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Exploring effectiveness of psychotherapy options for sexually abused children and adolescents: A systematic review of randomized controlled trials*



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ABSTRACT

Childhood sexual abuse (CSA) can have major implications for child mental health on the short-term, but also for developmental outcomes later in life, especially when left untreated. Yet, there is no consensus about best practices in psychotherapy for child and adolescent CSA-victims. In this study, we therefore systematically reviewed existing literature on the effectiveness of different types of psychotherapy, as well as specific treatment components, for improving CSA-victims' mental-health outcomes. We searched databases (PsycINFO, PubMed, Scopus, Web of Science) for randomized controlled trials (RCTs) examining effectiveness of psychotherapy for child or adolescent victims of CSA. This search yielded 32 RCTs testing effectiveness of cognitive behavioral therapy (with and without adaptation to CSA), trauma-focused cognitive behavioral therapy, group therapy, prolonged-exposure treatment, eye movement desensitization and reprocessing, and play therapy. For each type of psychotherapy, some studies demonstrated evidence for its effectiveness in improving CSA-victims' mental health, but other studies did not. We also found some evidence that certain therapy approaches might be specifically effective for specific groups of clients, i.e., TF-CBT for highly vulnerable and traumatized clients, group therapy for girls, and briefer approaches for younger children. Regarding treatment components, trauma narration and pharmacotherapy appeared to enhance effectiveness of psychotherapy. A thorough comparison between studies was difficult, because control-groups and measured outcomes differed greatly. Therefore, the field needs more rigorous large-scale RCTs, with long-term follow-up and more uniformity in outcome measures, investigating the effectiveness of specific treatment components, to be able to draw evidence-based conclusions about best practices for CSA-victims.

1. Introduction

Child sexual abuse (CSA) as defined by the World Health Organization (WHO) entails involvement of children in sexual activities that they do not fully understand, are unable to give informed consent to, for which they are not developmentally prepared, or that violate the standards of the society in which the children live (WHO, n.d.). CSA is thought to take place in the context of a relationship of power, position of inequality and/or exploitation of vulnerability (Mathews & Collin-Vézina, 2019). Children can be victimized on a single occasion, but most experience multiple events over a period of time (Davis, Combs-Lane, & Jackson, 2002; WHO, n.d.).

CSA is difficult to notice as an informant, since it is often highly secretive in nature (Finkelhor, Ormrod, Turner, & Hamby, 2005; Finkelhor, 1994; McElvaney, 2015). As a result, prevalence rates based

on informant report are far lower than those based on self-reports (Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011). Overall, taking both types of measurement into account, worldwide prevalence is being estimated at 11.8% (118 per 1000 children), with 18% of girls being victimized and 8% of boys (Stoltenborgh et al., 2011). CSA victims can suffer severe and enduring consequences to their development. Symptoms can occur directly following the abuse, but victims can also remain asymptomatic (estimated up to 40%) (Kendall-Tackett, Williams, & Finkelhor, 1993). However, some of these asymptomatic children may develop CSA-related problems later in life, the so-called 'sleeper effects'.

CSA has been related to a wide range of affective and behavioral symptoms (Ernst, Angst, & Földényi, 1993; Kendall-Tackett et al., 1993). With regard to affective symptoms, for example, CSA victims are more likely to develop anxiety and depressive symptoms. Adults with a

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history of CSA, in particular, show earlier onsets of depression and prolonged duration of depressive episodes (Bifulco, Brown, & Adler, 1991; Ernst et al., 1993). CSA is also known to be related to posttraumatic stress symptoms (Trask, Walsh, & DiLillo, 2011). A behavioral symptom, often uniquely related to CSA is sexualized behaviors, such as sexual preoccupation or boundary problems (Putnam, 2003; Trickett, 1997). These symptoms are particularly visible in early and middle childhood, but also lead to more high-risk sexual behavior in adolescence or adulthood (e.g., higher arrest rate for sex crimes and prostitution; Widom & Ames, 1994). However, early psychotherapy for CSA victims appears to be promising for reducing the negative consequences of CSA (Trask et al., 2011). Yet, there is no conclusive evidence in the literature favoring one type of psychotherapy over another type of psychotherapy (for reviews see, Greenspan, Moretzsohn, & Silverstone, 2013; Trask et al., 2011), which hampers the formulation of best practices in the treatment of CSA victims (Vuijsje, 2016). Therefore, the field needs a systematic review of the literature that summarizes the effectiveness of different types of psychotherapy (treatment models, e.g., cognitive behavioral therapy, play therapy, group therapy) or treatment components (components of broad treatment models, e.g., exposure, cognitive restructuring) for child and adolescent CSA victims.

1.1. Types of psychotherapy for CSA victims

There are different psychotherapy options for child and adolescent CSA victims, varying from Eye Movement Desensitization and Reprocessing (EMDR) to animal-assisted therapies (Choudhary, Satapathy, & Sagar, 2016; Cummings, Berkowitz, & Scribano, 2012; Greenspan et al., 2013; Macdonald et al., 2012; Parker & Turner, 2014; Passarela, Mendes, & Mari, 2010; Putnam, 2003). The most often used and studied types are discussed below.

