as caregiving, research, education, therapy, and rehabilitation. The most important role of nurses in this process is their researcher role (Taylan et al., 2012). Public health nurses, through their research endeavors, play a crucial role in advancing both individual well-being and the nursing profession. Their commitment to investigating various aspects related to T&CM methods aims to enhance the quality of care and education, contributing to overall progress and development (Olgun, 2019; Gedük, 2018). Some studies conducted by nurse researchers have focused on the knowledge levels, attitudes, and behaviors of individuals about T&CM methods. However, no studies have been conducted in Turkey to examine individuals' beliefs in T&CM methods (Aktaş, 2017; Cevik & Tari Selcuk, 2019; Sağkal et al., 2013; Öztürk et al., 2016). Conducting research to ascertain the motivations behind individuals' utilization of T&CM methods and to comprehensively grasp and assess their treatment beliefs holds significant academic and practical importance (Bishop et al., 2005; Hyland et al., 2003).

Standardized measurement tools are needed to assess beliefs about T&CM and to conduct research. Upon reviewing measurement instruments designed for T&CM methods, the Holistic Complementary and Alternative Treatment Questionnaire, initially developed by Hyland et al. (2003) in the UK, was adapted by Erci in 2007, and its validity and reliability for the Turkish version were assessed by Erci in the same year. In the United States, Schneider et al. (2003) formulated the Holistic Therapies Attitude Questionnaire, while McFadden et al. (2010) employed the Complementary Alternative Traditional Therapies Attitude Scale. The latter was subsequently validated in Turkish by Köse et al. in 2018. Additionally, the Alternative Medicine Attitude Scale, validated by

Lewith et al. (2002), was also identified for use in the context discussed. In Turkey, Bilge et al. (2018) developed the Attitude Towards Using Complementary Therapies Scale. In England, Bishop et al. (2005) conducted a validity and reliability study of the Complementary Alternative Medicine Beliefs Inventory (CAMBI) (Bilge et al., 2018; Bishop et al., 2005; Hyland et al., 2003; Erci, 2007; Schneider et al., 2003; McFadden et al., 2010; Köse et al., 2018; Lewith et al., 2002). Upon conducting a literature review, it became evident that the majority of scales were designed to assess attitudes towards traditional and complementary medicine (T&CM). Notably, CAMBI was developed to measure the individual's belief in complementary medicine and its Turkish validity and reliability has not been conducted. Remarkably, no scale related to beliefs in T&CM has been identified within the Turkish context. As a result, this study was conducted to adapt the Complementary and Alternative Medicine Beliefs Inventory into the Turkish language.

METHOD and MATERIAL

Design

This research is of a methodological type.

Research Population and Participants

The population of the research consisted of adult individuals receiving services from a family health center in Ankara, the capital of Turkey, between September 2020 and January 2021. The relevant literature was taken into consideration when calculating the sample. In scale adaptation studies, the sample size must be at least five to ten times the total number of items in the scale (Erdoğan et al., 2017). According to this statement, at least 170 participants should be selected for the 17-item scale. In studies conducted to reveal the factorial structure of a psychometric test, very large sample sizes are needed and it is recommended that 300 or more participants be included in the study (International Test Commission, 2018). The sample of the research consists of 354 volunteer participants. Additionally, participants must be able to meet the following criteria to participate in the research. Inclusion criteria are being over 18 years of age, not having any health disabilities, and being registered at the family health center.

Instruments

The Descriptive information form; it consists of nine questions about individuals' personal information.

The CAMBI developed by Bishop et al. (2005) in England, is designed to assess individuals' beliefs regarding complementary medicine. The questionnaire encompasses inquiries that delve into the beliefs of individuals utilizing complementary medicine methods. In total, the scale comprises 17 items organized into three sub-dimensions: belief in holistic treatments, belief in natural treatments, and participation in treatment. Specifically, the CAMBI includes six items for belief in holistic treatments, five items for belief in natural treatments, and six items for participation in treatment. Scoring of the scale is "1- Strongly disagree", "7-Strongly agree". The cumulative score achievable on the CAMBI ranges from 17 to 119 (Bishop et al., 2005).

