Clinical and Experimental Health Sciences

# Turkish Validity and Reliability Study of the Trust in the Health Care Team Scale

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**ABSTRACT**

**Objective:** This study aimed to conduct the Turkish validity and reliability study of the Trust in Health Care Team Scale and to contribute to the literature by proposing a valid, reliable and easy-to-use measurement tool for researchers

**Methods:** This methodological study was conducted between March and May 2022, using the survey method, among 1013 people over the age of 18 who live in Konya and can read and write Turkish. The research was designed within the scope of the quantitative research model in terms of method. The first part consists of demographic characteristics and the second part consists of adapted version of the items. The data were analyzed using the SPSS and AMOS programs. First, the construct validity of the scale was performed followed by the content validity.

**Results:** As a result of the construct validity, it was found that the fit indices of the scale were at an acceptable level (X2/df=2.215; GFI=0.998; AGFI=0.997; NFI=0.998; RFI=0.997; RMR=0.043; SRMR=0.029). As a result of the reliability analysis, the Cronbach's alpha value was 0.975.

**Conclusion:** The results indicated that the Trust in the Health Care Team Scale has an adequate level of validity and reliability in Turkish culture to measure the level of trust in the health care team.

**Keywords:** Health Communication; Health Professional-Patient Relationship; Trust; Validation Studies

## 1. INTRODUCTION

Trust in health system and health care professionals is considered an important component of high-quality care, as well as achieving desired health outcomes (1-4). Trust is an optimistic acceptance of one's vulnerability, accompanied by a belief that one's own interests will be taken care of by physicians, health institutions or the system (5,6). There are multiple aspects of trust regarding the concept of health care in the literature, the aspects associated with trust are as follows: fidelity, honesty, confidentiality, competency, and general trust (6,7). Patients' trust in health professionals has rarely been examined in the literature. However, with the developments in information and communication technology, and the increase in the use of the Internet and social media, it has become easier for individuals to access information. The news and information published in the media, and in various platforms about issues such as physician negligence, incorrect treatment and practices, and medical errors attract the attention of the society, cause public to question the trust in health care providers (8).

In the last 20 years, research has proved that patients who trust more in their physicians and health service providers are more interested in their own care process, more likely to follow the recommended care and medications and generally are abler to control chronic conditions (9-13). An individual's trust in a health care provider is also related to better use of health care, including greater continuity of care with a provider, not delaying care, and keeping track of appointments (14). Conceptually, distrust in the health care system and health care professionals causes a delay in health care – seeking, which complicates the care process and often adversely affects patient outcomes (15). Delayed access to healthcare services causes patients to seek treatment at advanced stages, necessitating complex and costly treatments; this puts economic strain on the healthcare system as well as individuals. Chronic diseases such as cancer or diabetes, which can be prevented with early diagnosis, in particular, require intensive care and long-term treatment processes in their advanced stages. These additional costs consume more of the healthcare system's




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resources and put an extra burden on the budget. At the same time, when treatment is started late, the likelihood of the disease spreading to other organs increases, which reduces the quality of life of patients and creates a need for more social support. In order to reduce such risks, the importance of early diagnosis should be emphasized, regular health check-ups should be encouraged, and strategies that increase access to healthcare should be implemented. (15).

Many factors affect patients' trust in health professionals. These are as follows: health care workers allocating time for patient and relatives, listening to them, giving opportunity to ask questions, answering questions, providing information about diseases or conditions, as well as adapting a polite, patient, empathetic, and honest approach towards them, and attaching importance to their privacy (6,16,17). In addition, factors such as physician's gender, appearance, educational status, competencies, professional experience, communication skills, reputation, being a media figure, and social circle have also influence on patients' trust in professionals (18). Although it primarily depends on the attitude and behavior exhibited by the physician, trust regarding the physician-patient relationship is influenced by many factors. Various factors such as the situation patients are in, their expectations from treatment, physical and technological condition of the institution from which they purchase service, approaching policies toward patients, requirements for health care services, sociodemographic characteristics of patients, and expectations of physicians towards their relationship with patients may influence the level of trust.

