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Research Article

Analysis of the Psychometric Properties of the Siblings' Experience Quality Scale for Individuals with Siblings with Special Needs: 12-18-Year-Old Adolescents Form

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Objective: This study was conducted to perform the Turkish validity and reliability study of the siblings' experience quality scale (SEQS) for healthy siblings who were aged between 12 and 18 and had a sibling with special needs.

Materials and Methods: Our study was carried out with healthy siblings of students enrolled in two special education and application schools in a province in the west of Türkiye. Validity and reliability stages were carried out, and experts were consulted. Shapiro-Wilk normality test, content validity index, Pearson correlation analysis, Cronbach's Alpha coefficient, confirmatory factor analysis, McDonald's omega test, and t-test were employed in the analysis.

Results: Of the participants, 59% were female, 58% had high school education, and 63% had siblings with intellectual disabilities. The mean age of the participants was 14.87±2.06. The scale explained 58.8% of the total variance. It was found that the omega reliability coefficient for the overall scale was 0.85 and that the fit indices obtained as a result of CFA were X^2=262.28, df=128, X^2/df=2.04, RMSEA=0.073, GFI=0.88, IFI=0.89, NFI=0.80, TLI=0.86, CFI=0.88, RFI=0.76, and AGFI=0.843. The Turkish version of the SEQS was proven to be reliable and valid for the 12-18 age group.

Conclusion: The Turkish version of the SEQS was proven to be reliable and valid for the 12-18 age group.

Keywords: Children with special needs, Sibling relationships, Adolescent, Validity and reliability, Adjustment

1. INTRODUCTION

Siblings within the family system have a long-term relationship that involves constant communication with each other, and siblings are influenced by each other. The first place where a child is socialized in society is the family and the individual often shares this experience with his/her siblings. Siblings take on many different roles such as friends, teachers and caregivers. These dynamics between siblings in the development of the individual will also affect the lifestyle, attitudes and behaviors of children in the future. Siblings are affected by each other socially, emotionally, and psychologically in all periods of life, especially in childhood and adolescence. Siblings' relationships have an important role in their psychological and social development, and in cases of chronic, intellectual, and physical illness, the bond between siblings is affected more.[1] According to the 2010 data of the World Health Organization, the rate of individuals with at least one disability in the world population is approximately 15% (more than one billion people), and this rate is predicted to increase with the effect of aging, disability, and other factors.[2] In Türkiye, on the other hand, according to the 2011data, the rate of the population with at least one disability in all age groups is 6.9%, and this rate is expected to increase with the increase in the age group.[3] The fact that an individual has a physical, social, or intellectual disability affects not only the individual but also their close environment and even the society in which they live. When the relationship between the individual with special needs and his/her healthy sibling is considered, this interaction will change in many ways. The gender of siblings, coping strategies, developmental period characteristics, educational level, type and severity of special needs, family attitude, etc. can affect the relationship between siblings. School-age children develop a sense of responsibility over their siblings and assume the

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role of caregiver. This puts the healthy sibling at risk of being stigmatized by the community or peers, and feeling helpless, guilty, anger, shame, low self-esteem and low self-efficacy. The loss of the child with special needs, increased hospitalization, long-term separation of siblings from each other, etc. may also lead to negative feelings and attitudes on the other healthy sibling. Anxiety about the future quality of life of the individual with special needs, negative attitudes towards the sibling with special needs by peers, variability in domestic processes, disruption of family processes or role confusion between parents may cause the healthy sibling to develop feelings of jealousy, low academic achievement and anxiety. Having a sibling with special needs has also been found that the healthy sibling is more tolerant and helpful, develops more responsibility taking skills, has higher levels of compassion, and develops more communication skills. Determining the level of relationship between siblings with a holistic approach is very important to determine the positive contribution of sibling relationships to the lives of both siblings.

