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A study on the adaptation of the HIV/AIDS-related Stigma Scale into Turkish

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Abstract

Purpose: This study aims to test the validity and reliability of the Turkish version of the HIV/AIDS-related Stigma Scale.

Design and Methods: The study has a methodological design. The sample included a total of 428 participants. of the participants, 198 were HIV/AIDS patients, 230 were HIV-negative individuals. The data were analyzed using the Exploratory and Confirmatory Factor Analysis.

Findings: The Turkish version of the HIV/AIDS-related Stigma Scale was found to be valid and reliable for the Turkish society. Cronbach's α was 0.93 for the community perspectives subscale and 0.89 for the patient perspectives subscale, and all the model fit indices were acceptable.

Practice Implications: The level of stigmatization revealed by the scale helps gain an insight into the community and patient perspectives on HIV/AIDS.

KEYWORDS
HIV/AIDS, HIV/AIDS-related Stigma Scale, reliability and validity, stigmatization

1 | INTRODUCTION

The number of HIV/AIDS cases has considerably increased throughout the world. The number of HIV-positive people has been reported to increase to 37.9 million. The number of new HIV/AIDS cases was 1.7 million and the number of people who died from AIDS was 770 in 2018 (UNAIDS, 2019). Although Turkey is a country where HIV/AIDS is rarely seen, there has been an increase in the number of cases recently. The number of HIV-positive cases was 19.748 and the number of AIDS cases was 1772 in Turkey by December 31, 2018. Of these 1772 cases, 79.9% were male and 20.1% were female (Health, 2019). Among the important causes of the increase in the prevalence of HIV/AIDS cases are insufficient information about the prevention of the disease and the stigmatization of the patients. Therefore, it is important to reveal the opinions of the population and the patients about the disease (Tran et al., 2019).

To stop the HIV/AIDS epidemic by 2030, the UNAIDS identified an objective titled "Target: 90-90-90," which countries were expected to achieve by 2020 (UNAIDS, 2017). Turkey has created the HIV/AIDS Control Program in accordance with the international objectives (2019–2024). The program aims at reducing new HIV/AIDS cases and deaths from the disease, improving the capacity of healthcare services for HIV/AIDS, preventing discrimination against the HIV-positive individuals, and protecting their privacy (Health, 2019).

HIV/AIDS is an important public health problem and has become the medical condition including the highest level of stigmatization throughout the world due to its social aspects (Sweileh, 2019).

HIV/AIDS-related stigmatization has continued to cause anxiety in HIV-positive individuals, their families, caregivers and even health care workers for a long time (Alexandra Marshall et al., 2017; Kabbash et al., 2018; Tran et al., 2019). Stigma is prevalent in rural and poverty-stricken areas as a result of low education and lack of knowledge about HIV/AIDS (Bozkurt & Turan, 2020; Egbe et al., 2020). Stigmatization refers to excluding a person or a community from the rest of the society, discriminating against them, and seeing them as worthless. In recent years, HIV/AIDS patients have faced stigmatization, which is a negative experience caused by the disease (Zhang et al., 2021). The relevant literature shows that stigmatization is most frequently encountered in mental illnesses and other conditions including addiction, AIDS, tuberculosis, obesity, cancer and disability (Bogart et al., 2019; Craig et al., 2017; Kudva et al., 2020; Matthews et al., 2017; Puhl et al., 2020; Rivera-Díaz et al., 2017; Shiri et al., 2018). According to the data from the Joined Nations Program on HIV/AIDS, 34.6% of the people aged 15–49 in Angola, a country in southwestern Africa, discriminate against and stigmatize the HIV-positive people (UNAIDS, 2019).

