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Childhood abuse experience scale: Examining its factor structure using item confirmatory & exploratory factor analyses among a sample of Saudi adolescents

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Abstract

This study aimed to investigate the factorial structure of the Child Abuse Experiences Scale using exploratory factor analysis. It also aimed to examine the number of underlying factors. An exploratory factor analysis was conducted for this purpose. The study sample consisted of (n = 400, mean age 14.7 years, standard deviation = 1.9, 37.5% females and 62.5% males), third and middle-grade secondary school adolescents residing in the capital city of Riyadh. The current study used the Child Abuse Experiences Scale developed by Helmy and Hamid Al-Din (2023) and applied it to the Saudi setting. Assessment of the study results showed control of the scale's psychometric properties, indicating acceptable levels of validity and reliability. The exploratory factorial results using the principal components with orthogonal axes of rotation revealed the presence of three factors for the scale: Experiences of Physical Abuse, Experiences of Psychological Abuse, and Neglect. Physical abuse emerged as a main factor saturated with most items of the scale. In addition, physical abuse is an indicator of mental disorders in the community of the current study group. Therefore, it is important to consider physical abuse when designing counseling and psychological treatment programs for adolescents suffering from mental health and social problems.

Keywords: Childhood abuse experience scale, Confirmatory, Exploratory factor analyses.

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1. Introduction

Psychological theories agree that the childhood years form the basis for the adult personality, which is compatible with the social system. Accordingly, if normal experiences characterize this phase, then a person becomes mature and more productive in his youth and adulthood. In contrast, problems in childhood contribute to the development of psychological and mental disorders and behavioral deviations in adolescence and adulthood. Many studies have shown that a large proportion of psychoses, neurotics, delinquents, criminals, drug addicts, and sexual deviants were unhappy in their childhood and suffered from many psychological and social problems during that time. Therefore, coping with childhood problems by identifying them, knowing the causes of their origin, and seeking treatment and prevention methods is the first line of defense to create a normal personality [1].

The image formed in the child's mentality about his family life is above all the outcomes of the experiences he has in his family circle. If harmony, friendliness, and frugality prevail, they will help children to steer their feelings in the right direction as far as their emotional and behavioral life is concerned. This means that family structure has a great influence on the formation of the child's psyche, as it has a profound effect on later stages of life [2]. Arab countries are demographically among the most youthful countries in the world [3]. Physical and psychological violence against children is largely normalized and accepted as a form of discipline in Arab cultures and is not prohibited by law in most Arab countries [4]. It is worth mentioning that violence against children is a major public health problem, affecting an estimated one billion children annually [5]. There is some evidence that reports childhood emotional abuse (CEA) is associated with mental disorders in adulthood [6-9]. Academic institutions have been called upon to produce local evidence-based studies on violence against children in Arab countries to inform policy and interventions, given the scale of the increase in research capacity. The first step in this direction is to provide valid scaling tools that can be used in Arab settings to assess the multidimensional and complex construct of child maltreatment. In this context, the efforts made by the Kingdom of Saudi Arabia to combat child abuse and protect children are worth noting. As part of the implementing regulations of the Child Protection Law, the Saudi Ministry of Justice issued Law No. (56386) in 2015, which defines 'child abuse' as any form of child abuse or exploitation or the threat of abuse, whether physical, psychological or sexual, or neglect [10]. Despite these governmental and academic efforts to protect children from the negative psychological effects of childhood abuse experiences, they are not adequately recognized by mental health professionals. Different scales have already been used by studies conducted in some Arab countries. For example, the 30-item Adverse Childhood Experiences-International Scale (ACE-IQ) [11] was used in Saudi Arabia [12], Iraq [13], and Tunisia [4]. On the other hand, the 28-item Childhood Trauma Scale (CTQ) [3] was used in Tunisia [14, 15], Saudi Arabia [16], and Egypt [17]. Further, the Child Abuse Self Report Scale (CASRS) [18] was used in Lebanon [19]. Studies differ in their use of scales and tests to measure childhood abuse experiences. Additionally, it has been found that most Arab studies, unlike foreign studies, have overlooked sexual abuse when measuring abuse. This is perhaps because the Arab culture distances itself from this topic. Moreover, the interest of researchers in the Arab or international context is limited to capturing the impact of abuse on the age group on which the study is conducted, without considering the experiences that abuse may leave in the later stages of a person's life. Furthermore, it has been noted that the samples studied vary widely in terms of gender and chronological age. For instance, the samples of some studies included children, while in other studies they were adolescents. Therefore, this study seeks to benefit from theories, scientific concepts, and previous studies to examine the factorial construction of the childhood abuse experiences scale in the Saudi setting. The present study used the scale developed by Helmy and Hamid [20] to measure childhood abuse experiences in the Saudi setting. This scale was widely used in empirical research [20-22]. It is worth noting that a common feature of these studies is that they relied on the factor analysis method for common factor tests with ordinal data, which leads to bias in the results and, therefore, inferential validity inaccuracy, as will be seen in detail in the main body of this review. This has prompted the present study to investigate the psychometric properties of this scale using a methodology appropriate to the nature of ordinal data or item-analysis-factor methodology. There is an urgent need for more accurate scaling instruments that are required by researchers and decision-makers in various psychological fields, such as medical specialists, psychological and social counselors, psychotherapists, as well as by individuals interested in evaluating research projects, programmers, and institutions. Therefore, scaling instruments serve theoretical academic research fields and purposes as well as scientific and applied purposes. Based on what has been mentioned above, it becomes clear how important the concept of childhood abuse experiences is. It also becomes evident that there is an urgent need to codify the multidimensional scale of Helmy and Hamid [20] with a modern methodology that corresponds to the nature of ordinal data or self-report scales in this scale, which is still one of the scales used in modern studies.