A first therapy type is general cognitive behavior therapy (CBT). Four different learning principles underlie this type of treatment: classical (associative) conditioning, operant conditioning (through use of reinforcement and punishment), observational/imitative learning and cognitive learning, emphasizing impact of thought patters on feelings and behavior (Hazzlett-Stevens & Craske, 2002; Macdonald et al., 2012). New learning experiences eventually overpower previous forms of maladaptive information processing, which is visible in the core component of cognitive restructuring (Hazzlett-Stevens & Craske, 2002). For CSA victims, maladaptive cognitions such as being permanently soiled or believing it is their own fault are restructured in order to change maladaptive internalizing or externalizing behavior, and so, alleviating symptoms (Macdonald et al., 2012).

Because CSA victims present certain specific clinical issues, such as feelings of shame, helplessness, stigmatization, and sexualized behaviors, there has been growing recognition that the basic principles of CBT needed to be adapted to fit CSA populations (Cohen & Mannarino, 1998). Therefore, several forms of CSA-specific CBT were developed (Cohen & Mannarino, 1996, 1998). Common elements of CSA-specific CBT include a focus on addressing each dimension of Finkelhor's fourfactor model (1987) (i.e., traumatic sexualization, and feelings of powerlessness, betrayal, blame and stigmatization) in both children and parents. In CSA-specific CBT the parent is not only considered as a client but also as an agent facilitating their child's recovery.

Another adaptation of general CBT is trauma-focused CBT (TF-CBT), shifting the core focus to gradual exposure and the treatment of trauma symptoms after CSA experiences (Cohen & Mannarino, 2017). Exposure as a treatment technique aims to reduce maladaptive behaviors that occur as a response to a particular situation, through consistently presenting harmless consequences of that situation to the client. Within the context of gradual exposure, the therapist essentially breaks down the feared situation and exposes the child gradually to related stimuli, each time presenting benign consequences. Other treatment components central to TF-CBT are often summed up in the acronym 'PRACTICE'

(Cohen & Mannarino, 2017). 'PRACTICE' entails Psychoeducation and parenting skills, Relaxation skills, Affect expression and modulation skills, Cognitive coping and processing skills, Trauma narration, In vivo mastery of trauma reminders, Conjoint parent-child sessions and Enhancing future safety. By working through these specific phases, TF-CBT helps the child build and practice extensive skills for processing the abuse, so they become and stay free of trauma symptoms in post-abuse life.

Group-delivered therapy seems to be particularly suited for adolescents, since it is generally their preferred type of treatment (Glodich & Allen, 1998) and research shows that peers can help guide disclosure of sexually abusive events (McElvaney, 2015). Group therapy can be applied for reducing emotional, behavioral and (other) specific trauma symptoms related to CSA, but also for psychoeducational purposes regarding sexuality. It is often hypothesized that group treatment poses a unique context in which feelings of isolation and social stigmatization associated with CSA can be addressed most effectively (Reeker, Ensing, & Elliott, 1997). Sharing of experiences creates groupwide social support, which in turn can alleviate or prevent further symptoms. Group therapy is considered high cost effective and low labor intensive (McCrone et al., 2005; Reeker et al., 1997).

Another type of treatment, Prolonged Exposure for Adolescents (PE-A), is only suitable for adolescents (Foa, McLean, Capaldi, & Rosenfield, 2013). PE-A relies on eight different modules in which psychoeducational techniques are used to teach clients about trauma reactions and provide rationale behind the different aspects of treatment. PE-A centers around two different types of exposure. First, client and therapist work through a module of in vivo exposure, desensitizing the client to trauma reminders by experiencing these reminders in real-world situations. The adolescent needs to practice coping with trauma reminders at home as well. The second module involves imaginal exposure, in which the adolescent and therapist revisit the traumatic experience (by going back to specific memories) in order to reprocess the memories. The 'worst' moments are revisited repeatedly. PE-A is built on the premises that trauma reminders (whether imaginal or in vivo) are cues for maladaptive behavior and the experiencing of symptoms. Thus, focusing on desensitization is thought to lead to symptom reduction.

Another treatment focusing on imaginal exposure is EMDR. With EMDR, the traumatic CSA-related memory is desensitized by short episodes of imaginal exposure whilst the therapist subsequently offers external bilateral stimuli in a rhythmic side-to-side pattern (Shapiro, 2007). This is repeated until the heightened emotional sensitivity to the traumatic memory has disappeared and possible dysfunctional cognitions about the trauma have become functional. EMDR opts to induce a physiological condition in which adequate information processing is achieved: the unprocessed memories of traumatic experiences are than linked to neurological networks including healthy processed memories (Rodenburg, Benjamin, De Roos, Meijer, & Stams, 2009). Taking away maladaptive processing of memories is thought to be the working mechanism of EMDR.

A final treatment option that is often used for child victims of CSA is play therapy (Greenspan et al., 2013). Since it has been widely accepted that the disclosure of sexual abuse is important for the victims' healing process and play therapy is considered to be helpful in the disclosure of children's experiences, the two have been linked in clinical setting. Play provides an age-appropriate manner for children to express their feelings, which they are often unable to express through language (Bratton, Ray, Rhine, & Jones, 2005). Since most children under the age of 11 lack the capacity of abstract thought, children more naturally express themselves through play and activity, which then becomes the vehicle of communication in play therapy (Bratton et al., 2005; Piaget, 1952).