Recent systematic reviews emphasize concerns about the number of measurement tools used in order to assess the level of trust and distrust in health care institutions and professionals, in addition to quantitative and qualitative validity of existing instruments (19-21). A separate concern is that current measures do not adequately capture all relevant dimensions of trust. Based on a systematic review of the criteria used to assess trust in a health system, the Health Systems Trust Content Domain Framework was developed to conceptualize trust (20). The review concluded that some key constructs, such as fairness, are rarely included in confidence measures. Similarly, recent literature suggests that patient-provider communication is a critical component of trust, but communication is rarely the focus of current measures (22). Also, most existing scales measure trust as a one-dimensional construct, but previous research shows that trust is complex and consists of multiple dimensions (20,22). Therefore, current measures do not allow researchers to assess certain dimensions of trust. For example, in studies focused on health equity, it is crucial to evaluate aspects such as fairness and impartiality in the treatment of patients, which may not be adequately captured by existing measurement tools. This scale, on the other hand, includes the most comprehensive trust measures ever developed, based on the Health Systems Trust Content Analysis created by Ozawa and Sripad (20). It is seen that trust studies conducted in the field of health in Turkey are very limited. It is essential to better understand what constitutes patients' trust in health care providers, and to take proper measures based on the outcomes. Since no valid and reliable studies have been found to measure individuals' level of trust in health care professionals and factors affecting the formation of trust, the current study is considered important in terms of filling a significant gap in the literature. In this study, it was aimed to perform Turkish validity and reliability of the Trust in Health Care Team Scale, developed by Richmond et al., and to contribute to the literature through suggesting a valid, reliable and easy to use measure instrument for researchers (23).

## 2. METHOD

### *2.1. Study Design*

This methodological study is a cross-sectional study and was conducted between March and May 2022 in Konya province with individuals over the age of 18 who can read and write Turkish through online platforms. The research was designed within the scope of the quantitative research model in terms of method. Methodological studies are defined as research on data editing and analysis methods designed to evaluate and validate research instruments and techniques (24). The survey prepared at docs.Google.com/forms was sent to individuals over the age of 18 via online tools (e-mail, WhatsApp, Facebook and Instagram). The survey application time was approximately 10 minutes. A detailed information letter was written before the online survey was prepared. An explanation was made about the research and the surveys were given to them. The inclusion criteria for the research were individuals over the age of 18 who can read and write Turkish, live in Konya and have used healthcare services in the last six months. The exclusion criteria are, first of all, individuals under the age of 18 are excluded from the scope of the research. In addition, individuals who have difficulty reading or writing Turkish are also excluded, because this situation may prevent them from reaching the level of communication and understanding required by the research. Individuals who have not received healthcare services in the last six months are also not included in the research, because the target of the study is individuals with healthcare experience.

### *2.2. Participants*

In validity and reliability studies, 10 times the number of items is considered adequate to determine the sample size (25). In this context, considering that the scale consists of 29 items, at least 290 people are considered to constitute an adequate sample size. Individuals who are over the age of 18 and can read and write in Turkish were included in the study. Within the scope of the research, the convenience sampling method was used, and 1013 people were reached.

### 2.3. Instrument

Personal information form (eight questions about socio-demographic characteristics such as age, gender, marital status, educational status, health institution preference, income status), and the "Trust in the Health Care Team Scale" were used to collect the data. The scale consists of 29 items and 7 subscales. The subscales are as follows: Communication Competency (items 1,2,3,4, and 5), Fidelity (item 6,7,8,9, and 10), Systems Trust (items 11,12, and 13), Confidentiality (items 14, 15, and 16), Fairness (items 17, 18, 19, 20, 21, 22, and 23), Stigma-Based Discrimination (items 24, 25 and 26), and Global Trust (items 27, 28, and 29). The participants were asked to mark the most suitable option ranging from "1-strongly disagree, 2-Disagree, 3-Neutral, 4 – Agree to 5-strongly agree".

### 2.4. Procedure and Statistical Analyses

The data were analyzed using package programs of SPSS 26.0 and AMOS 24.0. For quantitative variables, mean, standard deviation, and median were calculated, while number and percentage were used for qualitative variables. In the study, language validity, content validity, and construct validity were conducted regarding the scale validity.

In order to test the language validity of the scale, the translation-reverse translation method was used. The language validity was achieved by comparing the items of the original scale and the adaptation, thus ensuring semantic equality. The scale was translated into Turkish without establishing any changes by six different academicians who were experts in the field. A common text in target language was created after the evaluation of all translations. The translated version was retranslated into English by a different expert independently of the previous translators, who had a command of the culture of the country where the scale was developed. The original scale and Turkish translation were assessed for language equivalence, and the final form of the scale was determined in order to submit for expert opinion. After it was decided that there was no difference in meaning in the expressions, a preliminary application was made to 10 people in order to test the intelligibility of the items.

