

## RESEARCH

# Child Abuse Cognitions Scale: Parents Form Çocuk İstismarına İlişkin Bilişler Ölçeği: Ebeveyn Formu

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### Abstract

Parents can have certain misbeliefs, misconceptions or cognitions related to child abuse within the framework of cultural norms and family dynamics. These cognitions can lead to unhealthy communication in the family and deterioration of the child's mental structure. In order to raise a healthy family and society, it is necessary to determine the cognitions of parents regarding child abuse. In this direction, this study sets out to develop a measurement tool that measures the cognition of parents about child abuse. The study group of the research consists of 794 parents residing in Siirt. Exploratory factor analysis and confirmatory factor analysis studies were carried out in order to ensure construct validity during the scale development. According to the exploratory factor analysis, it was seen that the three-dimensional structure of the scale explained 50.36% of the total variance. The model fit of the scale was tested, and it was concluded that the fit indices were at an acceptable level according to the confirmatory factor analysis. Within the scope of the reliability studies of the scale, it was seen that the internal consistency, split half reliability and test-retest reliability coefficients of the whole scale were high. In order to test the criterion-related validity of the scale, it was determined that there was a moderate and high level of relationship between the Childhood Sexual Abuse Myths Scale, and the Child Negligence and Abuse Awareness Scales. A total of 18 items and sub-dimensions of the three-factor structure were determined as cognitions related to child neglect, cognitions related to the act of abuse, and cognitions related to coping with abuse. In line with the results obtained, it can be said that the scale is a valid and reliable measurement tool.

**Keywords:** Child abuse, cognitions, scale development, parents

### Öz

Kültürel normlar ve aile içi dinamikler çerçevesinde ebeveynlerin çocuk istismarına ilişkin bir takım yanlış inanışları veya bilişleri bulunabilmektedir. Bu bilişler aile ortamında sağlıklı iletişime, çocuğun ruhsal yapısının bozulmasına yol açabilmektedir. Sağlıklı bir aile ve toplum yetiştirmek için ebeveynlerin çocuk istismarına ilişkin bilişlerinin belirlenmesine ihtiyaç duyulmaktadır. Bu doğrultuda çalışmada ebeveynlerin çocuk istismarına ilişkin bilişlerini ölçen bir ölçme aracı geliştirmektedir. Araştırmanın çalışma grubunu Siirt ilinde ikamet eden 794 ebeveyn oluşturmaktadır. Ölçek geliştirme sürecinde yapı geçerliliğini sağlamak amacıyla açılımlı faktör analizi ve doğrulayıcı faktör analizi çalışmaları yürütülmüştür. Açılımlı faktör analizine göre ölçek üç boyutlu yapının toplam varyansın % 50.36'sını açıkladığı görülmüştür. Doğrulayıcı faktör analizine göre ölçeğin model uyumu test edilmiş ve uyum indekslerinin kabul edilebilir düzeyde olduğu sonucuna varılmıştır. Ölçeğin güvenilirlik çalışmaları kapsamında tüm ölçeğin iç tutarlılık, iki yarı güvenilirliği ve test-tekrar test güvenilirlik katsayılarının yüksek olduğu görülmüştür. Ölçeğin ölçüt bağlantılı geçerliliğini test etmek üzere Çocukların Cinsel İstismarına İlişkin Mitler Ölçeği, Çocuk İhmal ve İstismarı Farkındalık Ölçekleri arasındaki ilişkilerinde orta ve yüksek düzeyde bir ilişkiye sahip olduğu tespit edilmiştir. Toplam 18 madde ve üç faktörlü yapının alt boyutları çocuk ihmaline ilişkin bilişler, istismar eylemine ilişkin bilişler ve istismarla başa çıkmaya ilişkin bilişler şeklinde belirlenmiştir. Elde edilen sonuçlar doğrultusunda ölçeğin geçerli ve güvenilir bir ölçme aracı olduğu söylenebilir.

**Anahtar sözcükler:** Çocuk istismarı, bilişler, ölçek geliştirme, ebeveynler

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**CHILDREN** are at the center of life of the family and society. It is everyone's dream to create a world where children are protected and cared for by every segment of society, and children's rights are respected. Children's rights are among the indispensables of raising physically and psychologically healthy individuals and families (Polat 2018). Child abuse is one of the violations of children's rights. Today, child maltreatment is among the subjects that society and the media focus on. A case of child abuse can be seen almost every day in visual, written or social media. However, it is seen that child abuse is reflected more in reports in developed countries compared to others (Alzoubi et al. 2018). In developing countries such as Turkey, it may be insufficient to carry out the necessary studies to prevent and cope with child abuse (Çeçen 2007). The phenomenon of child abuse is a social problem that has somehow been postponed in many countries (Altıntop 2019, Polat 2019). For example, some cultural codes, such as family honor and family secrecy, prevent revealing abuse within the family in some societies (Ligiéro et al. 2009, Cromer and Goldsmith 2010, Fontes and Plumer 2011, Rueda et al. 2021).

