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Psychometric Properties of the German Version of the Child Post-Traumatic Cognitions Inventory (CPTCI-GER)

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Abstract

Dysfunctional trauma-related cognitions are associated with posttraumatic stress disorder (PTSD). The psychometric properties of the German version of the *Child Post-Traumatic Cognitions Inventory* (CPTCI-GER) were assessed in a sample of 223 children and adolescents (7–16 years) with a history of different traumatic events. Confirmatory factor analyses supported the original two-factor structure—*permanent and disturbing change* (CPTCI-PC) and *fragile person in a scary world* (CPTCI-SW). The total scale and both subscales showed good internal consistency. Participants with PTSD had significantly more dysfunctional trauma-related cognitions than those without PTSD. Dysfunctional posttraumatic cognitions correlated significantly with posttraumatic stress symptoms (PTSS; $r = .62$), depression ($r = .71$), and anxiety ($r = .67$). The CPTCI-GER has good psychometric properties and may facilitate evaluation of treatments and further research on the function of trauma-related cognitions in children and adolescents. (Partial) correlations provide empirical support for the combined DSM-5 symptom cluster *negative alterations in cognitions and mood*.

Keywords: children and adolescents, CPTCI, posttraumatic cognitions, posttraumatic stress disorder.

Many children and adolescents experience a traumatic event [1]. Prevalence rates vary relative to the country of origin [2], the definition of the stressor criterion, and the acquisition of the data [3]. Representative studies of German samples suggest a lifetime prevalence of 22.5 % [4] or 21.2 % [5] for adolescents and young adults (12–24 years); two North American studies report rates of 43.0 % [6] and 67.8 % [1] for children and adolescents aged 9–18 years. Despite the wide age range, it is clear that the likelihood of being exposed to a trauma is relatively high in childhood and adolescence. Moreover, trauma exposure in childhood and adolescence has significant repercussions for their developmental trajectory, being a major risk factor for lifelong mental and physical illness [7].

It has been suggested that how children and adolescents respond to traumatic events (i.e. whether they develop a psychiatric disorder that warrants intervention) is affected by the cognitive appraisal of each experience [8]. This insight is now reflected within the latest edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5), with the inclusion of a new criterion within the *posttraumatic stress disorder* (PTSD) diagnosis: *negative alterations in cognitions and mood* [9]. This shift in diagnostic practice is consistent with etiological models such as Ehlers and Clark's cognitive model [10] which emphasize the influence of dysfunctional posttraumatic cognitions especially for the development and maintenance of a chronic pathogenic course. This model suggests that people who develop PTSD following a traumatic event are less able to see the trauma as a past event, and are more likely to see the trauma as having negative implications for their future. They appraise the traumatic event and its consequences as extremely negative, which leads to a feeling of current threat. This threat can be felt in relation to both the external (i.e. the world is a scary place where I am highly vulnerable) and internal domains (I am an incompetent person, I will never be the same again) [10]. Various studies support the adaptability of cognitive models from adulthood to childhood and adolescence [11, 12, 13], but also clarify that a cognitive

theory of childhood PTSD needs to consider developmental factors [14]. Research findings confirm the impact which cognitions have on the development and persistence of PTSD, even in childhood and adolescence [11]. Dysfunctional cognitions correlate highly with *posttraumatic stress symptoms* (PTSS), depression and anxiety [15,16]. Moreover, children and adolescents with PTSD have significantly more negative cognitions than those without PTSD [16].

Assessing dysfunctional posttraumatic cognitions is important for conducting an assessment of a child's response to trauma, planning psychological interventions (e.g. when formulating a child's difficulties using cognitive behavioral therapy) as well as evaluating and refining the theoretical understanding of PTSD in this age group. The *Post-Traumatic Cognitions Inventory* (PTCI; [17]) is an established instrument for adults which measures post-traumatic appraisals proposed by cognitive models of PTSD [10,18]. Despite various forms of assessment and many studies regarding trauma-related cognitions in adults, child and adolescent cognitive responses to trauma are much less investigated. A few studies show the influence of dysfunctional trauma-related appraisals on developing PTSD (e.g. [11,13]). A lack of valid and reliable assessment tools is one reason for the scant state of research.

