

Prevalence of Exposure to Complex Trauma and Community Violence, and their Associations with Internalizing and Externalizing Symptoms

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Abstract

Studies about trauma often tend to focus on abuse and neglect. However important, these studies may neglect the importance of the broader community context that is often associated with trauma, and complex trauma (CT) in particular. This study aimed to investigate the effects of CT (defined in terms of experiencing abuse and/or neglect occurring in the context of relationships with caregivers), and of broader environmental adversity (i.e. exposure to community violence), in a sample of adolescents ($N = 218$) from a severely disadvantaged district of Lima, Peru. The study had two aims: (a) to assess the prevalence of CT and its associations with internalizing and externalizing symptoms in these adolescents, and (b) to investigate the associations between community violence and both internalizing and externalizing symptoms over and above the effects of CT. In total, 39.4% of the adolescents reported at least one type of moderate to severe trauma. There was a clear association between CT and both internalizing and externalizing symptoms. Ordinal logistic regressions showed that children who were exposed to one or more traumatic experiences were more likely to score within a higher range of internalizing and externalizing symptoms than children with no history of trauma. Finally, exposure to community violence was an important predictor of symptomatology beyond the effects of CT.

Keywords: Childhood Trauma Questionnaire; complex trauma; early adversity; community violence, trauma assessment.

Complex trauma (CT) concerns the consequences of multiple experiences of emotional, physical, or sexual abuse, and emotional or physical neglect at an early age within a caregiving context (Bernstein et al., 2003; Mendelsohn et al., 2011; Solomon, 1999). The effects of CT on psychological development and symptomatology have been extensively studied during the past two decades (Anda et al., 2006; Cummings & Berkowitz, 2014; Dong et al., 2004; Dube et al., 2001; Geffner & Tishelman, 2011).

Pathogenic environments, in turn, refer to exposure to risky environments (Grigorenko, 2009) at different layers of social interaction, such as the household, the neighborhood, or the school. Pathogenic environments such as poverty, community violence, and household dysfunctions have been shown to negatively influence psychological development and well-being (Callahan et al., 2011; Cicchetti, 2004; Cicchetti & Lynch, 1993; Green et al., 2010, 2014; Hammack, Richards, Luo, Edlynn, & Roy, 2004; Ludwig et al., 2012, 2013; Páez, Fernández, & Beristain, 2001; Richters & Saltzman, 1990; Taylor et al., 2006; Vanderbilt-Adriance & Shaw, 2009).

Furthermore, exposure to community violence during childhood and adolescence has been linked to internalizing and externalizing problems, PTSD, low school engagement, problematic peer relationships, substance abuse, and sexual risk behaviors (Voisin & Berringer, 2015). Internalizing and externalizing symptoms following CT and exposure to violence, are related to over and under-controlled behavior patterns. Abused children may display rigid, controlled behaviors such as compulsive compliance and resistance to change, as well as under-controlled or impulsive behaviors like aggression and impulse control disorders (Cook, Blaustein, Spinazzola, & Van der Kolk, 2003; Lubit, Rovine, Defrancisci, & Eth, 2003)

Research addressing the effects of CT in Latin American countries is very limited (Ballesteros, Vitriol, Florenzano, Vacarezza, & Calderón, 2007; Florenzano et al., 2002; Leggerini, Caetano, Loreto, Dias de Mattos, & Iracema de Lima, 2013; Vitriol, 2005; Weil et al., 2004). In addition, the rather restricted body of research often tends to neglect the effects of community violence. Much of the current research focusing on CT addresses specific types of maltreatment and does not include a focus on broader pathogenic environments, while studies clearly suggest that these two tend to co-occur (Dong et al., 2004). These studies thus risk overestimating the predictive power of specific types of CT. The present study attempts to overcome these limitations of existing research by including a measure of exposure to community violence.

The limited attention paid to CT in children in Latin America stands in sharp contrast to empirical evidence highlighting the adverse effects of CT and community violence on the cognitive, intellectual, social, emotional, and physical development of children in the USA and Europe (Sameroff, Gutman, & Peck, 2003). More specifically, studies have reported increased levels of emotional distress, a high prevalence of mental disorders, and academic failure

(Cicchetti, 2004), internalizing and externalizing problems (Callahan, Scaramella, Laird, & Sohr-Preston, 2011), and violent behavior among adolescents (Spano, Rivera, & Bolland, 2006) and young people growing up in a poor and violent context.