Process

While preparing the Turkish version of the scale, translation, expert opinion, linguist review, and back translation methods were used. In the first stage, the scale was translated into Turkish by two academicians. Then, the translations were examined by a linguist who has a good command of both Turkish and English, and necessary adjustments were made. The final version of the form was offered to an expert group consisting of 10 academicians. The experts compared the English original and the Turkish translation of each scale item and evaluated the scope of the items and whether the translation was appropriate. During the assessment of item scope, the CVR (Content Validity Ratio) and CVI (Content Validity Index) values were computed using the Davis Technique, where scores of 4 indicated suitability, 3 denoted that the item required slight revision, 2 signified the need for significant revision, and 1 indicated that the item was deemed unsuitable. According to the results of the expert opinions, the translated scale items were back-translated into English to ensure the cultural equivalence of the scale. The results of the two translations were compared and the items were revised. A pilot study was conducted with 15 adult volunteers to test the comprehensibility and appropriateness of the scale items. Following the pre-application, the final version of the data collection form was refined based on feedback received from participants, resulting in necessary adjustments for improved clarity and understanding.

Data Collection

Research data were obtained from adult individuals receiving services from a family health center in Ankara, the capital of Turkey, between September 2020 and January 2021. Health personnel working in the institution were contacted, and randomly selected participants were invited to participate in the online survey.

Data Analysis

In the statistical analysis of the data, SPSS for Win. Ver. 21.0 package program and AMOS 21.0 package program were used. Descriptive statistics of the research data were calculated. For the version of a scale in a different language to be usable, it should be tested with validity and reliability tests. At this point, Cronbach's α coefficient was first calculated to test the reliability of the scale. In addition, item-total correlation, item analysis, and test-retest correlation analyses were conducted. Content validity analyses (CVA and CVI) were calculated to evaluate the validity of the scale. Construct validity was evaluated with Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The adequacy of the sample size was determined by the Kaiser-Meyer-Olkin (KMO) test and Barlett's Sphericity Test. Kolmogorov-Smirnov Test was used to determine the normal distribution. In addition, the scale total score and scale total score mean were calculated. Spearman's correlation was used to determine the relationship between the mean scale total score and the mean retest scale total score. Mann-Whitney U Test was used to compare two quantitative data in groups that did not show normal distribution, and the Kruskal-Wallis Test was used to compare more than two quantitative data. In statistical analyses, $p < 0.05$ level was accepted as an indicator of whether there was a significant difference.

Ethical Considerations

The research was ethically approved by the University of Health Sciences Gülhane Non-Interventional Ethics Committee (Project / Decision no: 2020-136, Number: 46418926). The necessary approvals were received from the Provincial Directorate of Public Health for the research to be conducted in a family health center. The participant's approval to participate in the research was taken before the questionnaire forms were filled out. In addition, permission was taken from F.L. Bishop via e-mail for the adaptation of CAMBI into Turkish.

RESULTS

Of the individuals who participated in the study, 24% (n=85) were male and 76% (n=269) were female, with a mean age of 30.64 ± 9.10 years. 51.4% (n=182) were single and 86.1% (n=305) had a nuclear family structure. When their educational status was analyzed, 75.4% had a university education or higher. 60.7% (n=215) of the participants were employed, and 66.7% (n=236) reported their monthly income as moderate. Among the participants, 84.7% (n=300) reported not having a chronic disease, and 85.9% (n=304) indicated that they were not taking any continuous medication (Table 1).

Table 1. Distribution of participants according to socio-demographic characteristics (N=354)

	Characteristics	n	%
Mean age=30.64±9.10			
Gender	Woman	269	76.0
	Man	85	24.0
Marital Status	Single	186	52.5
	Married	168	47.5
Family Structure	Nuclear Family	305	86.1
	Extended Family	42	11.9
	Other (Alone)	7	2.0
Education Status	Literate	5	1.4
	Primary School	14	4.0
	Secondary School	10	2.8
	Highschool	58	16.4
	University and above	267	75.4
Employment Status	Employed	215	60.7
	Unemployed	139	39.3
Income Status	Poor	35	9.9
	Moderate	236	66.7
	Good	83	23.4
Chronic Disease	Yes	54	15.3
	No	300	84.7
Drug Use	Yes	50	14.1
	No	304	85.9

Reliability of the Scale

Internal Consistency

First, item analysis was performed to identify whether the items were working in line with the objectives of the scale. Item analysis is conducted to evaluate the relationship between all items of the scale and each scale

item. When the item-total correlation coefficients were examined, it was seen that they ranged between 0.35- 0.94 (Table 2).