1.2. Previous reviews summarizing effectiveness of psychotherapy for CSA victims

To date, several narrative and meta-analytic reviews have evaluated the effectiveness of different types of psychotherapy for CSA victims. Only the most recent reviews (published between 2010 and 2020) are discussed. A meta-analysis conducted by Passarela et al. (2010) on three randomized controlled trials (RCTs) showed that CBT was more effective than either no treatment, community care or child centered treatment (i.e., focus on personal growth and less on resolving symptoms) in reducing symptoms of post-traumatic stress disorder (PTSD) in child and adolescent victims of CSA. Trask et al. (2011) meta-analytically examined the effects of psychotherapy at reducing negative outcomes of CSA and provided preliminary evidence from 3 studies that CBT might be more effective than "other" therapy types (e.g., play therapy, supportive therapy). They also showed that longer interventions were more effective than shorter interventions, whereas group and individual treatments were equally effective. A Cochrane metaanalysis by Macdonald et al. (2012) that included 10 RCTs on CBT demonstrated moderate positive effects of CBT on depression, anxiety, and PTSD, but not on child behavior problems. They therefore concluded that the evidence base for CBT-approaches is weaker than implied by other reviews. Cummings et al. (2012) reviewed literature on the effectiveness of TF-CBT from 2009 to 2012 and included two studies demonstrating that TF-CBT was effective in enhancing a broad spectrum of affective and behavioral functioning. Greenspan et al., 2013 reviewed the effectiveness of different treatment types i.e., CBT, TF-CBT, EMDR, play therapy, pet therapy, and group therapy. For all included therapy types the authors found some evidence for their effectiveness in reducing CSA-related symptoms. They also concluded that there were no clear differences between the treatment types in the types and range of symptoms they reduced. Parker and Turner (2014) aimed to review the effectiveness of psychoanalytic and psychodynamic treatments for CSA, but they were unable to include any RCTs based on their eligibility criteria, which signaled the need for more research on this particular type of psychotherapy. Most recently, Choudhary et al. (2016) conducted a narrative review on 17 RCTs examining the effectiveness of different types of psychotherapy, but they did not compare effectiveness between the different treatment types. The authors concluded that treatment (in general) was mostly effective in reducing PTSD symptoms, depression, other internalizing symptoms, externalizing symptoms, and sexualized behavior, but less effective in improving coping skills and competence.

1.3. Current study

The primary aim of this review was to examine which effective treatments have been identified in the literature on psychotherapy for child and adolescent CSA victims. This is important to determine whether one specific treatment is most effective in reducing a broad range of negative mental health consequences of CSA for child and adolescent victims. A secondary aim was to summarize the literature on effective treatment components. The current review thereby extends previous reviews in five ways. First, our review provided an update of previous reviews that have been conducted about 4-10 years ago. Second, we only included RCTs in our review. RCTs are considered the 'golden standard' for assessing effectiveness of interventions. Third, we summarized the effectiveness of different types of psychotherapy. Summarizing the effectiveness of different treatment types provides preliminary information as to whether one specific treatment (or component) could be considered 'best practice' in the treatment of CSA victims. Previous reviews that included RCTs only, focused on one specific treatment type (Macdonald et al., 2012; Parker & Turner, 2014; Passarela et al., 2010) or did not summarize effectiveness of different treatment types (Choudhary et al., 2016). Previous reviews that did summarize the effectiveness of different treatment types for CSA victims included non-RCTs as well (Greenspan et al., 2013). Fourth, we examined the effectiveness of the different types of psychotherapy for a broad range of CSA-related outcomes, as CSA is related to a multitude of affective and behavioral sequelae (Putnam, 2003). Effective psychotherapy for CSA victims should be able to reduce a wide range of symptoms. Previous meta-analyses had to take a more narrow focus on specific negative outcomes in order to be able to combine effect sizes across studies (Macdonald et al., 2012; Trask et al., 2011). Last, we examined the effectivity of specific treatment components for improving mental health of CSA victims. This is critical for advancing treatment because it may lead to a deeper understanding of the working mechanisms of specific interventions (Kazdin, 2003).

2. Method

2.1. Literature search

Via three search methods, we identified eligible studies on the effectiveness of psychotherapy for CSA until August 13th, 2019. First, we searched the electronic databases of PsycINFO, PubMed, Scopus and Web of Science for empirical, peer-reviewed articles using the following four types of search terms. First, we included terms related to 'sexual abuse', 'child sexual abuse', 'sexual victimization', 'sexual trauma', 'sexual violence' and derivatives in our search term. Second, considering our focus on psychotherapy for child and adolescent victims, we included variations of 'child(ren)' and 'adolescent(s)'. Third, we included terms related to '(psycho)therapy' and 'treatment'. Fourth, we included derivatives of 'randomized' and/or 'control group' in our search terms, so we would only obtain RCTs. These search terms were similar to the search terms used in previous narrative and systematic reviews on the effectiveness of psychotherapy for CSA (Choudhary et al., 2016; Cummings et al., 2012; Greenspan et al., 2013; Macdonald et al., 2012; Parker & Turner, 2014; Passarela et al., 2010; Putnam, 2003). We checked whether the search terms yielded all articles included in these previous narrative and systematic reviews which was the case for more than 90% of the studies. Second, we searched the reference lists of the previous narrative and systematic reviews on the effectiveness of treatments for CSA. Third, we searched the reference lists of the articles that met our inclusion criteria for eligible studies. We applied a very broad strategy with this reference search, including all articles that mentioned any of our search terms in the title terms. The literature search yielded a total of 1105 hits, which were imported in EndNote (version 19.1) for screening of their eligibility. After removing duplicates, 729 articles remained. Fig. 1 depicts the flow chart of the literature search and eligibility screening.