After the necessary corrections were made through the pilot application, the content validity was established. To test whether a scale is suitable for a new language, construct and content validity should be ensured (26). Therefore, the content validity of the scale items was calculated using the Kendall W Test. Academician who are experts in their fields were asked to evaluate the suitability of each scale item in terms of content and language on a range from 1 to 4 (1 point: inappropriate; 2 points: somewhat appropriate/requires revision; 3 points: right but requires small changes; 4 points: very reasonable). The percentage value of the answers reporting the appropriateness of each item was calculated with the scores given by each expert to the statements. When the responses of six experts were analyzed with Kendall's W test for the comprehensive items' comprehensibility, simplicity, and correlational validity, there was no statistical difference between the scale items and expert opinions (Kendall's W= 0.060; p= 0.526 > 0.05).

Construct validity analysis was performed in the second phase of the study. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used to determine the construct validity. Kaiser Meyer Olkin (KMO) and Bartlett's test were used for factor analysis suitability. The KMO test is used to assess the validity of factor analysis and measures the partial correlation between variables. The closer the KMO value is to 1.0, the higher the suitability of the data set for factor analysis. Bartlett's test tests the significance of the correlation matrix and determines whether there is a significant relationship between the variables. These two tests are important to assess the suitability of the data prior to factor analysis. Acceptable factor values for EFA should be 0.60 and above (27). The value obtained by dividing the chi-square into degree of freedom below the value of 3, RMSEA value of 0.08 or lower, NNFI, CFI and NFI values over 0.90, RMR value close to zero, and GFI and AGFI values close to 1 shows that the model is strong (28,29). Divergent and convergent validity were assessed using the average variance extracted (AVE), construct reliability (CR), and the square of correlation. In order to determine the reliability, the Cronbach's alpha coefficient and item-total score correlation were calculated to test the internal consistency. A p value of $< 0.05$ was set for the analyses. The Cronbach's alpha coefficient was used to evaluate the internal consistency. Values above 0.70 are considered acceptable, while those above 0.80 indicate good internal consistency (30).

### 2.5. Ethics

Permission was obtained via email from the authors in order to perform Turkish adaptation of the Trust in the Health Care Team Scale, which was originally developed in English. The participants were informed about the research and the volunteer application form was provided on the online system, and the data of those who approved the form were included in the study. In addition, ethical approval was granted by Non-Interventional Clinical Research Ethics Committee of Selçuk University, Faculty of Health Sciences, dated 31/03/2022 and numbered 2022/275.

## 3. RESULTS

Descriptive findings of the participants, exploratory factor analysis, confirmatory factor analysis, reliability analysis and correlation findings of the scales were given in this part.

As given in Table 1, the average age of the participants was 34.76±13.59 years. Of the participants, 605 (59.7%) are female and 408 (40.3%) are male. 493 (48.7%) are married, 481 (47.5%) are single, and 395 (39.0%) have a bachelor's degree. Of the participants, 495 (48.9%) prefer public hospitals, 572 (56.5%) have moderate income status, 650 (64.2%) have insurance, and 443 (43.7%) have applied to the doctor 1 to 2 times in the last 6 months.

The adjusted item-total correlation values were examined prior to performing EFA for the Trust in the Health Care Team Scale, and it was determined that the lowest value was 0.551, and the analyses were continued without removing any items. EFA analyses were performed using principal component analysis and varimax rotation methods.

***Table 1.*** *Descriptive Findings Regarding the Demographic Characteristics of the Participants*

| | | n | % |
|---|---|---|---|
| Age | Avg ±SD (34.76±13.59) | | |
| Gender | Male | 408 | 40.3 |
| | Female | 605 | 59.7 |
| Marital Status | Married | 493 | 48.7 |
| | Single | 481 | 47.5 |
| | Living separately from his/her spouse' or 'spouse deceased | 39 | 3.8 |
| Educational Status | Primary | 51 | 5.0 |
| | High School | 271 | 26.8 |
| | Associate Degree | 154 | 15.2 |
| | Bachelor's Degree | 395 | 39.0 |
| | Postgraduate | 142 | 14.0 |
| Preferred Health Care Institution | Family physician | 66 | 6.5 |
| | Private hospital | 246 | 24.3 |
| | Public hospital | 495 | 48.9 |
| | University hospital | 206 | 20.3 |
| Income Status | Very low | 19 | 1.9 |
| | Low | 69 | 6.8 |
| | Middle | 572 | 56.5 |
| | Good | 294 | 29.0 |
| | Very good | 59 | 5.8 |
| Insurance Status | Yes | 650 | 64.2 |
| | No | 363 | 35.8 |
| Frequency of Visits to the Doctor in the Last 6 Months | Never | 135 | 13.3 |
| | 1 to 2 times | 443 | 43.7 |
| | 3 to 6 times | 275 | 27.1 |
| | More than 6 times | 160 | 15.8 |
| | **Total** | **1013** | **100** |

