Original Article

DOI: 10.14235/bas.galenos.2023.85579
Bezmialem Science 2023;11(4):425-431

Parent Skill Assessment Scale (Age 1-3) (PASKAS 1-3): Validity and Reliability Study

Ebeveyn Beceri Değerlendirme Ölçeği (1-3 Yaş): Geçerlik ve Güvenirlik Çalışması

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ABSTRACT

Objective: This study was planned for the development, validity and reliability of the parent skill assessment scale (aged 1-3) (PASKAS 1-3) in order to evaluate the skills of parents with children aged 1-3 in nurturing.

Methods: This study was carried out with a total of 400 parents with children aged 1-3 between September-October in 2022. The validity of the parent skill assessment scale (aged 1-3) (PASKAS 1-3) was tested with content validity and construct validity. Test-retest, Cronbach Alpha reliability coefficient and Item Total Score Correlation coefficient were examined to determine the scale reliability.

Results: The content validity index of the data was between 0.81 and Explanatory factor analysis (EFA) and confirmatory factor analysis (CFA) fit indexes of the scale, which consisted of 3 factors with a total of 30 items, were found as χ2/df: 1.687, RMSEA: 0.041, comparative fit index: 0.87, incremental fit index: 0.87, GFI: 0.90 and Tucker-Lewis index: 0.86. The Cronbach alpha reliability value was 0.82, the test-retest correlation coefficient was 0.74, and the item-total score correlation coefficient was above 0.20.

Conclusion: The scale is a valid and reliable measurement tool that can be used to evaluate child nurturing skills of parents with children aged 1-3 from physical, cognitive, language development and social-emotional aspects.

Keywords: Child, parenting, parents, reliability and validity

ÖZ

Amaç: Bu çalışma 1-3 yaş döneminde çocuğu olan ebeveynlerin çocuk yetiştirmede kendi becerilerini değerlendirmeleri amacıyla geliştirilen ebeveynlik becerilerini değerlendirme ölçeğinin geliştirilmesi, geçerlik ve güvenirliğinin yapılması amacıyla planlanmıştır.

Yöntemler: Araştırma metodolojik yöntem kullanılarak tasarlanmış geçerlik ve güvenirlik çalışmasıdır. Çalışma, Eylül-Ekim 2022 tarihleri arasında 1-3 yaş arasında çocuğu olan 400 ebeveyne uygulanmıştır. Ebeveynlik Beceri Değerlendirme Ölçeğinin geçerliği, kapsam geçerliği ve yapı geçerliği ile test edilmiştir. Ölçeğin güvenirliğini belirlemek için test tekrar test, Cronbach Alpha güvenirlik kat sayısı, Madde Toplam Puan Korelasyon katsayısına bakılmıştır.

Bulgular: Verilerin kapsam geçerlik indeksi 0,81 ile 1 arasında idi. Açıklayıcı faktör analizi (AFA) ile 30 maddelik 3 alt boyuttan oluşan ölçeğin doğrulayıcı faktör analizi (DFA) uyum indeksleri χ2/df: 1,687, RMSEA: 0,04, karşılaştırmalı uyum indeksi: 0,87, artan uyum indeksi: 0,87, GFI: 0,90 ve Tucker-Lewis indeksi: 0,86 olarak bulunmuştur. Ölçeğin Cronbach alpha güvenilirlik değeri 0,82, Test-tekrar test kolerasyon katsayısı 0,74 Madde-Toplam Puan Korelasyon Katsayısı ise 0,20'nin üstünde bulunmuştur.

Sonuç: Ölçek 1-3 yaş döneminde çocuğu olan ebeveynlerin çocuklarını fiziksel, bilişsel, dil gelişimi ve sosyal-duygusal yönden yetiştirme konusunda becerilerinin değerlendirilmesinde kullanılabilecek geçerli ve güvenilir bir ölçektir.

Anahtar Sözcükler: Çocuk, ebeveynlik, ebeveynler, güvenirlik ve geçerlik

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Received: 16.02.2023
Accepted: 01.07.2023

Cite this article as: Çırlak A, Kılıçarslan Törüner E. Parent Skill Assessment Scale (Age 1-3) (PASKAS 1-3): Validity and Reliability Study. Bezmialem Science 2023;11(4):425-431

Introduction

The play period in children (1-3 years) is a period in which rapid changes occur in growth and development. During this period, the child's sense of independence and autonomy comes to the fore, while the child's curiosity and interest increase. In this period, besides physical growth changes, cognitive, social-emotional and linguistic developments occur in children (1). Interventions in this period will affect the cognitive development, psychosocial behaviors and personality of the child in the following years (2).