To our knowledge, no validated German measure to assess dysfunctional trauma-related cognitions exists so far; one approach to developing such a measure would be to translate an existing measure. The *Child Post-Traumatic Cognitions Inventory* (CPTCI, [16]) is a child-oriented version of the PTCI, which has been used in some recent studies (e.g. [19,20]). The item pool for developing this measure was based on the original PTCI [17] and Ehlers and Clark's cognitive model [10]. The preliminary measure comprised 41 items: a) 33 Items were drawn from the adult PTCI and were adapted for children and adolescents as well as b) several additional items were included which also addressed the key concepts of the PTCI (*negative cognitions about self*, *negative cognitions about the world*, *self-blame*). A

principal components analysis with all 41 items suggested a two-factor model with 25 items for the CPTCI; these factors were labelled *permanent and disturbing change* (CPTCI-PC; 13 items) and *fragile person in a scary world* (CPTCI-SW; 12 items). Based on a sample of 570 children and adolescents aged 6–18 years the original English version showed good psychometric properties [16]. However, this study comprised a limited sample consisting only of children and adolescents who had experienced a *single* traumatic event (typically motor vehicle accidents or assaults). Meiser-Stedman et al. [16] recognized this limitation, and suggested that the utility of the CPTCI would also need to be demonstrated in children and adolescents exposed to *multiple* traumatic events (e.g. sexual or physical abuse) and to demonstrate cross-cultural validity of the measure in further studies. Moreover, although other translations of the CPTCI exist e.g., Dutch [15] and Arabic [21], only the Dutch version has been recently validated as a reliable and valid instrument [15]. A validation of a German version has yet to be carried out. Therefore, the goal of the current study was to examine the psychometric properties of the German version in a sample that was heterogenous with respect to age, gender, trauma type and severity (thereby demonstrating its utility in a wide range of child and adolescent clinical settings). Moreover, examining the properties of the CPTCI in a German sample would also evaluate the cross-cultural validity of the instrument and the emphasis placed on negative appraisals within cognitive models of PTSD [10].

We hypothesized that the two-factor structure of the English original version would be replicated. We hypothesized that dysfunctional posttraumatic cognitions correlate highly ($r > .50$) with PTSS, depression, and anxiety. Furthermore, we hypothesized that children and adolescents with PTSD have significantly more dysfunctional trauma-related cognitions compared to those without PTSD.

Methods

Participants

Children and adolescents ($N = 223$, age 7–16 years) completed the CPTCI-GER before treatment while participating in two multi-site clinical studies in Germany: *TreatChildTrauma* and *CANMANAGE*. The TreatChildTrauma study investigates the effectiveness of *trauma-focused cognitive behavioral therapy* (TF-CBT; [22]) for children and adolescents with PTSD in Germany (NCT01516827). CANMANAGE is a research collaboration addressing the implementation of managed mental healthcare for children and adolescents after abuse or neglect (DRKS00003979). The study samples differ regarding type of trauma exposure. Fifty-five (50.4 %) participants of the TreatChildTrauma sample experienced a single traumatic event, 38 (34.9 %) multiple traumatic events and 16 (14.7 %) could not be reliably classified to one of these categories (single vs. multiple traumatic events) due to insufficient information. Most TreatChildTrauma participants had experienced sexual abuse ($n = 48$, 44.0 %), physical abuse ($n = 20$, 18.4 %) or an accidental trauma ($n = 18$, 16.5 %). CANMANAGE participants had mainly experienced multiple traumatic events (109, 95.6 %), 4 (3.5 %) reported a single traumatic event and 1 (0.9 %) could not reliably be classified to either of both categories. In this study, most participants had experienced physical abuse ($n = 37$, 32.5 %), reported sexual abuse ($n = 26$, 22.8 %) or witnessed domestic violence ($n = 22$, 19.3 %). Both studies were approved by the Institutional Review Board at the University of Ulm. Written consent from a legal guardian was necessary for participation. Inclusion criterion for the current study were a history of exposure to a potentially traumatic event (as defined by Criterion A of the PTSD diagnosis proposed in DSM-IV [23]), and ability to complete the study questionnaires. Standardized clinical evaluation was performed by trained assessors.