Extensive research on the phenomenon of child abuse reveals the impact of children's traumatic experiences. According to the research of the United Nations International Children's Emergency Fund (UNICEF 2012), one out of every ten girls in the world is exposed to abuse. The World Health Organization (WHO) data show that one out of every four adults has experienced childhood abuse (WHO 2016). Considering the cases not reflected in the reports, it can be considered that these rates are high. Statistics of Children coming or brought to Security Units published annually by the Turkish Statistical Institute (TUIK) also support these striking results. The overall crime rate against children was 10% in 2015, 12.1% in 2016 and 13.5% in 2017 (TUIK 2016, 2017, 2018). These data show that crimes and abuse cases against children tend to increase. When international and domestic data can be evaluated in general, it is necessary to carry out comprehensive studies to prevent child abuse, which poses a risk in terms of community mental health, and to increase awareness (Polat 2019).

The phenomenon of child abuse includes the behaviors of an adult, group or country that intentionally or unknowingly prevent the emotional, physical and social development of the child and impair their health (WHO 2016). As it can be understood from this definition, what is meant by the adult is the parent or caregiver who is responsible for the development and care of the child. If there is a healthy communication between parents and children, a healthy family can be mentioned. In an unhealthy family environment, children cannot express their feelings and thoughts clearly. In this environment, it is difficult to clearly understand what parents expect from their children. In this direction, it can be said that healthy children grow up in families with healthy communication (Satir 2016). It is possible for a child who grows up in an unhealthy family environment to be abused emotionally, physically and even sexually (Gonzalez et al. 2021). For example, when a mother tells what she wants to tell by shouting at her child or slaps her child, there is an unhealthy communication environment that includes abusive behavior.

It is understood that healthy or unhealthy communication in the family environment is related to the personal characteristics of parents, parenting styles and cognitions about child rearing (Milner 2003, Johnston et al. 2018, Miragoli et al. 2018, Chung et al. 2020, Gonzalez et al. 2021). In a family with strict parenting style, it is not possible to talk about a healthy communication because the child cannot express his/her feelings and thoughts easily. On the other hand, it is seen that parents who exhibit strict parenting

style have cognitions to control the child's behavior and protect the child from bad situations (Beckerman et al. 2018, Chung et al. 2020). It has been observed that the personality traits and educational level of the parents can change the probability of child abuse (Ross 1996). While parents raise their children, physical or emotional abuse as a discipline method may cause more harm to children (Güler et al. 2002, Milner 2003, Kara Doruk 2012, Beckerman et al. 2018, Sigel and McGillicuddy-De Lisi 2019). Communication styles within the family, coping styles and conflict resolution approaches are among the factors affecting the potential for abuse (Azar and Weinzierl 2005, Miragoli et al. 2018, Chung et al. 2020).

Child abuse can be seen as a taboo depending on cultural factors. In some societies, the word abuse alone can be seen as an expression that should not be spoken (WHO 2016, Ferragut et al. 2020, Rueda et al. 2021). There may be changes in cognitions and myths depending on the level of awareness of child abuse in the family and society. If there is unhealthy communication in the family, family members may develop false cognitions about abuse (Cromer and Goldsmith 2010, Koçtürk and Kızıldağ 2018). The source of these cognitions may be the myths accepted but not expressed by the society. Myths in the society are intensely aimed at blaming and devaluing victims, and drawing attention to and promoting the perpetrators (Cromer and Goldsmith 2010, Fontes and Plummer 2010, Pedneault 2019). Cognitions formed in the family environment, on the other hand, emerge more in the case of low awareness of child abuse. An example of this is when parents think that their children are clumsy due to parenting inadequacies (Milner 2003, Timraz 2018, Sigel and McGillicuddy-De Lisi 2019).

Cultural norms and values may cause social approval of physical and/or emotional child abuse cases in the family (Fontes 2005, Ligéro et al. 2009, Fontes and Plummer 2010). It is understood that some idioms or proverbs that are frequently used as cultural accumulation in Turkey include mistreatment towards children (Polat 2018, Altıntop 2019). Two of them are "Spare the rod and spoil the child (Kızını dövmezen dizini döver)" and "Beating is from heaven (Dayak cennetten çıkmadır)." Words embedded in this cultural subconscious can cause prejudice to the child in the family. Incorrect language and unhealthy communication style used in the family increase the possibility of child abuse. It is necessary to examine how parents learn the wrong methods they use in raising children (Beckerman et al. 2018, Miragoli et al. 2018, Chung et al. 2020). Depending on the perspective of the parents towards their children, approaches to conflict resolution regarding the problems experienced at home may differ. Cultural elements and family dynamics can lead to rigid parenting style (Milner 2003, Fontes 2005). When cultural norms and family dynamics are evaluated together, it is seen that parent cognitions and interpretations are effective in raising children (Kağıtçıbaşı 2005). For example, if something happens to the child, the mother may think that she is a bad mother. Thus, the mother can limit the child's life more at home and at school. This can be explained by family dynamics and faulty cognitive thoughts.