Parents should be able to balance the needs of their children (toilet training, language development, etc.) with the need for autonomy (3). They should be able to provide sensitive care in a way that adapts to their children's cues, emotions, interests and abilities (4). During this period, parents can improve the skills and efforts of the child trying to be autonomous by displaying encouraging attitudes towards them (5). Therefore, parents should be empowered to develop their attitudes and behaviors as their children shift from infancy to play period. Parents may have different attitudes and skills when it comes to raising children. Especially in this period, when physical, cognitive, social, emotional and language development needs are demanding, it is important for parents to feel competent in raising children (6). When children's physical skills, cognitive, language and social-emotional development are supported in the 1-3-year-old period, they can become self-confident and solution-oriented individuals able to make decisions later in adulthood. That's why it's important for parents to develop their parenting skills (4,7).

The literature review shows that the measurement tools that parents can evaluate themselves about child nurturing are generally suitable for children aged 3-6 (8-10). Valid and reliable tools are not available in which parents can evaluate their child-rearing skills specific to the 1-3-year-old age group. For this reason, there is a need for a valid and reliable measurement tool for parents who have children aged 1-3 years to evaluate their own child-rearing skills (11). Besides parents, nurses playing an important role in health assessments and training can use such an assessment tool, thus, nurses can evaluate the child-rearing skills of parents with children aged 1-3 and provide the necessary support to parents.

Objective: This study was planned for the development, validity and reliability of the parenting skill assessment scale, which was developed for parents with children aged 1-3 to evaluate their own parenting skills in terms of children's physical, cognitive, language and social-emotional development.

Methods

Study Design

The study was designed as a methodological research.

Place and time of the research: This online study was carried out between September 14 and October 14, 2022.

Population and sample selection: The population consisted of parents with children aged 1-3 living in different provinces of Turkey. Snowball sampling method, a non-probability and purposeful sampling method was implemented in the study. In the snowball sampling method, any person included in the study population was contacted through social media accounts, and other participants were reached with the help of the contact person. Snowball sampling method was used in order to achieve maximum diversity in the sample. Since the research was a validity and reliability study, it was planned to reach at least 180 parents, 5-10 times the number of items (12). Four hundred parents participated in the study within the specified period.

Inclusion criteria

- Children aged 12-36 months

Exclusion criteria

- Being a non-parent caregiver
- Having child with a chronic illness

Data Collection

The design of the forms was created on Google Forms. The data were collected online through "Parent and Child Descriptive Data Form" and "Parent Skill Assessment Form". The parent and child descriptive data form consisted of 7 questions about age and education level of parents, child age, child gender and number of children) (13-16).

Forming the Data Collection Tool

The parent skill assessment form was created by the researchers in line with the literature (16-20). This form was developed to evaluate the parenting skills of parents with children aged 1-3. A pool of 34 items was created in the draft scale and 11 individuals (7 academic nurses working in the field of child health and diseases, 2 child development specialists, 2 pediatric specialists in the field of child health and diseases) were counselled for expert opinion. It is recommended to seek for at least three expert opinions to determine the content validity of a scale (12,21). Expert opinions were evaluated in accordance with Davis Technique.

The 36-item draft scale, prepared upon expert opinion, was applied to 10 parents to evaluate its intelligibility. Since no changes were made on the draft scale for its intelligibility, the validity and reliability analysis of the forms were started.

Parent Skill Assessment Scale (Age 1-3) (PASKAS 1-3): The number of items in the first scale was 34. Upon the expert opinion, the number of items increased to 36. The number of items decreased to 30 based on the validity and reliability analyzes after the parents filled out the 36-item scale. As a result, the parenting skill assessment scale consisted of a total of 30 items. In the scale, 0 point was scored as "Never", 1 point as "Rarely", 2 points as "Sometimes", 3 points as "Often" and 4 points as "Always". The minimum score that could be obtained from the scale was 0, and the highest score was 120. Lower total score indicated that there was a need for development for parenting skills, and a higher one indicated that the specified parenting skills were appropriate.