When the KMO (0.965) and Bartlett's sphericity test values ($\chi 2(300) = 28978.409$; $p < .01$) were examined according to the EFA results of the Trust in the Health Care Team Scale, the data were found to be suitable for analysis. It was seen that the items "people working in health services can conduct experiments (scientific research) on patients without their knowledge", and "people working in health services respect patients' confidentiality" were in different subscales, and were removed from the analysis, respectively. As a result of the analysis conducted with 27 items, the items "people working in health services keep medical records confidential" and "people working in health services use secure systems to store medical records" were found to be overlapping. Both items were excluded from the analysis since "Privacy" subscale would not be available in case of excluding either of the items. The final version of the scale consists of 6 subscales and 25 items. The Justice subscale explained 21.26% of the variance, while Communication Competency explained 17.26%, Fidelity explained 13.78%, Stamping-Based Discrimination explained 11.80%, System Trust explained 10.97%, Global Trust explained 7.95%, and the total explained variance was 83.03% (Table 2).

According to the scale structure that emerged after EFA, second level CFA was performed. When the Figure 1, including CFA results of the Trust in the Health Care Team Scale was examined, it was found that the fit indices were at an acceptable level ($X^2/df=2.215$; GFI=0.998; AGFI=0.997; NFI=0.998; RFI=0.997; RMR=0.043; SRMR=0.029). Factor loads were statistically significant ($p < .05$). These findings indicate that the scale is a valid instrument compatible with the data.

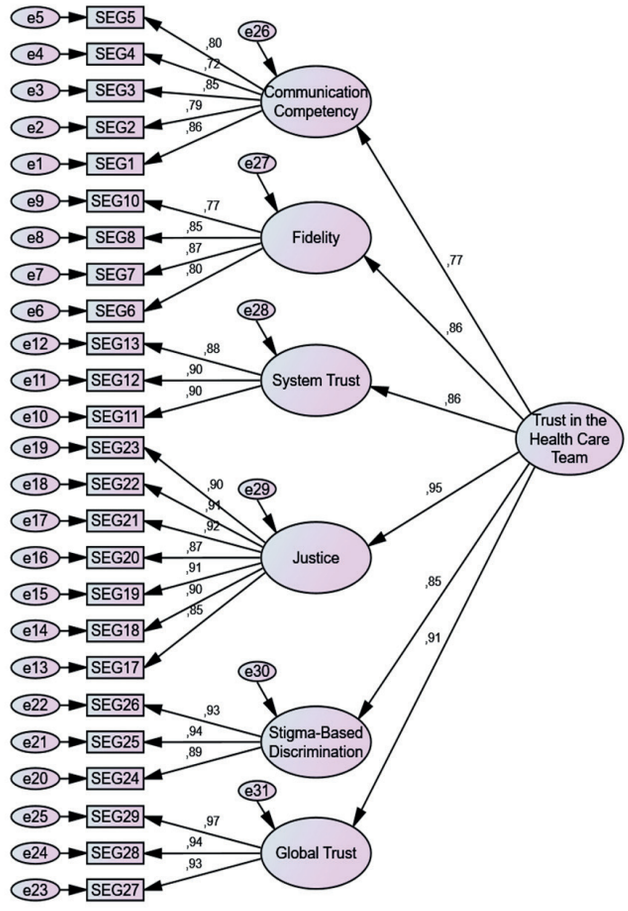


***Figure 1.*** *CFA Model of the Trust in the Health Care Team Scale*

Results of descriptive analysis, correlation analysis, reliability, and convergent and divergent validity related to the Trust in the Health Care Team Scale were given in Table 3. The AVE value of the scale dimensions of Trust in the Health Care Team greater than 0.500, and the CR value greater than 0.700 indicate convergent validity. When the results were examined, it was seen that the AVE value for any of the two subscales was greater than the square of their correlation, and it was determined that the scale had divergent validity (30). According to the CA values, the scale and subscales were found to be reliable.