It is possible to come across studies that reveal parental cognitions that lead to child abuse within the framework of cultural norms and family dynamics (Haskett et al. 2003, Mammen et al. 2003, Milner 2003, Fontes and Plummer 2010, Camilo et al. 2020, Gonzalez et al. 2021, Rueda et al. 2021). When the local literature is examined, it can be seen that there is a measurement tool that measures myths about sexual abuse, which is a component of child abuse (Koçtürk and Kızıldağ 2018). In the context of the cultural variables mentioned above, it seems that this scale does not measure cognitions or myths

about physical and emotional abuse types. It is striking that there is no measurement tool in the literature that can measure parents' cognition about child abuse. In order to fill this gap in the field, it is thought to develop a measurement tool. Within the framework of cultural norms and family dynamics, parents may have some false beliefs or cognitions about child abuse. These cognitions can lead to unhealthy communication in the family environment and deterioration of the child's mental structure. In order to raise a healthy family and society, it is necessary to determine the cognitions of parents regarding child abuse. Recognizing, preventing, reporting, and responding to child abuse can help parents, families, and society correct misconceptions or cognitions. In addition, it can be said that knowing cognitive errors can increase the ability to cope with child abuse in the family and social structure, and the incidence of abuse will tend to decrease with increasing awareness. In this direction, the purpose of the study is to develop a measurement tool that measures parents' cognition about child abuse.

## Method

### Sample

At every stage of this study, which is a scale development study, study groups were formed among the parents who have children in primary schools in the center and districts of Siirt, by using the appropriate sampling method (Büyüköztürk et al. 2018). In the study, some inclusion and exclusion criteria were determined while working with parents. Inclusion criteria are having at least one child in primary school age, being sensitive to child abuse, using online communication applications, being internet literate and approving the informed consent form. Parents who did not meet these criteria were excluded from the study.

During the scale development process, data were collected from 73 parents for pilot study, 471 parents in exploratory factor analysis, 323 parents in confirmatory factor analysis, and 119 parents in internal consistency reliability, test-retest reliability and criterion validity studies. Data were collected from a total of 794 parents. In line with the recommendations in the literature (Kline 2014, Seçer 2015), it can be stated that the study groups of the research are of sufficient size in order to conduct validity and reliability analyzes. The data of the research were collected between May 15, 2020, and 1 September 5, 2020. 480 (60%) of the participants were female and 314 (40%) were male. The age range of the parents forming the study groups varies between 23 and 65. Of the participants, 125 (15%) were illiterate, 158 (20%) primary school graduates, 224 (28%) secondary school graduates (3 years of education after primary school), 161 (21%) secondary school graduates (primary and secondary school integrated, 8 years of education), and 126 (16%) graduates of higher education. Of the participants, 368 (46%) had a nuclear family, 306 (39%) had an extended family, and 120 (15%) had a single-parent family. 123 of the participants (15%) are at the upper socio-economic level, 326 (41%) are at the middle and 435 (44%) are at the lower socio-economic level.

### Procedure

For the application, firstly, permission was obtained with the letter of the Atatürk University Educational Sciences Unit Ethics Committee with the decision number 06, dated 10/7/2020 and numbered 56785782-050.02.04-E-2000172704. Afterwards,

application permission was obtained from the Provincial Directorate of National Education and individual consent was obtained from the participants with a voluntary consent form. School administrations were contacted for the application. However, in this study, which was carried out on a subject such as child abuse that is difficult to talk about and work with, three school principals created an obstacle to reach the parents because of the reasons that “their names would be tarnished in a possible abuse detection and there would be a management fault in a way.” Seven school principals were agreed for implementation. Due to the uncertainty during the Covid-19 epidemic, parents were reached through online instant communication application (Whatsapp) groups through primary school administrators and teachers. Data were collected by online data collection method (Google Forms) with internet-based scales. In the processes of reaching the parents and collecting data, attention was paid to the confidentiality, authenticity and integrity criteria of the personal data of the participants (Yıldırım and Şimşek 2018).

## Measures

### Demographic information form

It was applied to collect data related to the demographic characteristics of the participants, including information such as gender, age, education level, family type and perceived socio-economic structure.

### Child Abuse Awareness Scale

The scale was developed by Celiloğlu (2018) to measure awareness of child abuse. It is a Likert-type measurement tool consisting of three sub-dimensions and 23 items. As a result of the exploratory factor analysis of the measurement tool, it was seen that it explained 51.92% of the total variance. As a result of confirmatory factor analysis, it was found that the model fit of the three-dimensional structure was sufficient ( $\chi^2/sd=2.71$ , RMSEA=.074, NFI=.91, IFI=.90, CFI=.92, GFI=.95, AGFI=.88). There are items related to physical, emotional and sexual abuse dimensions in the scale. The items related to the physical abuse dimension are like “Do the following situations and behaviors make you think that the child has been physically abused? The child... Crying after making a mistake, Often playing violent games or with violent toys.” During this study, the validity and reliability of the Child Abuse Awareness Scale was re-examined, and it was seen that the model fit was sufficient for the three-dimensional structure of the scale. As a result of the reliability analysis of the scale, the internal consistency coefficients in terms of dimensions were found as .83, .87, .84 and .86 for the whole scale.