2. Childhood Abuse Experience Framework

Developmental psychologists emphasize the importance of the childhood years. They believe that giving children the care and attention they need and meeting their needs are important for their stability and well-being, while abuse and harm may have a negative impact on their development and cause them many problems. The issue of childhood abuse has attracted a great deal of professionals' and researchers' attention to identify the negative effects of childhood abuse and the types of harm it causes.

The American Psychiatric Association (APA) defines childhood abuse as non-accidental verbal or symbolic acts by a child's parent or caregiver that result in or have reasonable potential to result in significant psychological harm to the child. Examples of psychological abuse of a child include: calling the child names; denigrating or humiliating the child; threatening the child; hurting people or things that are important to the child, or suggesting that the alleged perpetrator will hurt or

abandon them; restraining the child (e.g., tying the child's arms or legs together or tying the child to furniture or other objects); confining the child to a small enclosed space (e.g., a closet); scapegoating the child egregiously; coercing the child to inflict pain on himself or herself; disciplining the child excessive (e.g., with extremely high frequency or duration, even if it does not rise to the level of physical abuse) by physical or nonphysical means [23].

Many factors lead to the prevalence of child abuse in society. The most common are drug and alcohol abuse, economic problems or poverty, unemployment, disputes between spouses, frequent stresses and responsibilities, parents or caregivers who were abused as children, loss of family support, inability of parents or caregivers to adapt to contemporary living conditions, and failure to express and exchange feelings of love between caregiver and child [24].

Sometimes, health professionals, especially in the healthcare sector, find it difficult to recognize and assess cases of abuse and neglect due to many reasons. These include: insufficient knowledge of how to deal with abuse cases; difficulty in diagnosing them; unwillingness to address the legal issues involved; lack of confidence in the psychological and social services provided to them; lack of awareness of family issues; fear of being mistreated (verbally or physically) if they report such cases [25].

The extent of abuse and its impact on a child is determined by several factors, such as the child's age and stage of development at the time of the abuse, the type of abuse, its frequency, duration, and severity, and the nature of the relationship between the caregiver and the child. The child's handling of abuse and the psychological resilience they have to abuse also play a role in determining the extent of the impact. Given that some children have positive characteristics such as optimism, self-esteem, respect for others, self-confidence, acceptance of peers, and listening to positive guidance from other people, such as teachers and mentors, such characteristics may reduce the potential negative impact of these experiences. In addition, the child's environment, i.e., the existence of laws and regulations in the community to protect children, the support of families, the provision of necessary areas of care, and the well-being of society, reduces children's vulnerability to abuse [26]. The neglect of children and the lack of adequate care for them are also among the problems that affect the health of individuals and society. Constant neglect in the care of children (and young people) and the failure to meet their needs make them feel less important and less valued over time, that they do not deserve attention and care, and that they are rejected by their parents. Neglect and emotional abuse are usually associated with the possibility of an individual developing mental health problems and disorders later in life [25].

3. Questions

The present study aims to reveal the factorial structure of childhood abuse experiences. Accordingly, the study is guided by the following main questions:

What is the significance of the correlation coefficients of the scale items with the total scale score?

What is the factorial structure of the Childhood Abuse Experiences Scale in adolescents from the study sample using exploratory factor analysis (EFA) of the items in the Saudi setting?

Are there statistically significant differences between genders in the dimensions of childhood abuse experiences after extracting the factorial structure of the scale in the current study?

4. Methods, Data, and Sample

4.1. Participants

The study sample included (N=400) adolescents, mean age 14.7, SD = 1.9, 37.5% girls and 62.2% boys) selected from the third year of secondary and middle school in the capital city of Riyadh. The demographic characteristics of the participants are displayed in Table 1.