2.2. Eligibility criteria

To be included in this systematic review, studies had to meet the following eligibility criteria: they had to (1) study child sexual abuse (and not abuse in general, at least 75% percent of the sample had to consist of CSA victims), (2) include children below the age of 18 enrolled in therapy for CSA (no studies into adults with "history of CSA"), (3) examine effectiveness of psychotherapy after CSA (no preventive interventions) on child mental health outcomes (4) have a randomized controlled design (i.e., included an experimental and a control group with random allocation of participants to groups), and (5) were peerreviewed. No restrictions were set with regard to the language of the paper, as long as an English abstract was available for screening purposes. During the full-text screening phase, papers written in languages other than English (a total of six, two French, two German and two Turkish) were translated by experienced speakers of the language. Ultimately, one of the French articles was included.

The eligibility of the studies for inclusion was first assessed by screening abstracts, which led to exclusion of 614 publications. The remaining 115 studies were screened full-text. A total of 32 RCTs were

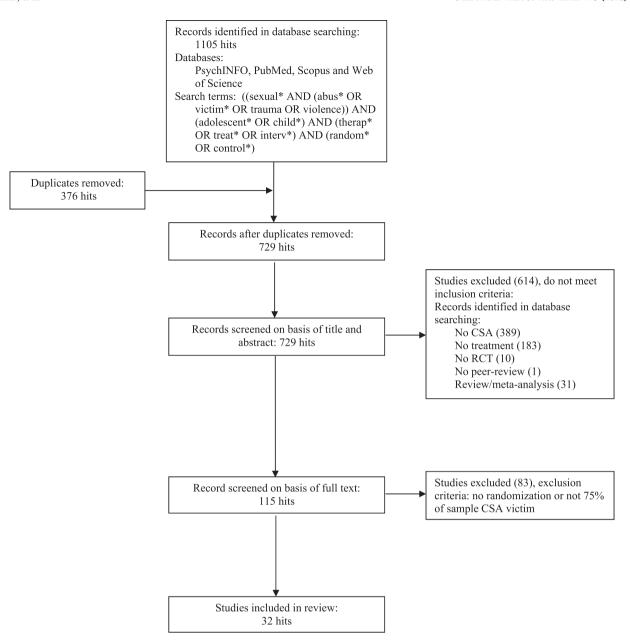


Fig. 1. Flow-chart of literature search process.

eventually included in our full analysis, see Fig. 1. The first author conducted abstract and full-text screening, but consulted the last author in case of unclarity. Most unclarities were with regard to study design (i.e., RCT or not). In case of disagreements between the coders, this was discussed until consensus was reached.

2.3. Data extraction

Appendix A provides an extensive overview of the types of data that were extracted from the included studies. Regarding study design we extracted data on the included treatment type(s), type of the control group(s), and number and timing of outcome assessments (e.g., pre-/post-test, follow-ups). For information on the sample, we extracted number of participants, percentage of female participants, participants' mean age, and presence of other distinctive characteristics of the sample in general (such as presence of PTSD symptoms, ethnicity of the sample when non-Western). Although all studies included were RCTs, we explicitly coded whether randomization was successful (i.e., whether no differences were found in background characteristics between

treatment and control group). We also extracted data with regard to the measurement instruments used, specifically information about the informant and the construct it measured. Extracted data about the study findings contained the changes over time for the treatment and control group combined (i.e., main effect of time), the outcomes over time per group (i.e., interaction of time \times experimental group), and the effect sizes for these effects. In order to create a complete overview of effects (significant as well as non-significant), effects on all outcome measures were extracted. Table 1 presents the extracted data for all included studies. Data extraction was performed by the first and last author together. Any differences were discussed until consensus was reached.

3. Results

The studies that were included in this systematic review and their findings are presented in Table 1. In this result section, studies are grouped into five different treatment categories on the basis of common treatment components: CBT, CBT with adaptation to CSA victims, TF-CBT, Group therapy and Other treatments (EMDR, PE-A and filial (play)

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 Table 1

 Study data extracted from 32 included publications.