HIV/AIDS-related stigmatization involves both patients' stigmatizing themselves and stigmatization of the patients by their families, health professionals, laws, and the society (Egbe et al., 2020; Kabbash et al., 2018; Tran et al., 2019). Health professionals have been shown to have negative attitudes to patients with AIDS (Kabbash et al., 2018; Van Rie et al., 2008). This causes severe stress in the patients, reduces their self-confidence throughout their lives, and creates a negative effect on the healing process (Doka et al., 2017; Kabbash et al., 2018). Studies conducted both in Turkey and other countries have shown that stigmatization has considerable negative effects (Beyazyuz et al., 2015; Kocabasoglu & Aliustaolu, 2003; Stutterheim et al., 2014). Stigmatization makes acceptance of the diagnosis difficult for patients and their relatives and causes delays in treatment and follow-up. In addition, it leads to social isolation, a more restricted life, and a delay in seeking medical help. Furthermore, stigmatization may cause some patients to lose their jobs, become unemployed, experience difficulty in finding a job, feel the need to keep their disease secret, and avoid taking their medications since they do not want others to see it (Aguwa et al., 2015; Beyazyuz et al., 2015; Kocabasoglu & Aliustaolu, 2003).

The most important factors contributing to HIV/AIDS-related stigmatization are the lethality of the disease, fear of being infected, association of the disease with unethical behavior, and the perception that the disease is the responsibility of the patient. The main source of the negative attitudes to and irrational fears about HIV/AIDS dates back to the periods when little was known about the disease and its causes (Arrey et al., 2017; Deschepper, 2017; Horter et al., 2019). Studies performed with people from many different social classes have shown that people do not have adequate information about HIV/AIDS, which triggers social stigmatization (Bozkurt & Turan, 2020; Egbe et al., 2020; Tran et al., 2019). Most of the studies conducted in Turkey about HIV/AIDS have aimed to reveal the level of knowledge and attitudes of the society about HIV/AIDS and have shown that adolescents have inaccurate information about the routes of transmission of the disease; male students have

increased awareness and information about AIDS; culture influences the attitudes towards the disease; and education is effective in improving the knowledge and attitudes about the disease (Bulduk et al., 2006; Cimen et al., 2013; Kaya et al., 2010; Saruç et al., 2015).

The report about the AIDS eradication program developed by the United Nations has emphasized attempts to eliminate stigmatization and discrimination concerning HIV/AIDS (UNAIDS, 2015, 2019). To this end, the level of stigmatization and discrimination against the HIV-positive people should be revealed (United Nations, 2011).

To improve public health, stigmatization towards people with AIDS must be revealed; effective programs must be developed for the prevention of stigmatization and the effects of these programs must be evaluated; and a valid and reliable measurement tool must be developed. Many scales about HIV/AIDS have been developed and administered in many cultures. They can measure the level of knowledge and stigmatization attitudes about HIV/AIDS (Beaulieu et al., 2014; Bowen et al., 2016; Ebrahimi-Kalan et al., 2013; Varas-Diaz & Neilands, 2009). However, there is not an agreement about which scale is preferable and can be used regularly. Among the scales about HIV/AIDS, the AIDS Attitude Scale adapted by Cimen et al. (2013) and the Self-Efficacy Scale for Protection from AIDS-27 adapted by Bulduk et al. (2006) are used in Turkey. Although there are scales to measure attitudes and self-efficacy concerning HIV/AIDS, there is not a valid and reliable scale to evaluate stigmatization. The scale adapted to fill this gap is unique in that it can measure HIV/AIDS-related stigma at community and individual levels. Therefore, testing the validity and reliability of the HIV/AIDS-related Stigma Scale-Turkish version is expected to contribute to the literature.

2 | METHODS

2.1 | Study design

This study is a methodological study.

2.2 | Sample and setting

It is recommended that the sample size should be 5 or 10 times the number of the items in a given scale to perform the factor analysis in validity and reliability studies (Tabachnick & Fidell, 2019). The HIV/AIDS-related Stigma Scale includes 11 items about the community perspective and 10 items about the patient perspective. The sample of the study included a total of 428 individuals. Two hundred and thirty of these individuals were HIV-negative to evaluate the HIV/AIDS-related stigma from the community perspective, and 198 participants were HIV-positive to evaluate the stigma from the patient perspective.

The inclusion criteria were volunteering to participate in the study, being able to speak and write in Turkish, not having hearing or speech problems, and being 18 years old and over for both the patients and HIV-negative individuals, having been diagnosed as HIV-positive/AIDS for the patients and not having been diagnosed as HIV-positive/AIDS for the HIV-negative individuals.