Table 1.
Demographic characteristics of the participants (N = 400).

| Variable | Distribution | Percentage |
|--------------------|--------------------|------------------|
| Gender | Male | 62.5 % (N = 250) |
| | Female | 37.5 % (N = 150) |
| Age | Range of age | 13 to 18 |
| | Mean age | 14.7 |
| | Standard deviation | 1.9 |
| Level of education | Middle | 42.5 % (n = 170) |
| | Secondary | 57.5 % (n = 230) |

4.2. Measurements

4.2.1. Childhood Abuse Experiences Scale

The present study used the Childhood Abuse Experiences Scale developed by Helmy and Hamid [20] in the Saudi setting. The scale was designed, and its psychometric properties were calculated after applying it to a sample of 50 Saudi adolescents (male and female) from Riyadh and Jeddah. The scale consists of four dimensions that measure the physical, sexual, psychological, and neglect patterns of abuse. It involved 18 statements spread across four dimensions: four statements in the physical abuse dimension, five statements in the psychological abuse dimension, five statements in the sexual abuse dimension, and four statements in the neglect dimension. The responses to the statements included a range of choices (often

= 4, sometimes = 3, rarely = 2, absolutely = 1), and there were no reverse statements in the scale where there was a correction in one direction. The lowest value on the scale was 18, while the highest value was 72. The scale had good psychometric properties in terms of honesty and consistency. The correlation coefficients were between (0.20 – 0.90). In addition, the correlation coefficients between the individual statements and the overall result of the scale were between (0.33 – 0.77), which were all statistically significant. The structural validity of the scale was also calculated after deleting the two non-functional statements, and the correlation coefficients ranged between (0.46 – 0.9), all of which were statistically significant. The results showed that all stability coefficients were high, as the alpha coefficients for the dimensions ranged between (0.58 – 0.87) and (0.84) for the total scale, the midpoint coefficients for the dimensions ranged between (0.35 – 0.68) and (0.43) for the total scale, and the stability coefficients of half fractionation after correction by the Guttman equation for dimensions were between (0.41 – 0.81) and (0.50) for the total scale.

4.2. Data Collection and Analysis Procedures

The survey instruments, including the Child Abuse Experience Scale and demographic questions, were distributed to the participants selected randomly from high and middle schools in Riyadh. Two research assistants and experienced academic advisors supervised the process of data collection according to the established protocols. Sufficient time was provided to complete the questionnaire, and the participants were encouraged to provide honest and unbiased responses. After completing the application of the study instruments, the data were analyzed using SPSS, version 22. Statistical coefficients were used in the factor analysis for exploration, using the Hotelling method for the principal components, the Kaiser-Meyer-Olkin (KMO) test, and the item retention criterion. The Kaiser standard and Pearson correlation coefficient were also used in the exploration, and confirmatory factor analysis (CFA) was performed on the sample (n = 400).

5. Results

5.1. Item Analysis for the Childhood Abuse Scale

To answer the first question, which reads, "What is the significance of the correlation coefficients of the scale items with the total degree of the scale?" Pearson's correlation coefficient was used to examine the relationships between the scale items and the total level of the scale. The linear correlation coefficients between the items of the scale and the total degree of the scale were measured using Pearson's coefficient to exclude all items whose relevance to the total degree of the scale did not reach the level of statistical significance at the significance level (0.05) or (0.01). Table 2 displays the results of these coefficients, indicating the means and standard deviations of the subjects' performance on the items of the scale.

Table 2.

The mean values, standard deviations and Pearson correlation coefficients of the scale items (N=400).

| Item | M | SD | Corrected total-item correlations | Significance level |
|----------|--------|---------|-----------------------------------|--------------------|
| VAR00001 | 1.6978 | 0.96697 | 0.703** | 0.000 |
| VAR00002 | 1.7378 | 0.98091 | 0.792** | 0.000 |
| VAR00003 | 1.5822 | 0.87303 | 0.762** | 0.000 |
| VAR00004 | 1.4533 | 0.84452 | 0.583** | 0.000 |
| VAR00005 | 1.7911 | 1.00708 | 0.769** | 0.000 |
| VAR00006 | 1.8044 | 1.07195 | 0.765** | 0.000 |
| VAR00007 | 1.4978 | 0.84581 | 0.619** | 0.000 |
| VAR00008 | 1.6622 | 0.95975 | 0.636** | 0.000 |
| VAR00009 | 1.5244 | 0.94045 | 0.797** | 0.000 |
| VAR00010 | 1.3467 | 0.7469 | 0.691** | 0.000 |
| VAR00011 | 1.3244 | 0.74197 | 0.649** | 0.000 |
| VAR00012 | 1.4533 | 0.83388 | 0.691** | 0.000 |
| VAR00013 | 1.3956 | 0.78432 | 0.797** | 0.000 |
| VAR00014 | 1.6222 | 0.97029 | 0.636** | 0.000 |
| VAR00015 | 1.1822 | 0.58067 | 0.619** | 0.000 |
| VAR00016 | 1.5156 | 0.90681 | 0.765** | 0.000 |
| VAR00017 | 1.2 | 0.59761 | 0.748** | 0.000 |
| VAR00018 | 1.2889 | 0.68863 | 0.780** | 0.000 |

Table 2 shows that the correlation coefficient between each item of the scale and its total score is statistically significant. Accordingly, the scale comprising Razzaghi [18] items was used for conducting factor analysis in this study.