Measures

Posttraumatic Cognitions. The CPTCI-GER [16] is a self-report questionnaire with 25 items, which assesses dysfunctional trauma-related cognitions in children and adolescents. The two subscales consist of 13 items (CPTCI-PC) and 12 items (CPTCI-SW), which are rated on a Likert scale with (1) *Don't agree at all*, (2) *Don't agree a bit*, (3) *Agree a bit*, and (4) *Agree a lot*. The score ranges are from 25 to 100 for the total scale, from 13 to 52 for the subscale CPTCI-PC and from 12 to 48 for the subscale CPTCI-SW. Higher scores indicate more dysfunctional trauma-related cognitions. Both subscales show good psychometric properties: Cronbach's α = 86–.93; test-retest reliability = .70–.78. The German version was translated according to consensus principles between multiple translators and used forward-backward translation procedures undertaken by clinical researchers and a native English speaker at the University of Ulm.

PTSD. As participants were recruited from two clinical studies, different semi-structured interviews were used to assess exposure to traumatic events and PTSD symptoms according to DSM-IV-TR: (a) The German version [24] of the *Clinician-Administered PTSD Scale for Children and Adolescents* (CAPS-CA; [25]), which possesses good internal consistency (Cronbach's α > .80) as well as a sensitivity of 80.0 % and a specificity of 91.4 % for detecting a PTSD diagnosis, was used in the TreatChildTrauma study; and (b) the *Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version* (K-SADS-PL; [26]), which has an inter-rater reliability of 93–100 % was used in the CANMANAGE study.

The discriminant validity of the CPTCI-GER was evaluated by comparing the scores of participants with and without PTSD.

PTSS. In the TreatChildTrauma subsample, PTSS were assessed using the *University of California at Los Angeles Post-Traumatic Stress Disorder Reaction Index* (UCLA PTSD-

RI; [27]), a widely-used self-report measure of PTSS in school-age children and adolescents that possesses good psychometric properties (e.g. Cronbach's α = .88–.91 [28]).

Depression. The German version [29] of the *Children's Depression Inventory* (CDI; [30]) was used in the TreatChildTrauma subsample to assess the presence and severity of depression symptoms. The measure has good internal consistency (Cronbach's α ≥ .84 and split-half reliability ≥ .82).

Anxiety. In the TreatChildTrauma subsample, anxiety symptoms were assessed using the German version of the *Screen for Child Anxiety Related Emotional Disorders* (SCARED) in the revised version [31]. The SCARED possesses good psychometric properties, e.g. Cronbach's α = .91 in a German sample [32].

The convergent validity of the CPTCI-GER was assessed by exploring how it correlated with these measures of PTSS, depression, and anxiety.

Data Analyses

All analyses were performed using the Statistical Package for Social Sciences (SPSS, version 21.0) and the SPSS add-on module Analysis of Moment Structures (AMOS, version 21.0). Confirmatory factor analyses (CFA) were conducted to evaluate the factor structure of the CPTCI-GER. Due to non-normally distributed scores, the maximum-likelihood estimation using a Bollen-Stine Bootstrap [33] was adopted. The goodness of fit (GoF) of the original two-factor model (Model 1; [16]), a direct hierarchical model (Model 2), and a one-factor model (Model 3) were determined. The direct hierarchical model implied, alongside the two specific factors CPTCI-PC and CPTCI-SW, one general factor which had a direct impact on every item. The cut-off criteria of the fit indices adopted from the German validation study of the PTCI [34] were in line with widely used recommendations (e.g. [35]): χ^2/degrees of freedom (*df*) ratio less than 3, Comparative Fit Index (CFI) of .900 or more, Root-Mean-Square Error of Approximation (RMSEA) of less than .080 and Standardized

