



# Parental Support in Language Skills Development: Scale Development and Validation

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## Abstract

The present study aims to develop a measurement tool that involves parental support for the language skills development process in mother tongue education or language arts classes (Turkish course in Türkiye, L1). Family is an undeniable factor in a child's academic performance. In this context, there is no measurement tool that examines the support provided by families to their children in the field of language arts (mother tongue education). Considering that such a measurement tool would be useful for researchers and teachers, the study set out to develop it. The scale is not language specific, but in order to apply it to the Turkish parents it was created in Turkish. In order to develop the measurement tool, first, a literature review was conducted. The relationship between family and academic achievement, family social support, and parental academic support were investigated. In addition, interviews were conducted with five parents on a voluntary basis, and the actions that parents can take to support language skills were investigated. Thus, the item pool of the measurement tool was formed as 32 items. These items were prepared within the framework of the relevant literature and interviews with parents in a way to cover the following topics: parents' guiding and activities that can support language skills, parents' emotional support to the child, parents' material support that can enhance language skills, parents' support to the child in homework assignments in language arts classes (Turkish course in Türkiye). The items were presented to the inspection of two field experts and one measurement and evaluation expert. In addition, the items were presented to a field expert and two parents for the inspection of language and expression, and measures were taken to ensure that there were no incomprehensible items. After these stages, a total of 439 parents formed the participants of the study. While 204 of these participants were used for item analysis and EFA (exploratory factor analysis), 235 of them were used for CFA (confirmatory factor analysis), convergent validity and reliability analysis. Based on the findings obtained, 24-item, 4-factor "Parental Support in Language Skills Development Scale" can be considered as a valid and reliable measurement tool.

## Keywords

Language arts, mother tongue (Turkish) education, parental support, parental academic support, language skills, scale development.

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## INTRODUCTION

Achieving the desired goals in education depends on various factors beyond teacher-student relationships. Personality traits, parents, home environment, and school resources are among the factors that impact student achievement and the quality of education (Akay & Oskonbaeva, 2019, p. 314; Bal, 2011; Crossley, 2005; Yıldırım, 2012). According to the study conducted by Marchant, Paulson, and Rothlisberg (2001, p. 515), supportive relationships with parents, teachers, and peers play an important role in the school success of early adolescents. Yıldırım (2012, p. 229) reported that the importance level of home and parental characteristics among such factors was quite high (52%). The positive effects of parental involvement on student achievement have been documented in the literature (Christenson, Rounds, & Gorney, 1992, p. 192). Reparaz and Sotés-Elizalde (2019) stated in their study that family involvement is related to academic achievement. From a general perspective, the main message of many studies on family environments and their effects is that “families are important for children’s learning, development and school success in all grades” (Epstein & Connors, 1995, p. 143). Moreover, according to another research result, families make critical contributions to student achievement from early childhood to high school (Henderson & Berla, 1994). However, if family support is continuous and consistent, its effect on students is stronger (Epstein & Connors, 1995, p. 143). The literature suggests that the family factor has a significant impact on a student’s academic performance. Parental support is considered an important family factor for academic success (Cutrona, et al., 1994; de la Iglesia, Stover & Fernández Liporace, 2014; Sanders, 1998).

The literature analyses the concept of family support within the framework of social support theory. Social support means emotional, informative or practical help from important people such as family members, friends or colleagues (Thoits, 2010, p. S46). It is stated that social support directly affects well-being and has effects such as reducing the negativities of stressful life experiences (Cohen & Wills, 1985), supporting academic success (Kapikıran & Özgüngör, 2009; Yıldırım, 1997), contributing positively to mental health and physical condition (Kaner, 2004; Kapikıran & Özgüngör, 2009). Caplan (1974) analysed social support in five types: Emotional Support, Esteem Support, Instrumental Support, Informational Support and Social Support. Cohen and Wills (1985) examined the types of social support in four categories: Emotional Support, Instrumental Support, Informational Support, Diffuse Support. Emotional support refers to the support related to love, interest, acceptance, feeling valuable; Instrumental support refers to the support for the material-monetary needs of the individual; Informational support refers to the support for the problems encountered; Diffuse support refers to the support for socialising and spending time with other people (Cohen & Wills, 1985). Since social support is considered as social and psychological support (Yıldırım, 1997, p. 81), it does not directly focus on academic development.

Thompson and Mazer (2012) and Mazer and Thompson (2016) conducted studies examining the support of families in academic settings. These studies developed a measurement tool to assess the family factor. The Parental Academic Support scale comprises five factors: academic performance, classroom behaviour, preparation, hostile peer interactions, and health. Thompson and Mazer (2012) evaluate parent-teacher communication as the primary form of parental academic support. In the scale developed in this study, the focus was on the situations in the home environment after the learning process at school. Thus, the communication of the parents with the teacher and the school was not included in this study. For this reason, the scale items were planned only in terms of student and parent interaction-communication. Social support types were utilised in the planning of the scale in this study. The structures created in the studies conducted by Cohen and Wills (1985), Caplan (1974)

and Kaner (2003) constitute the basic factor structure of the measurement tool planned in this study. Thus, the aim was to structure the measurement tool based on guidance and individual support, emotional support, material support, and practical and homework support.