Some studies in the literature have shown that the mothers, fathers, siblings, or other caregivers of individuals with disability experience many problems.[4–7] For example, siblings of individuals with special needs are generally at risk for anxiety, depression, and low self-esteem, have feelings, such as guilt, shame, or regret, and experience some psychological problems.[1,6,8] One of the roles of public health nurses, who consider individuals as a whole with their social and physical environment and have important responsibilities in the protection and development of health, is to provide care, training, and consultancy services for disadvantaged groups in society. The public health nurse, who works in primary care, gives care to individuals with a disability, as well as carrying out rehabilitation services and programs related to the protection and development of health for their sibling who is at risk for depression, social isolation, and low self-esteem.[9] This is very important for the mental health of society. There are few studies conducted by nurse researchers on this topic, and especially public health nurses should know the siblings of individuals with a disability, who are at risk for health, and they should apply nursing interventions to identify the problems in the early period and eliminate the risks.[5]

There are many qualitative studies conducted with healthy siblings of individuals with special needs in Türkiye. The results of these studies have shown that healthy siblings are mostly sad, are not uncomfortable spending time outside with a sibling who has special needs, share their positive and negative feelings together, do not have difficulty communicating, and help each other.[10,11] However, the number of valid and reliable measurement tools that question siblings with special needs and sibling relationships is quite limited.[12] There is a need for an up-to-date, valid, and reliable measurement tool on the topic. Studies in the literature have revealed the feelings of sibling relationships such as anxiety, jealousy, worry about the future of the sibling with special needs, etc. with qualitative methods. It is thought that this tool can reveal the quality of the relationship for individuals in our country due to its sub-dimensions and item content specific to these dimensions. There is no measurement tool in the literature that includes the factors that characterize the findings of qualitative studies.

Therefore, the aim of this study is to carry out the Turkish adaptation study and validity and reliability analysis of the "Siblings' Experience Quality Scale (SEQS)", which aims to reveal the sibling relationships of healthy individuals who are aged between 12 and 18 and have siblings with special needs.

2. MATERIALS AND METHODS

2.1. Type of study

A methodological, descriptive, and cross-sectional design was used in this study, which aims to conduct the Turkish validity and reliability study of the SEQS, which measures the sibling relationships of 12-18-year-old healthy individuals who have a sibling with special needs.

2.2. Research population and sample

The study data were collected from 12-18-year-old healthy individuals who had siblings with special needs who were enrolled in two special

education and application schools in a province in the west of Türkiye between January and May 2021. The scale used in the study consisted of 23 questions. To obtain healthy data in the study, the sample size was determined based on the rule that a sample size of about 5-10 times the number of items on the scale should be reached, which is recommended in validity and reliability studies.[13] A total of 200 participants who agreed to participate in the study were included in the sample. In the original study of the scale, the age range of the participants is 18-69. In our study, the author who developed the scale was contacted and the necessary permission was obtained to conduct a Turkish validity and reliability study for healthy siblings aged between 12 and 18.

Inclusion criteria

-Having a sibling with special needs enrolled in a special education and application school,

-Being aged between 12 and 18, and

-Voluntary participation in the study and submitting consent for participation.

Exclusion criteria

-Disagreeing to participate in the study, and

-Not knowing Turkish.

2.3. Data collection tools

The data of this study were collected by using a socio-demographic characteristics form, the Siblings' Experience Quality Scale (SEQS), and the Attitude Scale for Disabled Sibling (ASDS).