Root-Mean-Square Residual (SRMR) of less than .090. In addition to these fit indices, standardized regression weights were considered to determine the best model [35]. In a further step, internal consistency of the total scale and both subscales were assessed using Cronbach's α. Convergent validity was assessed by examining the Pearson correlations between the total scale and both subscales with self-report measures of PTSS, depression, and anxiety in the sub-sample of the TreatChildTrauma study participants ($n = 105$, 79 female [75.2 %]). The discriminant ability of the CPTCI was investigated by comparing the scores of children and adolescents with PTSD and those without PTSD by means of an independent samples t-test. A maximum of two missing CPTCI values were allowed for the CFA, where missing values were replaced with the aid of an imputation method called the expectation-maximization algorithm. To calculate the Pearson correlations, 20 % missing values for each questionnaire were allowed, but not replaced.

Results

Sample Description

Sociodemographic data and trauma-related information are displayed in Table 1. Exposure to multiple traumatic events implied either different trauma types experienced sequentially or repeated events of the same type.

Confirmatory Factor Analyses

The original two-factor model had a moderate GoF: The χ^2/df ratio was acceptable ($\chi^2/df = 2.39$) and the fit indices SRMR and RMSEA were in an acceptable range as well, except for the upper boundary of the RMSEA 90 % confidence interval [.071–.086]. The CFI, however, was insufficient (.849 < .900; see Table 2). The standardized regression weights for all items were significant ($p < .001$) and, except for items 1 and 12, greater than or equal to $\lambda = .50$ (see Table 3). The correlation between both subscales was $r = .91$ ($p < .001$).

As shown in Table 2, the best fit indices were achieved by the second model, the direct hierarchical model. For this model, the standardized regression weights of the items on the general factor ranged from $\lambda = .35$ to $\lambda = .78$ ($p < .001$); however, the regression weights of nine items on their respective subscales were very small and non-significant ($\lambda = .02–.14$, $p > .05$), contradicting a subordinated two-factor structure. The direct hierarchical model (comprising one general factor and two specific factors) did not therefore fit the data. Compared to the third model—the one-factor model—the original two-factor model showed a slightly, but significantly better GoF ($\Delta\chi^2 = 39.37$, $\Delta df = 1$, $p < .001$.).

On the basis of these fit indices and standardized regression weights, the original two-factor model had the strongest support; this model is therefore used throughout the rest of this paper. The standardized regression weights for the items on the two subscales proposed by this model are displayed in Table 3.

Internal Consistency

Reliability analyses demonstrated high internal consistency for the total scale (Cronbach's $\alpha = .94$), the CPTCI-PC subscale ($\alpha = .91$), and the CPTCI-SW subscale ($\alpha = .86$) in the total sample. Furthermore, internal consistency for the CPTCI-GER was supported even when child (7–12 years, $n = 118$; total scale: $\alpha = .90$; CPTCI-PC: $\alpha = .87$; and CPTCI-SW: $\alpha = .80$) and adolescent (13–16 years, $n = 105$; total scale: $\alpha = .94$; CPTCI-PC: $\alpha = .91$; and CPTCI-SW: $\alpha = .88$) sub-samples were investigated separately.

Convergent Validity

The total scale and the subscales correlated highly with self-report questionnaires of PTSS, depression, and anxiety (rs $\geq .55$, $p < .001$). The CPTCI total score and the CPTCI-PC sub-scale correlated most highly with the CDI; the CPTCI-SW sub-scale with both the CDI and the SCARED (see Table 4). Because of the high correlations with depression and anxiety, the impact of the CDI and the SCARED were controlled for. The partial correlations

between posttraumatic cognitions and PTSS remained significant, but yielded substantially lower correlations (see Table 4 values in brackets).