***Table 2.*** *Descriptive Factor Analysis Results of the Trust in the Health Care Team Scale*

| The Trust in the Health Care Team Scale | F1 | F2 | F3 | F4 | F5 | F6 |
|---|---|---|---|---|---|---|
| People working in health services treat patients fairly regardless of their sexual orientation | **0.740** | 0.237 | 0.289 | 0.216 | 0.265 | 0.151 |
| People working in health services treat patients fairly regardless of their gender | **0.740** | 0.270 | 0.235 | 0.303 | 0.231 | 0.241 |
| People working in health services treat each patient fairly regardless of their race and ethnicity | **0.717** | 0.368 | 0.307 | 0.218 | 0.207 | 0.140 |
| People working in health services treat patients fairly regardless of their religious beliefs | **0.717** | 0.234 | 0.210 | 0.356 | 0.317 | 0.203 |
| People working in the health services treat patients fairly regardless of their educational status | **0.715** | 0.304 | 0.287 | 0.255 | 0.244 | 0.176 |
| People working in health services treat patients fairly regardless of their weight | **0.714** | 0.286 | 0.196 | 0.324 | 0.250 | 0.287 |
| People working in health services treat patients fairly regardless of their financial status | **0.593** | 0.348 | 0.366 | 0.122 | 0.273 | 0.223 |
| People working in health care believe patients when they say something is wrong | 0.141 | **0.787** | 0.214 | 0.055 | 0.216 | -0.013 |
| People working in health services explain the benefits and risks of treatments to patients | 0.196 | **0.787** | 0.133 | 0.196 | 0.072 | 0.182 |
| People working in health services listen to patients | 0.240 | **0.776** | 0.204 | 0.138 | 0.092 | 0.225 |
| People working in health services have common sense | 0.284 | **0.723** | 0.201 | 0.219 | 0.029 | 0.222 |
| People working in health services follow up patients when necessary | 0.272 | **0.704** | 0.096 | 0.098 | 0.324 | 0.084 |
| People working in health care recommend expensive treatments to earn money | 0.327 | 0.190 | **0.726** | 0.252 | 0.150 | 0.241 |
| People working in health services keep appointment durations short | 0.183 | 0.270 | **0.713** | 0.230 | 0.291 | 0.016 |
| For people working in healthcare, making money is more important than patients' needs | 0.273 | 0.146 | **0.712** | 0.254 | 0.113 | 0.291 |
| People working in health services hide their mistakes | 0.284 | 0.290 | **0.708** | 0.235 | 0.232 | 0.082 |
| People working in health services treat patients diagnosed with HIV (AIDS) unfairly | 0.358 | 0.204 | 0.311 | **0.764** | 0.246 | 0.122 |
| People working in health services treat patients with a mental health history unfairly | 0.303 | 0.185 | 0.307 | **0.753** | 0.202 | 0.187 |
| People working in health services treat patients with substance use unfairly | 0.320 | 0.237 | 0.322 | **0.752** | 0.199 | 0.172 |
| People working in health services are held responsible if they do not treat patients fairly | 0.324 | 0.227 | 0.277 | 0.217 | **0.770** | 0.173 |
| People working in health services are held responsible for discriminating against patients | 0.373 | 0.227 | 0.280 | 0.170 | **0.736** | 0.142 |
| People working in health care services are held responsible in case of mistakes | 0.346 | 0.200 | 0.199 | 0.352 | **0.660** | 0.263 |
| I believe that I can trust people working in health care | 0.422 | 0.335 | 0.272 | 0.246 | 0.273 | **0.653** |
| When I think about everything, I trust people who work in health care | 0.423 | 0.324 | 0.267 | 0.237 | 0.279 | **0.652** |
| People providing health care services are reliable | 0.459 | 0.365 | 0.282 | 0.256 | 0.278 | **0.585** |
| **Self-values** | 15.739 | 1.679 | 1.103 | 0.865 | 0.760 | 0.612 |
| **Variance explained (%)** | 21.26 | 17.26 | 13.78 | 11.80 | 10.97 | 7.95 |
| **The total variance explained (%)** | 21.26 | 38.52 | 52.30 | 64.10 | 75.08 | 83.03 |