5.2. The Exploratory Factorial Analysis of Scale

To answer the second question, which reads, "What is the factor structure of the Childhood Abuse Experiences Scale in adolescents from the study sample using exploratory factor analysis of the items in the Saudi setting?", the exploratory factorial analysis of the scale was followed.

Exploratory factor analysis of the responses of the sample ($N = 400$) was conducted on the childhood abuse experiences scale after excluding the items whose relevance did not meet the overall scale level of statistical significance at the significance level (0.05) or (0.01). Besides, the scale (18) items were used to identify the factorial structure of the scale in the Saudi setting by using the Hotelling method of principal components, for this method has the advantage of extracting the maximum possible variation.

The assumptions of the exploratory factor analysis, reflected in the adequacy of the sample size, were also confirmed by the results of the Kaiser-Meyer-Olkin (KMO) test, whose values are between 0-1 and preferably above (0.60) and whose overall value for the whole scale is (0.93). This value is higher than the average. Table 3 presents the results obtained from the KMO test for the scale as a whole.

Table 3.

KMO and Bartlett's Test Childhood Abuse Experience Scale.

| KMO and Bartlett's Test | | |
|--|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.933 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2661.562 |
| | Df | 153 |
| | Sig. | 0.000 |

Table 3 shows that the KMO test scores for all items of the Childhood Abuse Experience Scale are above with the exception of (.933). Thus, it can be assumed that the data obtained from the current research sample are suitable for conducting an exploratory analysis of the items. In a relevant context, the matrix correlation of the observed data was confirmed to deviate from the Identity 2 matrix by the results of Bartlett's sphericity test, which follows the distribution of the Ka2 test. Its value must be a function because its value for the current data is ($Ka = 2661.562$) with degrees of freedom [153] and function value (0.00). The value of the determinant is an indication that the correlation coefficient matrix is not the identity matrix. It can therefore be said that the data fulfill the assumptions of the exploratory factor analysis of the items.

5.3. Extraction Criteria for the Number of Factors for Exploratory Factor Analysis

Parallel analysis was used to determine the number of factors extracted for the current scale data, as it is characterized by its accuracy compared to other criteria for determining the number of factors, such as the latent roots criterion, which leads to over-factoring, and the latent roots accumulation Scree Plot criterion, which is influenced by the subjectivity of the researcher in determining the curvature point. Parallel analysis is based on the generation of data that is parallel to the actual data set using simulation techniques. Subsequently, the factors whose underlying roots exceeded the latent roots of the generated data were retained. Figure 1 shows the results of this criterion.