Study data extract	Study data extracted from 32 included publications.	1 publications.												
		Psychotherapy Characteristics	aracteristics		0, 1	Sample	Sample Characteristics			Outcome Measurement	ement	н	Findings	
Psycho- therapy type	Authors	EG	Duration	90	Duration 1	% N	%Females Mage	ge Other specifics	Random	T Outcome	Info	Informant T	Time \times Group Effec	Effect size
CBT	Deblinger et al.	EG1: CBT child	12 Ws	TAU		83	3 9.9	PTSD	Y	2 PTSD symptoms	oms C/P		$\Delta EG1, \Delta EG3 > \Delta EG2, \Delta CG$.	
		EG2:CBT mother EG3: CBT child						symptoms (3 minimum)		State anxiety Trait anxiety	O O	ns		
		+ mother								Depression		. ⊲	$\Delta EG2$, $\Delta EG3 > \Delta EG1$, ΔCG	
										Internalizing behavior		ns		
										Externalizing behavior	В	< 1	$\Delta EG2, \Delta EG3 > \Delta EG1, \Delta CG$.	
	Deblinger et al.	EG1: CBT child	12 Ws	TAU		90 83	3 9.9	PTSD	ı	5 PTSD symptoms	oms C	us		
		EG2:CBT mother						symptoms		Depression	O	ns		
		EG3: CBT child						(3 minimum)		Externalizing behavior		=		
	Dominguez (2001)	+ mother CBT	20 Ss	Supportive	20 Ss	25 76	6 10.2		Y	10 Internalizing	д	su		
				treatment						behavior Externalizing	Д	ns		
										behavior				
										Total behavioral	ioral P	us		
										Score Internalizing	U	ns		
										behavior		1		
										Externalizing	C C	us		
										Denavior Total behavioral	ioral C	su		
										score				
										Self-concept		su		
										Depression Intrusive thoughts	oriohte C	SU		
										Avoidance		us ns		
										behaviors		ı		
	King et al. (2000)	EG1: CBT	20 Ws	WL		36 69	9 11.4	(Sub)clinical	Y	3 PTSD symptoms	oms C	L	T0-T1: AEG1,	
										(total)		<1 1	$\Delta EG2 > \Delta CG$,	
		EGZ:Tamily CB1						PISD				- <	10-12: AEG1,	
										Avoidance	O	ı	T0-T1: AEG1,	
												< 1	$\Delta EG2 > \Delta CG$,	
												- <	10-17: ∆EG1,	
										Hyperarousal	O	1 F	T0-T1: AEG1.	
										;		◁	$\Delta EG2 > \Delta CG$,	
												г.	T0-T2:	
										Reexperiencing	ing	V F	$\Delta EGI = \Delta EGZ = \Delta CG$ TO-T1: $\Delta EG1$,	
												< 1	$\Delta EG2 > \Delta CG$,	
												Η <	T0-T2: VFG1 = AFG2 = ACG	
										Fear	O	ıF	T0-T1: AEG1,	
												◁	$\Delta EG2 > \Delta CG$,	1

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Table 1 (continued)	Ð												
		Psychotherapy Characteristics	racteristics			Sample (Sample Characteristics		0	Outcome Measurement		Findings	
Psycho- therapy type	Authors	EG	Duration	90	Duration	N %I	%Females Mage	ge Other specifics Random	s Random T	Outcome	Informant	Time × Group	Effect size
												T0-T2: AEG1, AEG2 > ACG	
										Coping with CSA Trait anxiety	υυ	ns T0-T1:	
												$\Delta EGI = \Delta EG2 = \Delta CG$,	
												$\Delta EG2 > \Delta CG$	
										Depressive	O	ns	
										Behavioral	Ь	T0-T1, T2:	
										symptoms PTSD symptoms	Ь	$\Delta EG1 = \Delta EG2 = \Delta CG$ T0-T1: $\Delta EG1$,	
										General	TC	$\Delta EGZ > \Delta CG$ TO-T1: $\Delta EG1$,	
										functioning		\text{\Delta EG2} > \text{\Delta CG}, \text{\T0-T2: \Delta EG1}, \text{\Delta EG2} > \text{\Delta CG}	
	Shamseddeen et al. Pharmacotherapy 12 Ws	Pharmacotherapy	12 Ws	Pharmacotherapy	e Ws	. 22		Resistant	Y 3	Depression	O	ns	
	(2011)	with CBT						depression		Clinical improvement	O	su	
CSA-specific CBT		RAP	8 Ws	TAU	8 Ws	32 100	00 10.5		Υ .	Externalizing	Ъ	ns	
	(1996)									behavior Internalizing	Д	ACG > AEG	
										behavior			
										PTSD symptoms PTSD-symptoms	a, U	ns ns	
	Cohen and	CBT-SAP	12 Ss	NST		67 58	4.7	Symptomatic	Υ 2			ns ns	
	Mannarino (1996) ²										Д	90V / 94V	
										problems	4 8	\	
										Externalizing behavior	٦,	ns	
										Internalizing	Ь	$\Delta EG > \Delta CG$	
										Sexualized	Ь	ns	
										behaviors Problem behavior	Ь	ns	
										(type) Problem behavior	Д	ns	
										(total)			
	Cohen and	CBT-SAP	12 Ss	NST		43 56	5.8	Symptomatic	Y 4	Affective symptoms Social competence	D G	ns ns	
	Mannarino (1997)									Total behavior	Ь	T0-T3: $\Delta EG > \Delta CG$	
										problems Externalizing behavior	Ь	$TO-T3: \Delta EG > \Delta CG$	
													,