The dimension of guidance and individual support includes parents guiding the child on issues related to language skills, carrying out educational activities in which language skills are used, and talking about listening and reading materials with which the child interacts. In Sağlam and Doğan's (2013) study, the importance of the child expressing himself/herself within the family, the family providing exemplary behaviours and sharing what the child reads with his/her family for language acquisition are mentioned. Can, Deniz, and Çeçen (2016, p. 650) also emphasise the importance of parents' motivation in the context of reading habits. In Uçgun's (2016, p. 1967) study, it was stated that parents being role models by interacting with children can reduce anxiety. It is also seen from the studies that parents' doing activities with their children and supporting the child by setting an example for him/her provide important contributions.

The emotional support dimension refers to parents' support for the child in affective areas. This includes showing appreciation, understanding, giving positive feedback, encouragement, and being considerate of their child during the learning process. In this way, the student who develops language skills at school can be supported emotionally. It is stated that emotional support is also related to academic success (Çakır & Avcı, 2021). It is reported that when parents provide emotional support that offers understanding and trust to children, children's school performance can also be positively affected (Kapıkıran, 2020, p. 412). It is seen that the emotional support provided to children can have an academic output. Thus, it is important to provide support for language skills.

The dimension of material support refers to parents' efforts to provide materials that can support the child's learning process. Material support consists of providing appropriate books, games, audio stories, and magazines. This dimension also includes parents regularly providing materials and guiding their child, selecting materials that are suitable for the child's age group, introducing the child to different types of materials and books, selecting materials according to the child's interests. In Ateş, Çetinkaya and Yıldırım (2012, p. 390), it is stated that "teachers and parents have important roles in terms of being a model in providing children with a rich reading environment, helping them gain reading habits, and guiding children to choose appropriate reading materials". The importance of selecting appropriate materials for children is examined in the literature. It can be said that the main function of this dimension is the selection of appropriate and various materials.

The dimension of practical homework support refers to the assistance given to the child for completing their homework. This support does not include parents doing the homework for the child. The intended situation is that parents monitor and support the child's homework process. This dimension includes parents regularly monitoring homework, assisting with difficult homework, providing guidance when necessary, ensuring the child allocates time for homework, and checking the child's completed homework. The literature suggests that parents feel that they need to be involved in their students' homework, that participation makes a difference, and that participation is expected (Kathleen et al., 2001, p. 206). Thus, it is seen that parents are already involved in homework. Núñez et al. (2015, p. 393) showed that perceived parental involvement in homework is significantly and directly related to academic achievement. In the study of İyiöz and İflazoğlu-Saban (2020, p. 378), it is stated that "homework done under the control of adults causes students to have more positive attitudes towards homework and success". Walker et al. (2004, p. 8) states "well-designed homework

helps students learn; it also offers parents opportunities to see what students are learning, talk with children about their learning, and interact with teachers and other school-community members about ways to support student learning”.

Thus, the aim of this study is to develop a valid and reliable measurement tool that analyses the support that parents can provide in the process of language skills development in mother tongue education. The gap of a specific measurement tool in that regard limits the evaluation of the parental factor in terms of mother tongue education. Through this measurement tool, it would be possible to analyse parental support in the context of academic achievement in mother tongue education. Thus, the current study is important for both literature and educational practice. For this purpose, the following research questions were developed:

1. Is Parental Support in Language Skills Development a valid scale?
2. Is Parental Support in Language Skills Development a reliable scale?

## METHOD

### Participants

In the initial application of the developed items, 204 parents voluntarily participated, of whom 141 were female (69.11%) and 63 were male (30.88%). This group was used for the exploratory factor analysis (EFA) and item analysis stages of the study. The first study group comprised parents aged between 27 and 59, with an average age of 40.68 (SD = 5.31). Of the 204 participants, 88 (43.13 %) had a bachelor’s degree, 47 (23.03 %) had a master’s degree, 31 (15.19 %) had a high school diploma, 16 (7.84 %) had an associate’s degree, and 22 (10.78 %) had completed primary school. Family income status was reported as low-middle by 24 participants (11.76%), low by 8 participants (3.92%), middle by 131 participants (64.21%), middle-high by 35 participants (17.15%), and high by 6 participants (2.94%).

To conduct CFA (confirmatory factor analysis), convergent validity, and reliability analyses, we contacted 235 parents on a voluntary basis. Of these, 171 were female (72.76%) and 64 were male (27.23%). The second study group comprised parents aged between 27 and 57, with an average age of 40.32 (SD = 5.93). Of the 235 participants, 95 (40.42%) had an undergraduate degree, 41 (17.44%) had a graduate degree, 58 (24.68%) had a high school diploma, 10 (4.25%) had an associate’s degree, and 31 (13.19%) had completed primary school. Family income status was reported by 29 participants (12.34%) as low-middle, 12 participants (5.10%) as low, 141 participants (60.00%) as middle, 52 participants (22.12%) as middle-high, and 1 participant (0.42%) as high.