No sampling method was used. Instead, all the volunteers satisfying the inclusion criteria were included in the sample. For test-retest analysis, an instrument should be administered for a second time and there must be a group of at least 30 participants (Capik et al., 2018). In this study, 4 weeks after the first application, the scale was administered to 50 only HIV-negative individuals who were willing to take part in the retest.

2.3 | Instrument

The Sociodemographic Characteristics Form: The form is composed of questions about gender, age, marital status, education, employment status, income, and place of residence.

The HIV/AIDS-related Stigma Scale: The scale was developed by Van Rie et al. (2008). The scale has two subscales: community perspectives and patient perspectives. The former has 11 questions about the attitudes of the society towards HIV/AIDS, and the latter has 10 questions about the attitudes of the HIV-positive patients. Cronbach's α was found to be 0.93 for the community perspectives subscale and 0.89 for the patient perspectives subscale.

Calculating the standardized stigma scores:

- The HIV/AIDS-related Stigma Scale is a four-point Likert scale (0: strongly disagree, 1: disagree, 2: agree, and 3: strongly agree). Higher scores indicate higher levels of stigmatization. None of the items were scored in the reverse order.
- For each subscale, the scores for all the items were summed to create the summary score (SS_{raw}).
- Before comparing the scores across subscales, a standardized score is needed because each subscale has a different number of items. Any form of standardization can be used (item-adjusted, 10-point scale, etc.). We chose to standardize all the scores to a 50-point scale using the following equation: $SS_{50} = (SS_{raw} \times 50)/(n \times 3)$.
- where n is the number of items on the subscale being calculated, and 3 is the maximum value for any item in the scale. Standardized scores vary from 1 to 50.

According to the results of the test–retest reliability analysis with the community group, the correlation coefficient was $r = 0.98$ for community perspectives on HIV/AIDS ($p = 0.001$).

2.4 | Translation of the scale

The scale was translated from English to Turkish by the researchers to ensure linguistic validity. Different Turkish versions of the scale were compared, and one Turkish version was created. The language used in the translated scale was checked by nine linguists. This Turkish version was translated back to English by a linguist with a good command of English and Turkish. It was compared with the original scale. As no differences were found between the original and the back-translated scales, the final version was reached.

2.5 | Data collection

Data were collected face to face from the HIV-negative individuals living in Atakum Province, Samsun, and in the Infectious Diseases Outpatient Clinic of the University Hospital from the HIV-positive patients. It took about 10 min to fill in the scales.

2.6 | Data analysis

The data were analyzed with the SPSS 25.0 and the Amos 22.0. The reliability analysis was performed to test the reliability of the scale, and the Exploratory Factor Analysis (EFA) and the Confirmatory Factor Analysis (CFA) were performed to test the construct validity of the scale. The Maximum Likelihood was performed for factorization within the Exploratory Factor Analysis, and the data were analyzed with the promax rotation method.

Maximum Likelihood in Exploratory Factor Analysis: For Confirmatory Factor Analysis, Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), Normed Fit Index (NFI), Incremental Fit Index (IFI), Turker-Lewis Index (TLI), χ^2 and χ^2/df were utilized. Composite Reliability (CR) and Average Variance Extracted (AVE) values of each subscale were calculated for convergent and divergent validity.

2.7 | Validity analysis

The Kaiser-Meyer-Olkin (KMO) measure of sample adequacy was used to assess the appropriateness of the Exploratory Factor Analysis. Bartlett's sphericity test was used to determine the significance of the intervariable correlation coefficients. The EFA and the CFA were used to test the validity of the scale.

2.8 | Reliability analysis

Cronbach's α was used to test the internal consistency of the instrument and of each of the factors resulting from the factor analysis. The analysis included the item-total item correlations and mean inter-item correlations. The Spearman correlation analysis was utilized to perform test–retest and item total analysis.