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Findings	× Group Effect size	. AEG > ACG			ACG ACG S AC
	Informant Time × Group	P T0-T3: AEG P ns P T0-T3: AEG P T0-T3: AEG	ns AEG > ns ns ns	C ns C C DEG > 2	0.00
Outcome Measurement	T Outcome	Internalizing behavior Sexualized behaviors Problem behavior (type) Problem behavior	(total) 2 Behavioral symptoms Social competence Internalizing behavior Externalizing behavior State anxiety Total consists	ıran anxıety Depression Sexual behavior	1 rate anxiety Depression Sexual behavior Sexual behavior Avoidance Hyperarousal Depressive symptoms State/trait anxiety Attributions: - Feeling different - Negative events - Credibility - Trust Feelings of shame Social competence Total behavior problems Externalizing behavior Internalizing behavior Sexualized behavior Sexualized
	%Females Mage Other specifics Random T		69 11.1 · Y 2		79 10.8 (Sub)clinical Y PTSD
2			12 Ws 49 6		12 Ws 203 7
Duration CG			12 Ws NST		12 Ws CCT
	Authors EG		Cohen and SAS-CBT Mannarino (1998) ³		Cohen et al. TF-CBT (2004) ⁴
	Psycho- therapy Aut type		Col		7F-CBT Cob

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		Psychotherapy Characteristics	racteristics			Sample	Sample Characteristics	cs		Outco	Outcome Measurement		Findings	
Psycho- therapy type	Authors	EG	Duration	D)	Duration	% N	%Females M	Mage Other specifics	ifics Random	H	Outcome	Informant	Time \times Group	Effect size
										A T T S T T D D D D D D D D D D D D D D D	Anger Social competence Total behavior problems Externalizing behavior Internalizing		ns ns ns ns	
	Cohen et al. (2007)	TF-CBT with sertraline	12 Ss	vith placebo	12 Ss	22 10	100	10-17 PTSD symptoms	>	S A A A Y P G T T T T T T T T T T T T T T T T T T	of PTSD pairment pptoms feelings ymptoms ributions npetence avior ing		ns T0-T4; AEG > ACG ns ns ns ns ns ns	.घ
				E		i i	Ċ	Ţ					ns	
	Deblinger et al. (2006) ⁴	TF-CBT	12 Ws	CCT	12 Ws	155 .	φ	8–14		4 R 4	Reexperiencing Avoidance	C/P	ns ns	
										, т П 5	sal		ns ns	
										s L S V	symptoms Trait anxiety State anxiety Attributions:	00	ns ns	
											Feeling differentNegative eventsCredibility		ns ns ns	
										- 4 S I	- Trust Feelings of shame Social competence Total behavior		ns ns ns ns	
										тноцо	problems Externalizing behavior Internalizing behavior	<u>a</u> <u>a</u>	T1-T3: ACG > AEG T1-T2: ACG > AEG, T2-T3: AEG > ACG	
	Kane et al. (2016)	TF-CBT	10–12	TAU		46 50	50 13	13.7 Orphans with	ith Y	S P	Sexualized behaviors Trauma symptoms	г ⁷	> ACG	. п
			Ws					PTSD		Ŧü	Functional impairment		Λ	ı
Group therapy	Baker (1985)	Group therapy	6 Ws	Individual therapy	10 Ws	39 10	100 13	13–17 .		2 D A S	Self-concept Anxiety Depression	000	ΔEG > ΔCG ns ns	

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Table 1 (continued)									
	Psychotherapy	by Characteristics	Sa	Sample Characteristics	cs		Outcome Measurement		Findings
Psycho- therapy Authors type	EG	Duration CG	Duration N	%Females M	Duration N %Females Mage Other specifics Random T Outcome	cs Random T		Informant	Informant Time × Group

		Psychotherapy Characteristics	aracteristic	8		Sam	Sample Characteristics	istics			Outco	Outcome Measurement		Findings	
Psycho- therapy type	Authors	EG	Duration	90	Duration		%Females	M age	Other specifics	Random	F	Outcome	Informant	Time × Group	Effect size
	Burke (1988)	Group therapy		WL		25	100	8–13		>-	8	Depression Anxiety General fear (total) Fear about CSA Internalizing	00004	TO-(T1 = T2): AEG > ACG . TO-(T1 = T2): AEG > ACG . ns TO-(T1 = T2): AEG > ACG . TO-(T1 = T2): AEG > ACG .	
	Deblinger et al. (2001)	CBT-group	11 Ss	Supportive group	11 Ss	4	61	5.5	ı	>	е 8484	PTSD symptoms Sociobehavioral function Sexual behavior	a a a O	ns The control of	
	Hyde et al. (1995)	Family/network therapy with group sessions	1	Family/network therapy	1	47	15	4-16		>		Health and behavior behavior Depressive symptoms Self-esteem Competence/ acceptance Family relations Femily relations	4 0 00 0 E	772: ns	
	O'Callaghan et al. (2013)	TF-CBT group	15 Ss	WL		52	100	16.0	Exploited Congolese girls	> -	К	PTSD, traumatic stress Depression/anxiety Conduct problems Prosocial behavior		G > ACG G > ACG G > ACG	
	Thun et al. (2002) Trowell et al. (2002)	Group therapy Psychoeducation group therapy	12 Ws 18 Ss	No treatment Individual therapy	30 Ss	13	100	16–18	At-risk youth Emotional,	>	9 4 H 9 9 I O H	Body image Self reliance Self confidence Impulse control Global impairment	00000	I: AEG = ACG	
	Verleur et al. (1986)	Group therapy with sexual education	26 Ss	No treatment		30	100	13-17	symptoms Incest victims	>-	0 0 0 0 1 1 1	Avoidance Hyperarousal Self-esteem/ concept Sexual awareness: - Physiology - Anatomy	000 000	T0-T2, T3: AEG > ACG T0-T1, T2, T3: AEG = ACG	
Other: EMDR	Farkas et al. (2008) EMDR	EMDR	12 Ws	TAU	12 Ws	30	73	14.8	(Sub)clinical PTSD	¥	e 6	- Birth control Anxiety Depression PTSD Dissociation Sexual		T0-T1: AEG > ACG	X