**Table 1**

#### *Demographic Informations of the Study Group*

	1st Group		2nd Group	
Gender	141 Female	63 Male	171 Female	64 Male
Age (Mean)	40.68 (SD = 5.31)		40.32 (SD = 5.93)	
N	204		235	

The sample size of the study (204 and 235 participants) is considered sufficient for factor analysis (Child, 2006; Comrey & Lee, 1992; Hair, et al., 2013, p. 100). Therefore, it can be concluded that an adequate number of participants were recruited.

### **Research Instrument**

#### ***The Parental Support in Language Skills Development Scale (PSLSD)***

During primary and secondary education, students develop their language skills through various courses (e.g. language arts), including Turkish language courses in Türkiye. The Parental Support in Language Skills Development Scale was developed to assess the level of support parents provide to their children during this critical period. The process of developing the scale items began with a literature review, followed by interviews with parents. The relevant literature was examined to identify the types of support that parents can provide for the development language skills. In addition, five parents were interviewed about their methods of supporting their children's language skills. Questions were asked about how they provide emotional support, select language development materials, help with language-related homework, and guide their children in developing their language skills. The group of parents consisted of two men and three women, all of whom have university-level education. Firstly, the researchers noted the parents' responses to the questions. For instance, the parents reported providing support for their children's language arts lessons by purchasing books, attending theatre performances, checking homework, promoting socialisation, and modelling reading behaviour. These responses were also utilised in the item development process. As a result of these processes, a pool of 32 items was drawn up by the researchers. In the next stage, two field experts and one measurement and evaluation expert evaluated the items. Based on the evaluation, item 32, which pertained to homework support, was removed as it could be included in emotional support (item 16). Items 1 and 3 were deemed too general, while items 5 and 6 were not fully comprehensible to parents. Additionally, the content of item 21 was already covered by other items in the same factor. Thus, the total number of items was reduced to 25. Subsequently, a field expert and two parents reviewed the prepared items for grammar and comprehension. The 25-item form was finalized at this stage after being evaluated for comprehensibility. Then, it was prepared for the first application.

### **Data Analysis**

JASP 0.17.3 (JASP Team, 2023) software was used for data analysis. The data analysis started with item analysis, and exploratory factor analysis was applied after the item-rest correlations were examined. "Factor analysis is an interdependence technique whose primary purpose is to define the underlying structure among the variables in the analysis." (Hair, et al., 2013, p. 92). In exploratory factor analysis, the number of factors was applied as eigenvalue above 1.00. The factoring method was selected as principal axis factoring. For the rotation method, Promax rotation method was used since a correlational relationship was expected between the factors. Then, confirmatory factor analysis was used to verify the structure revealed by the first study group with the second independent study group. Then, convergent validity was checked with CR and AVE values. In the last phase, Cronbach's  $\alpha$  and McDonald's  $\omega$  values were analysed for reliability analysis and the inter-factor correlation coefficient value was presented. Additionally, both data were examined for normal distribution. According to kurtosis and skewness we can assume a normal distribution.

## Ethical Principles

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## FINDINGS

### Item Analysis and Exploratory Factor Analysis (EFA)

Prior to commencing the exploratory factor analysis, an item analysis was conducted, and item-rest correlations were scrutinised. According to the results in Table 2, item-rest correlation coefficients ranged between .49 and .80. Exploratory factor analysis was initiated with the same 25 items, as it is assumed that item total correlation values above .30 measure the same tendency and characteristics (Coşkun et al., 2023).

**Table 2**

#### *Item Reliability Statistics*

Item	If item dropped	
	Cronbach's $\alpha$	Item-rest correlation
i1	.96	.66
Deleted Item 2 (after EFA)	.96	.72
i2	.96	.73
i3	.96	.71
i4	.96	.49
i5	.96	.69
i6	.96	.65
i7	.96	.76
i8	.96	.71
i9	.96	.68
i10	.96	.73
i11	.96	.63
i12	.96	.74
i13	.96	.74
i14	.96	.77
i15	.96	.73
i16	.96	.73
i17	.96	.80
i18	.96	.78
i19	.96	.75
i20	.96	.70
i21	.96	.69
i22	.96	.79

Item	If item dropped	
	Cronbach's $\alpha$	Item-rest correlation
i23	.96	.76
i24	.96	.73

Note. Cronbach's  $\alpha$  = .96, McDonald's  $\omega$  = .96, Avarage interitem correlation=.536 (%95 CI=.460, .606), MEAN = 4.13, SD = .75

After the item analysis, exploratory factor analysis (EFA) aimed to discover the latent structure consisting of interrelated items (Field, 2017). A total of 25 items have been analysed in EFA. Kaiser-Meyer-Olkin Coefficient and Barlett Test were used to examine whether there was sufficient correlation between the variables to continue the analysis and meet the criterion of sampling adequacy (Hair, et al., 2013, p. 102). Since the KMO coefficient was found to be .95 and the Barlett test was significant ( $X^2 = 4457.576$ ,  $df = 300.000$ ,  $p < .001$ ), it was determined that the sample size was sufficient (Field, 2017; Hair, et al., 2013).