This study focused on young adolescents growing up in Villa El Salvador, a very poor region in Lima, Peru, characterized by well-documented high levels of family and community violence, abuse, neglect, and poverty (Instituto Nacional de Estadística e Informática, 2009; Ministerio de la Mujer y Poblaciones Vulnerables, 2012). The majority of adolescents living in Villa El Salvador are exposed to very difficult circumstances within the family, the school, and the broader community environment. They are at high risk of experiencing early negative life events, in terms of both of victimization and exposure across different layers of social interaction.

The aims of this study were twofold. First, we aimed to assess the prevalence of CT and its associations to internalizing and externalizing symptoms. Given the harsh characteristics of Villa El Salvador (high rates of community violence and criminal activities), we expected to find a high prevalence of trauma, as well as significant correlations between CT and symptoms. Furthermore, we expected to find a direct relationship between trauma and symptoms, in that more traumatic experiences would lead to more symptoms. As a second aim of this study, we investigated the associations between community violence and both internalizing and externalizing symptoms, beyond the effects of CT. We expected that exposure to community violence would be a significant predictor of both internalizing and externalizing symptoms, above and beyond the effects of CT.

Method

Participants

A sample of 218 Peruvian adolescents aged between 11 and 18 years ($M = 14.16$, $SD = 1.54$) participated in this study. Inclusion criteria were (a) Peruvian nationality, (b) age 11–18 years, (c) student in a public high school in Villa El Salvador. Equal gender distribution was aimed for, and a final sample of 52.3% boys and 47.7% girls was achieved.

Procedures

The current study is part of a larger longitudinal study on CT, pathogenic environments, and adolescent mental health in Villa El Salvador. Together with Rimac (56.5%) and El Agustino (55.3%), Villa El Salvador (53%) is one of the districts with highest indices of victimization (criminal activity and community violence) in Lima, Peru (Instituto Nacional de Estadística e Informática, 2009; Ministerio de la Mujer y Poblaciones Vulnerables, 2012, Municipalidad de Lima, 2012).

Adolescents were recruited via public high schools, with a non-probability sampling method, where a convenience sample was used. All students were provided with information about the aims of the study, and had to sign an informed consent form assuring that participation

in the study was completely voluntary, confidential, and anonymous. Participants were given oral and written instructions about the procedure and completed the self-report questionnaires during class hours. This study was approved by the KU Leuven University Social and Societal Ethics Committee.

Measures

The Childhood Trauma Questionnaire –Short Form (CTQ-SF; Bernstein et al., 2003) is a 28-item retrospective self-report questionnaire, including 25 clinical items assessing five dimensions of CT: physical abuse (PA), emotional abuse (EA), sexual abuse (SA), physical neglect (PN), and emotional neglect (EN). An additional three-item subscale measures minimization/denial. Answers are rated on a five-point Likert-type scale structured to reflect the frequency of maltreatment experiences. Good to excellent internal consistency has been demonstrated, with Cronbach's alphas that ranged from .78 to .95 in adolescents (Bernstein et al., 2003; Thombs et al., 2009). In the current study, the Spanish version was used with minor adaptations, taking into consideration the differences of Spanish between Spain and Peru. Specifically, three items received minor word changes: item 3 (word "menso(a)" was changed to "estupido(a)"), item 4 (word "endrogados" was changed to "drogados"), and item 24 ("alguien me molestaba sexualmente" was changed to "alguien solía abusar de mi sexualmente"). Due to the fact that this instrument had not been previously validated in Peru, and particularly in this population, the psychometric properties and factor structure of this instrument were assessed and are presented in Appendices A and B.

The Youth Self-Report (YSR; Achenbach & Rescorla, 2001) is a 112 item self-report questionnaire for adolescents between 11 and 18 years of age. It assesses eight first-order syndromes (e.g. Anxious/Depressed, Rule-breaking Behavior), clustering into two second-order factors: the Internalizing Dimension, covering anxious - depressed, withdrawn -depressed, and somatic complaints syndromes, and the Externalizing Dimension, including rule-breaking behavior and aggressive behavior syndromes. For this study, the internalizing and externalizing factors were considered. The YSR has been used in a wide variety of cultures (Ivanova et al., 2007; Rescorla et al., 2007; Verhulst et al., 2003) and has shown adequate psychometric properties (Achenbach & Rescorla, 2001; Achenbach et al., 2008; Hofstra, Van der Ende, & Verhulst, 2001, 2002). Fonseca-Pedrero, Sierra-Baigrie, Lemos-Giráldez, Paino, and Muñiz (2012) demonstrated measurement invariance across gender and age. The Spanish version was purchased for this study through the Achenbach System of Empirically Based Assessment. In this study, good to excellent internal consistency indices of $\alpha = .89$ for the internalizing factor and $\alpha = .93$ for the externalizing factor were found.