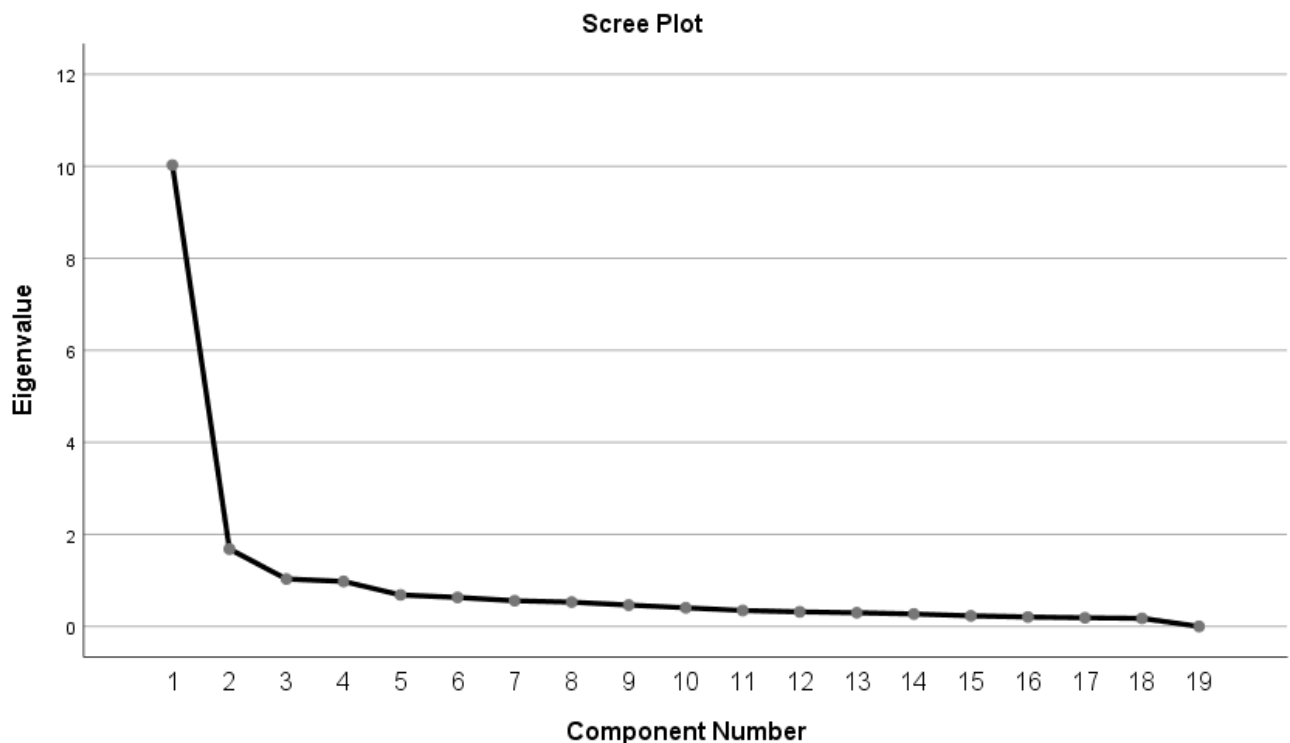


Figure 1.

Parallel Analysis Curve of Childhood Abuse Experience Scale Data.

From Figure 1, it can be seen that there are three proposed factors where the Childhood Abuse Experience Scale items reach factor saturation by the number of circles that are above the simulation line (bottom), as shown by the circle above. It should be noted that all criteria used to determine the number of factors extracted, regardless of their accuracy, are only guides to the suggested number of factors extracted and not an absolute decision to adhere to. The main role of the researcher lies in the ability to choose the most appropriate factor solution for the variable measured by the scale. Rotation of factors: Factor rotation: factors are rotated using oblimin rotation, an oblique rotation that in turn helps to simplify the factor structure of the scale. The choice of oblique rotation in this study is justified by the fact that psychological variables are inherently relevant variables; therefore, the oblique rotation method is most appropriate in psychological studies.

5.4. Criterion of Item Retention

The "Kaiser" criterion, proposed by Guttman, was also utilized to extract the significant factors with latent roots below (1) and a significance level of 0.30 for the saturation of the items, i.e., the items that are saturated with a function equal to or greater than the value of (0.3). It should be noted that in the case of items saturated on more than one cross-loading factor, the item was calculated considering its fit to the factor it is expected to belong to, and not the highest saturation factor since the saturation value is nothing but a quantitative indicator of the relationship between the item and the factor. Therefore, we did not rely solely on factorial saturation to assess the extent to which the item belongs to one factor and not to the others, without carefully examining the content of that item and the extent to which it contributes significantly to the factors that saturate with it in explaining the variation in responses to it, or in clarifying the need for qualitative or psychological evidence supporting the belonging of that item to one factor and not to the others.

5.5. The Three Factors Extracted

Table 4 shows the bifurcations in light of the pattern matrix and the coefficients of the intercorrelations between the factors extracted for the items of the scale for child abuse experiences in the Saudi environment.

Table 4.
Results of the principal component analysis of Childhood Abuse Experience Scale.

| Item | Factors | | | Communalities |
|---------------|---------|-------|-------|---------------|
| | 1 | 2 | 3 | |
| Ab2 | 0.882 | | | 0.554 |
| Ab5 | 0.877 | | | 0.754 |
| Ab6 | 0.877 | | | 0.593 |
| Ab13 | 0.848 | | | 0.497 |
| Ab14 | 0.752 | | | 0.711 |
| Ab9 | 0.743 | | | 0.723 |
| Ab1 | 0.664 | | | 0.468 |
| Ab3 | 0.567 | | | 0.663 |
| Ab12 | 0.457 | | | 0.685 |
| Ab15 | | 0.907 | | 0.673 |
| Ab18 | | 0.887 | | 0.674 |
| Ab11 | | 0.777 | | 0.590 |
| Ab17 | | 0.590 | | 0.801 |
| Ab10 | | 0.510 | | 0.672 |
| Ab8 | | | 0.652 | 0.774 |
| Ab4 | | | 0.477 | 0.449 |
| Ab16 | | | 0.424 | 0.683 |
| Ab7 | | | 0.380 | 0.775 |
| Total | 9.030 | 1.681 | 1.028 | |
| % of Variance | 50.166 | 9.337 | 5.710 | |

The results of the factor analysis of the scale on the experience of child abuse in the Saudi environment show that three factors have emerged.

The first factor: based on the maximum factor saturation value, this factor can be labeled as (Physical Abuse). The underlying latent root of this factor is (9.030) and explains (50.166%) of the correlated variance. With (9) items reaching saturation value, this factor is significantly positive in the range of (0.457 to 0.882).

The second factor: based on the maximum factor saturation value, this factor can be labeled as (Emotional Abuse). The underlying latent root of this factor is (1.681) and explains (9.337%) of the correlation variance. With (5) items reaching saturation level, this factor is significantly positive in the range of (0.510 to 0.907).

The third factor: based on the maximum factor saturation value, this factor can be labeled as (neglect). The underlying root of this factor is (1.028) and explains (5.710%) of the correlational variance. Saturation was achieved in (4) items, which is significantly positive in the range of 0.380 to 0.652). Table 5 summarizes the three items of the Childhood Abuse Experience Scale extracted from the analysis.