The number of factors in EFA was determined according to the eigenvalue. Thus, as suggested, factors that have eigenvalues higher than 1.0 were taken into consideration (Hair, et al., 2013, p. 109). As a rotation method, Promax rotation, one of the oblique rotation methods, was selected since the factors were expected to be related to each other (Garson, 2023, p. 282). Thompson (2004, p. 43) states that Promax rotation is always a good option in oblique rotation. This method, in which the reference axes of the factors are rotated around the origin until another position is reached, is perhaps the most important tool in interpreting the factors (Hair, et al., 2013, p. 111). A cut-off point of .40 was used for factor loadings. Hair et al. (2013, p. 116) stated that factor loadings between  $\pm .30$  and  $\pm .40$  are minimally acceptable. Thus, four factors were identified in the analysis. However, the analysis was renewed by discarding Item 2, which loaded on two factors. "Variables that cross-load (load highly on two or more factors) are usually deleted unless theoretically justified or the objective is strictly data reduction" (Hair, et al., 2013, p. 120). Accordingly, as a result of EFA, a 4-factor structure with 24 items emerged. It was determined that this structure explained 67% of the total variance, KMO (.94) and Barlett's test were significant ( $X^2 = 4217.811$ ,  $df = 276.000$ ,  $p < .001$ ). Factor loadings and eigenvalues of the factors are presented in Table 3.

**Table 3***EFA Factor Loadings*

	Factor 1	Factor 2	Factor 3	Factor 4
i1				.57
i2				.47
i3				.56
i4				.71
i5				.92
i6				.81
i7			.70	
i8			.79	
i9			.78	
i10			.74	
i11			.74	
i12			.68	
i13	.67			
i14	.84			
i15	.76			
i16	.96			
i17	.72			
i18	.59			
i19		.61		
i20		.84		
i21		.88		
i22		.69		
i23		.82		
i24		.85		

*Note.* Applied rotation method is promax, Factor 1 Eigenvalue: 13.446, Factor 2 Eigenvalue: 1.535, Factor 3 Eigenvalue: 1.253, Factor 4 Eigenvalue: 1.201, Total Variance Explained: 67%, KMO: .94, Barlett Test of Sphericity:  $X^2 = 4217.811$ ;  $p < .001$ , Factor 1: Material Support, Factor 2: Practical-Homework Support, Factor 3: Emotional Support, Factor 4: Guidance-Individual Support.

**Table 4***Factor Correlations*

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	-	.74	.72	.66
Factor 2	.74	-	.72	.65
Factor 3	.72	.72	-	.65
Factor 4	.66	.65	.65	-

*Note.* Factor 1: Material Support, Factor 2: Practical-Homework Support, Factor 3: Emotional Support, Factor 4: Guidance-Individual Support.



After the EFA with Eigenvalue and Promax rotation methods, the 24-item structure was reanalysed with Parallel Analysis with Promax and Varimax rotation and Varimax rotation based on Eigenvalue. As a result of these analyses, there was no change in the structure obtained in the previous analysis and 1 item were cross-loaded and these items were discarded, and the same structure was reached. The correlations between factors are given in Table 4. According to the table, significant relationships were found between the factors in the exploratory factor analysis.

The fact that the 4-factor structure consisting of 24 items explained 67% of the total variance can be interpreted as sufficient to define the latent construct because Merenda (1997, p. 158) stated that the basic rule to be followed is that the ratio for the “real” number of factors or components should be at least .50. The fact that there is no factor loading below .40 indicates that the items under the same factor are strongly clustered with each other (Garson, 2023; Field, 2017; Hair et al., 2013).

According to the findings obtained, the structure created in item writing was discovered. In this way, the factor from item 1 to item 6 was named as Guidance-Individual Support, the factor from item 7 to item 12 as Emotional Support, the factor from item 13 to item 18 as Material Support, and the factor from item 19 to item 24 as Practical-Homework Support.