### Child Negligence Awareness Scale

The scale was developed by Celiloğlu (2018) to measure awareness of child neglect. The scale is a Likert-type measurement tool consisting of 38 items and four factors. As a result of the exploratory factor analysis, it was seen that the scale explained 53.36% of the total variance. As a result of confirmatory factor analysis, it was found that the model fit of the four-factor structure was sufficient ( $\chi^2/sd=2.21$ , RMSEA=.066, NFI=.91, IFI=.92, CFI=.93, GFI=.95, AGFI=.88). The child neglect awareness scale includes items on the right to freedom of expression, the right to life and development, the right to a decent standard of living, and the rights of children with special needs and

disabilities. Sample articles on the dimension of the right to freedom of expression are like “Do the following situations and behaviors make you think that the child's right to freedom of expression has been neglected? The child... Witnessing images containing violence, blood, and brutality, Disregarding his bodily privacy, Preventing them from making decisions about themselves.” During this study, the validity and reliability of the Child Negligence Awareness Scale was re-examined, and it was determined that the model fit was sufficient for the four-dimensional structure of the scale. As a result of the reliability analysis of the scale, the internal consistency coefficients in terms of dimensions were found as .91, .86, .87, .88, and .92 for the whole scale.

### **Childhood Sexual Abuse Myths Scale**

The scale was developed by Koçtürk and Kızıldağ (2018) to measure myths about childhood sexual abuse. The scale is a Likert type measurement tool consisting of 22 items and two sub-factors. As a result of the exploratory factor analysis of the scale, it was seen that it explained 41.88% of the total variance. As a result of confirmatory factor analysis, it was found that the model fit of the two-dimensional structure was sufficient ( $\chi^2/sd=2.48$ , RMSEA=.084, SRMR=.07, RMR=.06, NFI=.91, NNFI=.94, IFI=.95, CFI=.95, RFI=.90, GFI=.84, AGFI=.80). As a result of the reliability analysis of the scale, the internal consistency coefficients in terms of dimensions were found to be .88 and .85, and the test-retest reliability coefficients were found to be .93 and .89. A score between 22 and 110 can be obtained from the scale. There is no reverse scored item in the scale. High scores from the scale indicate the height of myths about sexual abuse of children (Koçtürk and Kızıldağ 2018). During this study, the validity and reliability of the Childhood Sexual Abuse Myths Scale were re-examined. As a result of the exploratory factor analysis of the scale, it was seen that it explained 50.38% of the total variance. The model fit of the two-dimensional structure of the scale was found to be sufficient. As a result of the reliability analysis of the scale, the internal consistency coefficients in terms of dimensions were found to be .90, .87, and .91 for the whole scale.

### **Statistical analysis**

The literature on Cognitive Behavioral Therapy, misconceptions about child abuse, child abuse and related scales was extensively reviewed to create the item pool of the scale of cognitions on child abuse (Milner 2003, Fontes and 2005, Cromer and Goldsmith 2010, Sargın 2012, Koçtürk and Kızıldağ 2018, Professional Development Service for Teachers [PDST] 2017, Güneş 2019). At this stage, three faculty members working in the fields of psychological counseling and guidance and child and adolescent psychiatry were consulted to create items. On the other hand, cognitive distortion statements, which were emphasized in a previous study by the researchers, were added to the item pool (Aktu and Dilekmen 2019). Some of the opinions are as following: “When my child does something wrong, he does it just to spite me, I wonder how he can do this to me, is there no comfort for me and I get angry (K2).”, “My son is beaten because he deserves it. He can't stop being beaten (K1)”, “I used to think that the poor and the impoverished beat their children. I would never have guessed that I would get angry and beat mine (K9).”, “He is very naughty when there are guests in the house. If there was no

guest, I would have slapped a couple of times (P7).” At the end of this process, a 42-item draft form was developed.

The scale form was graded in accordance with a five-point Likert-type rating with the options “1=Absolutely not true, 2=Not true, 3=Neither true nor false, 4=True, 5=Absolutely true”. At this stage, opinions were obtained from two academics who are experts in the field of Turkish language in order to examine its linguistic intelligibility, two experts from the field of child and adolescent psychiatry, one from the fields of child development and social services, and one expert in the field of measurement and evaluation in education, in terms of suitability of the developmental period and the scope of the literature. In line with the feedback of the experts, the draft form of the scale was applied to 73 parents. In the pilot application, item-total correlation values and internal consistency reliability coefficient (.83) were examined. According to these criteria, it was decided to arrange the items for which expert opinion should be obtained (Çokluk et al. 2018).

SPSS 25 and Lisrel 8.80 programs were used in the analysis of the data, and the margin of error was taken as .05 in the research. After the data collected as a result of validity and reliability analyzes were transferred to the SPSS software, extreme value, missing data, normality, linearity and multiple correlation analyzes were done. Accordingly, data on 20 individuals in exploratory factor analysis and 14 individuals in confirmatory factor analysis were excluded from the data set on the grounds that they had extreme values (Seçer 2015)..