2.4. The Socio-demographic characteristics form

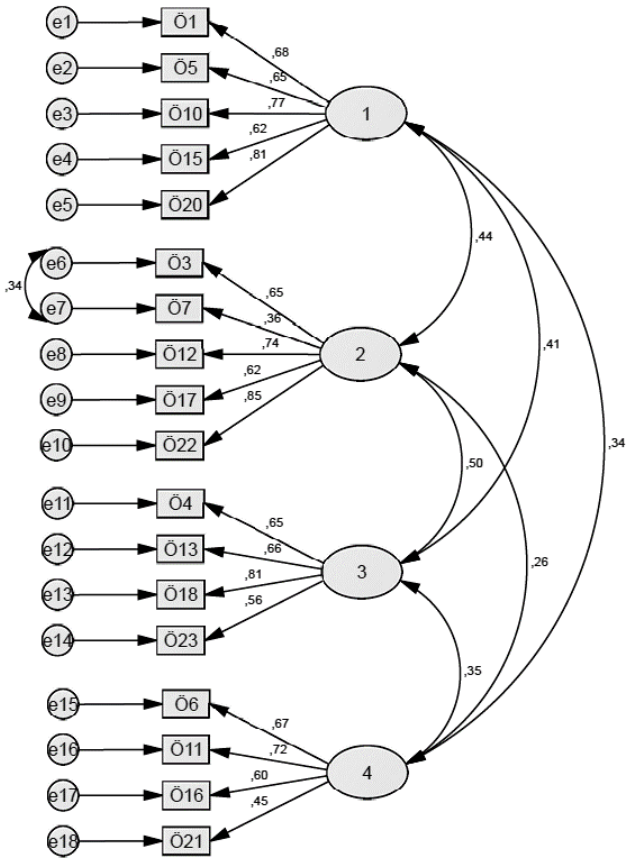
This form was created by the researchers following a review of the literature.[11,14] It consists of questions, such as gender, age, and special needs, about children with special needs and their healthy siblings.

2.5. The Siblings' Experience Quality Scale (SEQS)

This scale was developed by Sommantico et al. (2020) to measure sibling relationships of healthy children with siblings with disabilities and chronic and mental illnesses. It consists of 23 items evaluated on a 7-point Likert-type scale with options ranging from 1 (strongly disagree) to 7 (strongly agree). The scale has five sub-dimensions, namely, closeness (items 3,7,12,17 and 22); conflict (items 1,5,10,15 and 20); jealousy (items 4,8,13,18 and 23); self-marginalization (items 9,14 and 19); worry (items 2,6,11,16 and 21). The closeness sub-dimension involves sibling relationships based on friendship, love, knowledge, and sincerity; the conflict sub-dimension refers to feelings such as fight, enmity, or envy towards the sibling; the jealousy sub-dimension is about the presence of feelings such as jealousy and rivalry between siblings and the perception of biased love towards siblings by the parents; the self-marginalization sub-dimension is about the difficulty in expressing needs and wishes and making parents exhausted; the worry sub-dimension is about worrying about the health and future life of the sibling with special needs. In the evaluation of the scale, the total mean score of each sub-dimension is calculated. A high score obtained from a sub-dimension of the scale indicates that the related relationship is at a higher level. The reliability coefficients (α) of the original scale were found as .78 for closeness, .88 for conflict, .87 for jealousy, .74 for self-marginalization, and .88 for worry. According to confirmatory factor analysis, the goodness of fit indices were found as $\chi 2/df = 1.98$; RMSEA (Root Mean Square Error of approximation) = 0.047 [.033–.061]; CFI (Comparative Fit Index) = 0.92; TLI = 0.91; SRMR = 0.063. The original scale is suitable for siblings aged 18-69.[14] Cronbach alpha values in this study were; closeness .79, conflict .82, jealousy .75, worry .70 and total scale .84.

Figure 1.

Confirmatory factor analysis of the Siblings' Experience Quality Scale (SEQS) – 12-18-year-old adolescents for individuals with siblings with special needs