The Questionnaire of exposure to violence (Cuestionario de exposición a la violencia (CEV)) (CEV; Orue & Calvete, 2010) is a 21 item self-report questionnaire for

children and adolescents that assesses four possible contexts of exposure to violence from a lifetime perspective: school, household, community, and media. In this study, only the subscale assessing exposure to community violence was used. The internal consistency index found for this subscale was $\alpha = .73$.

Statistical Analysis

For statistical analyses, IBM SPSS version 22 was used. The descriptive statistics are presented in terms of distribution of both trauma and symptomatology (Table 1). To explore the distribution of trauma, cutoff points to determine moderate to severe trauma, as measured by the CTQ-SF, were estimated using established cutoff criteria (Bernstein & Fink, 1998; Heim et al., 2009). Additionally, a cumulative measure of trauma was computed by defining three categories: no history of trauma, one type of trauma, and two or more types of trauma (moderate to severe). The presence of symptoms, as measured by the YSR, was defined according to cutoff points for normal, borderline/subclinical, and clinical categories, considering multi-cultural norms that apply to the Peruvian population (Achenbach & Rescorla, 2001).

To assess the relationship between CT and internalizing and externalizing symptoms, zero-order correlations were calculated (see Table 2). Furthermore, two ordinal logistic regressions with proportional odds were used to determine the cumulative effect of moderate to severe trauma, on the likelihood of developing clinical symptoms (see Table 3).

Finally, to investigate the influence of exposure to community violence on symptoms beyond the effects of trauma, both zero-order correlations and hierarchical multiple regressions were carried out (see Table 4).

Results

Descriptive Statistics

The prevalence of moderate to severe trauma (for each type of trauma) ranged from 4.4% to 27.2% (see Table 1). About 40% of the adolescents had suffered at least one type of moderate to severe trauma (see Table 1).

As shown in Table 1, just over 48% of the sample was classified as falling within the clinical range of internalizing symptoms, and around 35% fell within the clinical range of externalizing symptoms.

Table 1.

Sample Characteristics

	Total	Boys	Girls
Moderate to Severe Trauma Distribution			
EA%	9.2	4.4	14.4
PA%	10.6	7.0	14.4
SA%	10.6	4.4	17.3
EN%	10.6	5.3	16.3
PN%	26.1	27.2	25.0
Cumulative Distribution of Trauma			
No history of trauma%	60.6	63.2	57.7

One type of trauma%	22.0	26.3	17.3
2 or more types of trauma%	17.4	10.5	25.0
Distribution of Internalizing Symptoms			
Normal%	38.5	36.8	40.4
Borderline%	13.3	10.5	16.3
Clinical%	48.2	52.6	43.3
Distribution of Externalizing Symptoms			
Normal%	54.1	55.3	52.9
Borderline%	11.0	7.9	14.4
Clinical%	34.9	36.8	32.7

Note. $N = 218$ (boys =114, girls =104). EA= Emotional abuse, PA = physical abuse, SA = sexual abuse, EN = emotional neglect, PN = physical neglect.

Impact of CT on Symptomatology

Significant correlations among all of the CTQ-SF subscales and the internalizing and externalizing factors of the YSR were found (see Table 2).

Table 2.

Pearson Correlations between all Study Variables

	1	2	3	4	5	6	7	8	9
1. EA	1								
2. PA	.635**	1							
3. SA	.515**	.548**	1						
4. EN	.556**	.380**	.244**	1					
5. PN	.354**	.356**	.225**	.466**	1				
6. Global CTQ	.844**	.772**	.636**	.765**	.652**	1			
7.CV	.342**	.315**	.201**	.134*	.195**	.318**	1		
8.Internalizing	.335**	.324**	.254**	.175**	.260**	.359**	.338**	1	
9.Externalizing	.271**	.264**	.189**	.155*	.273**	.308**	.375**	.824**	1

Note. $N = 218$. ** $p < .01$, * $p < .05$. EA= Emotional abuse, PA = physical abuse, SA = sexual abuse, EN = emotional neglect, PN = physical neglect, CV= exposure to community violence.