## Results

### Exploratory factor analysis

Exploratory factor analysis was conducted to examine the factor structure of the Child Abuse Cognition Scale: The Parent Form (CACCS-P). It is recommended that the eigenvalues of the items in the scale should be at least 1% and the factor variance ratio should be at least 5% as a criterion in the development or adaptation process of a scale. These ratios show the contribution of the items and dimensions to the total variance. In addition, in a scale development study, it is emphasized that the item load values should be at least .30, the items should be in one dimension and there should be at least .10 difference between two separate dimensions (Kline 2014, Seçer 2015, Çokluk et al. 2018). These criteria reveal the relationship of each item with the factor and the whole scale.

As a result of the exploratory factor analysis, KMO and Barlett tests were performed in order to reveal the suitability of the data collected from the participants for factor analysis, and KMO = .82 and Barlett test ( $\chi^2/df=8598.645/300$ ,  $p<.001$ ). It has been observed that these values contain appropriate data for factor analysis (Kline 2014, Seçer 2015). The scree plot was used to decide on the factor number of the scale. In addition, the promax method, which is one of the principal component analysis and oblique rotation methods, which is intensely preferred in research, was preferred. Based on the opinions of the experts in the scale development literature (Kline 2014, Seçer 2015, Çokluk et al. 2018) on creating a higher quality data set, 12 items with an item load value below .45 in the exploratory factor analysis were excluded from the analysis (1, 2, 3, 4, 6, 7, 8, 9, 10, 12, 13, 15, 19, 21, 27, 33, 38). The item analyzes of the scale and the explained variance are presented in Table 1.

As seen in Table 1, as a result of EFA, a three-dimensional structure was obtained explaining 50.366% of the total variance. The first of these dimensions consists of items 16, 28, 29, 30, 31, 36, 37, 39, 41 and 42. The second is the factor consisting of items 14, 17, 18, 23, 24, 25, 26, 35 and 40. The third is the dimension consisting of items 5, 11, 20, 22, 32 and 34. It was observed that the factor load values of the scale ranged between .475 and .877, and the item-total correlation values ranged between .308 and .522. According to these results, it can be said that all items are associated with the scale total score at an acceptable level and fulfill the item validity condition (Seçer 2015, Çokluk et al. 2018).

**Table 1. Item analysis of the Child Abuse Cognitions Scale: Parents Form and the variances explained**

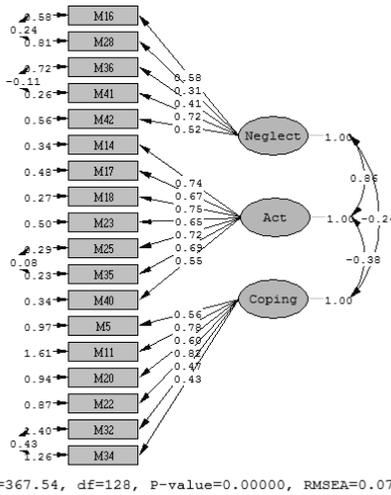
Item no	Factor 1	Factor 2	Factor 3	Item-Total Correlation	Eigenvalue	Explained Variance	Total Explained Variance
16	.643			.411	6.592	26.369%	50.366%
28	.703			.458			
29	.580			.308			
30	.681			.408			
31	.631			.522			
36	.663			.502			
37	.661			.433			
39	.495			.401			
41	.528			.387			
42	.647			.539			
14		.823		.376			
17		.846		.414			
18		.844		.408			
23		.706		.363			
24		.712		.351			
25		.710		.378			
26		.877		.436			
35		.663		.308			
40		.475		.402			
5			.625	.380	2.282	9.130%	
11			.830	.424			
20			.786	.406			
22			.793	.383			
32			.721	.386			
34			.727	.384			

In order to determine the relationship between the dimensions of CACS-P, the correlation between factors was examined. It is stated that the correlations obtained in terms of the multi-correlation problem between the sub-dimensions should be below .90 (Pallant, 2011). The correlations between the sub-dimensions of the scale ranged from -.159 to .311. According to this, it is understood that there are significant relations between the sub-dimensions of CACS-P, and there is no multicollinearity problem (Seçer 2015).

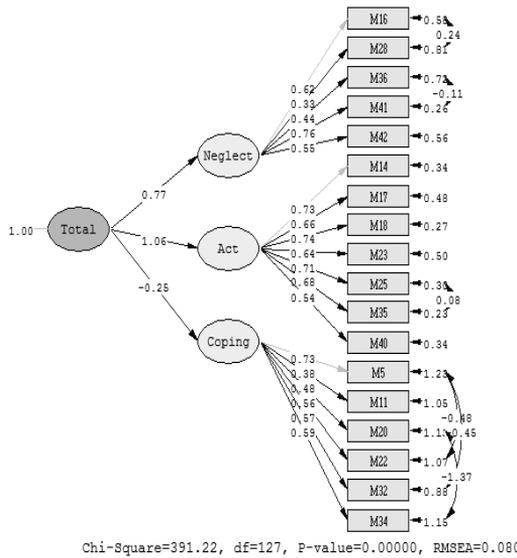
### Confirmatory factor analysis

In a scale development study, it is emphasized that confirmatory factor analysis should be performed to test the suitability of the dimensions and items determined by exploratory factor analysis (Kline 2014, Seçer 2015). The model fit of the three-factor structure of the CACS-P obtained by exploratory factor analysis was tested with