Discriminant Validity

Both the total and sub-scale scores were able to discriminate between participants with PTSD ($n = 107$) and those without PTSD ($n = 116$). Children and adolescents with PTSD scored significantly higher on the total scale as well as on the subscales compared to those without PTSD: total scale participants with PTSD M (SD) = 58.96 (16.04), participants without PTSD M (SD) = 44.56 (14.30), $t = 7.06$, $p < .001$, $d = 0.95$; CPTCI-PC participants with PTSD M (SD) = 31.11 (9.13), participants without PTSD M (SD) = 22.18 (8.32), $t = 7.64$, $p < .001$, $d = 1.02$; CPTCI-SW participants with PTSD M (SD) = 27.85 (7.88), participants without PTSD M (SD) = 22.38 (6.96), $t = 5.51$, $p < .001$, $d = 0.74$.

Discussion

This study investigates psychometric properties of the CPTCI-GER in a sample of children and adolescents with a history of various traumatic events. The large sample of children and adolescents, which was heterogeneous regarding type of trauma, is one of the strengths of the present study.

CFA revealed a moderate GoF of the original two-factor structure as specified by Meiser-Stedman et al. [16]. The χ^2/df ratio, the RMSEA, and the SMRI were acceptable, but the CFI was too low. However, the high loadings of almost all items for the subscales show that the two-factor model fits the data. Regarding both fit indices and standardized regression weights, two alternative models (direct hierarchical and one-factor) achieved a poorer fit with the data than the two-factor model. The original two-factor model was therefore found to be the best fit for the data, confirming the first hypothesis. Nevertheless, there was a strong correlation between the subscales.

Across the different indicators investigated in this study, the CPTCI-GER shows good psychometric properties. Both the total scale and the subscales have good internal consistency, independent of age. Convergent validity was confirmed by high correlations between dysfunctional posttraumatic cognitions and PTSS, as well as depression and anxiety, supporting the second hypothesis. However, the total scale and both subscales correlated higher with depression and anxiety than with PTSS. These findings are in line with previous studies of posttraumatic cognitions in adulthood [36,34] and childhood [15,16]. Additionally, after controlling for depression or anxiety, the partial correlations between dysfunctional trauma-related cognitions and PTSS remained distinctly lower. These results suggest that the association between the feeling of a *disturbing and permanent change* and an *incompetent person in a scary world* and the severity of PTSS can at least partly attributed to symptoms of depression and anxiety. Multiple explanations for the strong association between dysfunctional trauma-related cognitions and depression and anxiety have been proposed: 1) PTSD is often accompanied by depression and anxiety [15]; 2) dysfunctional posttraumatic cognitions are not restricted to having a role only in the maintenance of PTSD [15]; 3) pre-trauma depression and anxiety might be risk factors for dysfunctional trauma-related cognitions [34]; and 4) dysfunctional trauma-related cognitions could be more a sign of depression than a distinct psychopathological construct or mechanism in their own right [34]. It might also be possible that these negative post-traumatic appraisals reflect a general cognitive style that pre-existed the trauma but exerts a damaging impact in the aftermath of a trauma. Nevertheless, these partial correlation findings support the combination of cognitive and affective symptoms in the new DSM-5 cluster *negative alterations in cognitions and mood* [9]. Moreover, they point to the importance of detailed differential assessment of co-morbid or even primary depression or anxiety among traumatized children and adolescents [37].

The CPTCI-GER was able to discriminate between children and adolescents with and without PTSD, supporting hypothesis 3. This finding underscores the potential importance of posttraumatic cognitions in driving a pathological reaction after a traumatic event and stresses the importance of assessing posttraumatic cognitions in diagnostic and therapeutic contexts.

The English [16], Dutch [15], and present German validation studies describe similar results regarding the psychometric properties of the CPTCI. Both the English and Dutch studies used school and clinical samples, while the German study only comprised a clinical sample. The clinical samples for the English study (sample S2; $n = 138$), the Dutch study ($n = 184$), and the present study are comparable regarding age and gender structure, but differ in terms of trauma frequency and type. Participants of the English clinical sample had experienced a single traumatic event (assault or motor vehicle accident; [16]). The Dutch clinical sample consisted of participants who also reported predominantly a single traumatic event [15]. In contrast, most participants in the present study had been exposed to multiple traumatic events. Nonetheless, these diverse validation studies yield relatively consistent findings about the role of trauma-related cognitions in childhood and adolescence across different cultures, study designs, and samples.