Table 5.

Summary of the three items extracted from the analysis of the Childhood Abuse Experience Scale.

| Arranging of factors | Name of factors | Number of saturated items |
|----------------------|-------------------|---------------------------|
| The first factor | Physical abuse | 9 |
| The second factor | Emotional abuse., | 5 |
| The third factor | Neglect | 4 |

Table 5 shows that the three factors extracted from the factorial analysis of the items of the childhood abuse experience scale include [18] items with positive and high intrinsic saturations.

5.6. The Confirmatory Factorial Analysis of Scale

The confirmatory factor analysis (CFA) model for the Childhood Abuse Experience Scale (CAES), (as shown in the figure), shows three latent factors. The factor loadings of the items range from moderate to high across all factors, with particularly strong loadings for some items, such as (Item 5) and (Item 6) on the first factor (0.80) and (Item 15) and (Item 18) on the second factor (0.81 and 0.88) respectively. The loadings on the third factor are generally lower, with (Item 16) having the weakest loading (0.32). The relationships between the latent factors and the overarching construct (CAES) are moderately strong, with path coefficients of 0.60 for the first factor, 0.48 for the second factor, and 0.53 for the third factor, suggesting that all three factors contribute significantly to the overall construct. Overall, the model shows a reasonable fit, although some loadings indicate areas where refinement is possible.

Table 6.

Model Fit Indices for the Confirmatory Factor Analysis Model.

| Index | Value | Threshold | Interpretation |
|---------------------------|----------------------|---|----------------------|
| $\chi^2(df)$ | 276.82 (128) | - | - |
| $\chi^2/(df)$ | 2.163 | < 3 (acceptable), < 2 (good) | Acceptable fit |
| GFI | 0.863 | > 0.90 | Slightly below ideal |
| AGFI | 0.817 | > 0.90 | Slightly below ideal |
| CFI | 0.465 | > 0.90 | Needs improvement |
| RMR | 0.270 | < 0.08 | |
| RMSEA (90% CI) | 0.072 (0.060, 0.084) | < 0.08 (acceptable), < 0.05 (excellent) | Acceptable fit |
| ECVI (Default model) | 1.620 | Default model lower than independence model | Acceptable fit |
| ECVI (Independence model) | 2.086 | | |

Note: χ^2 = chi-square, df = degrees of freedom, χ^2/df = ratio of χ^2 to df; GFI = Goodness-of-Fit Index; AGFI = Adjusted Goodness-of-Fit Index; CFI = Comparative fit index; RMR = Root mean square residual; RMSEA = Root mean square error of approximation with 90% confidence intervals; ECVI = Expected Cross Validation Index.

The model fit indices suggest that the confirmatory factor analysis model provides an overall acceptable fit. The chi-square/df ratio (2.163) falls below the threshold of 3, indicating an acceptable fit, while the RMSEA value of 0.072 (90% CI = .060, .084) is also within the acceptable range (< 0.08). Both GFI (0.863) and AGFI (0.817) are slightly below the ideal threshold of 0.90, but still indicate a reasonable fit. However, the CFI value of 0.465 suggests that the model needs improvement in explaining the covariance among the variables. Additionally, the RMR (0.270) exceeds the recommended threshold (< 0.08), indicating residual discrepancies. On a positive note, the ECVI value of 1.620 for the default model is lower than that of the independence model, in further support of the model's generalizability. Overall, while some indices suggest areas for improvement, most of the fit indices are within acceptable ranges.