confirmatory factor analysis. In the model examined, a total of 7 items (24, 26, 29, 30, 31, 37, 39) were excluded from the scale, including 3 problematic items in terms of t values and 4 items with item load values below .30 (Seçer 2015). Confirmatory factor analysis was continued on the remaining 18 items. The results of the first and second level confirmatory factor analysis of the scale are given in Figure 1 and Figure 2.



**Figure 1. First level CFA results of the Child Abuse Cognitions Scale (Parents Form)**



**Figure 2. Second level CFA results of the Child Abuse Cognitions Scale: Parents Form**

As seen in Figure 1, it is understood that the fit indices of the CACS-P, which consists of 18 items and three sub-dimensions, are significant ( $\chi^2/df=367.54/128=2.87$ ,  $p=.00$ ). When the goodness of fit indices of the scale were examined, it was found that the model fit of the three-dimensional structure was at a sufficient level (RMSEA=.076,

SRMR=.057, RMR=.064, NFI=.92, NNFI=.94, IFI=.95, CFI=.95, RFI=.91, GFI=.89, AGFI=.85). As a result of the first level CFA, it was observed that the model gave a better fit after the procedure made in line with the suggestions to make changes between items 16 and 28, 36 and 41, 25 and 35, and 32 and 34.

In Figure 2, it is seen that the second level confirmatory factor analysis fit indices of the CACS-P, which consists of 18 items and three sub-dimensions, are significant. ( $\chi^2/sd=391.22/127=3.08$ ,  $p=.00$ ). As a result of the second level CFA, it was observed that the model gave a better fit after the process made in line with the suggestions to make changes between items 16 and 28, 36 and 41, 25 and 35, 5 and 22, 20 and 34. When the goodness of fit indices of the scale were examined, it was found that the model fit of the three-dimensional structure was at a sufficient level (RMSEA=.080, SRMR=.065, RMR=.074, NFI=.92, NNFI=.93, IFI=.94, CFI=.94, RFI=.90, AGFI=.84, GFI=.88). Considering the results of first and second level confirmatory factor analysis, it can be said that the model fit of the CACS-P coincides with acceptable fit values (Seçer 2015).

As a result, it was seen that the three-dimensional and 18-item structure of the Child Abuse Cognitions Scale-Parent Form was adequately compatible with the EFA and CFA. The first dimension of the scale is cognitions related to child neglect, the second dimension is cognitions related to the act of abuse, and the third dimension is cognitions related to coping with abuse. The cognitions about child neglect dimension refers to parents' faulty cognitions about the protection and neglect of their children's rights. The dimension of cognitions regarding the act of abuse includes the parents' misperceptions of the act of physical, emotional and sexual abuse of the child. The dimension of cognitions related to coping with abuse refers to parents' perceptions of overcoming child abuse. There are five items in the first dimension of the scale, seven items in the second dimension and six items in the third dimension.

### Validity and reliability studies

The relationship between Childhood Sexual Abuse Myths Scale, Child Abuse and Negligence Awareness Scales was examined in order to test the criterion-related validity of the CACS-P. The findings obtained in this respect are given in Table 2.

**Table 2. Findings regarding the criterion validity of the Child Abuse Cognitions Scale: Parents Form**

	Cognitions about child neglect	Cognitions related to the act of abuse	Cognitions about coping with abuse
1. Sexual Abuse Myths Scale	.53*	.39*	-.33*
2. Child Negligence Awareness Scale	-.78*	-.66*	.79*
3. Child Abuse Awareness Scale	-.75*	-.63*	.75*

\* $p < 0.01$

As it can be seen in Table 2, it is understood that CACS-P has a moderate and high level of relationship with the Childhood Sexual Abuse Myths Scale, Child Abuse Awareness Scale and Child Negligence Awareness Scale. In the criterion-related validity study of the scale, it was observed that there was a moderate positive correlation between the cognitions of child negligence and the childhood sexual abuse myths scale (.53), and there was a high level of negative correlation with the child negligence awareness scale (-.78) and the child abuse awareness scale (-.75). It was determined that there is a

moderate positive relationship with the cognitions related to the act of abuse dimension with the childhood sexual abuse myths scale (.39), and a moderate negative relationship with the child negligence awareness scale (-.66) and the child abuse awareness scale (-.63). It was found that there was a moderate negative correlation with the cognitions related to the coping with abuse scale and childhood sexual abuse myths scale (-.33), and a positive high-level correlation with the child negligence awareness scale (.79) and child abuse awareness scale (.75).