Both CTPCI-GER subscales, which represent different theoretical models, have good reliability and validity. Consequently, the theoretical constructs *scary world* and *incompetent person* [18] and the feeling of a *permanent and disturbing change* [10] seem transferable to childhood and adolescence. Moreover, the CPTCI-GER addresses two items of the new DSM-5 cluster: D2 *Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world* (e.g. I am bad, No one can be trusted, The world is completely dangerous, My whole nervous system is permanently ruined). D3 *Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others* [9]. The CPTCI-GER, therefore, could be used for a more

reliable PTSD assessment according to DSM-5 criteria. However, blame items should be added for a comprehensive assessment.

Limitations

Convergent validity was only examined in the TreatChildTrauma study as it included measures of PTSS, depression and anxiety. However, this sub-sample was mostly female. The higher rates of depression in female adolescents [38] might therefore be responsible for the strong association between posttraumatic cognitions and depression observed in this study. Furthermore, the impact of specific types of trauma could not be evaluated as many participants in the current sample population experienced multiple types of trauma.

Conclusion

The CPTCI-GER is a psychometrically robust questionnaire for assessing dysfunctional trauma-related cognitions in children and adolescents. The original two-factor structure—*permanent and disturbing change* and *fragile person in a scary world*—turned out to be the best model based on multiple statistical criteria and content-based considerations. Both the total scale and each subscale might be explored in clinical practice and future research studies. The differential assessment of dysfunctional posttraumatic cognitions with the CPTCI allows better tailoring of cognitive interventions to the individual needs of the child or adolescent and better evaluation of treatment outcomes. Further research should investigate factors associated with the development of non-accurate or dysfunctional posttraumatic cognitions in traumatized children and adolescents, as well as the test-retest reliability of the instrument and its sensitivity for change.

Summary

This study investigated the psychometric properties of the German version of the CPTCI-GER in a sample of 223 children and adolescents aged 7–16 years with a history of exposure to different traumatic events. CFA demonstrated that (a) the original two-factor

structure—*permanent and disturbing change* (CPTCI-PC) and *fragile person in a scary world* (CPTCI-SW)—had a moderate GoF and that (b) alternative models achieved a poorer GoF compared to the two-factor model. The total scale and both subscales showed good internal consistency. Children and adolescents with PTSD had significantly more dysfunctional trauma-related cognitions than those without PTSD. Dysfunctional posttraumatic cognitions correlated significantly with PTSS ($r = .62$), depression ($r = .71$), and anxiety ($r = .67$). In summary, the CPTCI-GER has good psychometric properties and the original two-factor structure turns out to be the best model. (Partial) correlations between dysfunctional trauma-related cognitions, PTSS, depression, and anxiety provide empirical support for the combined DSM-5 symptom cluster *negative alterations in cognitions and mood*. The questionnaire may facilitate evaluation of treatments and further research on the function of trauma-related cognitions in children and adolescents.

Ethical Standards This study has been approved by the Institutional Review Board at the University of Ulm and has therefore been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments. All caregivers or legal guardians provided their informed consent, and children and adolescents provided their informed assent prior to their inclusion in the study.

Conflict of Interest The authors declare that they have no conflict of interest.

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Table 1
Sociodemographic data and trauma-related information

Variable	Total sample ($N = 223$)
Sex *n* (%)	
Male	96 (43.0)
Female	127 (57.0)
Age in years *M* (*SD*)	12.5 (2.6)
Frequency of trauma *n* (%)	
Multiple traumatic events	147 (65.9)
Single traumatic event	59 (26.5)
Not determined	17 (7.6)
Type of trauma *n* (%)	
Physical abuse	57 (25.6)
Extra-familial sexual abuse	46 (20.6)
Intra-familial sexual abuse	28 (12.5)
Witnessing domestic violence	28 (12.5)
Accidental trauma	18 (8.1)
Violence outside the family	16 (7.2)
Other	30 (13.5)
Out-of-home care *n* (%)	24 (10.8)

Note. "Not determined" means that these participants could not reliably be classified to either of both categories (single vs. multiple traumatic events) due to insufficient information.