Table 2. Item-total correlation analysis of the scale

Scale Items	Corrected Item-Total Correlation	Cronbach's α if Item Deleted
1. Treatments should not have side effects.	,71	,972
2. It is important to me that treatments are non-toxic.	,89	,969
3. Only natural ingredients should be used in treatments.	,86	,969
4. It is important that the treatments strengthen my immune system.	,93	,968
5. Treatments should allow my body to heal itself.	,93	,968
6. Treatments should boost my natural strength to stay healthy.	,94	,968
7. Health workers must treat patients equally.	,91	,969
8. Patients should take an active role in their treatment.	,89	,969
9. Health workers should make all treatment decisions. *	,58	,974
10. Health workers should help patients to make their own treatment decisions.	,88	,969
11. Health workers should check what is said during examinations. *	,77	,971
12. Health is about the harmony of body, soul, and mind.	,93	,968
13. Imbalances in a person's life are an important cause of the disease.	,89	,969
14. Treatments should focus only on the symptoms and not on the whole body. *	,35	,977
15. Treatments should focus on people's complete well-being.	,84	,970
16. I think my body has a natural ability to heal itself.	,76	,971

In the evaluation of internal consistency, Cronbach α coefficient of the scale was calculated in addition to item analysis. Cronbach's α coefficient for the total scale was found to be 0.97. Furthermore, to assess internal consistency, an examination of the relationship between the mean total score of the scale obtained from 354 participants and the total score of the scale collected from 45 participants revealed a positive, moderate, and statistically significant correlation between the scale total score and the test-retest total score ($r=0.517$; $p<0.001$), as illustrated in Table 3.

Table 3. The relationship between scale total score and retest scale total score

	N	Mean \pm SD	r	p
Scale	45	5.71 \pm 0.52	.517	.001
Retest-Scale	45	5.80 \pm 0.55		

In addition, the Wilcoxon Test revealed that there was no statistically significant difference between the participants' mean total score on the scale test and the mean scores obtained after the Test-retest ($p>0.05$). In the test-retest, the total Cronbach α coefficient of the scale was calculated as 0.68.

Validity of the Scale

Exploratory Factor Analysis

Kaiser-Meyer-Olkin (KMO) and Bartlett's Sphericity Test were conducted to determine whether the sample size was sufficient. The KMO value was 0.96 and Bartlett's Sphericity Test result was $\chi^2 = 7551.93$; $p = .001$. Based on the results of the calculations, it was identified that the sample size was adequate. Oblimin axis rotation technique was used in the EFA of scale. As a result of the process, it was found that there was only one factor with eigenvalues above 1 explaining 73.11% of the total variance. The factor loadings of the items of the obtained structure are between 0.26 and 0.95. After EFA, an item with a factor loading below 0.3 was identified. It was deemed appropriate to remove this item (item 17) from the scale. The factor loading distribution of scale is presented in Table 4.

Table 4. Factor loading distribution of the scale in EFA

Scale Items	Factor 1
1. Treatments should not have side effects.	0.75
2. It is important to me that treatments are non-toxic.	0.91
3. Only natural ingredients should be used in treatments.	0.88
4. It is important that the treatments strengthen my immune system.	0.94
5. Treatments should allow my body to heal itself.	0.95
6. Treatments should boost my natural strength to stay healthy.	0.95
7. Health workers must treat patients equally.	0.92
8. Patients should take an active role in their treatment.	0.91
9. Health workers should make all treatment decisions. *	0.62
10. Health workers should help patients to make their own treatment decisions.	0.89
11. Health workers should check what is said during examinations. *	0.80
12. Health is about the harmony of body, soul, and mind.	0.95
13. Imbalances in a person's life are an important cause of the disease.	0.91
14. Treatments should focus only on the symptoms and not on the whole body. *	0.38
15. Treatments should focus on people's complete well-being.	0.86
16. I think my body has a natural ability to heal itself.	0.79
17. Treatments do not need to have natural healing powers.	0.26