Statistical Analysis

The descriptive characteristics of the participants were expressed as number, percentage, minimum, maximum, mean and standard deviation. The SPSS 26.0 (Statistical Software) was used for data analysis and exploratory factor analysis (EFA), and IBM SPSS Amos 16.0 (Analysis of Moment Structures) was used for confirmatory factor analysis (CFA).

Scale content validity was evaluated using the Davis technique. In order to evaluate the construct validity, (EFA) and (CFA) were performed. The Kaiser-Meyer-Olkin (KMO) and Bartlett's test were decided if the scale was suitable for performing EFA and CFA. The scale reliability was evaluated using Cronbach Alpha reliability coefficient, Item-Total Score Correlation Coefficient and Test-Retest analysis.

Ethical Considerations

In the study, written permission was obtained from Gazi University Ethics Commission (with the meeting numbered 15 on September 13, 2022, numbered: E-77082166-604.01.02-455039). In addition, a statement was written for the parents that the information to be obtained would be kept confidential and they could withdraw from the research at any time, and an article confirming that they agreed to participate in the research was placed in the form created on Google forms.

Results

Descriptive characteristics of parents and their children were as follows: three hundred and thirty mothers and 70 fathers participated in the study. The mean age of the mothers was 33.55±4.54 [minimum (min): 20-maximum (max): 53 years], the average age of the fathers was 36.22±5.27 (min: 26-max: 56 years), and the average age of children was 25.01±6.85 (min: 12-max: 36 months). Regarding the educational level of parents, it was found that 61% of the mothers and 58.3% of the fathers had bachelor's degrees. Of the children 43.8% were girls and 56.3% were boys. It was determined that 57.5% of the parents had one child, 34.8% two children, and 7.8% three or more children (Table 1).

Validity Analyzes

Content Validity

Thirty four items were created in the item pool and consulted for expert opinion. Items were evaluated by experts using the Davis technique. Based on expert opinions, the item "I can understand my child peeing in the toilet and pooping on his diaper (I3)" was removed. The expressions "I play with my child every day at the times I set" (I13) and "I paint with my child every day at the hours I set" (I14) were combined as "I do activities such as plays and painting with my child every day, considering the needs of my child". Based on the suggestions from the experts, the following items were added: "I give my child the opportunity to complete his/her own sentence", "I offer options to increase my child's decision-making skills", "I act consistently against the behaviors I want to develop in my child", and "I ignore certain behaviors of my child if they do not harm him/her".

The content validity index (CVI) of the items was checked after the expert evaluation. Based on expert opinions, 34 items were put into final form and the scale was finalized with 36 items. The CVI of the scale was found to be between 0.81-1.

Item analysis: Items with item total score correlation below 0.20 were removed from the draft scale (I3 and I35) (21,22).

Construct Validity

The KMO, Bartlett's test, (EFA) and (CFA) were used for the construct validity of the scale. As a result of the analysis, the KMO value was determined as 0.84, and p=0.001 for the Barlett's test. Since the KMO value was above 0.50 (9,23), EFA was initiated. In the EFA, three factors with an eigenvalue above 1 and explaining 31.5% of the total variance were determined. Based on EFA, items with a factor load of less than 0.30 (24) (I7, I12, I21, I31) were removed from the scale. Eighteen items in Factor 1 (I10, I13, I14, I16, I18, I17, I21, I22, I23, I24, I25, I26, I28, I30, I32, I33, I34, I36), 7 items in Factor 2 (I1, I2, I4, I6, I8, I9, I29) and 5 items in Factor 3 (I5, I11, I15, I19, I20) produced a factor load of more than 0.30 (Table 2).

The CFA was measured if the scale had three factors. When modifications were made between the items of the scale four times, the fit indices were found as $\chi 2/df$: 1.687, RMR: 0.03 The Root Mean Square Error of Approximation (RMSEA): 0.04, The goodness of fit index (GFI): 0.90, comparative fit index (CFI): 0.87, Tucker-Lewis index (TLI): 0.86, incremental fit index (IFI): 0.87 (25) (Table 3) (Figure 1).

Table 1. Descriptive characteristics of parents and their children

Descriptive characteristics	Min	Max	
Maternal age	20	53	33.55±4.54
Paternal age	26	56	36.22±5.27
Child age (months)	12	36	25.01±6.85
	Number (n)	Percent (%)	
Gender			
Girl	175	43.8	
Boy	225	56.2	
Mother's education			
Primary or high school	68	17.0	
Undergradute or postgraduate	332	83.0	
Father's education			
Primary or high school	89	22.3	
Undergradute or postgraduate	311	77.7	
Number of children			
One	230	57.5	
Two	139	34.8	
≥ three	31	7.7	

Min: Minimum, Max: Maximum

Reliability Analyzes

For the reliability analysis, the stability and internal consistency of the scale were evaluated.