***Table 3.*** *Correlational Findings of the Subscales*

| Subscales | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| **1. CC** | - | 0.352 | 0.336 | 0.470 | 0.305 | 0.471 | 0.592 |
| **2. F** | 0,594** | - | 0.465 | 0.555 | 0.534 | 0.505 | 0.744 |
| **3. ST** | 0,580** | 0,682** | - | 0.611 | 0.470 | 0.541 | 0.748 |
| **4. J** | 0,686** | 0,745** | 0,782** | - | 0.579 | 0.710 | 0.863 |
| **5. SBD** | 0,553** | 0,731** | 0,686** | 0,761** | - | 0.504 | 0.741 |
| **6. GT** | 0,687** | 0,711** | 0,736** | 0,843** | 0,710** | - | 0.815 |
| **7. THCT** | 0,770** | 0,863** | 0,865** | 0,929** | 0,861** | 0,903** | - |
| **Average** | 3.630 | 3.145 | 3.491 | 3.563 | 3.595 | 3.586 | 3.502 |
| **Std Deviation** | 0.865 | 1.148 | 1.173 | 1.133 | 1.167 | 1.147 | 0.961 |
| **AVE** | 0.645 | 0.681 | 0.801 | 0.800 | 0.851 | 0.900 | 0.768 |
| **CR** | 0.900 | 0.895 | 0.923 | 0.965 | 0.945 | 0.964 | 0.988 |
| **CA** | 0.899 | 0.894 | 0.923 | 0.965 | 0.945 | 0.964 | 0.975 |

*CC = Communication Competency; F= Fidelity; ST = System Trust; J= Justice; SBD = Stigma-Based Discrimination; GT = Global Trust; THCT = Trust in the Health Care Team; AVE = Average Variance Extracted; CR = Construct Reliability; CA = Cronbach's Alpha*

*The values below the diagonal show the correlation between the factors, while the values above show the square of the correlation.*

***p < .01*

## 4. DISCUSSION

The study was carried out in order to examine the Turkish validity and reliability of the "Trust in the Health Care Team Scale", developed by Richmond et al. (23), and to measure adult individuals' level of trust in the health care team in health institutions that provide patient-centered care and work environment for large number of health care professionals working in cooperation. Given that the internal consistency level was required to be greater than 0.80 for measurement instruments, the reliability of the Turkish adaptation (CA= 0.975) was provided (31). Additionally, as a result of the item analysis, it was found that the item-total correlation coefficients of the scale met the minimum criterion of 0.50. The scale was found to be adequate in terms of item-test correlations (32). In the construct validity analysis of the scale, the model fit, which was found using the descriptive analysis, was tested with the confirmatory factor analysis. Although no conclusion has been established on which fit indices are considered in the statistics calculated for model-data fit with confirmatory factor analysis, the index values of X2/df, RMSEA, SRMR, GFI, TLI, CFI, etc. are provided (32). The original scale fit index values were X2/df= 1.613; RMSEA= 0.065; SRMR= 0.03 and CFI= 0.98, while the fit index values in the current study were found X2/df=2.215; GFI=0.998; AGFI=0.997; NFI=0.998; RFI=0.997; RMR=0.043; SRMR=0.029. When the fit indices were examined, it was found that the six-dimensional model provided acceptable fit, and the original factor structure of the scale was found to be compatible with the Turkish adaptation, except items 9, 14, 15 and 16. Therefore, the model consisting of 25 items and

six subscales was found to be theoretically and statistically significant, and according to the results of the reliability and validity studies, the Trust in the Health Care Team Scale is an applicable instrument.

## 5. CONCLUSION

Today, it is observed that patients' trust towards healthcare providers has decreased. Insecurity can cause loss of time and money by going from hospital to hospital. In medical applications where not harming the patient and providing the patient with the highest benefit is a priority, the patient's trust in the healthcare team is important in terms of commitment to the healthcare provider or institution. In determining the quality of the health service received, studies should be carried out to evaluate the trust of the patients in the health care team. It can be used as a criterion in the evaluation of health services. Periodically repeated evaluations will be an important topic for both hospital administrators and policy makers in the future. It is extremely important to determine the reasons that affect the trust levels of the patients in the health care team in health institutions and to make improvements for these reasons in order for the hospitals to provide sustainable and quality services.

There are many measurement tools in the literature that measure trust in the health system, health institution and health professionals. Most of the existing scales measure trust as a single-dimensional construct; however, previous studies have shown that trust is complex and consists of multiple dimensions. Therefore, the existing measures do not provide researchers with the opportunity to assess specific dimensions of trust that may be particularly relevant to the research questions (e.g., justice in health equity studies). This scale, whose validity and reliability we measured, was designed to comprehensively assess various dimensions of trust. As a result of the validity and reliability analyses, it was revealed that the scale is an important tool in understanding the relationship between health professionals and patients. The strength of the study is that it provides researchers with the opportunity to measure trust in all its dimensions.