2.6. The Attitude Scale for Disabled Sibling (ASDS)

The scale developed by Küçüker (1997) has a 4-point Likert-type structure. It consists of 28 questions and 4 sub-dimensions. The sub-dimensions are feelings and thoughts about living with a disabled sibling (1,4,6,8,9,10,11,12,14,17,18,19,20,21,24,27), feeling sad and worried regarding the (current and future) situation of the disabled sibling (2,3,13,16,25,26), and thoughts about the characteristics of the disabled sibling (5,7,15,22,23,28). While the items expressing a positive attitude on the scale are evaluated from 4 to 1 with options ranging between "totally agree" to "totally disagree", the items expressing a negative attitude are evaluated from 1 to 4 with options ranging from "totally agree" to "totally disagree". The scores that can be obtained from the scale vary between 28 and 112, and high scores indicate positive attitudes and low scores indicate negative ones. Cronbach's alpha coefficient values of the sub-dimensions were found as .84 for the attitude towards the disabled sibling sub-dimension, .81 for the living with the disabled sibling sub-dimension, .70 for the status of the disabled sibling sub-dimension, and .73 for the characteristics of the disabled sibling sub-dimension.[12] In our study, Cronbach alpha value was found to be .86.

2.7. Steps of the study

Expert opinion stage: First, the permission of the author, Sommantico, who developed the scale, was obtained via e-mail to carry out the adaptation study. The English form of the scale was translated into Turkish by two academics who are expert linguists and fluent in English and Turkish. The scale translated into Turkish by the linguists was combined into a single form. The Turkish form created was translated back into English by two experts with good command of the two languages. After back translation, the Turkish version of the scale was found to be close to the English version. The translations were then submitted to expert opinion. It is recommended to consult at least three experts to determine the content validity of a scale.[15–18] A total of 10 experts, including four faculty members working in the field of public health nursing, five faculty members working in the field of child health and diseases nursing, and one faculty member working in the field of internal medicine nursing, were consulted. The experts were given the draft form of the scale, and they were asked to rate each item on a score between 1 and 4 (1=not appropriate at all, 4=completely appropriate) to evaluate their suitability. Scores were evaluated by using the content validity index. The Content Validity Index (CVI) is a statistical measure used to assess the content validity of a scale or measurement instrument.[19] After the expert opinion stage, the Turkish form of the scale was finalized by making necessary arrangements.

Pilot application: The form was piloted to 20 siblings.[16–18] At the end of the application, it was determined that none of the items needed a change. The siblings included in the pilot application were not involved in the sample.

2.8. Data analysis

In the analysis of the data, descriptive statistics were presented as percentages and mean scores. Other analyses included the Shapiro-Wilk test for testing the normality of the data, content validity index for the analysis of the inter-rater reliability, Pearson correlation analysis for the item-total score analysis of the scale and sub-dimensions, Cronbach's Alpha coefficient for determining the internal consistency of the scale and sub-dimensions, omega coefficient for the total scale and sub-dimension reliability, Davis technique for content validity, explanatory factor analysis for determining item-factor correlation, confirmatory factor analysis for determining whether items and sub-dimensions explained the original structure of the scale, t-test for known group comparisons, and Pearson correlation analysis for the correlation between the factors of the scale. For parallel forms reliability, the ASDS was used, and the correlations between the sub-dimensions were examined with Pearson correlation analysis. In the evaluation of the data, the margin of error was taken as p=0.05. The SPSS 24.0 (IBM Statistics, Armonk, NY, USA), SPSS AMOS 24.0 (IBM, Statistics, Armonk, NY, USA), and Jamovi version 2.2.2 software packages were used for statistical analysis. $P<0.05$ was considered statistically significant.

2.9. Ethics of the study

Ethics committee approval was obtained for the study (decision number: 2020/14-01 dated: 13.11.2020). The institutional permission of the Provincial Directorate of National Education (dated: 25.12.2020) and the written permission of the parents and children were obtained. The permission of the author who developed the scale was obtained via e-mail. The present study followed the principles outlined in the Declaration of Helsinki for Human Studies.

2.9. Limitations of the Study

This research is limited to siblings of children with special needs aged 12-18.

3. RESULTS

Of the siblings in the study, 59% (n=18) were female, 41% (n=82) were male, 58% (n=116) had high school education, and 42% (n=84) had secondary education. The mean age of the siblings was 14.87±2.06. Also, 62% (n=124) of the siblings with special needs were male, 38% (n=76) were female, 63% (n=126) had a intellectual disability, 48% (n=48) had an emotional disability, and 13% (n=26) had a physical disability.