Stability: The scale was reapplied to 30 people with an interval of 2 weeks in order to determine the scale stability (26). For the analysis of the test, test-retest was performed and the correlation coefficient was checked. As a result of the analysis, the correlation coefficient was found to be 0.74.

Internal consistency: In the study, the Cronbach alpha value of the 30-item scale was determined as 0.82. The Cronbach's alpha value of the factors was found to be 0.83 for factor 1, 0.63 for factor 2 and 0.60 for factor 3. The item total correlation coefficient was found to be over 0.20 (Table 4). Accordingly, it was determined that the scale was a reliable measurement tool.

Table 2. Factor loads of the scale, eigenvalues in factor loads and percentage of variance explained

Factors	Items	Factor loads	Eigen values	Variance explained
Factor 1	I23	.625	5.948	16.441
	I28	.615		
	I17	.613		
	I14	.608		
	I33	.605		
	I26	.587		
	I21	.564		
	I13	.556		
	I34	.551		
	I32	.519		
	I25	.463		
	I18	.448		
	I24	.430		
	I10	.400		
	I16	.396		
	I22	.343		
	I30	.335		
	I36	.331		
Factor 2	I8	.695	1.852	8.210
	I9	.661		
	I4	.602		
	I29	.446		
	I6	.439		
	I2	.415		
	I1	.327		
Factor 3	I11	.685	1.670	6.916
	I5	.645		
	I19	.571		
	I20	.523		
	I15	.461		
Percent of the total variance: 31.5%				

Table 3. Good fit indices

	X^2/df	RMSEA	GFI	CFI	IFI	TLI
Desired good fit value	≤3	≤0.10	≥0.90	≥0.80	≥0.80	≥0.80
Results	1.687	0.041	0.90	0.87	0.87	0.86

X^2/df: Corrected chi-square, RMSEA: Root mean square error of approximation, GFI = goodness-of-fit index, CFI: Comparative fit index, IFI: Incremental Fit Index, TLI: Tucker-Lewis index

Discussion

In the study, the validity and reliability of the "Parent Skill Assessment Form" was conducted in parents with children aged 1-3 in order to identify their skills according to the developmental characteristics of their children. As a result of the findings obtained from the scale, it was concluded that it was a valid and reliable scale. The form was a 30-item scale that could be filled out by parents.

In order for a measurement tool to produce appropriate data, it must be valid and reliable. Validity and reliability are the two most important criteria used in the evaluation of a measurement tool. The first stage of validity methods is content validity and item analysis.

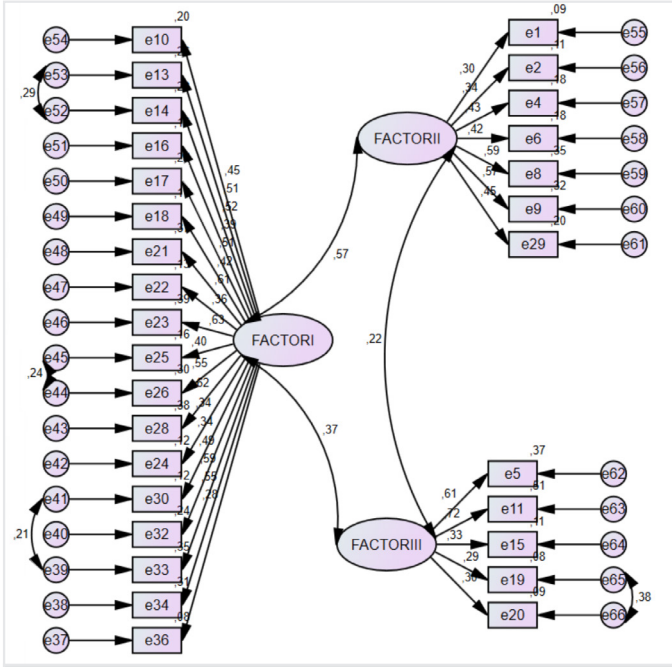

Figure 1. PATH diagram of the scale

Table 4. Cronbach alpha values of the scale

Cronbach alpha 0.82
Factor 1 Cronbach alpha 0.83
Factor 2 Cronbach alpha 0.63
Factor 3 Cronbach alpha 0.60

Content validity should cover the whole quality that a measurement tool aims to measure (23,25,27,28). Items with a CVI above 0.80 are considered appropriate in terms of content validity (23,25,28). In our study, the 34-item draft scale was submitted to expert opinion and the draft scale was rearranged using the Davis technique in line with expert opinions. The 36-item new version of the draft scale was formed after the experts evaluated the 34-item draft according to the Davis technique. In this study, the CVI was found between 0.81 and 1.00 according to the Davis technique, which indicated appropriate content validity (12).