* *Items 9, 11, and 14 are reverse coded.*

Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) was conducted to test the accuracy of the obtained structure. With this analysis, the factor structure of the new version of the scale was examined. In order to evaluate the validity of the model, Chi-square Fit Test (χ^2/df), GFI, CFI, AGFI, and RMSEA were used. The results of the fit indices were $\chi^2/df = 3.21$; GFI=0.901; CFI=0.972; AGFI=0.854; RMSEA=0.079. The results of the fit indices are presented in Table 5.

Table 5. Confirmatory factor analysis fit indices

Fit Indices	Results of the Model	Conformity
RMSEA	0.079	Acceptable Fit
GFI	0.901	Acceptable Fit
AGFI	0.854	Acceptable Fit
CFI	0.972	Good Fit
χ^2/df	3.214	Acceptable Fit

Figure 1 depicts the path diagram illustrating the factors derived from CFA and the corresponding factor loadings among the associated items.

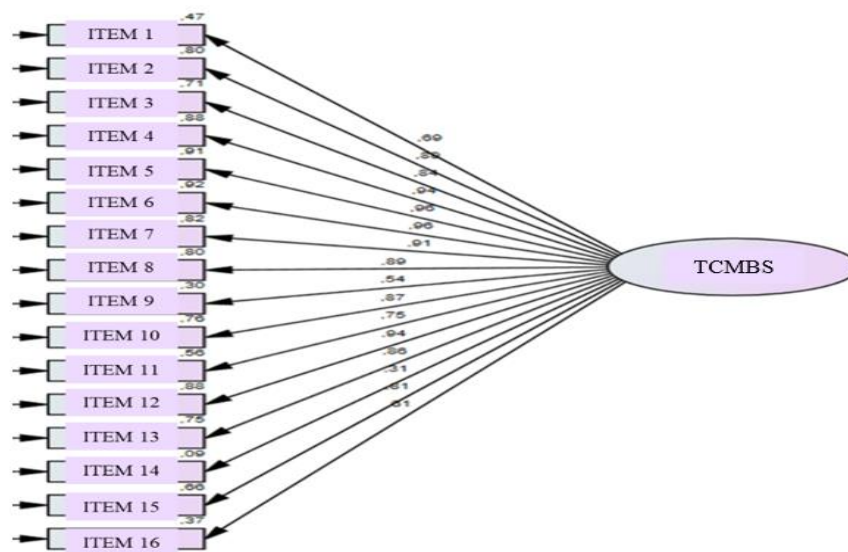


Figure 1 Path diagram

In the stage of testing the structure that emerged after EFA with CFA, it is tested whether there is a statistically significant relationship among the factors and items. As a result of CFA, the calculated "t" values ranged between 5.86 and 27.19 (Table 6).

Table 6. "t" values of the relationship between factors and items

Scale Items	t values
1. Treatments should not have side effects.	23,29
2. It is important to me that treatments are non-toxic.	20,83
3. Only natural ingredients should be used in treatments.	25,9
4. It is important that the treatments strengthen my immune system.	27,02
5. Treatments should allow my body to heal itself.	27,19
6. Treatments should boost my natural strength to stay healthy.	24,04
7. Health workers must treat patients equally.	23,32
8. Patients should take an active role in their treatment.	11,20
9. Health workers should make all treatment decisions. *	22,16
10. Health workers should help patients to make their own treatment decisions.	17,23
11. Health workers should check what is said during examinations. *	25,90
12. Health is about the harmony of body, soul, and mind.	24,03
13. Imbalances in a person's life are an important cause of the disease.	5,86
14. Treatments should focus only on the symptoms and not on the whole body. *	19,66
15. Treatments should focus on people's complete well-being.	13,26
16. I think my body has a natural ability to heal itself.	23,29