3 | RESULTS

3.1 | Characteristics of the sample

The participants' mean age was 38.14 ± 11.98 (min:18, max:75). 62.1% of the participants were male, 37.9% were female, and 56.5% were married. 16.8% were primary school graduates, 26.9% were high school graduates, and 45.1% had a university degree. In addition,

TABLE 1 Sociodemographic characteristics of the participants

Characteristics	x̄ ± SD	Min–Max
Age	38.14 ± 11.98	18–75
	n	%
Gender		
Female	162	37.9
Male	266	62.1
Marital status		
Married	242	56.5
Single	186	43.5
Education		
Illiterate	7	1.6
Primary school	72	16.8
Secondary school	41	9.6
High school	115	26.9
Two-year university program	193	45.1
Employment status		
Employed	293	68.5
Unemployed	135	31.5
Income		
Lower than expenditures	120	28.0
Equal to expenditures	233	54.4
Higher than expenditures	75	17.5
Place of living		
City	301	70.3
Town	79	18.5
Village	48	11.2
Total	428	100.0

68.5% were employed, 54.4% had an income equal to their expenditures, and 70.3% lived in the city (Table 1).

3.2 | Descriptive statistics for the HIV/AIDS-Related Stigma Scale

The mean score was 18.24 ± 6.68 for the community perspectives on HIV/AIDS subscale and 18.82 ± 5.27 for the patient perspectives on HIV/AIDS subscale (Table 2).

3.3 | Validity analysis

The scores assigned by nine experts were evaluated using the Kendall W analysis, and no statistically significant difference was found

TABLE 2 Community and patient perspectives towards HIV/AIDS scores

Stigma subscale	x̄ ± SD	Min–Max
Community perspectives towards HIV/AIDS	18.24 ± 6.68	0–33
Patient perspectives towards HIV/AIDS	18.82 ± 5.27	0–30

between the raters' scores (Kendall $W = 0.47$, $p = 0.16$). According to the EFA, the KMO coefficient was 0.945 and Bartlett's test result was $\chi^2 = 5395.050$, $p < 0.001$. The factor loadings of the scale ranged from 0.88 to 0.43. The variance explained was 42.16 for the community perspectives subscale, 9.90 for the patient perspectives subscale, and the total variance explained for the whole scale was 52.06 (Table 3).

The CFA showed that the SEM results were significant ($p < 0.001$), and the 21 items and two subscales of the scale were found to fit the scale structure. The model was improved. During the improvement, the variables decreasing the model fit were determined and new covariances were created for residuals with high covariances (e1–e3; e13–e14). The following calculations of the model fit indices proved that the indices were acceptable as presented. The results of the first level multi-factor analysis revealed that, when the goodness of fit indices of the HIV/AIDS-Related Stigma Scale are examined, χ^2/df was 2.874 ($p < 0.001$) and TLI was 0.926, which points to a perfect fit; and with the values of GFI 0.890; AGFI 0.864; CFI 0.934; RMSEA 0.066; NFI 0.903; IFI 0.934, the fit was at an acceptable level (Table 4).

Figure 1 shows the results of the first step multivariate confirmatory factor analysis of the HIV/AIDS-Related Stigma Scale. Based on these results, none of the items were removed from the scale and the two-factor structure of the scale was maintained. The lowest and highest factor loadings of the scale were 0.43 and 0.88, respectively.

When the convergent and divergent validity were examined, the CR value was found to be 0.85 in the community perspectives subscale and 0.81 in the patient perspectives subscale. The AVE values were found to be 0.66 for the community perspectives subscale and 0.59 for the patient perspectives subscale. The square root of the AVE values in both factors is greater than the correlation between the factors (Table 5).

3.4 | Reliability analysis

Cronbach's α was 0.94 for the HIV/AIDS-Related Stigma Scale, 0.93 for the community perspectives on HIV/AIDS subscale, and 0.89 for the patient perspectives on HIV/AIDS subscale. In split-half analysis, Cronbach's α was 0.90 for the community perspectives subscale and 0.85 for the patient perspectives subscale. The reliability for both subscales was acceptable and the correlation between them was 0.87, which showed a strong relationship. The item-total score

TABLE 3 Results of reliability and validity analyses of the HIV/AIDS-Related Stigma Scale