Internal consistency, split-half reliability and test-retest reliability analyzes were conducted within the scope of reliability studies of CACS-P. The internal consistency coefficient of the cognitions related to child neglect dimension is .74, the split-half reliability coefficient is .77, and the test-retest reliability coefficient is .79. The internal consistency reliability coefficient of the cognitions related to the act of abuse dimension is .82, the split-half reliability coefficient is .85 and the test-retest reliability coefficient is .77. The internal consistency reliability coefficient of the cognitions related to coping with abuse dimension is .76, the split-half reliability coefficient is .73 and the test-retest reliability coefficient is .74. The internal consistency coefficient of the whole scale is .90, the split-half reliability coefficient is .92, and the test-retest reliability coefficient is .83.

## Discussion

In this study, it was aimed to develop a scale to measure parents' cognitions about child abuse. Accordingly, exploratory factor analysis, confirmatory factor analysis, criterion-related validity and reliability studies were conducted to develop the Child Abuse Cognitions Scale-Parent Form. As a result of exploratory factor analysis, KMO test (.82) and Barlett test ( $\chi^2/df=8598.645/300$ ,  $p<.001$ ), which were performed to demonstrate the suitability of the data collected from the study group for factor analysis, were found significant. It was concluded that these values contain appropriate data for factor analysis (Kline 2014, Seer 2015). As a result of the exploratory factor analysis, a three-dimensional structure was obtained that explained 50.36% of the total variance. When the literature related to scale development is examined, it is stated that the total variance explained for a scale should be at least 40% (Kline 2014). It is emphasized that the rate of variance explained methodically should be determined according to the factors. Accordingly, as the number of factors increases, the explained variance ratio is expected to increase as well. However, it can be difficult to achieve this rate in behavioral sciences (Büyüköztürk 2011, okluk et al. 2018). Accordingly, in this scale development study, it can be stated that the explained variance ratio of the three-dimensional structure is big enough.

Confirmatory factor analysis compliance indicators of Child Abuse Cognitions Scale-Parent Form are seen to be significant ( $\chi^2/sd=391.22/127=3.08$ ,  $p=.00$ ). It was determined that the goodness of fit indexes of the three-dimensional and 18-item structure were at an acceptable level ( $\chi^2/sd=391.22/127=3.08$ ,  $p=.00$ , RMSEA=.080, SRMR=.065, RMR=.074, NFI =.92, NNFI=.93, IFI=.94, CFI=.94, RFI=.90, AGFI=.84, GFI=.88). In the literature, the upper limit of the coefficient of fit indicators ( $\chi^2/sd \leq 5$ ) and the limits of the fit index values are indicated in RMSEA  $\leq .080$ , SRMR  $\leq .080$ , RMR  $\leq .080$ , NFI  $\geq .90$ , NNFI  $\geq .90$ , IFI  $\geq .90$ , CFI  $\geq .90$ , RFI  $\geq .90$ , AGFI  $\geq .85$ , GFI  $\geq .85$  (Büyüköztürk 2011, Kline 2014, Marcholudis and Schumacher 2007, cited in Seer 2015, okluk et al. 2018). Considering the confirmatory factor

analysis criteria, it is seen that the fit index values of the scale are mostly within acceptable limits. Accordingly, it can be said that the model fit of the scale is sufficient. The internal consistency coefficient of the whole scale was .90, the split-half reliability coefficient was .92, and the test-retest reliability coefficient was .83. In all studies mentioned in the literature, it is stated that the reliability ratio should be  $\geq .70$  (Fraenkel et al. 2012). In this respect, it can be said that the scale provides the reliability criterion. In summary, the results indicate that the scale is a measurement tool that provides construct validity criteria in measuring parents' cognition about child abuse.

All dimensions of the scale have statistically significant correlations with the Childhood Sexual Abuse Myths Scale, Child Abuse Awareness Scale and Child Negligence Awareness Scale. In this context, it has been observed that there is a moderate positive relationship between the Childhood Sexual Abuse Myths Scale and Cognitions Related to Child Neglect and Cognitions Regarding Acts of Abuse, and there is a moderate negative relationship with the Cognitions Related to Coping with Abuse dimension. Studies in the literature show that myths about sexual abuse adopted by the society are closely related to neglect and abuse behavior (Milner 2003, Cromer and Goldsmith 2010, Fontes and Plummer 2010, Koçtürk and Kızıldağ 2018). On the other hand, the insufficient coping mechanism of families with abuse is explained by social taboos (Francis and Wolfe 2008, Ligéro et al. 2009, Rodriguez 2010, Chung et al. 2020, Ferragut et al. 2020, Rueda et al. 2021). A mixed-methods study conducted with belief community groups in social media shows how false beliefs related to child abuse are reinforced by the society (Oakley et al. 2017). In a study conducted on abuse myths, findings that are indirectly hidden but widely believed by the society have been reached (Catallo et al. 2013). In a study revealing the relationship between pedophilia and culture, the belief that children can only be abused by strangers is adopted in society (Pedneault, 2019). Accordingly, as cognitions about child neglect and abuse increase, myths about sexual abuse increase and coping behavior with abuse decreases.