DISCUSSION

It is not adequate to simply translate a scale into a different language and use it. It is equally important to conduct validity and reliability studies related to the scale (Karakaoç & Dönmez, 2014). The CAMBI is a scale developed to assess complementary medicine beliefs in the British population. The objective of this study was to assess the validity and reliability of the scale in the Turkish context. The first method used in the process of adapting scales to another language is language adaptation (Öner, 2009). During the language adaptation of the

scale, the methods of translation, expert opinion, linguist review, and back translation were used. In the first stage, the scale was translated into Turkish by two academicians. Then, it was examined by a linguist who has a good command of Turkish and English, and necessary adjustments were made. The final version of the form was offered to an expert group consisting of 10 academicians. The experts compared the English original and the Turkish translation of each scale item and evaluated the scope of the items and whether the translation was appropriate. While evaluating the scope of the items, CVR and CVI values were calculated. The CVI value was found to be 0.84. Research suggests that a CVI value equal to or exceeding 0.80 is considered an acceptable level (Erdoğan et al., 2017; Polit et al., 2007).

Reliability of Scale

First, item analysis was conducted to determine whether the items worked in line with the objectives of the scale. This analysis involved evaluating the relationship between each scale item and all other items within the scale. The correlation coefficient for each item (although not standardized) is expected to be greater than 0.3 (Erdoğan et al., 2017). When the item-total correlation coefficients were calculated, it was seen that they ranged between 0.35- 0.94. At this stage, no items were dropped from the scale. For internal consistency, the reliability coefficient Cronbach α was calculated after the item analysis. As a result of the analysis, the Cronbach's α coefficient for the total scale was found to be 0.97. Reliability coefficients of 0.70 or higher are considered sufficient (Nunnally, 1978). The number of items in the scale is directly related to the magnitude of Cronbach's α value. Cronbach's alpha coefficient is highly affected by the number of items in the scale. Increasing the correlation between the items also increases the Cronbach's α value. In addition, the unidimensional structure of the scale is another factor that supports the increase in Cronbach's α value (Souza et al., 2017; Vaske et al., 2017; Green et al., 1977; Cortina; 1993; Miller, 1995).

When the number of items in the scale is less than 10, Cronbach's α value decreases (Bolarinwa, 2015). However, if there are more than 20 items in the scale, Cronbach's alpha α value can be higher than 0.70 even if the correlation between the items is very low (Cortina, 1993). At this point, it is thought that the high Cronbach α value in our study is related to the high number of items in the scale, the single-factor scale structure and the high correlation values between the items. The main reason for the high Cronbach's α value calculated in the study is the high correlation between the items.

Furthermore, test-retest results, considered another measure to assess internal consistency, were scrutinized. Test-retest reliability stands as one of the methods employed to evaluate the overall reliability of scales (Erdoğan et al., 2017). Spearman's correlation analysis was used to examine the relationship between the total scores of the scale at the retest. As a result of the retest, there was a positive, moderate, and statistically significant relationship between the test-retest scores of the TCMBS ($r=0.517$; $p<0.01$). In addition to Spearman's correlation, the Wilcoxon Test was employed to ascertain the internal consistency of the scale, given that the total averages of the scale from the two administrations did not adhere to normal distribution. The Wilcoxon Test results indicated no statistically significant difference between the scale test and scale score averages obtained during the test-retest. The analyses suggested that the outcomes of the scale test and the test-retest were comparable, signifying the internal consistency of the scale. In our study, the Cronbach's α coefficient for the TCMBS test was determined to

be 0.97, whereas the Cronbach's α coefficient for the test-retest was found to be 0.68. The lower Cronbach's α coefficient for the test-retest is attributed to the limited sample size.