Item analysis was performed to determine the discriminatory power of the scale. Items below 0.20 represent weak correlation with the item total score correlation of the scale (21,22). Therefore, items below 0.20 were excluded from the draft scale (I3 and I35). Thus, the draft scale had 34 items prior to the exploratory factor analysis.

The second stage of validity methods is construct validity. Construct validity is achieved to evaluate the extent to which a scale measures the construct it aims to measure (26). In construct validity, exploratory and CFA is mostly used. In exploratory factor analysis, KMO is used to measure sample adequacy, and Bartlett's test is used to evaluate homogeneity of variances (9,23). Factor analysis is recommended for the scale if KMO >0.50 and Bartlett test p<0.005, (9,23). In our study, the KMO value was 0.84, and p=0.001 for Barlett's test. Therefore, it was concluded that the sample size was sufficient and the variances were homogeneous, and EFA was started. In exploratory factor analysis, factor load value is required to be above 0.30 (24). In our study, at the end of the exploratory factor analysis, 4 items with a factor load of less than 0.3 were removed from the scale. The scale was restructured as 30 items.

Upon the exploratory factor analysis, CFA is performed and the fit indices of the scale are examined. Different acceptable values are presented in the literature for fit indices in CFA Wong et al. (29) considers $\chi 2/df$ of <2-5 to be a good fit, a RMESEA value of 0.06 to be a close fit and a RMESEA value of 0 to be a perfect fit. If the GFI and CFI values are ≥0.90, it indicates the minimum acceptable value, if ≥0.95 it is a good fit, and a value close to 1 indicates a perfect fit, while Gomez and Stavropoulos (30) accept that RMSEA values of 0.06 or less are good fit, 0.07 to 0.08 moderate fit, 0.08 to 0.10 as marginal fit and a value >0.10 as weak fit. Values close to 0.95 for CFI and TLI indicate good fit, values 0.90-0.95 as acceptable fit, and values less than 0.90 as weak fit. In the study of Kalkan and Karadağ (31), the values of fit indices $\chi 2/d$ <3; 0< RMSEA <0.05; 0.95≤ IFI ≤1; 0.95≤ CFI ≤1 and 0.95≤ GFI ≤1indicate perfect fit, and 3<$\chi 2/d$ <5; 0.05< RMSEA <0.08; 0.90≤ IFI ≤0.95; 0.90≤ CFI ≤0.95 and 0.90≤ GFI ≤0.95 indicate acceptable fit. Weerasekara et al. (25) determined the fit indices as reference $\chi 2/df$ ≤3.0, RMR ≤0.05, RMSEA ≤0.10, NFI ≥0.80, GFI ≥0.90, TLI ≥0.80 and CFI ≥0.80. In our study, by making four modifications between the items, the fit indices of the scale were found as $\chi 2/df$: 1.687, RMR: 0.03, RMSEA: 0.04, IFI: 0.87, GFI: 0.90, CFI: 0.87, TLI: 0.86, and they were found to be in appropriate values for the fit indices.

The reliability of a measurement tool is evaluated by its ability to produce consistent and stable results (26). The criteria used in reliability studies are stability and internal consistency. In order to measure the stability of the scale, it is requested to repeat the measurements in at least 15 and at most 30 days (26). For the stability acceptance of the scale, a value of at least 0.70 is taken as a reference (32,33). In our study, the measurements were repeated with an interval of two weeks. For the analysis of the test, the test-retest method was used and the correlation coefficient was checked by Pearson correlation analysis. As a result of the analysis, the correlation coefficient was found to be 0.74. This shows that our scale is not affected by time and measures the structure it aims to measure with the same stability (26). If the responses to the items in a measurement tool are compatible with the total test score, it is stated that the test has internal consistency. The methods used to evaluate the internal consistency are the Kuder-Richardson (KR-20 and KR-21) method and the Cronbach alpha reliability method which is one of the most frequently used reliability criteria in likert type scales (24). In order for the measurement tool to be considered reliable, the Cronbach alpha reliability coefficient should be between 0.60 and 1.00 (31). According to the assessment criteria of Cronbach's alpha coefficient, "the scale is highly reliable" if the coefficient is between 0.80 and 1.00, "the scale is fairly reliable" if it is between 0.60-0.79, "the scale has low reliability" if it is between 0.40-0.59, "the scale is not reliable" if it is between 0, 00-0.39 (31). In our study, the total Cronbach's alpha reliability coefficient of the scale was found to be 0.82, and it was concluded that it was highly reliable. The total item correlation of the scale was found to be over 0.20.