However, among the limitations of the study is that the focus of trust relationships may differ according to the health service delivery model. Various health systems have distinct structures, practices, and cultural contexts that can influence how trust is established and perceived. For instance, in systems where patient-centered care is prioritized, trust dynamics may be more pronounced compared to models with a more hierarchical approach. Additionally, since this study was conducted in Turkey, it only measures trust in health teams working within the Turkish health system. This geographical and contextual specificity means that the findings may not be generalizable to other countries or health care systems, where different socio-economic, political, and cultural factors might affect trust levels. Consequently, the level of trust may vary significantly in different health service delivery systems, and further research in diverse settings is necessary to understand these variations comprehensively.

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***Author Contributions:***
*Research idea: EF, HE, SÜ, ŞK*
*Design of the study: EF, HE, SÜ, ŞK*
*Acquisition of data for the study: EF, HE, SÜ, ŞK*
*Analysis of data for the study: EF, HE, SÜ, ŞK*
*Interpretation of data for the study: EF, HE, SÜ, ŞK*
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## REFERENCES

[1] Gilson L. Trust and the development of health care as a social institution. Soc Sci Med. 2003;56(7):1453-1468. https://doi.org/10.1016/S0277-9536(02)00142-9

[2] Brennan N, Barnes R, Calnan M, Corrigan O, Dieppe P, Entwistle V. Trust in the health-care provider–patient relationship: A systematic mapping review of the evidence base. Int J Qual Health Care. 2013;25(6):682-688. https://doi.org/10.1093/intqhc/mzt063

[3] Lee YY, Lin JL. How much does trust really matter? A study of the longitudinal effects of trust and decision-making preferences on diabetic patient outcomes. Patient Educ Couns. 2011;85(3):406-412. https://doi.org/10.1016/j.pec.2010.12.005

[4] Kelley JM, Kraft-Todd G, Schapira L, Kossowsky J, Riess H. The influence of the patient-clinician relationship on healthcare outcomes: A systematic review and meta-analysis of randomized controlled trials. PLoS One. 2014;9(6). https://doi.org/10.1371/journal.pone.0094207

[5] Giordano GN, Lindström M. Trust and health: Testing the reverse causality hypothesis. J Epidemiol Community Health. 2016;70(1):10-16. https://doi.org/10.1136/jech-2015-205822

[6] Hall MA, Zheng B, Dugan E, Camacho F, Kidd KE, Mishra A, Balkrishnan R. Measuring patients' trust in their primary care providers. Med Care Res Rev. 2002;59(3):293-318. https://doi.org/10.1177/1077558702059003004

[7] Nikodem K, Ćurković M, Borovečki A. Trust in the healthcare system and physicians in Croatia: A survey of the general population. Int J Environ Res Public Health. 2022;19(2):993. https://doi.org/10.3390/ijerph19020993

[8] Gülcemal E, Keklik B. A study on the investigation of factors affecting patients' confidence in physicians: The case of Isparta Province. Mehmet Akif Ersoy University Journal of Social Sciences Institute. 2016;8(14):64-87. https://doi.org/10.20875/sb.66346

[9] Braksmajer A, Fedor TM, Chen SR, Corales R, Holt S, Valenti W, McMahon JM. Willingness to take PrEP for HIV prevention: The combined effects of race/ethnicity and provider trust. AIDS Educ Prev. 2018;30(1):1-12. https://doi.org/10.1521/aeap.2018.30.1.1

[10] Gupta S, Brenner AT, Ratanawongsa N, Inadomi JM. Patient trust in physician influences colorectal cancer screening in

low-income patients. Am J Prev Med. 2014;47(4):417-423. https://doi.org/10.1016/j.amepre.2014.04.020

[11] Ratanawongsa N, Karter AJ, Parker MM, Lyles CR, Heisler M, Moffet HH, Schillinger D. Communication and medication refill adherence: The diabetes study of Northern California. JAMA Intern Med. 2013;173(3):210-218. https://doi.org/10.1001/jamainternmed.2013.1216

[12] Schoenthaler A, Montague E, Baier Manwell R, Brown R, Schwartz MD, Linzer M. Patient–physician racial/ethnic concordance and blood pressure control: The role of trust and medication adherence. Ethnicity & Health. 2014;19(5):565-578. https://doi.org/10.1080/13557858.2013.857764