3.1. Content validity

Item-based content validity index was found to range between 0.99 and 1.00, and scale-based content validity index was determined as 0.99.

3.2. Explanatory Factor Analysis (EFA)

As a result of the explanatory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) coefficient was determined as .799 and the Bartlett test as $X^2=1298.965$. The original scale has five sub-dimensions, but as a result of the EFA, the scale was determined to consist of four sub-dimensions. The scale explained 58.8% of the total variance. The rate of explained total variance by sub-dimensions was as follows: the closeness sub-dimension, 15.5%; the conflict sub-dimension, 17.4%; the jealousy sub-dimension, 13.3%; and the worry sub-dimension, 12.4%.

The factor loads of the items on the sub-dimensions were found to range between .67 and .76 for the closeness sub-dimension, .59 and .83 for the conflict sub-dimension, .49 and .82 for the jealousy sub-dimension, and .57 and 82. for the worry sub-dimension (Table 1).

Table 1.

Explanatory Factor Analysis (EFA) (n=200)

	Sub-dimensions			
Items	Closeness	Conflict	Jealousy	Worry
m3	.76			
m7	.67			
m12	.72			
m17	.69			
m22	.73			
m1		.78		
m5		.66		
m10		.83		
m15		.59		
m20		.81		
m4			.73	
m13			.78	
m18			.82	
m23			.49	
m6				.70
m11				.82
m16				.71
m21				.57

3.3. Confirmatory Factor Analysis (CFA)

As a result of the CFA, the fit indices were found as X^2=262.28, df=128, X^2/df=2.04, RMSEA=0.073, GFI=0.88, IFI=0.89, NFI=0.80, TLI=0.86, CFI=0.88, RFI=0.76, and AGFI=0.843. The factor loads of the items on the sub-dimensions were found to range between .36 and .85 for the closeness sub-dimension, .62 and .81 for the conflict sub-dimension, .56 and .81 for the jealousy sub-dimension, and .45 and 72. for the worry sub-dimension. A modification was made between two items, and the explained variances of these two items are 24% and 13%, respectively.

3.4. Reliability analysis

Cronbach's alpha values of the sub-dimensions of the scale were 0.82 for conflict, 0.79 for closeness, 0.75 for jealousy, and 0.70 for worry sub-dimension. As a result of the split-half analysis of the scale, Cronbach's alpha value of the first half was determined as .70 and .74 for the second half. Spearman-Brown and Guttman Split-Half coefficients were both found as .85. McDonald's omega coefficient was calculated as 0.83 for conflict, 0.80 for closeness, 0.76 for jealousy, and 0.70 for worry sub-dimension. The total alpha value of the scale was 0.84 and the omega value was 0.85. It was determined that the individuals participating in the study had a high level of closeness relationship with their siblings with special needs and that the lowest level of relationship between them was jealousy (Table 2).

It was determined that the total dimension mean of the scale was 84.75±16.85, and the sub-dimension total scores were 29.73±6.32 for closeness, 15.85±7.58 for worry, 13.81±7.21 for conflict and 11.76±7.34 for jealousy, respectively (Table 2).

Table 2.

Reliability analysis of scale and sub-scale scores (n=200)

Subscale	*Cronbach α*	*M ± SD*	*Min-Max*	*McDonald's ω*
Closeness	.79	29.30±6.87	5-35	0.80
Conflict	.82	14.15±7.77	5-35	0.83
Jealousy	.75	10.07±6.43	4-28	0.76
Worry	.70	12.83±6.44	4-28	0.70
Total Scale	.84	66.35±14.18	21-119	0.85

It was determined that the item-total score correlations of the sub-dimensions ranged between 0.36 and 0.71 (Table 3).

Table 3.