Table 2
Confirmatory factor analyses: fit indices for three models

Model	χ^2 (*df*)	*p*	CFI	SRMR	RMSEA	CL-RMSEA
	$\chi^2/df < 3$	**> .05**	**> .900**	**< .090**	**< .080**	
1. Original two-factor	653.67 / (274) = 2.39	.001**	.849	.062	.079	.071–.086
2. Direct hierarchical two-factor	490.29 / (250) = 1.96	.001**	.904	.050	.066	.057–.074
3. One-factor	693.04 / (275) = 2.52	.001**	.834	.064	.083	.075–.090

Note. df = degrees of freedom. CFI = Comparative Fit Index. SRMR = Standardized Root-Mean-Square Residual. RMSEA = Root-Mean-Square Error of Approximation. CL-RMSEA = 90 % confidence interval.
** $p < .01$, Bollen-Stine-Bootstrap-corrected *p*-values.

Table 3

Standardized regression weights (and standard errors) of questionnaire items for the suggested two-factor model

Item	CPTCI-PC	CPTCI-SW
4. My reactions since the frightening event mean I have changed for the worse.	.58 (.07)	
6. My reactions since the frightening event mean something is seriously wrong with me.	.66 (.07)	
8. Not being able to get over all my fears means that I am a failure.	.57 (.06)	
13. My reactions since the frightening event mean I will never get over it.	.60 (.07)	
14. I used to be a happy person but now I am always sad.	.69 (.07)	
16. I will never be able to have normal feelings again.	.70 (.06)	
17. I'm scared that I'll get so angry that I'll break something or hurt someone.	.52 (.07)	
19. My life has been destroyed by the frightening event.	.79 (.07)	
20. I feel like I am a different person since the frightening event.	.72 (.07)	
21. My reactions since the frightening event show that I must be going crazy.	.71 (.06)	
22. Nothing good can happen to me anymore.	.67 (.05)	
23. Something terrible will happen if I do not try to control my thoughts about the frightening event.	.66 (.07)	
24. The frightening event has changed me forever.	.78 (.07)	
1. Anyone could hurt me.		.41 (.07)
2. Everyone lets me down.		.60 (.06)
3. I am a coward.		.55 (.06)
5. I don't trust people.		.58 (.06)
7. I am no good.		.76 (.06)
9. Small things upset me.		.56 (.07)
10. I can't cope when things get tough.		.65 (.06)
11. I can't stop bad things from happening to me.		.50 (.07)
12. I have to watch out for danger all the time.		.40 (.08)
15. Bad things always happen.		.73 (.06)
18. Life is not fair.		.62 (.08)
25. I have to be really careful because something bad could happen.		.56 (.07)

Note. CPTCI-PC = CPTCI scale permanent and disturbing change. CPTCI-SW = CPTCI scale fragile person in a scary world.

Table 4

Correlations between posttraumatic cognitions, posttraumatic stress symptoms, depression, and anxiety in a subsample (n = 105)

CPTCI sub-scale	UCLA PTSD-RI	CDI	SCARED
Total score[a]	.62*** (.39***/.42***)	.71***	.67***
CPTCI-PC	.55*** (.28**/.33***)	.69***	.61***
CPTCI-SW	.62*** (.42***/.43***)	.65***	.65***

Note. CPTCI = Child Post-Traumatic Cognitions Inventory. CPTCI-PC = CPTCI scale permanent and disturbing change. CPTCI-SW = CPTCI scale fragile person in a scary world.
UCLA PTSD-RI = University of California at Los Angeles Post-Traumatic Stress Disorder Reaction Index.
CDI = Children's Depression Inventory. SCARED = Screen for Child Anxiety Related Emotional Disorders.
[a]Values in brackets denote the partial correlations between the CPTCI and UCLA PTSD-RI controlling for CDI and SCARED scores, respectively.
** $p < .01$, *** $p < .001$.