### **Confirmatory Factor Analysis (CFA)**

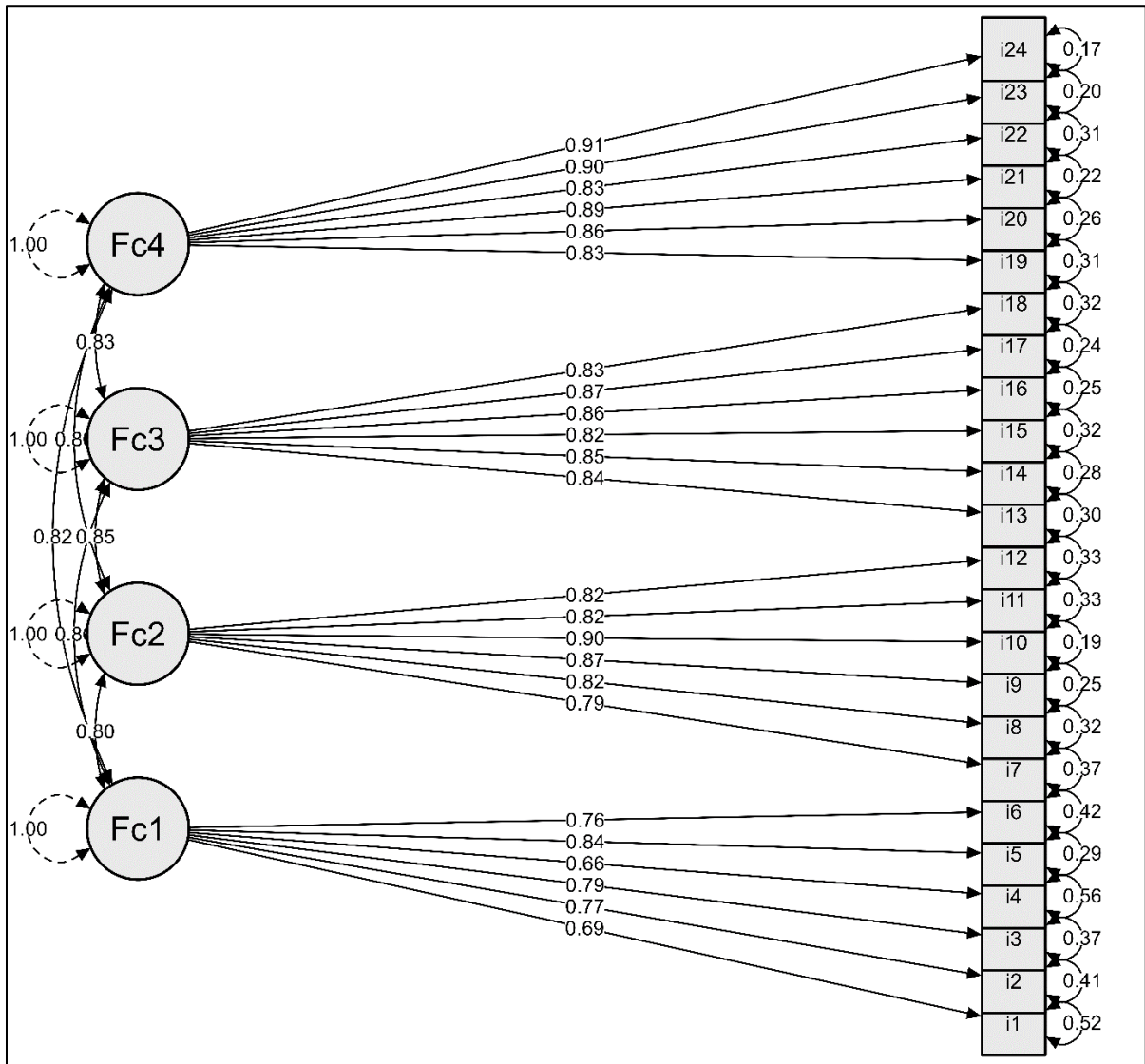
Confirmatory factor analysis (CFA) was conducted twice, as a first-order and second-order analysis. The reason for examining the fit indices at the second level is that the structure constitutes a whole. In addition, second level confirmatory factor analysis is also recommended for measurement tools with three or more factors (Meydan & Şeşen, 2011).

First-order CFA results were also carried out with the JASP computer software. CFA model fit indices are reported as RMSEA (root mean square error of approximation), SRMR (standardised root mean residual), CFI (comparative fit indices), GFI (goodness of fit index), TLI (Tucker-Lewis Index), IFI (incremental fit index), NNFI (non-formed fit index). The following results were obtained from the first-order CFA:  $RMSEA = .07$ ,  $SRMR = .03$ ,  $CFI = .93$ ,  $GFI = .95$ ,  $TLI = .92$ ,  $IFI = .93$ ,  $NNFI = .92$ ,  $X^2/df = 2.41$ . The following results were obtained from the second-order CFA:  $RMSEA = .07$ ,  $SRMR = .03$ ,  $CFI = .93$ ,  $GFI = .95$ ,  $TLI = .92$ ,  $IFI = .93$ ,  $NNFI = .92$ ,  $X^2/df = 2.39$ .

In addition, the standardised factor loadings ranged between .64 and .90 in the first and second level confirmatory factor analyses. Further, the correlations of all four factors with each other were high. According to the fit indices and standardised factor loadings, it can be said that both models are at an acceptable level (Kline, 2023; Marsh, et al, 1988; Hair, et al., 2013). The path diagram of the first level confirmatory factor analysis is given in Figure 1 and the path diagram of the second level confirmatory factor analysis is given in Figure 2.

