Turkish version of the resilience scale for young children: Validity and reliability study

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A B S T R A C T

Purpose: This study was conducted to determine the validity and reliability of the Turkish version of the Resilience Scale for Young Children.
Method: This study used a methodological and descriptive design. The study was conducted with 210 parents of children aged 2–6 years at a Family Health Centre in Sakarya from June 2023 to January 2024. Data was collected by face-to-face interviews via a Descriptive Information Form and the Chinese Resilience Scale for Young Children. Translation processes, expert opinions, and content validity were meticulously addressed. Data analysis was utilized by IBM SPSS Statistics and AMOS 24.
Result: The mean age of parents was 35.85 ± 6.52 years, and 82.9% of the parents were mothers ($n = 174$). The item-content validity index (I-CVI) ranged between 0.81 and 0.94, indicating a high level of agreement between the experts. The Cronbach's alpha value for the scale was 0.791. In the exploratory factor analysis, it was determined that the distribution of the items according to the sub-dimensions was consistent with the original scale. Confirmatory factor analysis results are as follows: chi-square/df = 2.395, RMSEA = 0.082, GFI = 0.842, CFI = 0.853, IFI = 0.856, RFI = 0.726, NFI = 0.776 and TLI = 0.820.
Conclusion: This study revealed that the Turkish scale with four sub-dimensions and 16 items is a valid and reliable tool.
Practice implications: It is recommended to use the Turkish version of the Resilience Scale for Young Children to assess resilience in children aged 2–6 years.

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Introduction

Resilience, defined as the ability to adapt successfully despite challenging, threatening, or negative conditions, is considered an important protective factor against emotional and behavioral problems in children (Ding et al., 2023; Luthar et al., 2000; Steinhardt & Dolbier, 2008). This process includes various protective factors including individual, environmental, and social elements that operate simultaneously with risk factors such as distress and difficulties faced by the individual (Benzies & Mychasiuk, 2009; Luthar et al., 2000; Yoon et al., 2021; Zuo et al., 2023).

Risk factors for resilience in young children encompass a range of elements, including family structure and characteristics, family stress, child health issues, exposure to violence, disasters, migration, and epidemics (Masten, 2021; Szatmari, 2018; Tso et al., 2020; Yule et al., 2019; Zhu et al., 2023). Conversely, protective factors play a crucial

role in enhancing resilience. For instance, optimism and positive religious coping have been linked to higher resilience in studies on posttraumatic growth (Schaefer et al., 2018). A meta-analysis spanning the last 30 years identified self-regulation, family support, school support, and peer support as key protective factors (Sanjeevi et al., 2018). Additionally, research on early childhood maltreatment has highlighted the importance of participation in extracurricular activities, satisfaction with school, avoidance of bullying, and the development of strong communication and social skills as protective factors that bolster resilience (Khambati et al., 2018).

The resilience process in early childhood serves as a cornerstone for future resilience (Yoon et al., 2022). Assessing resilience during the 2–6 age period, when resilience begins to develop, is crucial due to the fundamental nature of this developmental stage. Early identification of resilience enables targeted interventions that can reduce the impact of negative experiences and promote positive outcomes (Dubowitz et al., 2016). By identifying resilient traits and behaviors early on, interventions can be tailored to help children develop robust coping mechanisms and adaptive skills (Miller-Lewis et al., 2013). While the

importance of resilience in young children is well recognized, the availability of appropriate measurement tools is essential for understanding and assessing this construct. Currently, there is a lack of Turkish instruments for measuring resilience in young children. This gap highlights the need to explore existing resilience-related scales and select an appropriate tool for adaptation to the Turkish context. A review of the resilience scales in the literature shows that they are generally designed for adolescents (Gartland et al., 2011; Takviriyanun, 2008) and adults (DeSimone et al., 2017; Harms et al., 2017; Ryan & Caltabiano, 2009). One scale specifically for the period when resilience begins to develop is the Chinese Young Children's Resilience Scale, developed by Zuo et al. (2023). This scale is a promising instrument for assessing resilience in young children aged 2–6 years. It incorporates a comprehensive set of items that cover various aspects of resilience, including individual characteristics, family environment, and social support. Additionally, the scale has demonstrated good validity and reliability in the Chinese context, making it a suitable candidate for adaptation to Turkish. Therefore, this study aims to conduct a Turkish validity and reliability study of the Chinese Young Children's Resilience Scale. By adapting this scale to the Turkish context, we aim to provide a valuable tool for researchers and practitioners to assess resilience in young Turkish children, ultimately contributing to our understanding of resilience and its role in child development.