(continued on next page)

		Psychotherapy Characteristics	haracteristic	ý		Sample	Sample Characteristics	S		Oute	Outcome Measurement		Findings	
		(3											6	
Psycho- therapy type	Authors	EG	Duration	. CG	Duration	N o	%Females Mage		Other specifics Random	T	Outcome	Informant	Time × Group	Effect size
											Internalizing behavior	O	T0-T1: $\Delta EG > \Delta CG$	Г
										,	:	(٨	S
											Externalizing behavior	Ü	Λ	- 1
										-	Internalizing	Ь	$T1-T2$: $\Delta CG > \Delta EG$ $T0-T1$: $\Delta EG > \Delta CG$	S T
											behavior Externalizino	Д	TO-T1: AFG > ACG	≥
											behavior	4	١	Į.
	Jaberghaderi et al. (2004)	EMDR	e Ss	CBT	12 Ss	14	100 12	12–13 Iranian	Y	2	PTSD symptoms	U	ns	
								(sub)clincial PTSD	al		PTSD symptoms Behavior problems	P TC	ns ns	
PE-A	Foa et al. (2013) ⁵	PE-A	8–14	CCT	8-14	61 1	100 15	15.3 (Sub)clinic	al Y	9	PTSD symptoms	O	T0-T2: $\Delta EG > \Delta CG$,	1
			Ws		Ws			PTSD			•		AEG >	Г
										_	Presence of PTSD	Ü	T2-T5: $\Delta EG = \Delta CG$ T0-T2: $\Delta FG > \Delta CG$	
												ı		
										-	PTSD severity	O	T2-T5: $\Delta EG = \Delta CG$ T0-T2: $\Delta EG > \Delta CG$.	
													Λ	
										-		Ç	AEG =	
										-	Depression seventy	ی	$10-1.2$: $\Delta EG > \Delta CG$, $T0-T5$: $\Delta EG > \Delta CG$,	
													- 11	
										- 1	General	O	T0-T2: $\Delta EG > \Delta CG$,	
											runctioning		TO-T5: AFG > ACG	
													T2-T5: $\Delta EG = \Delta CG$	
	Kaczkurkin et al. (2016) ⁵	PE-A	8–14	CCT	8–14	61 1	100 15	15.3 PTSD	Y	9	PTSD symptoms	U	High state anger: $\Delta EG > \Delta CG$	M
			Ws		Ws									
	McLean et al.	PE-A	14 Ws	CCT	14 Ws	61 1	100 15	15.3 (Sub)clinical	al Y	9	PTSD symptoms	U	AEG > ACG	
								PTSD			Negative cognitions	U (AEG > ACG	
	Zandberg et al.	PE-A	8–14	CCT	8–14	61 1	100 15.3	3.3 (Sub)clinical	al Y	7 9	Depression severity Anxiety/	ن ر	^	
	(2016)5		147		147.			E C		P	Depression	Ç	į	
			S AA		S M			PISD		_	withdrawn/ Depression	ر	IIS	
										-,	Somatic	C	$\Delta EG > \Delta CG$	M
										- (Complaints	Ç		
											Social Problems Thought Problems	ی ر	ns ns	
										7	Attention Problems) U	AEG > ACG	. W
											Rule Breaking	C	Λ	M
										, -	Aggressive	O	ΔEG > ΔCG	M
											benavior Internalizing	C	AEG > ACG	v.
										. –	Externalizing) U	AEG > ACG	×
											,		F	

		Psychotherapy Characteristics	rracteristics	3		Sample	Sample Characteristics	S		Outcome Measurement	rement		Findings	
Psycho- therapy type	Authors	EG	Duration	50	Duration	N N	%Females Ma	M age Other specifics	ics Random	T Outcome		Informant	Time × Group	Effect size
										Total behavioral		O	ΔEG > ΔCG	M
										DSM Affective Problems		U	$\Delta EG > \Delta CG$	S
										DSM Somatic		O	ns	
										DSM ADHD			ns	
										DSM ODD		U I		. :
										DSM Conduct Problems			$\Delta EG > \Delta CG$	M
										OCD Problems			ns	
										PTSD Problems		C	ns	
										Positive Qualities			ns	
Play	Bassett Costas	Filial therapy	10 Ws	No treatment	10 Ws	26 6	68 4–10	. 01	Z	2 Behavioral		Ь	ns	•
thorony	(1998)									symptoms Self concept		ر	S.C.	
urerupy										Sell-colicer Anxiety			IIS NS	
										Emotional	-	. 0	ns	
										disturbance	(1)			
Treatment component:	nent:	-	0	i e					;					
Exposure/Stress inoculation	Berliner and Saunders (1996)	Group therapy:	10 Ws	TAU	10 Ws	80	89 8.3	-	.	4 Total anxiety		U	ns	
		stress inoculation		(group therapy)						Physiological		C	ns	
										anxiety				
		and gradual								Worry,		O	ns	
		exposure								Concentration		U	Su	
										anxiety				
										Total fear		O	ns	
										Failure and			ns	•
										Fear of unknown			ns	
										Injury small		O	su	
										animals				
										Danger and death		U (ns	
										Sex-associated fears			IIS	
										Interpersonal		, 0	su	
										discomfort				
										Depression		O I	ns	
										Total behavioral			ns	
										Social competence			Su	
										Internalizing		, д	us ns	
										behavior				
										Externalizing hehavior		Ъ	ns	
										Sexual behavior		Ь	ns	٠
NI	Deblinger et al. (2011) ⁶	TF-CBT with TN		TF-CBT no TN		158 6	61 7.7	PTSD	Y	2 Reexperiencing		C/P	$\Delta EG1, \Delta CG1 > \Delta EG2,$ $\Delta CG2$	s
	,												(continued	(continued on next page)