Two ordinal logistic regressions with proportional odds were carried out to determine the cumulative effect of moderate to severe trauma, on the likelihood of developing clinical internalizing and externalizing symptoms (see Table 3). No history of trauma was treated as a reference category, and age was included as a covariate. The assumption of proportional odds was met for both models, as assessed by a full likelihood ratio test comparing the fit of the proportional odds location model to a model with varying location parameters, $\chi^2(3) = 2.456$, $p > .05$ (internalizing), $\chi^2(3) = 7.802$, $p > .05$ (externalizing). The final models statistically significantly predicted the dependent variable (symptoms) over and above the intercept-only model, $\chi^2(3) = 26.497$, $p < .001$ (internalizing), $\chi^2(3) = 17.160$, $p < .001$ (externalizing). Finally, the cumulative measure of experienced trauma (moderate to severe) had a statistically significant effect on the prediction of whether a participant fell in a higher category of internalizing $\chi^2(2) = 9.149$, $p = .010$, or externalizing $\chi^2(2) = 7.457$, $p = .024$ symptoms.

For internalizing symptoms, the odds of participants with two or more types of trauma of falling within a higher category of internalizing symptoms was 2.269 (95% CI, 1.087 to 4.

736) times than for participants with no history of trauma, $\chi^2(1) = 4.767, p = .029$. Similarly, the odds of participants with at least one type of trauma of falling within a higher category of internalizing symptoms was 2.434 (95% CI, 1.228 to 4.823) times than for participants with no history of trauma, $\chi^2(1) = 6.495, p = .011$. Moreover, age was positively associated with an increase in the odds of falling within a higher category of internalizing symptoms, with an odds ratio of 1.370 (95% CI, 1.144 to 1.641), $\chi^2(1) = 11.682, p = .001$.

For externalizing symptoms, the odds of participants with two or more types of trauma of falling within a higher category of externalizing symptoms was 2.333 (95% CI, 1.139 to 4.777) times than for participants with no history of trauma, $\chi^2(1) = 5.363, p = .021$. Similarly, the odds of participants with at least one type of trauma of falling within a higher category of externalizing symptoms was 1.998 (95% CI, 1.028 to 3.885) times compared to participants with no history of trauma, $\chi^2(1) = 4.164, p = .041$. Again, age, was associated with an increase in the odds of falling within a higher category of externalizing symptoms, with an odds ratio of 1.257 (95% CI, 1.049 to 1.505), $\chi^2(1) = 6.173, p = .013$.

Table 3.

Prediction of Symptoms by Cumulative Effect of Trauma

	Estimate	SE	Wald	Sig.	Exp(B)	Lower	Upper
Internalizing Symptoms							
Normal	4.320	1.293	11.160	.001	75.188	5.962	948.160
Borderline	4.934	1.304	14.320	.000	138.877	10.787	1788.005
Age	.315	.092	11.682	.001	1.370	1.144	1.641
2 or more types of trauma	.819	.375	4.767	.029	2.269	1.087	4.736
1 type of trauma	.889	.349	6.495	.011	2.434	1.228	4.823
No trauma history	.000				1.000		
Externalizing Symptoms							
Normal	3.762	1.305	8.315	.004	43.030	3.336	554.987
Borderline	4.248	1.312	10.489	.001	69.999	5.352	915.528
Age	.228	.092	6.173	.013	1.257	1.049	1.505
2 or more types of trauma	.847	.366	5.363	.021	2.333	1.139	4.777
1 type of trauma	.692	.339	4.164	.041	1.998	1.028	3.885
No trauma history	.000				1.000		

Note. $N = 218$. $df = 1$. "No history of trauma" was treated as a reference category.

Effect of Community Violence

Significant correlations were found between CT and community violence, supporting the hypothesis that both types of adversity often co-occur (see Table 2). Next, we conducted a series of hierarchical linear regressions to investigate the effect of community violence on symptoms over and above CT (see Table 4). For internalizing symptoms, the first model (step 1) was statistically significant, $F(3, 213) = 15.009, p < .001$, and explained 18% of the variance of internalizing symptomatology. After the entry of exposure to community violence at step 2, the total variance explained by the model increased to 22% ($F(4,213) = 14.552, p < .01$). In the final

model, both CT and community violence independently predicted internalizing symptoms ($\beta = .233, p < .01$, and $\beta = .222, p < .01$, respectively).