Methods

Study type

This study employed a methodological and descriptive design to adapt the Turkish version of the Resilience Scale for Young Children, originally developed by Zuo et al. (2023), and to evaluate its validity and reliability.

Study setting

The study was conducted with parents of children aged 2–6 years who were followed up at a Family Health Centre in Sakarya from June 2023 to January 2024.

Study participants

Study participants were recruited from a family health center between June 2023 and January 2024. In scale adaptations, it is recommended to select a sample size of at least 5–10 times the number of items in the scale. For this study, with the scale consisting of 16 items, the sample size was calculated to be 160 individuals, taking 10 times the number of items. To account for potential dropouts, the sample size was increased by 20%, targeting 192 participants. During the study, 210 parents were admitted to the family health center and included in the study.

Inclusion criteria for the sample were determined as follows: being literate, speaking Turkish, being a volunteer participant in the study, and having a child aged 2–6 years.

Exclusion criteria for the sample were incomplete data filling, having visual or auditory problems, and wanting to withdraw from the investigation.

Data collection tools

Descriptive Information Form: The researchers developed the form. The form consists of 11 questions, including socio-demographic characteristics of the parents: age, gender, family type, family income level, education level, employment status, number of children, age of the children, and gender of the children.

Chinese Resilience Scale for Young Children: This scale was developed to assess resilience in young children aged 2–6 years. It consists of 16 items using a 5-point Likert scale, with responses ranging from 1 (never) to 5 (very often). The scale has four sub-dimensions, with the following Cronbach's alpha values: Social and Adaptive ($\alpha = 0.83$), Emotional Stability ($\alpha = 0.83$), Focused Engagement ($\alpha = 0.72$), and Self-Care ($\alpha = 0.71$). The 'Social and Adaptive' sub-dimension includes items 5, 12, 15, and 16; the 'Emotional Stability' sub-dimension includes items 1, 9, 13, and 14; 'Focused Engagement' includes items 2, 3, 4, and 8; and the 'Self-Care' sub-dimension includes items 6, 7, 10, and 11. The overall Cronbach's alpha for the scale is 0.87. Total scores range from 16 to 80, with higher scores indicating a higher level of resilience. There are no reverse-scored items on the scale. The original scale is in Chinese. The study team translated the scale into English to facilitate its use. The study's corresponding author, Yirui Luo, was contacted by e-mail, and permission was obtained for the Turkish validity and reliability study.

Validity and reliability stages

Translation process

During the language adaptation phase of the scale, the translation-back translation method, consisting of the five stages recommended by the World Health Organization (WHO), was implemented to minimize conceptual and expression differences (ITC, 2018; WHO, 2017). Initially, the scale was translated into Turkish by three individuals proficient in both Turkish (native language) and English (forward translation). It is recommended that the scale be translated from English to Turkish by health professionals familiar with the scale's terminology and experienced in interviewing/data collection (ITC, 2018; WHO, 2017). In this study, the scale was translated into Turkish by three translators who were knowledgeable about the subject matter and aware of the cultural, psychological, and grammatical differences between the two languages (ITC, 2018). The translations were then revised by the researcher (expert panel) and independently by two experts fluent in both languages who had not seen the English version of the questionnaire. These experts translated the Turkish version back into English (back-translation) (ITC, 2018; WHO, 2017). The Turkish translation was reviewed after comparing the translated expressions with the original English expressions, and necessary adjustments were made.