Study Limitations

Due to the online conduct of the study, unreachable parents who did not use social media constituted the limitation of the study.

Conclusion

The scale, developed based on the findings obtained as a result of the reliability and validity study, consists of 30 items and three sub-scales. The scale is scored over the total score. Sub-scales are not scored separately. It was concluded that the scale is a valid and reliable scale that can be used by parents with children aged 1-3 years to evaluate their own child-rearing skills. The scale can be used by nurses, physicians, psychologists and teachers who work with parents who have children between the ages of 1-3.

Ethics

Ethics Committee Approval: In the study, written permission was obtained from Gazi University Ethics Commission (with the meeting numbered 15 on September 13, 2022, numbered: E-77082166-604.01.02-455039).

Informed Consent: Obtained.

Peer-review: Externally peer reviewed.

Authorship Contributions

Surgical and Medical Practices: A.Ç., E.K.T., Concept: A.Ç., E.K.T., Design: A.Ç., E.K.T., Data Collection or Processing: A.Ç., E.K.T., Analysis or Interpretation: A.Ç., E.K.T., Literature Search: A.Ç., E.K.T., Writing: A.Ç., E.K.T.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

1. Franklin Q, Prows CA. Developmental and genetic influences on child health promotion. In: Hockenberry MJ, Wilson D, Rodgers CC, editors. Wong's Essentials of Pediatric Nursing, 10th ed. Missouri: Elsevier; 2017.
2. Tunçeli Hİ, Zembat R. The importance and assessment of early childhood development. Journal of Education, Theory and Practice Research 2017;3:1-12.
3. World Health Organization (WHO) Improving Early Childhood Development: WHO Guideline 2020 Avaliable from: URL: https://www.who.int/publications/i/item/97892400020986)
4. Nicholson JM, Cann W, Matthews J, Berthelsen D, Ukoumunne OC, Trajanovska M, et al. Enhancing the early home learning environment through a brief group parenting intervention: study protocol for a cluster randomised controlled trial. BMC Pediatrics 2016;16:73.
5. Törüner EK, Büyükgönenç L. Çocuk Sağlığı Temel Hemşirelik Yaklaşımları. Ankara: Nobel Tıp Yayınevleri; 2023.
6. Malik F, Marwaha R. Developmental Stages of Social Emotional Development In Children. StatPearls (Internet). Treasure Island: StatPearls Publishing; 2022.
7. Black MM. Toddler development and autonomy: baby-led weaning, neophobia, and responsive parenting. Nestle Nutr Inst Workshop Ser 2020;95:1-11.
8. Banik A, Zarychta K, Knoll N, Luszczynska A. Cultivation and enabling effects of social support and self-efficacy in parent-child dyads. Ann Behav Med 2021;55:1198-210.
9. Şan EG, Altay N. Psychosocial Status Assessment Scale For Children Aged 3–6 Years – Parent-Form development: Validity and reliability study. J Psychiatric Nurs 2021;1282:132-9.
10. Tuğut N, Gölbaşı Z. The determination of sexual education attitudes of parents with preschool children (3-6 ages). TJFMPC 2019;13:287-294.
11. de Wolff MS, Theunissen MH, Vogels AG, Reijneveld SA. Three questionnaires to detect psychosocial problems in toddlers: a comparison of the BITSEA, ASQ:SE, and KIPPPI. Acad Pediatr 2013;13:587-92.
12. Esin M N. Veri toplama yöntem ve araçları & veri toplama araçlarının güvenirlik ve geçerliği. İçinde: Erdoğan, S, Nahcivan N, Esin MN, editörler. Hemşirelikte Araştırma, 3rd ed. İstanbul: Nobel Tıp Kitabevleri; 2018.
13. Demir S, Gündüz B. Adaptation of the parental self-efficacy scale: the study of validity and reliability. Mustafa Kemal University Journal of Graduate School of Social Sciences 2014;11:309-22.