Factor	Scale Items	Factor loading	x̄ ± SD	Item-total correlation	Cronbach alpha if item deleted	Exp. variance (%)
Factor 1: Community perspectives towards HIV/AIDS ($\alpha = 0.931$)						42.157
1	Some people consider those with AIDS as disgusting.	0.749	1.60 ± 0.85	0.660	0.931	
2	Some people do not want their children to play with those with AIDS.	0.862	1.86 ± 0.78	0.689	0.931	
3	Some people feel uncomfortable when they are near those with AIDS.	0.855	1.80 ± 0.79	0.740	0.930	
4	Some people do not want to talk to those with AIDS.	0.807	1.49 ± 0.80	0.676	0.931	
5	Some people keep a distance from people with AIDS.	0.881	1.76 ± 0.76	0.748	0.930	
6	If a person has AIDS, some members of the community will behave differently towards that person for the rest of his or her life.	0.636	1.77 ± 0.80	0.711	0.930	
7	Some people try not to touch others with AIDS	0.697	1.76 ± 0.78	0.722	0.930	
8	Some people are afraid of those with AIDS.	0.798	1.73 ± 0.77	0.729	0.930	
9	Some people think that people with AIDS are not clean.	0.602	1.58 ± 0.77	0.599	0.932	
10	Some people do not want those with AIDS to live in their community.	0.733	1.75 ± 0.75	0.670	0.931	
11	Some people think that people with AIDS get what they deserve.	0.434	1.14 ± 0.82	0.352	0.937	
Factor 2: Patient perspectives towards HIV/AIDS ($\alpha = 0.893$)						9.904
1	Some people with AIDS feel hurt by others' reaction to their disease.	0.615	1.94 ± 0.71	0.548	0.933	
2	Some people with AIDS feel lonely.	0.612	1.91 ± 0.74	0.521	0.934	
3	Some people with AIDS are afraid that other people will talk about them.	0.780	1.91 ± 0.74	0.568	0.933	
4	Some people with AIDS lose friends when they tell them that they have AIDS.	0.548	1.67 ± 0.77	0.605	0.932	
5	Some people with AIDS are afraid to tell those outside of their family that they have AIDS.	0.810	2.00 ± 0.74	0.649	0.931	
6	Some people with AIDS are anxious that others will reveal their secret.	0.829	2.01 ± 0.72	0.608	0.932	
7	Some people with AIDS put in considerable effort to keep their disease a secret.	0.772	1.98 ± 0.78	0.647	0.931	
8	Some people with AIDS keep their distance from others so that they do not spread the virus.	0.526	1.76 ± 0.76	0.445	0.935	
9	Some people with AIDS feel guilty as their family shoulder the burden of caring for them.	0.553	1.58 ± 0.74	0.471	0.934	
10	Some people with AIDS choose the people with whom they will share their secret carefully.	0.609	2.05 ± 0.68	0.592	0.932	
Total Cronbach's $\alpha = 0.935$						
Total explained variance (%)						52.061

Fit indices	Perfect values	Acceptable values	Pre-modification	Post-modification
CMIN/df	$0 \leq \chi^2/df \leq 3$	$3 \leq \chi^2/df \leq 5$	3.280	2.874**
GFI	$0.90 \leq GFI$	$0.80 \leq GFI$	0.875	0.890*
AGFI	$0.90 \leq AGFI$	$0.80 \leq AGFI$	0.846	0.864*
CFI	$0.95 \leq CFI$	$0.85 \leq CFI$	0.919	0.934*
RMSEA	$0.0 \leq RMSEA \leq 0.05$	$0.06 \leq RMSEA \leq 1.0$	0.073	0.066*
NFI	$0.95 \leq NFI$	$0.80 \leq NFI$	0.888	0.903*
TLI	$0.90 \leq TLI$	$0.80 \leq TLI$	0.909	0.926**
IFI	$0.95 \leq IFI$	$0.85 \leq IFI$	0.919	0.934*

TABLE 4   Fit indices from multivariate confirmatory factor analysis of HIV/AIDS-Related Stigma Scale before and after modification