Expert panel/opinions

At this stage, the evaluation of the semantic and conceptual equivalence of the scale was requested from experts. These experts should assess the suitability of each item for the target culture and be familiar with both the original and target languages, cultures, characteristics of the scale, and scale adaptation methods. It is recommended to seek opinions from at least three experts for content validity (Çapik et al., 2018; Esin, 2014). For this study, 10 experts specializing in child psychology and psychiatry were consulted to assess content validity. Content validity was calculated using the Content Validity Index (CVI) based on Polit and Beck's expert assessments of item appropriateness. In this study, the CVI was compared with alternative indices, and it was determined that the widely used CVI offers advantages in terms of ease of calculation, comprehensibility, emphasizing agreement rather than consistency, and providing comprehensive item and scale information. Items with an I-CVI value of 0.80 or higher, as evaluated by three or more experts, can be accepted as indicators of good content validity (Polit et al., 2007).

Preliminary

According to the World Health Organization's (2009) 'Adaptation Process of Measurement Instruments' guideline, it is recommended to back-translate after obtaining expert opinions (World Health Organization, 2009). As emphasized by Yasir (2016), this recommendation requires the participation of at least two translators. In our study, after gathering expert opinions, the Turkish version of the scale was back-translated into English by two experts proficient in both languages. The researchers then evaluated both the original and translated

versions of the scale, making necessary corrections before preparing the scale for pilot application.

The test-retest method is a widely accepted approach for measuring the reliability of a scale by assessing its stability over time. If a scale is reliable, it is assumed that it should give similar results when administered to the same people under similar conditions after a short interval. For the pilot application, it is recommended to apply the scale to a group of 20–30 individuals who have similar characteristics to the study participants but are not included in the primary study sample (Şencan, 2005). In line with this guideline, the scale was piloted with the parents of 30 children admitted to the family health center for treatment and care. The same scale was administered to these parents twice, with a two-week interval between the first and second administrations, to evaluate its consistency over time.

Data collection

Data were obtained through face-to-face interviews with parents of 2–6-year-old children admitted to the family health center. The researchers visited the family health center every weekday between 09:00 and 17:00, informing parents who met the inclusion criteria about the purpose and scope of the study. Data were collected from volunteer participants, with each data collection session taking an average of 5–10 min.

Data analysis

IBM SPSS Statistics for Windows, Version 28.0. Armonk, NY: IBM Corp. and AMOS 24 package programs were used for data analysis. Descriptive statistics, including number, percentage, and mean were used to provide a comprehensive overview of the data. The Content Validity Index (CVI) was calculated to assess the instrument's validity. Exploratory Factor Analysis (EFA) was conducted to reveal the relationships between items and factors. Then, Confirmatory Factor Analysis (CFA) was utilized to assess how well the items and sub-dimensions fit the original structure of the scale (Brown, 2015; Jackson et al., 2009). For an item to be associated with a specific factor, its factor loading must be above 0.30 and exceed the loadings under other factors by at least 0.10 points. The Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity are used to assess whether a set of variables is suitable for factor analysis and whether the data has sufficient structure to extract meaningful factors. Exploratory Factor Analysis (EFA) was conducted to determine the relationships between items and factors, followed by Confirmatory Factor Analysis (CFA) to evaluate the fit of the items and sub-dimensions to the original structure of the scale. The criterion for an item to be associated with a particular factor was that its factor loading exceeded 0.30 and exceeded the loadings under other factors by at least 0.10 points. The model verification of the comparative fit index (CFI) was conducted based on the chi-square test, degree of freedom, root mean square error of approximation (RMSEA) (normal value b0. 05; acceptable value b0.08), goodness of fit index (GFI, normal value >0.95; acceptable values >0.90), CFI (normal value >0.95; acceptable value >0.90), and normal fit index (NFI, normal value >0.95; acceptable value >0.90). The reliability of the scale was assessed using Cronbach's alpha coefficient. Hotelling's T-square test was employed to determine the presence of a response bias.