For externalizing symptoms, the first model (step 1) was statistically significant, $F(3, 213) = 11.271, p < .001$, and explained 14% of the variance in externalizing symptomatology. After the entry of exposure to community violence at step 2, the total variance explained by the model was 20% ($F(4,213) = 12.830, p < .01$). In the final model, again, both CT and exposure to community violence were statistically significant predictors of externalizing symptomatology ($\beta = .188, p < .01$, and $\beta = .265, p < .01$, respectively).

Table 4.

Hierarchical Regressions Predicting Symptoms from Gender, Trauma, and Exposure to Community Violence.

	<i>R</i>	<i>R</i> ²	<i>R</i> ² Change	<i>B</i>	<i>SE</i>	β	<i>t</i>
Internalizing Symptoms							
Step1	.420	.177**					
Gender				.024	.045	.035	.541
Age				.048	.015	.211**	3.262
Global CTQ				.238	.051	.307**	4.646
Step 2	.466	.217**	.041**				
Gender				.055	.045	.078	1.212
Age				.041	.015	.178**	2.787
Global CTQ				.181	.053	.233**	3.401
Community violence exposure				.116	.035	.222**	3.306
Externalizing Symptoms							
Step1	.372	.139**					
Gender				-.027	.049	-.035	-.540
Age				.048	.016	.197**	2.987
Global CTQ				.229	.056	.277**	4.091
Step 2	.444	.197**	.058**				
Gender				.012	.048	.016	.244
Age				.039	.016	.158*	2.447
Global CTQ				.155	.057	.188**	2.707
Community violence exposure				.148	.038	.265**	3.901

Note. *N* = 218. ** $p < .01$, * $p < .05$

Discussion

This study aimed to investigate the effects of CT (defined in terms of experiencing abuse and/or neglect occurring in the context of relationships with caregivers), and of broader environmental adversity (i.e. exposure to community violence), in a sample of adolescents from a severely disadvantaged district of Lima, Peru. The main results of this study can be summarized as follows. First, as expected, the prevalence of trauma in this sample was relatively high, with about 40% of the sample having suffered at least one type of moderate to severe trauma, with girls typically having higher rates of trauma than boys. Studies in the

United States typically report trauma rates of about 25% in children and adolescents between 9-16 years old (Costello, et al., 2002). These results suggest that more children and adolescents from this region of Lima, Peru, are exposed to negative early life experiences in comparison to other countries. Furthermore, this exposure to trauma appears to be higher for girls than for boys, which is consistent with the increased gender violence indices existing in Latin America.

As we expected, results also showed a clear relationship between trauma history and both internalizing and externalizing symptoms, in that the likelihood of falling into a higher category of symptoms increased with the exposure to traumatic experiences. Interestingly, there did not seem to be a difference in effect by one versus two or more types of trauma, indicating that any number of traumatic experiences increases the odds of a higher level of symptoms. These results clearly suggest that exposure to abuse and neglect in childhood has a direct and substantial impact on adolescent development and psychological well-being. In addition, it is important to acknowledge that within this sample, a significant age effect showed that older adolescents were more likely to experience clinical internalizing and externalizing symptoms.

Moreover, exposure to community violence was associated with complex trauma, suggesting that trauma tends to occur within a broader context characterized by adversity. Furthermore, this broader adverse context was related to symptomatic distress beyond the effects of discrete types of trauma, and with higher effect sizes for the case of externalizing symptoms. These results indicate that the symptomatic distress of these adolescents can be partially explained by their exposure to a harsh environment, both in the household and in the community.

The clinical implications of the understanding of the effects of both CT and exposure to violence are substantial. Our results indicate that particularly in severely affected children, the likelihood to develop clinical symptoms of anxiety, depression, somatic complaints, rule-breaking and aggressive behaviors, is 2 to 2.4 fold more likely than in non-traumatized individuals. Future interventions in contexts such as Villa El Salvador, where the majority of children are exposed to traumatic events, should then start by focusing on the environment of the children, both regarding community and school, promoting public security, and psychosocial services. Moreover, the impact of community violence on externalizing symptoms like rule-breaking and aggressive behaviors suggests a cycle of violence, where the harsh environment constantly interacts with these children, leading to the possibility of their engagement in gangs, criminal activities, and violent behaviors. In this sense, intervention programs should also focus on affect regulation, reflective functioning and impulse control (Luyten, Fonagy, Lowyck, & Vermote, 2012), in order to buffer the effects of violence on externalizing symptoms. Future research should focus on the identification of mediating and moderating variables between CT, exposure to violence and symptoms, with the aim of pinpointing the course of future interventions.