Item-total score correlations of the sub-dimensions (n=200)

Subscales	***Items***	**Corrected Item-subscale score correlations *(r)****
Closeness	3	.63
	7	.43
	12	.60
	17	.57
	22	.65
Conflict	1	.62
	5	.57
	10	.69
	15	.53
	20	.71
Jealousy	4	.53
	13	.56
	18	.66
	23	.45
Worry	6	.50
	11	.58
	16	.49
	21	.36

*p<0.001

There was a significant and moderate correlation between the ASDS, which was used as a parallel form, and the closeness sub-dimension of the SEQS (p<0.001). There was a moderate, negative, and significant correlation between the ASDS and conflict sub-dimension, and a low, negative, and significant correlation between the ASDS and the jealousy and worry sub-dimension (p<0.001) (Table 4).

Table 4.

Correlations between the ASDS and the sub-dimensions of the SEQS (n=200)

Subscales	ASDS (*r*)*
Closeness	0.401*
Conflict	-0.337*
Jealousy	-0.251*
Worry	-0.295*

*p<0.001

4. DISCUSSION

According to the content validity index, it was observed that the item- and scale-based content validity indexes (0.90) were greater than 0.80, and there was a high level of agreement between the experts.[18,20,21] These results supported the content validity of the scale. According to this result, it was determined that the items adequately represented the desired area for siblings in the 12-18 age group.

4.1. Construct validity of the scale

In the literature, it has been stated that the KMO value should be at least 0.60 and the Barlett Sphericity test value should be statistically significant to perform factor analysis.[20,21] In our study, it was determined that the KMO value was greater than 0.60 and $p<0.05$ according to the Barlett Sphericity test result. Therefore, factor analysis could be performed.[18,20–23] This result of our study was also similar to the result of the original scale.[14] When the number of factors is determined in explanatory factor analysis, the eigenvalue is accepted as 1 and above according to the literature.[22,24] In the literature, it is emphasized that the minimum factor load should be 0.30 and above, and the items below this value should be removed from the scale when determining the factor of the items.[18,20–23] Although the construct of five items (2, 8, 9, 14, and 19) on the original scale was analyzed, these items were removed from the scale in line with the permission of the author who developed the scale, because the factor loads of these items were low. In our study, it was determined that the factor loads of the items on the four sub-dimensions of the scale were mostly greater than 0.50. This finding was consistent with the findings of the original scale.[14] The scale consisted of four sub-dimensions, and these four sub-dimensions explained 58.8% of the total variance. It was seen that the total explained variance in the original form of the scale was 66.3%.[14] The total variance explained in our study was over 50% and close to the total variance explained in the original scale, and this revealed that the scale was a valid measurement tool for the 12-18 age group. This result also supported the construct validity of the scale. All these results showed that the scale had a strong factor structure.

According to the confirmatory factor analysis, factor loads of the four sub-dimensions were found to vary between .36 and .85 (Figure 1). All factor loads were greater than 0.30, fit indices were greater than 0.80 (GFI=0.91, IFI=0.90, NFI=0.82, and CFI=0.89), RMSEA was less than 0.080 (RMSEA=0.073), and X^2/df was less than five ($X^2/df=2.04$), all of which showed that the items on each sub-dimension adequately defined their own factor. These findings appear to be close to or at the compliance limits stated in the literature.[25–27] The findings obtained were similar to the findings obtained in the original scale.[7] These results supported the construct validity of the scale and showed that an effective evaluation could be made. The explanatory and confirmatory factor analysis results of our study supported the construct validity of the scale, thereby revealing that this scale is a valid tool for the 12-18 age group. In this study, modifications were made between e6-e7. It is stated in the literature that some items in the same sub-dimension together measure a different concept other than the concept in that sub-dimension, which may cause measurement error. For this reason, modifications can be made between the items to reduce the measurement error in line with the recommendations of the model. In this study, it was seen that the two concepts in the conflict sub-dimension measure a different concept in common, and modifications were made to reduce the measurement error.[16,20,25–28]