Ethical considerations

Ethical issues were followed rigorously in this study. Before starting the study, ethical approval was obtained from the ethics committee of Sakarya University of Applied Sciences (Number: 2023/33). All participants were informed about the purpose of the study, possible risks and benefits, and their rights, including the right to withdraw at any stage without repercussions. Informed consent was obtained from all participants. The researchers protected the principles of confidentiality and privacy by anonymizing personal identifiers and using codes. This study complied with the ethical rules outlined in the Declaration of Helsinki.

Results

Sample characteristics

The mean age of parents was 35.85 ± 6.52, and 82.9% of the parents were mothers ($n = 174$). Forty-six percent of the parents were university graduates ($n = 99$), 44.3% of them were employed ($n = 94$), 81.4% had a medium family income level ($n = 171$), and 95.7% of them had a nuclear family structure ($n = 201$). Fifty-five percent of the children were girls ($n = 106$), and the mean age of the children was 4.39 ± 1.33.

Results of validity analysis

Content validity

Before the pilot application of the scale, the content analysis of the items and the scale was carried out by taking the opinions of 10 experts. The item-level Content Validity Index (I-CVI) ranged between 0.81 and 0.94, indicating a high level of agreement between the experts. The scale's overall Scope Validity Index (S-CVI) was 0.96, indicating consistent evaluation consistency.

Construct validity

The construct validity of the Turkish version of the scale was evaluated with both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). Before these analyses, the Kaiser-Meyer-Olkin (KMO) and Bartlett's tests were performed. The KMO value, which measures the adequacy of the sample size for EFA, was 0.750, indicating that the sample size was appropriate for this analysis. Furthermore, the results of Bartlett's Test of Sphericity were statistically significant ($\chi 2 = 1016.885$; $p < 0.001$), indicating that the assumption of equal variance within the sample was correct before statistical tests were applied (see Table 1).

Reliability analysis

The item-total correlation test and Cronbach's alpha coefficient test were used to evaluate the reliability of the scale. The Cronbach's alpha value calculated for the overall scale was 0.791, indicating satisfactory internal consistency. Exploratory Factor Analysis (EFA) also identified

Table 1
Results of the exploratory factor analysis.

Items	Subdimension
controlled his/her temper?	0.704
explored with interest?	0.425
focused and persisted at tasks?	0.646
had his/her own favorite toy, game, or book?	0.743
acted cheerful?	0.517
did things he/she was capable of (e.g., washing hands, eating)?	0.679
initiated activities or requests (e.g., saying "let me do it!")?	0.772
played alone for periods of time?	0.735
calmed his/herself down?	0.701
had a good appetite (e.g., ate and drank well)?	0.677
had good sleeping habits (e.g., regular routine, slept well, fell asleep easily)?	0.738
initiated communications with others (e.g., talking, gesturing)?	0.854
had a good temperament or was easy going?	0.459
was easy to care for and had few challenging behaviors (e.g., crying, tantrums, being difficult)?	0.642
was talkative and had good communication skills?	0.901
liked to socialize with others?	0.887
Total Explained Variance	56.30
KMO Coefficient	0.750
Barlett Test	1016.885; <0.001

KMO: Kaiser-Meyer Olkin coefficient.

Table 2
Model fit indices of the scale.

	X²	DFᵃ	X²/DF	RMSEAᵇ	GFIᶜ	CFIᵈ	IFIᵉ	RFIᶠ	NFIᵍ	TLIʰ
Model		98	2.395	0.082	0.842	0.853	0.856	0.726	0.776	0.820

a: Degree of Free; b: Root Mean Square Error of Approximation; c: Goodness of Fit Index; d: Comparative Fit Index; e: Incremental Fit Index; f: Relative Fit Index; g: Normed Fit Index; TLI (NNFI): Trucker-Lewis Index.

four dimensions within the scale. Principal component analysis was used as an extraction method, and item loadings were analyzed before and after rotation (varimax). The identified structure explained 56.30% of the total variance and gave an idea about the main factors affecting the measurement of the scale.