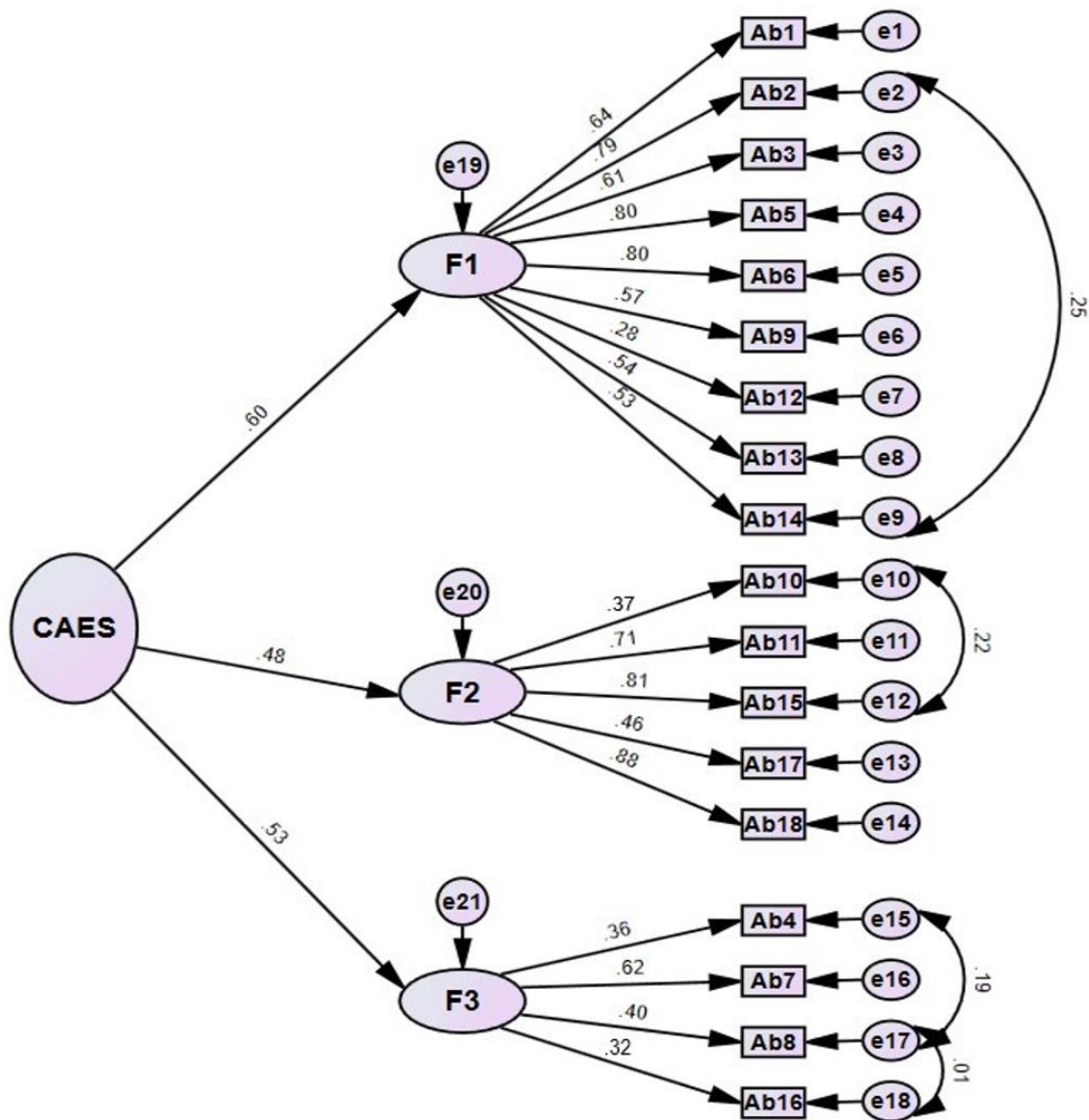


Figure 2.
Confirmatory Factor Analysis Model for Childhood Abuse Experience Scale (CAES).

The third question of this research reads, "Are there statistically significant differences between genders in the dimensions of childhood abuse experiences after extracting the factorial structure of the scale in the current study?" To answer this question, the (T) test was used to compare the mean scores of male and female participants in the dimensions of the childhood abuse experiences scale extracted based on the factor analysis. Table 6 shows the results obtained from this procedure.

Table 6.
Showing the significance of the differences between the means for males and females on the Childhood Abuse Experience Scale.

| Dimensions of scale | Male | N | Mean | Std. Deviation | T | Significance level |
|---------------------|--------|-----|--------|----------------|---------|--------------------|
| Physical abuse | Female | 250 | 6.6160 | 3.19584 | 0.20212 | 0.42 |
| | Female | 150 | 6.3533 | 3.17316 | | |
| Physical abuse | Male | 250 | 7.7720 | 3.51817 | 0.22251 | 0.97 |
| | Female | 150 | 7.5933 | 3.60294 | | |
| Emotional neglect | Male | 250 | 6.4040 | 3.05123 | 0.19298 | 0.78 |
| | Female | 150 | 6.0333 | 2.81753 | | |

As shown in Table 6, no significant differences were found in the dimensions of the scale in terms of the participants' gender.

6. Discussion

Based on the study results, the factor components of the childhood abuse experience scale can be formed from three factors extracted from the factor analysis of the childhood abuse experiences scale items, namely: physical abuse, psychological abuse and neglect. absorbed [18] items with positive and high essential saturations. There is a great similarity between this structural factor, extracted from the scale used in the current study, and the original version of the scale, which consists of four dimensions (psychological abuse, physical abuse, sexual abuse, and neglect). Perhaps the only difference between the results of the factor analysis of the scale in the current study and its counterpart in the original version of the scale is the disappearance of the sexual abuse dimension. We think this is due to several factors, the most important of which is the age difference, where the samples in the current study are middle and high school students. The extrapolation here is that, in the researchers' view, this dimension addresses the main reasons that make adolescents and children cautious, reluctant and angry about disclosing and revealing sexual abuse.