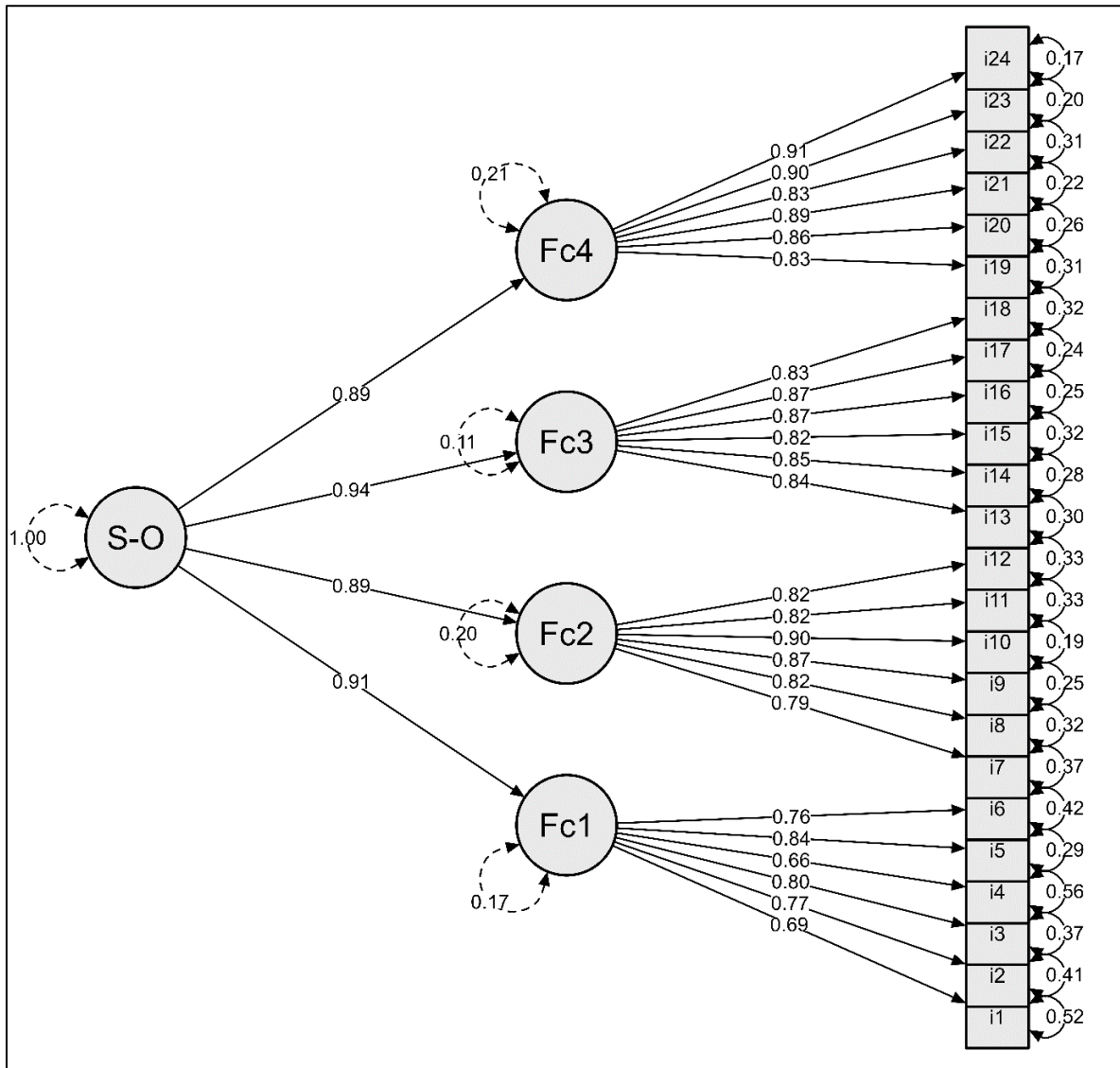
**Figure 1**

First Order CFA



**Figure 2**

Second Order CFA



The four-factor structure and the one-factor model were compared in terms of fit indices. As a result of the one factor CFA, it was observed that SRMR = .05, RMSEA = .12, CFI = .81, TLI = .79, IFI = .81, GFI = .88, NNFI = .79,  $\chi^2/df = 4.85$ . According to these findings, it can be said that the items in the measurement tool fit better as four factors.

**Convergent Validity**

Average Variance Extracted (AVE) and Composite Reliability (CR) values were analysed for convergent validity. The term AVE (Average Variance Explained) is used to gauge how well a latent variable explains the variability in observed variables. This is done by comparing the variance attributed to the construct with the variance caused by measurement error. Additionally, AVE serves to demonstrate convergent validity (Cheung & Chang, 2017). The Composite Reliability (CR) method is used to help discover the factorial structure of the item set and is used in scale development and reliability (Raykov, 1997).

The AVE values of the scale were calculated as .58, .70, .72, .76 respectively at the first level. CR values were determined as .92, .94, .94, .94, .94, respectively. AVE values above .50 indicate convergent validity, and CR values of .70 and above are recommended (Fornell & Larcker, 1981; Hair, et al., 2013, p. 619). According to these findings, it can be said that the measurement tool provides convergent validity.