CFA confirmed the model fit for the item-factor relationship obtained by EFA. As a result of the analyses, the fit indices of the scale were found to be significant ($\chi2 = 2.395$; CMIN = 234.701; df = 98, $p < 0.01$). Specific fit index values were RMSEA = 0.082; GFI = 0.842; CFI = 0.853; IFI = 0.856; RFI = 0.726; NFI = 0.776; TLI = 0.820 (see Table 2). CFA results emphasized the adherence to the four-dimensional structure of the scale. Detailed CFA results are presented in Table 2, and Fig. 1 visually represents the model fit and factor relationships within the scale.

The findings determined by Cronbach's alpha coefficient for the total scale and its sub-dimensions are detailed in Table 3. In addition, the
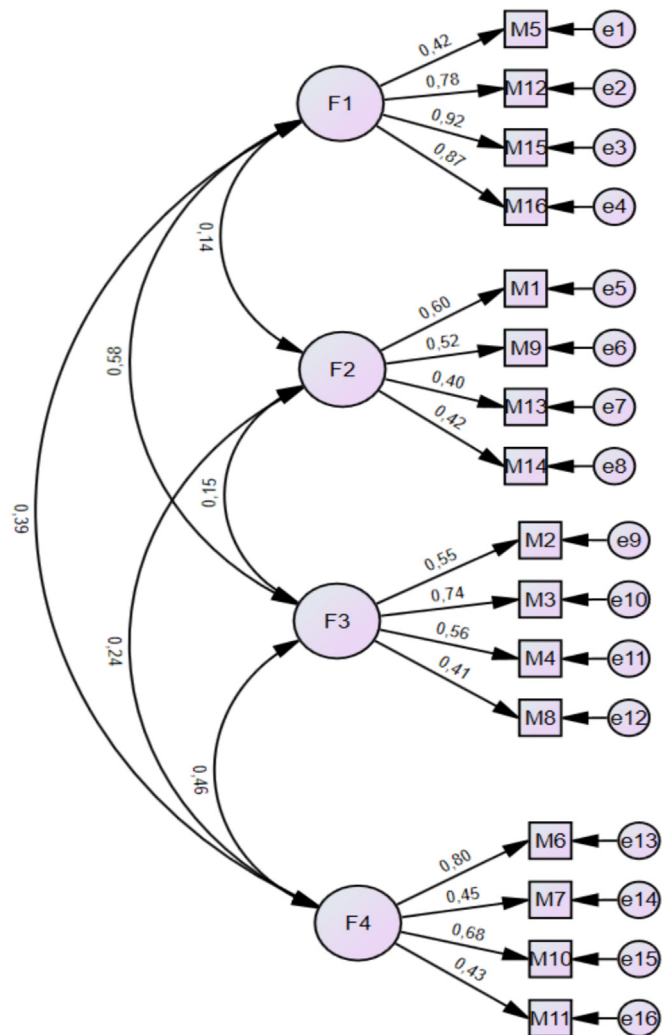

Fig. 1. Path diagram and factor loads of the one factor models of the scale.

Table 3
Results of the reliability analyses of the scale and correlations of the item total score.

Items	Cronbach α	X ± SD	Item-Total Score Correlation	Test-Retest Correlations of Items ($n = 30$)
1		3.85 ± 0.69	0.233	0.742
2		4.19 ± 0.66	0.525	0.643
3		4.05 ± 0.69	0.553	0.598
4		4.46 ± 0.61	0.435	0.759
5		4.19 ± 0.64	0.540	0.932
6		4.06 ± 0.72	0.618	0.926
7		3.94 ± 0.69	0.385	0.813
8		4.30 ± 0.60	0.400	0.872
9		3.74 ± 0.69	0.258	0.468
10		4.08 ± 0.73	0.466	0.685
11		3.96 ± 0.74	0.451	0.849
12		3.82 ± 0.96	0.656	0.932
13		4.04 ± 0.63	0.436	0.763
14		4.10 ± 0.80	0.309	0.638
15		4.03 ± 0.94	0.741	0.931
16		4.23 ± 0.87	0.688	0.898
Total Cronbach Alpha (α) Value 0.791				

relationships between individual items and total scores were evaluated by Pearson correlation analysis, and the results are presented in the same table.