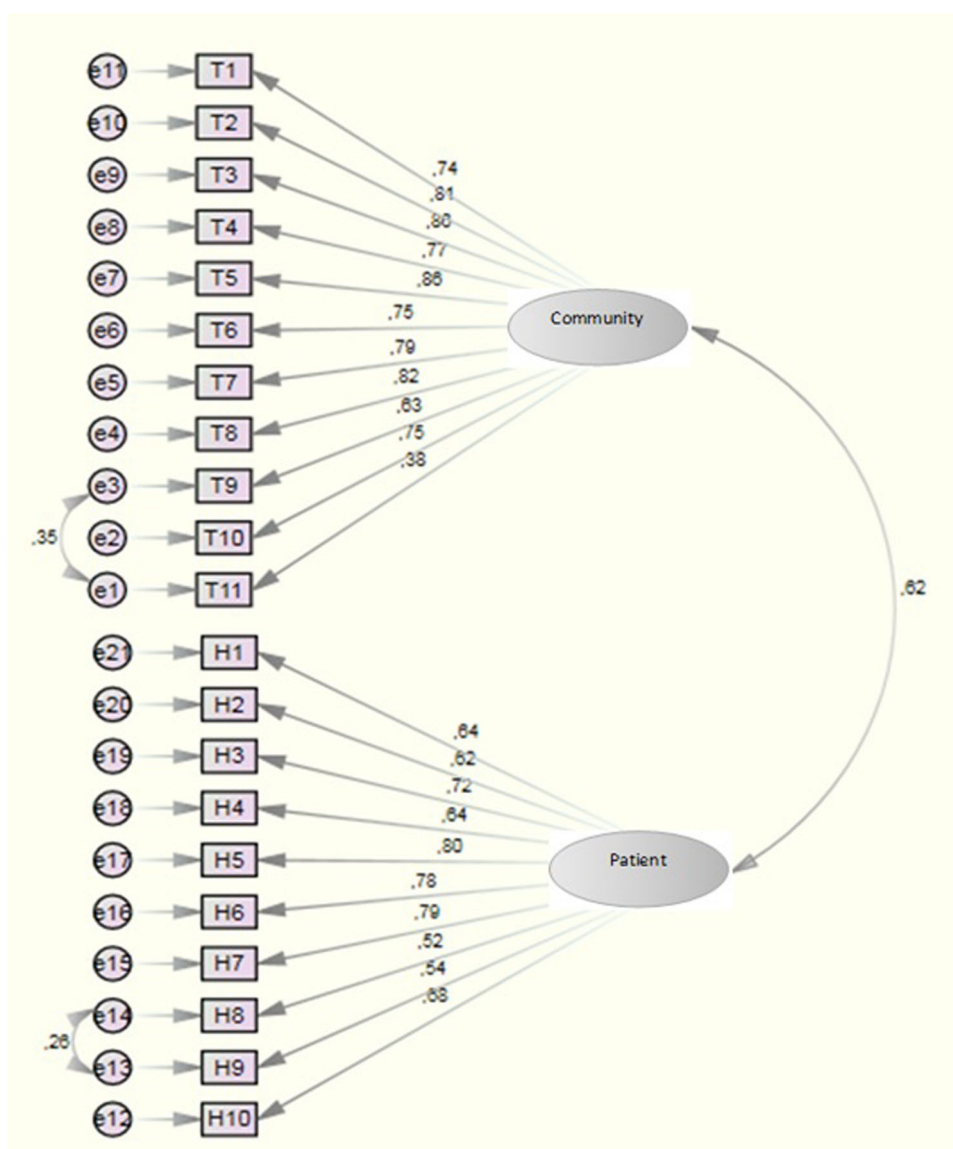*Acceptable fit indices.

**Perfect fit indices.

FIGURE 1   Path graph for the factor structure of HIV/AIDS-Related Stigma Scale

TABLE 5 The Average variance Explained (AVE) and Composite Reliability (CR) values for the HIV/AIDS-Related Stigma Scale

Factor	Community	Patient	CR	AVE	$\sqrt{AVE}$
Community	1.000		0.85	0.66	0.81
Patient	0.569	1.000	0.81	0.59	0.77

correlation coefficients of the scale ranged from 0.35 (lowest) to 0.75 (highest). The correlation coefficients were greater than 0.20 for all the items in the scale (Table 3).

4 | DISCUSSION

To test the content validity of the HIV/AIDS-Related Stigma Scale, the opinions of nine experts were obtained. The Kendal analysis of their opinions showed no difference in terms of the understandability of the scale items. The test–retest measurement could not be performed in the AIDS patient group. In addition, the test–retest analysis conducted with the community group at a 4-week interval revealed that the correlation coefficient was $r = 0.98$ for community perspectives on HIV/AIDS ($p < 0.001$). As a result, the scale was found to be consistent across time and people.