**Table 5.**

*AVE (Average Variance Extracted) and CR (Composite Reliability)*

Factor	AVE	CR
F1 GIS	.56	.88
F2 ES	.70	.93
F3 MS	.71	.93
F4 PHS	.75	.94

*Note.* GIS: Guidance-Individual Support, ES: Emotional Support, MS: Material Support, PHS: Practical-Homework Support

### Reliability Analysis

Cronbach's  $\alpha$  and McDonald's  $\omega$  values were analysed for reliability analysis. Accordingly, the overall reliability values of the scale were determined as  $\alpha = .98$  and  $\omega = .97$ . Factor 1 (F1) values were determined as  $\alpha = .87$ ,  $\omega = .88$ ; Factor 2 (F2) values were determined as  $\alpha = .93$ ,  $\omega = .93$ ; Factor 3 (F3) values were determined as  $\alpha = .93$ ,  $\omega = .93$ ; Factor 4 (F4) values were determined as  $\alpha = .95$ ,  $\omega = .95$ . According to these values, it is determined that the measurement tool has a significant internal reliability (Field, 2017). In addition, the correlational relationships between the factors are presented in Table 6 below. Accordingly, it was determined that the factors were correlated with each other and with the total score of the measurement tool.

**Table 6.***Factor Correlations*

Variable		F1	F2	F3	F4	PSLSD				
1. F1 (GIS)	r	—								
	Upper 95% CI	—								
	Lower 95% CI	—								
2. F2 (ES)	r	.68	*	—						
	Upper 95% CI	.76		—						
	Lower 95% CI	.59		—						
3. F3 (MS)	r	.73	*	.67	*	—				
	Upper 95% CI	.80		.74		—				
	Lower 95% CI	.66		.58		—				
4. F4 (PHS)	r	.66	*	.62	*	.65	*	—		
	Upper 95% CI	.74		.71		.73		—		
	Lower 95% CI	.57		.53		.56		—		
5. PSLSD	r	.91	*	.82	*	.87	*	.81	*	—
	Upper 95% CI	.93		.86		.90		.86		—
	Lower 95% CI	.89		.76		.83		.75		—

Note. Confidence intervals based on 1000 bootstrap replicates, \* $p < .001$ , PSLSD: Parental Support in Language Skills Development Scale, GIS: Guidance-Individual Support, ES: Emotional Support, MS: Material Support, PHS: Practical-Homework Support

**RESULTS AND DISCUSSIONS**

This study presents the development stages of the Parental Support in Language Skills Development Scale (PSLSD). The scale enables academics and teachers to assess parental support for children's language skills development. Thus, the role of the parents in the development of the child's language skills can be better defined in future studies. Using the measurement tool developed in this study, we can identify parents who need training on how to provide better support. We can then educate these parents on how to do so effectively. This can ensure that the education provided in schools is supported in a healthier way within the family. Thus, parental academic support perceived by children has a long-term and positive effect on their development and academic achievement (Jang & Suh, 2021, p. 8). Chen (2005, p. 107) also reported that perceived parental support has a strong direct relationship with academic achievement. Choe (2020) emphasised that parents' academic support is a predictor of adolescents' academic achievement and that a detailed examination of parental support is important in terms of improving academic outcomes, educating parents, and enabling practitioners to provide culturally sensitive services. The studies also analysed parental support in relation to achievement. The developed scale provides an opportunity to examine parental support in the context of first language teaching (L1).

Within the framework of the research, the analyses were carried out on two different samples. Thus, the discovered structure was verified with another study group. Firstly, item analysis was performed with the first study group, and it was determined that the item-rest correlations of all items in the

measurement tool were higher than the criterion value of .30. Afterwards, exploratory factor analysis was performed using principal axis factoring with Promax rotation method. Exploratory factor analysis revealed a 24-item structure with four factors. These factors were named as Guidance-Individual Support (F1), Emotional Support (F2), Material Support (F3), Practical-Homework Support (F4) as planned before. This four-factor structure explained 67% of the total variance.

CFA was, first, applied with the data collected from the second study group. According to the results obtained, the four-factor model presented acceptable fit values in the second group of 235 participants. Standardised factor loadings ranged between .64 and .90. After this stage, convergent validity was analysed. For this, Average Variance Extracted (AVE) and Composite Reliability (CR) were analysed. AVE values above .50 and CR values above .70 in all factors of the measurement tool can be considered as convergent validity (Fornell & Larcker, 1981; Hair, et al., 2013). In addition, according to the results of the reliability analysis conducted with the second study group, Cronbach's  $\alpha$  and McDonald's  $\omega$  values of .97 and .98, respectively, indicate that the measurement tool has internal consistency (Field, 2017).

In this study, an effort was made to create a valid and reliable measurement tool using two distinct study groups. According to the results obtained, it can be said that the measurement tool is valid and reliable. This scale, which examines the parent's support for the child's language skills development, is designed as a five-point Likert type. There are five options ranging from "Completely Not Suitable for Me" to "Completely Suitable for Me". The minimum score that can be obtained from the measurement tool is 24 and the maximum score is 120. A high score means an increase in the support provided by the parents. The scale, which constitutes a whole, can be used with a total score or with sub-factors based on the purpose.

Standard procedures were followed during the research. However, the discriminant and predictive validity of the measurement tool were not tested. Participants may not have responded truthfully to the statements in the measurement tool, even though they participated voluntarily. Additionally, it is possible that participants may have presented themselves in a different manner than their actual characteristics.