It was determined that there was a high level negative correlation with Child Neglect and Abuse Awareness Scales and Cognitions Related to Child Neglect and Cognitions Related to Action of Abuse, and a moderate positive correlation with the Cognitions Related to Coping with Abuse dimension. It has been determined in the literature that negative thoughts of parents towards children increase the potential for physical abuse (Mammen et al. 2003, Miragoli et al. 2018, Song and Hotang 2018, Camilo et al. 2020). These results show that parents' cognitions about neglect and abuse may change depending on their awareness of neglect and abuse. On the other hand, insufficient coping mechanism of families with abuse is explained by low level of awareness in the literature (Francis and Wolfe 2008, Ligéro et al. 2009, Rodriguez 2010, Chung et al. 2020, Ferragut et al. 2020, Rueda et al. 2021). A study in the domestic literature indicates that the physical abuse of parents towards their children is closely related to misconceptions. According to this study, parents often prioritize cognitive distortions before committing physical abuse (Aktu and Dilekmen 2019). In line with these results, it can be said that as awareness of child neglect and abuse increases, cognitions about child neglect and abuse decrease and coping behavior with abuse increases.

## Conclusion

In order to have a healthy family and society, it is important to know the cognitions

related to child abuse originating from cultural norms or family dynamics, to correct them and to increase awareness of abuse. In this direction, a measurement tool was developed that measures parents' cognitions about child abuse within the scope of this study. It is thought that this scale has a structure that can measure parents' cognition about child abuse and will make an important contribution to fill this gap in the field. In this study, Explanatory and Confirmatory Factor Analysis, criterion-related validity and reliability studies of Child Abuse Cognitions Scale-Parent Form were conducted. According to the results of these analyzes, it can be said that the scale provides construct validity criteria in measuring parents' cognitions about child abuse. It was determined that Child Abuse Cognitions Scale-Parent Form has a three-factor and 18-item structure: Cognitions Related to Child Neglect, Cognitions Related to Act of Abuse and Cognitions Related to Coping with Abuse. An above-average score from the scale indicates that cognitive errors or false beliefs about child abuse are above normal.

Some implications can be made in line with the results and limitations of the research. This research was conducted in a small-scale city in terms of population. Considering this limitation, the measurement tool can be tested with study groups that include different family types, different socio-cultural structures and settlements of different sizes in future studies so that more holistic and generalizable results can be obtained. Although the sub-dimensions of the developed scale and the Childhood Sexual Abuse Myths Scale, Child Abuse Awareness Scale and Child Negligence Awareness Scale are generally significant at the expected level, it is useful to evaluate the whole scale together in order to give better results. In addition, it is recommended to re-examine the criterion-related validity with different measurement tools in order to obtain more comprehensive evidence.

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## Addendum 1. Child Abuse Cognitions Scale (Parents Form)

Dear Parent,

This scale aims to measure parents' misperceptions, cognitive distortions and dysfunctional thoughts about child abuse. There is no right or wrong in the sentences given below. Each person may have a different option that they think is appropriate for a situation. Please read each sentence carefully and indicate how much you agree or disagree with each. Put an "X" in the relevant option opposite the expression indicating your agreement..

Expressions	Absolutely Not True				Absolutely True
1. If a child has not been sexually assaulted, it is not child abuse.	1	2	3	4	5
2. Children should do whatever the adults want.	1	2	3	4	5
3. A child must do whatever adults say to be a good person.	1	2	3	4	5
4. If the child does not complain about the abuse, it means that they are not disturbed by it.	1	2	3	4	5
5. Abusers can only abuse children they do not know.	1	2	3	4	5
6. If a child's close relatives touch their private parts, the child may feel safe.	1	2	3	4	5
7. Harmful behavior by an adult towards a child should remain a secret.	1	2	3	4	5
8. It may be okay to look at inappropriate images of children.	1	2	3	4	5
9. The children should be ashamed of themselves for being abused.	1	2	3	4	5
10. Being abused can make children more resilient.	1	2	3	4	5
11. The child should not tell anyone about the incident so that the abuser will not be harmed.	1	2	3	4	5
12. A child can give information such as home address, phone number to people s/he does not know.	1	2	3	4	5
13. The world is a bad place because children are abused.	1	2	3	4	5
14. Children cannot cope with abuse on their own.	1	2	3	4	5
15. A child cannot prevent bad things from happening to him/her.	1	2	3	4	5
16. Neglected children are more vulnerable to abuse.	1	2	3	4	5
17. Children exposed to abuse are shy.	1	2	3	4	5
18. A child who has to deal with abuse can never be happy.	1	2	3	4	5

### **Application and Scoring**

Items M1, M2, M3, M4, M5 are under neglect cognitions, M6, M7, M8, M9, M10, M11, M12 items are action cognitions, M13, M14, M15, M16, M17, M18 items are under coping cognitions. A score between 18 and 90 points can be obtained from this scale. There is no reverse scored item. As the score obtained increases, it can be interpreted that false beliefs, cognitive distortions and dysfunctional thoughts about child abuse increase.