This is due to the reactions and attitudes of adults in Arab societies towards this type of abuse through social rejection and prohibition, as well as the child's fear that no one will believe him, fear of parental authority, a sense of shame and helplessness, and the child's fear of causing a problem for his family. Considering the factors extracted for the scale in the current study, it is found that the first factor included all the items in the scale of childhood experiences of psychological abuse. This could be due to the fact that emotional abuse can take different forms. The three general patterns of abusive behavior include aggression, denial, and minimization. Withholding is another form of denial, which involves a refusal to listen, communicate and emotionally withdraw as punishment [27].

Although there is no set definition for emotional abuse, it can be defined beyond verbal and psychological abuse. Blaming and name-calling are some of the verbally abusive behaviors that can affect a victim emotionally. The victim's self-esteem and emotional well-being are altered and even compromised by the name-calling, resulting in an emotionally abused victim [28].

As for the second factor, i.e., physical abuse, it is highly saturated with Alkema et al. [7] items and can be represented by childhood experiences of physical abuse. Physical abuse is any intentional act that causes injury or trauma to another person or animal through physical contact. In most cases, children are the victims of physical abuse, but adults can also be victims, as in cases of domestic violence or workplace aggression.

Physical abuse can involve more than one perpetrator and more than one victim. Other terms that are sometimes used for physical abuse include physical assault, physical violence, and sexual abuse. However, the literature on abuse in Saudi Arabian society does not generally address abuse in these senses, where the limited available literature focuses mainly on physical abuse. This may be a consequence of societal acceptance of corporal punishment as a means of disciplining children and a reflection of a conservative ideology that shies away from acknowledging the existence of sexual and psychological abuse and neglect in Saudi Arabian culture [29].

In countries like Saudi Arabia, there is a long and deep-rooted tradition of corporal punishment of children, e.g., by beating them with a stick. It is therefore important to consider how such punishment is defined. Physical abuse is often accompanied by injuries and marks such as bruises, whereas corporal punishment, according to Saunders and Goddard [30], only results in mild or moderate temporary pain. However, what is accepted as non-abusive corporal punishment of children has changed over time, between cultures and within society. In societies such as Saudi Arabia, harsher punishment of children is traditional [29].

As for the interpretation of the third factor, the emotional neglect factor, it is saturated in El Mhamdi et al. [4] items; with positive intrinsic satiation presented in emotional neglect is the parent's failure to respond appropriately to the child's emotional needs.

Emotional neglect may in some ways be regarded as the opposite of abuse and maltreatment. While abuse and maltreatment are parental actions, emotional neglect refers to the failure of parents to act. It is the failure to notice, pay attention to, or respond appropriately to a child's feelings. Because it is an act of omission, it is not visible, tangible, or memorable. Emotional neglect is the white space in the family photo that lies in the background instead of the foreground. It is insidious and overlooked while silently causing harm to people's lives

Finally, the researchers attribute the lack of significant gender differences in the perception of childhood abuse experiences to the fact that males and females may be exposed to the same forms of abuse in childhood and almost to the same degree because the abuser is a parent or caregiver. This result can also be explained by the nature and size of the sample of the current study, which shows that the variable of gender does not influence the perception of childhood abuse experiences. However, among the other factors that might have similar effects on the perception of abuse in the context of this study is the fact that members of the sample come from the same social environment and the parenting methods are consistent. This finding is consistent with the results of some other studies that indicated that there are no statistically significant gender differences in childhood abuse experiences [31].

7. Limitations

The study has a number of limitations. The factor study of the scale of childhood abuse experiences needs additional studies to replicate the psychometric properties of the scale, especially the factorial structure and cutting scores with larger male and female samples, including a clinical sample. This would augment confidence in the results obtained and further support the findings. Samples can be selected from different places of child abuse, such as homes, juvenile care homes, and orphanages, if they differ in the severity and nature of abuse and neglect. This would increase the sensitivity of the measure

of identifying and classifying the cases and severity of childhood abuse experiences and neglect in the broader context.

8. Conclusion

As the scale of this study has a consistent factorial structure and is characterized by certain psychometric properties in its original version that reflect its strength, it can be used effectively in personality research and patient and therapeutic psychology. There is a need to apply this scale to larger samples of children and adolescents of both genders and from different categories in order to allow longitudinal, cross-sectional, and tracking studies, as well as comprehensive surveys that delve into the types of abuse to which the child is exposed, without neglecting the psychological and demographic variables and the cultural, social, and economic levels of the family to which the child belongs. There is also a need to apply the scale to samples of sick children in hospitals, psychiatric clinics, psychological rehabilitation centers, and youth welfare institutions. This could pave the way for comparisons between normal children and their peers who are mentally disturbed, disabled, and/or delinquent, as well as for epidemiological studies intended to know the duration of the prevalence of childhood abuse experiences in the Kingdom of Saudi Arabia and other Arab societies.

The procedures performed in our study involved human participants, and they agreed to the ethical standards of the institutional research committee, as well as the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The study was approved by the Academic Ethics Committee of Imam Mohammad Ibn Saud Islamic University. Informed consent was obtained from all subjects involved in the study. All experiments were performed in accordance with relevant guidelines and regulations.

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