It is suggested that future studies can be designed to overcome the limitations and increase the validity and reliability of the Parental Support in Language Skills Development Scale. The developed scale can be used to analyse the support provided by parents of primary and secondary school students for the development of language skills. The parental support and children's achievements in language skills can be analysed correlationally by using the scale developed in this study.

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## Appendix

## Parental Support in Language Skills Development Scale (PSLSD)

Factor No.	Item No.	Item
F1: Guidance and Individual Support	1	Çocuğumun dil becerilerini desteklemek için birlikte eğitici etkinlikler (kelime oyunları vb.) yaparız.
	2	Çocuğum, dil becerilerini destekleyen materyalleri kullanırken ona rehberlik ederim.
	3	Çocuğumla birlikte onun seviyesine uygun kitap okuma ve film izleme gibi ev içi etkinlikler yaparız.
	4	Çocuğumla birlikte kütüphane ziyareti ve tiyatro izleme gibi ev dışı etkinlikler yaparız.
	5	Çocuğumla onun okuduğu kitaplar veya izlediği programlar ile ilgili konuşuruz.
	6	Çocuğuma, izlediği programlardaki veya okuduğu kitaplardaki olaylar veya ana fikirler ile ilgili sorular sorarım.
F2: Emotional Support	7	Çocuğumun dil becerilerini geliştirme sürecinde elde ettiği başarıları takdir ederim.
	8	Çocuğum dil becerilerini geliştirme sürecinde zorlandığında ona anlayış gösteririm.
	9	Çocuğum, dil becerileriyle ilgili konularda başarılı olduğunda ona olumlu geri bildirimler veririm.
	10	Çocuğumu, dil becerilerini geliştirmesi için motive ederek desteklerim.
	11	Çocuğumun dil becerilerini geliştirmesi sürecinde ona sabırlı davranırım.
	12	Çocuğum dil becerilerini geliştirme sürecinde hata yapsa da başarabileceği konusunda onu cesaretlendiririm.
F3: Material Support	13	Çocuğuma, dil becerilerini destekleyebilecek materyalleri (kitap, oyun, sesli hikâye, podcast vb.) düzenli olarak sağlarım.
	14	Çocuğumun dil becerilerini desteklemek için onun yaş grubuna uygun materyalleri (kitap, oyun, sesli hikâye, podcast vb.) araştırırım.
	15	Çocuğumun dil gelişimini desteklemek için zengin içerikli (kaliteli içerik) materyalleri özenle seçerim.
	16	Çocuğumun dil becerilerini destekleyebilecek çeşitli türlerde materyaller (kitap, oyun, sesli hikâye, podcast vb.) sağlarım.
	17	Çocuğumun dil becerilerini desteklemek için onun ilgi duyabileceği materyalleri (kitap, oyun, sesli hikâye, podcast vb.) seçerim.
	18	Çocuğumun dil becerilerini desteklemek için ona farklı metin türlerinde (masal, hikâye vb.) kitaplar sağlarım.
F4: Practical-Homework Support	19	Çocuğumun dil becerilerini geliştirmek için verilen ödevleri düzenli olarak takip ederim.
	20	Çocuğumun dil becerileri ile ilgili zorlandığı ödevlerinde ona yardım ederim.
	21	Çocuğum, dil becerilerini kapsayan ev ödevlerini yaparken ona rehberlik ederim.
	22	Çocuğumun dil becerilerini geliştirme odaklı ödevlerine yeterli zaman ayırmasını sağlarım.
	23	Çocuğumun dil becerilerini geliştirmek için yaptığı ödevlerin ilerlemesini düzenli olarak izlerim.
	24	Çocuğumun dil becerileriyle ilgili yapmış olduğu ev ödevlerini kontrol ederim.

Note. Dil Becerileri Gelişiminde Ebeveyn Desteği Ölçeği (DBGED) beş dereceli likert tipi değerlendirmeye sahiptir (1 = bana tamamen uygun değil, 2 = bana uygun değil, 3 = bana biraz uygun, 4 = bana uygun, 5 = bana tamamen uygun). Faktör 1: Rehberlik ve Bireysel Destek (m1, m2, m3, m4, m5, m6), Faktör 2: Duygusal Destek (m7, m8, m9, m10, m11, m12), Faktör 3: Materyal Desteği (m13, m14, m15, m16, m17, m18), Faktör 4: Bilgisel-Ödev Desteği (m19, m20, m21, m22, m23, m24). The Parental Support in Language Skills Development Scale (PSLSD) has a five-point Likert-type assessment (1 = not at all characteristic of me, 2 = not really characteristic of me, 3 = moderately characteristic of me, 4 = characteristic of me, 5 = very characteristic of me). Factor 1: Guidance and Individual Support (i1, i2, i3, i4, i5, i6), Factor 2: Emotional Support (i7, i8, i9, i10, i11, i12), Factor 3: Material Support (i13, i14, i15, i16, i17, i18), Factor 4: Practical-Homework Support (i19, i20, i21, i22, i23, i24).

### **Author Contributions**

All authors contributed equally to the manuscript.

### **Conflict of Interest**

No potential conflict of interest was declared by the author.

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### **Ethical Approval and Participant Consent**

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