4.2. Reliability analysis of the scale

4.2.1. Internal consistency analysis of the scale and its sub-dimensions

In the literature, a Cronbach's alpha coefficient between 0.60 and 0.80 is reported to show the scale is quite reliable and a value between 0.80 and 1.00 indicates that the scale is highly reliable.[15,29,30] In the present study, Cronbach's alpha for the overall scale was found to be .84. Cronbach's alpha values of the sub-dimensions were found to vary between .70 and .82, and this result is similar to Cronbach's alpha values (.74-.88) in the original scale.[31] As a result of the correlations between the measurement tool used in parallel forms reliability (ASDS) and sub-dimensions of SEQS, it was found that there were moderate and low-level significant relationships, Cronbach's alpha values of both halves obtained in the split-half method were above 0.80, and that there was a significant and strong relationship between the two halves. These results provided important evidence supporting the reliability of the scale. In line with all these results, it was concluded that the scale was a measurement tool that could be used safely for the 12-18 age group.

4.2.2. Item-total score analysis of the sub-dimensions

In the literature, it has been reported that item-sub-dimension total score correlations should be greater than 0.20, as close to 1 as possible, and positive.[16] In our study, item-sub-dimension total correlations were found to be greater than 0.36 (Table 3). In line with these results, it was concluded in our study that the total sub-dimension scores were highly correlated with each item and adequately represented the area to be measured, the scale measured sibling relationships adequately for the 12-18 age group, and the item reliability of the scale and its sub-dimensions was high.

In the original form of the scale, the relationships between siblings were determined as closeness, self-marginalization, worry, conflict, and jealousy, respectively. According to the results of our study, the highest relationship between siblings included closeness and the lowest level of relationship included jealousy, which was consistent with the results of the original form of the scale.[31]

It was determined that the total dimension mean of the scale was 84.75±16.85, and the sub-dimension total scores were 29.73±6.32 for closeness, 15.85±7.58 for worry, 13.81±7.21 for conflict and 11.76±7.34 for jealousy, respectively. In the original form It was determined that the mean values in the original form were similar [14].

4.3. Strengths and limitations

The scale used in this study is a valid and reliable tool that can be used to measure the sibling relationships of individuals with siblings with special needs in the 12-18 age group and this is the first study in Türkiye on this topic, which shows the strength of the present study. The study has some limitations, as well. For example, the data collection process took place during the pandemic period, it was difficult to reach healthy siblings due to the absence of children with special needs, no sampling procedure was implemented, and only siblings who agreed to participate in the study were recruited. Another limitation of this study is that EFA and CFA were conducted on the same group due to lack of sufficient sample.

5. CONCLUSION

The original form of the scale consists of five sub-dimensions and 23 items. However, in our study, five items were removed (items 2, 8, 9, 14, and 19) because their factor loads were low although they had been controlled previously. Eventually, it was determined that the Turkish version of the scale consisted of 18 items and 4 sub-dimensions. The name of the new scale was determined as 'Sibling relationship scale of individuals with special needs: 12-18 years old adolescent'. The results of the study indicated that the scale was valid and reliable for measuring the sibling relationships of healthy individuals who were aged between 12 and 18 and had siblings with special needs. The current scale can be used to measure the level of sibling relationships of healthy individuals who are aged between 12 and 18 and have siblings with special needs in Türkiye. Having special needs affects not only the individual but also the family, especially the healthy sibling. It is thought that this measurement tool, which is valid and reliable,

determines the needs of healthy siblings, and reveals the level of sibling relationships, will contribute to the development of future sibling relationships.

Article Information Form

Informed Consent

Written informed consent was obtained from individuals after adequate information about the study aims and procedures had been provided.

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Authors' Contribution

Study conceptualization, design: T. Ö., G. K., M. B. Supervision: M. B. Data collection and analysis: T. Ö., M. B., G. K. Literature review: T. Ö., G. K. Manuscript writing: T. Ö. Final review: T. Ö, G. K, M. B.

The Declaration of Conflict of Interest/ Common Interest

No conflict of interest or common interest has been declared by authors.

Artificial Intelligence Statement

No artificial intelligence tools were used while writing this article.

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