A test-retest analysis of the scale was carried out with this group of 30 parents. The results, detailed in Table 4, showed no statistically significant difference between the mean scores of the two measurement sessions administered two weeks apart ($p < 0.05$). This lack of significant difference indicates that the scale produces stable and consistent results over time (p < 0.05, as shown in Table 4).

Discussion

The pre-pilot content validity analysis provided valuable insights into the relevance and appropriateness of each item by obtaining a comprehensive expert opinion from 10 experts. Item-level Content Validity Index (I-CVI) results ranged from 0.81 to 0.94, indicating a high level of consensus among the experts regarding the fit of each item with the intended resilience construct (Almanasreh et al., 2019). These values confirm the content validity of each scale item and indicate that they effectively capture the dimensions of resilience in young children as intended by the scale authors (Polit & Beck, 2006). Also noteworthy is the comprehensive assessment of the overall scale through the Content Validity Index (S-CVI) (Polit et al., 2007). The S-CVI yielded an impressive value of 0.96, indicating a remarkable level of consistency in the experts' assessments of the overall scale (Yusoff, 2019). This collective agreement on the overall content validity of the scale reinforces the idea that the adapted scale remains faithful to the conceptual framework of resilience in young children.

Assessing the construct validity of the Turkish version of the Resilience Scale for Young Children involved a rigorous examination through both EFA and CFA. Prior to these in-depth analyses, basic diagnostic tests such as Kaiser-Meyer-Olkin (KMO) test and Bartlett's test

Table 4
Test-retest score mean obtained from the scale and their comparison (n = 30).

	Scale Score Mean		Analysis Results			
	Pre-Test X ± SD	Post-Test X ± SD	Spearmen Correlation		Wilcoxon Signed Ranks Test	
			r	p	t	p
Scale	65.30 ± 5.85	65.05 ± 5.35	0.961	<0.001	−0.573	0.566

t = Wilcoxon Signed Ranks Test, r = Spearmen Correlation.

were conducted to ensure the adequacy of the sample size and the appropriateness of the data structure (Shrestha, 2021; Williams et al., 2010). The KMO value was 0.750, which is above the recommended threshold and indicates a suitable condition for conducting an EFA (Pett et al., 2003; Shrestha, 2021). This statistic, which assesses the proportion of variance shared between variables, indicates that the data set is rich enough to reveal the underlying factors related to resilience in young children (Zhang et al., 2024). Furthermore, the statistically significant result of Bartlett's Test of Sphericity ($\chi2 = 1016.885$; $p < 0.001$) further strengthens the suitability of the data for factor analysis (Shrestha, 2021). The significance of this result indicates that the variables in question do not exist independently and justifies the application of factor analytical techniques.

Two main statistical measures were used to assess the reliability of the Turkish version of the Resilience Scale for Young Children: item-total correlation test and Cronbach's alpha coefficient test (Hajjar, 2018; Zijlmans et al., 2019). Cronbach's alpha coefficient calculation for the overall scale yielded a commendable value of 0.791. This coefficient, which measures the internal consistency of the items in the scale, exceeds the widely accepted threshold, indicating a solid level of reliability (Tavakol & Dennick, 2011). The high Cronbach's alpha indicates that the items in the scale consistently measure the same basic construct of resilience among young children (Vaske et al., 2017). The identified construct, which explained 56.30% of the total variance, provides valuable information about the key factors affecting resilience measurement. The four sub-dimensions indicate a consistent and unified conceptualization of resilience in the scale context.