[13] Fernandez A, Seligman H, Quan J, Stern RJ, Jacobs EA. Associations between aspects of culturally competent care and clinical outcomes among patients with diabetes. Med Care. 2012;74-79. https://doi.org/10.1097/MLR.0b013e3182641110

[14] Hillen MA, Butow PN, Tattersall MH, Hruby G, Boyle FM, Vardy J, Smets EM. Validation of the English version of the Trust in Oncologist Scale (TIOS). Patient Educ Couns. 2013;91(1):25-28. https://doi.org/10.1016/j.pec.2012.11.004

[15] LaVeist TA, Isaac LA, Williams KP. Mistrust of health care organizations is associated with underutilization of health services. Health Serv Res. 2009;44(6):2093-2105. https://doi.org/10.1111/j.1475-6773.2009.01017.x

[16] Gezergün A, Şahin B, Tengilimoğlu D, Demir C, Bayer E. Physician-patient relationship and communication from the perspective of patients: Example of a teaching hospital. Anadolu University Journal of Social Sciences 2006;6(1):129-144.

[17] Mazinani A. Building trust between patients and physicians. Multidisciplinary Cancer Investigation. 2017;1(3):25-26. https://doi.org/10.21859/mci-01033

[18] Shaya B, Al Homsi, Eid K, Haidar Z, Khalil A, Merheb K, Akl EA. Factors associated with the public's trust in physicians in the context of the Lebanese healthcare system: A qualitative study. BMC Health Serv Res. 2019;19(1):1-9. https://doi.org/10.1186/s12913-019-4354-0

[19] Müller E, Zill JM, Dirmaier J, Härter M, Scholl I. Assessment of trust in physician: A systematic review of measures. PLoS One. 2014;9(9). https://doi.org/10.1371/journal.pone.0106844

[20] Ozawa S, Sripad P. How do you measure trust in the health system? A systematic review of literature. Soc Sci Med. 2013;91:10-14. https://doi.org/10.1016/j.socscimed.2013.05.005

[21] Williamson LD, Bigman CA. A systematic review of medical mistrust measures. Patient Educ Couns. 2018;101(10):1786-1794. https://doi.org/10.1016/j.pec.2018.05.007

[22] Greene J, Ramos C. A mixed methods examination of health care provider behaviors that build patients' trust. Patient Educ Couns. 2021;104(5):1222-1228. https://doi.org/10.1016/j.pec.2020.09.003

[23] Richmond J, Boynton MH, Ozawa S, Muessig KE, Cykert S, Ribisl KM. Development and validation of the Trust in My Doctor, Trust in Doctors in General, and Trust in the Health Care Team Scales. Soc Sci Med. 2022; 298:114827. https://doi.org/10.1016/j.socscimed.2022.114827

[24] Wood GL, Haber J. Desenhos não-experimentais. In: Wood GL, Haber J, editors. Pesquisa em enfermagem: Métodos, avaliação crítica e utilização. Rio de Janeiro (RJ): Guanabara Koogan; 2001. p. 110-21.

[25] Alpar R. Spor, sağlık ve eğitim bilimlerinden örneklerle uygulamalı istatistik ve geçerlik-güvenirlik. Ankara: Detay Yayıncılık; 2016. (Turkish)

[26] Karakoç A, Dönmez P. Basic principles of scale development. World of Medical Education 2014;13(40):39–49. https://doi.org/10.25282/ted.228738

[27] Hooper D, Coughlan J, Mullen MR. Structural equation modelling: Guidelines for determining model fit. Electron J Business Res Methods. 2008;6(1):53-60.

[28] Karagöz Y. SPSS and AMOS applied quantitative-qualitative-mixed scientific research methods and publication ethics. Istanbul: Nobel Akademik Yayıncılık; 2017. (Turkish)

[29] Hair JF, Black WC, Babin BJ, Anderson RE. Multivariate data analysis. Upper Saddle River, NJ: Pearson; 2014.

[30] Özdamar K. Ölçek ve test geliştirme yapısal eşitlik modelleme IBM SPSS, IBM SPSS AMOS ve MINITAB uygulamalı. Eskişehir: Nisan Kitabevi; 2017. (Turkish)

[31] Halıcı M, Soyuk S, Gün İ. Organizational trust in healthcare professionals. J Manage Econ. 2015;13(3):180-198.

[32] Cortina JM. What is coefficient alpha? An examination of theory and applications. J Appl Psychol. 1993;78(1):98. https://doi.org/10.1037/0021-9010.78.1.98

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