Limitations

Several limitations of the present study should be acknowledged. First, the results cannot be generalized and are applicable only to adolescents in Lima, Peru. Although this sample can be considered as a case-study of exposure to trauma and violence, it is important to take into consideration cultural and context-specific variables when comparing these results to those of other settings. Second, even though the sample size was large enough to claim reliable estimates, a larger sample size would provide more generalizable results. More specifically, a randomized sample could represent more accurately all the sociodemographic characteristics of Lima. Third, the measurements used were self-report and retrospective instruments (for the case of trauma), possibly implying a certain amount of bias. A recent review of tools for the assessment of CT (Roy & Perry, 2004) reported that interview methods in contrast to self-report measures, allow the interviewer to make ratings based on concrete events rather than relying on the individual's judgment, which could be influenced by their current emotional state. Additionally, the authors suggested that any measurement of CT might be affected by underreporting and/or distortion. In this sense, we recommend future studies to include a combination of self-report and interview measures. Furthermore, given that the study was cross-sectional, assessment of the stability of the instrument via test-retest reliability was not possible, and developmental trajectories could not be assessed by the measurement of all variables at different time points. Finally, we recommend future research to further explore the age effect found in this study, for example, by categorizing the sample in different age groups.

While acknowledging these limitations, the results that emerge from our analyses provide strong evidence of the relationships among trauma, pathogenic environments, and symptomatology in adolescents. Future research should include other types of adversity and other contexts (such as the school and household), to allow a more integrated and complex measurement of CT and pathogenic environments.

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Appendices

Appendix A.

Descriptive Statistics and Internal Consistency of the CTQ-SF(N = 272).

Scale	Total sample		Boys		Girls		α
	M	SD	M	SD	M	SD	
EA	1.642	.674	1.450	.481	1.837	.780	.734
PA	1.354	.547	1.274	.350	1.435	.684	.759
SA	1.166	.445	1.079	.215	1.253	.581	.841
EN	1.848	.745	1.775	.636	1.921	.840	.706
PN	1.643	.602	1.653	.569	1.633	.635	.364
Global CTQ	1.530	.438	1.446	.301	1.616	.531	.855

Note. $N = 272$. EA= Emotional abuse, PA = physical abuse, SA = sexual abuse, EN = emotional neglect, PN = physical neglect.

Appendix B.

Factor Structure of the Childhood Trauma Questionnaire–Short Form (CTQ-SF)

In order to assess the factor structure of the *CTQ-SF* within this sample, a strictly confirmatory approach (SC) to Confirmatory Factor Analysis (CFA) (Byrne, 2012) was used to assess the functioning of the theoretical model. For this analysis, Mplus Version 6.12 with MLM estimator (Satorra-Bentler chi-square) was used. Multiple fit indices were considered to determine the goodness of fit of the CFA models: RMSEA < .07, SRMR < .08 and CFI and TLI > .95 (Hooper, Coughlan, & Mullen, 2008, Hu & Bentler, 1999). Measurement errors of items that corresponded to the same subscale were allowed to correlate only when theoretically justifiable. More specifically, 3 pairs of error correlations were allowed because of similar wording and meaning: Items 3 (“Some people in my family called me names like stupid, lazy, or ugly”) and 14 (“My family would call me hurtful or insulting names”), Items 11 (“Some people in my family hit me so hard they left me bruises or marks”) and 12 (“They would punish me with a belt, a board, a cord, or another hard object”), and Items 13 (“The members of my family would look after each other”) and 19 (“The members of my family felt close to each other”). The final model, showed an acceptable model fit (see Table B1), but some items had low factor loadings, particularly within the Physical Neglect (PN) subscale (Figure B1).

Table B1. *CFA Model Fit*

Model	S-B χ^2	df	S-B χ^2/df	RMSEA	SRMR	CFI	TLI
Model 1: 5 factors	382.543*	262	1.460	.041	.062	.913	.901

Note. * $p < .01$

Figure B1. Standardized factor loadings