Confirming the model fit with CFA is essential in demonstrating the validity of the adapted Resilience Scale for Young Children in the Turkish context (Brown, 2015; Goretzko et al., 2024). In the analyses, the Chi-square test yielded a statistically significant result ($\chi2 = 2.395$; $p < 0.01$). Although statistical significance indicates a discrepancy between the observed and expected covariance matrices, it is important to note that the chi-square test is sensitive to sample size (Onchiri, 2013). Large samples can result in a significant chi-square even with small discrepancies (Shi et al., 2018). For this reason, researchers often consider additional fit indices for a more comprehensive assessment. The Root Mean Square Error of Approximation (RMSEA) indicates a reasonable fit with a value of 0.082 (Tennant & Pallant, 2012). Values below 0.05 are considered excellent, while values up to 0.08 are generally acceptable (Schubert et al., 2017). Goodness of Fit Index (GFI) 0.842 (Cheung & Rensvold, 2002), Comparative Fit Index (CFI) 0.853 (Van Laar & Braeken, 2021), Incremental Fit Index (IFI) 0.856 (Brosseau-Liard & Savalei, 2014) and Tucker-Lewis Index (TLI) 0.820 indicate a satisfactory fit (Cai et al., 2023). These indices assess how well the model reproduces the observed data compared to the null model. The Normed Fit Index (NFI) and Relative Fit Index (RFI), which are 0.776 and 0.726, respectively, are slightly lower but still contribute to an overall positive fit assessment (Yaşlıoğlu & Yaşlıoğlu, 2020). The confirmation of the four-dimensional structure through CFA results indicates that the adapted scale retains the structure originally intended by Zuo et al. (2023). This finding strengthens the cross-cultural applicability of the scale and shows that the dimensions of resilience identified in the original context are also retained in the Turkish adaptation.

To assess the stability and consistency of the Turkish version of the Resilience Scale for Young Children over time, a test-retest analysis was conducted with a group of 30 parents with a two-week interval between measurements (Berchtold, 2016). Two different measures were found to be consistent (Resch et al., 2013). The fact that there was no significant difference between the two measurements reveals that the scale shows reliability and stability over time (Polit, 2014). This consistency is particularly important when assessing a construct such as resilience, which is expected to show stability without significant external interventions or changes in participants' circumstances.

Strength and limitations

The strengths of this study include the fact that it is the first scale to assess the resilience of children aged between 2 and 6 years in Turkey. In addition, a comprehensive process was followed to determine the validity and reliability of the Turkish version of the scale. Translation processes, expert opinions, and content validity were carefully considered, thus ensuring the accuracy and appropriateness of the scale. The study also used a robust sample size and utilized both exploratory and confirmatory factor analyses to assess validity and reliability. In conclusion, this study makes an important contribution to the validity and reliability of a scale that can be used to assess young children's resilience in Turkey.

This study has strengths but also some limitations. Although the sample met the calculated target, it was selected from a specific Family Health Centre, potentially limiting generalizability. The Resilience Scale for Young Children is designed for children aged 2–6 years, and the mean age of the children in this study was 4.39 ± 1.33. While this falls within the target age range, the distribution of ages within the sample could influence the results. Resilience, as a psychological construct, can manifest differently at various developmental stages. Consequently, the findings should be interpreted with caution, considering that developmental differences within the 2–6 year age range might impact the observed levels of resilience.

Conclusion

The Turkish version of the Resilience Scale for Young Children showed strong validity and reliability. Content validity analysis, construct validity through EFA and CFA, and reliability tests indicated that the scale is suitable for assessing resilience in Turkish children aged 2–6 years. Test-retest analysis reinforced the stability of the scale over a two-week interval. The study successfully overcame translation difficulties and expert consultations and added a valuable tool to the Turkish context for assessing children's resilience.

Implications for nursing practice

This study has implications for nursing practice by providing a culturally adapted and validated tool to assess resilience in young Turkish children. Nurses who work with pediatric patients can provide a more nuanced understanding of children's adaptive capacities by incorporating the Turkish version of the Resilience Scale into their assessments. Early recognition and promotion of resilience can support the child's holistic well-being by guiding nursing interventions. This study contributes to evidence-based nursing practice by developing a toolkit that can be used by professionals interested in child health and family nursing.

CRediT authorship contribution statement

Gülzade Uysal: Writing – review & editing, Writing – original draft, Validation, Resources, Methodology, Conceptualization. **Remziye Semerci:** Writing – review & editing, Writing – original draft, Resources, Methodology, Formal analysis, Conceptualization. **Özge Şıktaş:**

Writing – original draft, Resources, Methodology, Data curation, Conceptualization.

Declaration of competing interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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