14. Fields-Olivieri MA, Cole PM, Roben CKP. Toddler emotion expressions and emotional traits: Associations with parent-toddler verbal conversation. Infant Behav Dev 2020;61:101474.
15. Kohlhoff J, Cibralic S, Wallace N, Morgan S, McMahon C, Hawkins E, et al. A randomized controlled trial comparing parent child interaction therapy - toddler, circle of security- parenting™ and waitlist controls in the treatment of disruptive behaviors for children aged 14-24 months: study protocol. BMC Psychol 2020;8:93.
16. Franklin Q, Mooney-Doyle K. Family, social, cultural, and religious influences on child health promotion. In: Hockenberry MJ, Wilson D, Rodgers CC, editors. Wong's Essentials of Pediatric Nursing, 10th ed. Missouri: Elsevier; 2017.
17. Green C. Çocuk yetiştirme sanatı (çev. F. Avcılar). İstanbul: Yakamoz; 2018.
18. Rudd K, Kocisko D, Reiter J. Psycho-social-cultural assessment of the child and the family. In: Rudd K, Kocisko DM, editors. Pediatric Nursing: The Critical Components of Nursing Care. Philadelphia, F.A: Davis Company; 2014.
19. Rains SG. Fifteen-to eighteen-month visit. In: Richardson B, editor. Pediatric Primary Care: Practice Guidelines for Nurses, 4th ed. Burlington, Jones&Bartlett Learning; 2020.
20. Richardson B, Porcher FK. Two-year visit In: Richardson B,editor. Pediatric Primary Care: Practice Guidelines for Nurses, 4th ed. Burlington: Jones&Bartlett Learning; 2020.
21. DeVellis RF. Scale development, theory and applications, 3rd ed. India: SAGE Publication; 2012.
22. Jonhson B, Christensen L. Educational research: quantitative, qualitative, and mixed approaches, California: SAGE Publication; 2014.
23. Moghadam M, Salavati M, Sahaf R, Rassouli M, Moghadam M, Kamrani AAA. The Persian Version of the "Life Satisfaction Scale": Construct Validity and Test-Re-Test Reliability among Iranian Older Adults. J Cross Cult Gerontol 2018;33:121-34.
24. Seçer İ. Psikolojik test geliştirme ve uyarlama süreci SPSS ve LISREL uygulamaları. Ankara: Anı Yayıncılık; 2015.
25. Weerasekara SS, Oh J, Cho H, Im M. Development and Validation of a Self-Efficacy Scale for Nursing Educators' Role in Sri Lanka. Int J Environ Res Public Health 2021;18:7773.
26. Seçer İ. SPSS ve LISREL ile pratik veri analizi analiz ve raporlaştırma. Ankara: Anı Yayıncılık; 2015.
27. Ayar D, Ünalp A, Bektaş M, Yılmaz Ü, Karaoğlu P, Yalçıntuğ FM. Psychometric properties of a Turkish version of the quality of life in childhood epilepsy questionnaire. J Pediatr Nurs 2022;62:91-7.
28. Yeşilbalkan ÖU, Erbay Ö, Yüceyar AN. Translation and validation of the Turkish version of multiple sclerosis treatment adherence questionnaire (MS-TAQ). Noro Psikiyatr Ars 2018;56:191-4.
29. Wong A, O'Sullivan D, Strauser D. Confirmatory factor analytical study of the revised developmental work personality scale. Meas Eval Couns Dev 2012;45:270-91.

30. Gomez R, Stavropoulos V. Confirmatory factor analysis and exploratory structural equation modeling of the structure of attention- deficit/hyperactivity disorder symptoms in adults. Assessment 2020;28:1570-82.

31. Kalkan N, Karadağ M. A study of development an attitude scale towards social hand washing on nursing students. Journal of Health Sciences of Adiyaman University 2021;7:258-68.

32. Karakoç FY, Dönmez L. Basic Principles of Scale Development. World of Medical Education 2014;13:39-49.

33. Zhang HM, Bai MH, Whang Q. Development, reliability and validity of traditional chinese medicine health self-evaluation scale (TCM-50). Chin J Integr Med 2015;23:350-6.