In the present study, based on the EFA, the KMO coefficient of 0.945 and the significant Bartlett's test of sphericity results indicated that the sample size was perfectly adequate and the data had a multivariate normal distribution (Chan & Idris, 2017). The total variance of the scale was 52.061. An exploratory variance of 40%–60% has been reported to be acceptable (Samuels, 2016).

The item analysis showed that the items could clearly identify HIV/AIDS-related stigma in the patients and HIV-negative individuals. It is recommended in the literature that the lowest factor loading of an item could vary from 0.30 to 0.40 (Samuels, 2016). In our study, the item-total score correlation coefficients in the item analysis ranged from 0.35 to 0.74. In Van Rie et al.'s (2008) study, the factor loadings of the scale were reported to vary between 0.38 and 0.85. The high correlation coefficients between the scale and its factors showed that the scale has a high internal consistency.

Concerning the model fit, χ^2/df lower than 3 indicates excellent fit, RMSEA 0.08 and less indicates good fit, NFI and CFI 0.90 and higher indicates good fit, NFI and CFI 0.95 and higher indicates excellent fit, IFI 0.90 and higher indicates good fit, GFI 0.90 and higher indicates good fit, and AGFI 0.85 and higher indicates acceptable fit (Kline, 2016; Tabachnick & Fidell, 2019). Van Rie et al. (2008) reported the following fit indices for the original scale: TLI = 0.94, CFI = 0.88, and RMSEA = 0.11. More than one fit index is used in the CFA, and a model fit is evaluated using all fit indices (Gurbuz & Sahin, 2018). In the present study, the fit indices of RMSEA, NFI, IFI, GFI, AGFI, CMIN, and CMIN/DF showed that the model fit was acceptable. Given the model fit indices and the factor loadings of the scale items, the two-factor structure of the HIV/AIDS-Related Stigma Scale with 21 items was confirmed and the model was found to have acceptable fit indices.

When the convergent and divergent validity are tested, a CR value of 0.70 and above and AVE values of 0.50 and above indicate convergent validity. For divergent validity, correlations between factors are calculated, and the square root of the AVE values should be greater than these correlation values (Ab Hamid et al., 2017). For this reason, based on the results, it was determined that the conditions were met.

Cronbach's α reliability coefficient is utilized to assess internal consistency. When it ranges from 0.60 to 0.79, a measurement tool is considered to be relatively reliable, and when it ranges from 0.80 to 1, the tool is considered to be highly reliable (Bujang et al., 2018). In the current study, Cronbach's α was 0.89 for the community perspectives subscale and 0.93 for the patient perspectives subscale. As for the original scale, Cronbach's α was 0.85 for community perspectives and 0.83 for patient perspectives (Van Rie et al., 2008). Similar to the original scale, Cronbach's α for both subscales in the Turkish version of the scale showed that the scale was quite reliable (Bujang et al., 2018).

5 | CONCLUSION

The psychometric properties of the Turkish version of the HIV/AIDS-Related Stigma Scale were found to be acceptable in the subscales of community and patient perspectives. Our findings showed that the scale is a valid and reliable scale which reveals the perceptions of Turkish people about HIV/AIDS-related stigmatization. It can be recommended that the validity and reliability of the scale should be analyzed in different cultures and with larger samples.

5.1 | Implications for nursing practice

The level of stigmatization revealed by the scale gives information about community and patients perspectives on HIV/AIDS. Stigmatization affects mental health negatively by causing individuals to be isolated from society and to feel worthless. Therefore, psychiatric nurses, public health nurses, and nurses providing care to HIV/AIDS patients can identify stigmatization from the perspectives of the patient and the community. This may guide the efforts towards the solution of many problems arising due to stigmatization.

ETHICS STATEMENT

Written permission was obtained from Annelies Van Rie, who developed the HIV/AIDS-Related Stigma Scale, through e-mail to examine the reliability and validity of the scale. Ethical approval was obtained from Ondokuz Mayıs University University, Noninvasive Research Ethics Committee (No: 2015/396). In addition, the participants were informed about the aim of the research and their informed consent was obtained.

DATA AVAILABILITY STATEMENT

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

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