Validity of the Scale

Construct validity is established by elucidating how accurately the items within the developed scale measure the designated features and the extent to which the results obtained from the scale correlate with the intended constructs (Karakoç & Dönmez, 2014). EFA was conducted to explore the structure of the scale. EFA is used to define the structure between variables (Hair et al., 2010). Before conducting factor analysis, the KMO value and Bartlett Sphericity Test were conducted to determine if the data set was suitable. The analysis yielded a KMO (Kaiser-Meyer-Olkin) value of 0.96. It is crucial to note that the KMO value must surpass 0.5 to ensure the suitability for factor analysis (Kaiser, 1974). The appropriateness of the data for multivariate normal distribution is assessed through Bartlett's Sphericity Test. This test, represented by a chi-square statistic, is considered satisfactory when the obtained value is below 0.05 (Tabachnick & Fidell, 2007). In this study, Bartlett's Sphericity Test $\chi^2 = 7551.93$; $p = .001$. In this study, Bartlett's Sphericity Test $\chi^2 = 7551.93$; $p = .001$. When the results obtained are compared, it is concluded that the sample size is excellent and suitable for data analysis.

While performing EFA of the scale, the Oblimin axis rotation method, one of the oblique rotation techniques, was used. When factors are thought to be related to each other, oblique rotation methods are used (Hair et al., 2010; Büyüköztürk, 2002). As a result of the process, a single-factor structure emerged with eigenvalues above 1 and explaining 73.11% of the total variance. In factor analysis, a total variance of 40% or more is an acceptable value (Kline, 1994). The eigenvalue should be 1 or above 1 (Büyüköztürk, 2002). In the last stage of EFA, a single factor was obtained, and it was named the Traditional and Complementary Medicine Beliefs Scale (TCMBS) concerning the semantic relationship and the original of the scale. Bishop et al., who developed the original scale, 's study concluded that the scale consists of 3 sub-dimensions. According to the factor analysis we obtained in our study, it was observed that the sub-dimensions of Belief in Holistic Therapies, Belief in Natural Therapies, and Participation in Treatment were not of the same structure.

When the factor loadings of all items of the TCMBS were analyzed, it was found that the factor loadings were between 0.26 and 0.95. The item with a factor loading less than 0.3 (item 17) was removed from the scale items. Because the minimum value of a factor loading should be 0.30 (37). (Karaman et al., 2017).

Following the EFA, CFA was performed on the same data set. CFA is used to "test how well the measured variables represent a smaller number of constructs" (Hair et al., 2010). Numerous fit statistics are available in the literature for assessing the validity of the model in CFA, and the field continues to see the development of new statistical models (Erkorkmaz et al., 2013). In this study, the Chi-square Fit Test (χ^2/df), GFI, CFI, AGFI, and RMSEA were analyzed. Among the goodness of fit indices of the model, χ^2/df value is 3.21. In the literature, it is indicated that models demonstrate an "excellent fit" when the obtained value falls below 2.5, particularly in studies involving small sample groups (Kline, 2005). Upon examination of the CFI and NFI values, an indication of .95 or higher for both indices suggests an excellent fit (Sümer, 2000). An AGFI value equal to or exceeding 0.90 signifies an excellent fit, while GFI values of 0.85 and above, along with AGFI values of 0.80 and above, indicate

an acceptable fit (Jöreskog & Sörbom, 1993). The results of the fit indices showed that the previously determined structure of the scale provided a good fit with the collected data.

During the examination of the structure derived from EFA and CFA, the statistical significance of the relationship among the factors and the associated items was tested. A value exceeding 1.96 for the "t" statistic is considered indicative of a statistically significant relationship among the factors and the relevant items (Şimşek, 2007). Given that all calculated "t" values exceeded 1.96, it was affirmed that a statistically significant relationship exists among the relevant items and factors.

LIMITATIONS

The research has certain limitations that warrant consideration. Firstly, no advance sample size calculation was conducted. Nevertheless, the sample size of 354 individuals is generally deemed adequate, following the rule of thumb of having five to ten observations per parameter estimated in CFA. However, it is important to note that the smaller sample size for the re-test represents another limitation.

CONCLUSION

This study introduces a 16-item scale with a singular sub-dimension that meets validity and reliability criteria, contributing to the literature by establishing the Turkish validity and reliability of the TCMBS, designed to measure beliefs towards T&CM practices. Health professionals are encouraged to consider utilizing this scale when assessing the beliefs of adult individuals regarding T&CM practices.

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