Table 1 (continued)

		Psychotherapy Characteristics	aracteristics		Š	Sample Characteristics	ristics			Outcome Measurement		Findings	
Psycho- therapy type	Authors	EG	Duration CG	90	Duration N		Mage (%Females Mage Other specifics Random T	Random T	outcome .	Informant	Informant Time × Group	Effect size
		EG1: 8 Ss	8 Ss	CG1: 8 Ss	8 Ss		S	symptoms		Avoidance	C/P	AEG1, ACG1 > AEG2, ACG2	S
		EG2: 16 Ss	16 Ss	CG2: 16 Ss	16 Ss					Hyperarousal	C/P	ns	
										Depression	O	ns	
										Fear/discomfort	C	$\Delta EG > \Delta CG$	M
										Global anxiety	C	$\Delta EG1 > \Delta CG1$	M
										Feelings of shame		ns	
										Recognizing abuse		ns	
										Internalizing	Ь	ns	
										behavior			
										Externalizing	Ь	$\Delta CG > \Delta EG$	S
										behavior			
										Sexualized	Ь	ns	
										behaviors			
	Mannarino et al.	TF-CBT with TN		TF-CBT no TN	1	158 62	7.6 F	PTSD	У 3	Reexperiencing	C/P	ns	
	(2012)	EC1. 9 Cs	ű	20 C 1 . 9 Cs	S		٠	o the other trains		Association	é	, c	
		ECO. 16 C.	16.52	CG1. 0 33	3 71		.,	symptoms		Avoidance Urmemental		III3	
		EGZ: 10 38	10.38	CGZ: 10 38	Se of					nyperarousai		IIS	
										depression	ر	IIS	
										Fear/discomfort	Ü	Su	
										Global anxiety		us	
										Feelings of shame	C	ns	
										Recognizing abuse	C	ns	
										Parental depression	Ь	ns	
										Internalizing	Ь	ns	
										behavior			
										Externalizing	Ь	ns	
										behavior			
										Sexualized	Ь	ns	
										behaviors			

Note. Author names with the same superscript indicate publications conducted on the same sample. The following abbreviations are used in the Table: EG = experimental group; CG = control group (when studies contain multiple EGs or CGs numbers are added); Ws = weeks; Ss = sessions; M age = participants' mean age; Y = successful randomization; N = unsuccessful randomization; PTSD = post-traumatic stress disorder; T = number of measurement times, with '2' meaning a pretest and posttest, and greater than 2 meaning some follow-up (ranging from several weeks to several years after treatment); C = child-report, P = parent-report; IC = teacher or clinician report; ns = no significant difference or change was found; S = small effect size; M = medium effect size; L = large effect size.

Regarding psychotherapy type and characteristics, the following abbreviations are used: CBT = cognitive behavioral therapy; CSA-specific CBT = child sexual abuse-specific CBT (with RAP = Recovery from Abuse Program, CBT-SAP = CBT for sexually abused preschoolers, and SAS-CBT = sexual-abuse specific CBT); TF-CBT = trauma-focused CBT; EMDR = Eye Movement and Desensitization Reprocessing; PE-A = Prolonged Exposure for Adolescents; TN = Trauma Narration. For different GGs the following abbreviations are used: TAU = treatment as usual; WL = wait list; NST = nondirective supportive therapy; CCT = client-centered therapy.

Regarding outcome measurements, the same constructs are, at times, measured by different instruments and therefore mentioned multiple times. Within this column the following abbreviations are used: Equation was used as notation for change over time. Findings were described in a way that reflects improvement for the child, e.g. AEG > ACG for conduct problems means that the improvement in conduct problems is larger for children in the experimental condition than in the control condition. All effect sizes reflect Cohen's d and checked for classification as 'small' 'medium' or 'large' by the DSM = Diagnostic and Statistical Manual of Mental Disorders; ADHD = attention deficit hyperactivity disorder; ODD = oppositional defiant disorder; OCD = obsessive-compulsive disorder.

authors. For all columns, notation of '.' means the specific information was not reported in the article.

therapy). Most of the studies were conducted by the research group of Cohen, Deblinger, Mannarino and colleagues: 12 of 32 studies were (co)authored by one of these researchers.

Overall, 24 different samples were investigated consisting of 1421 participants in total, ranging from 13 to 203 participants per sample. Even though some publications were based on the same sample, each publication presented unique information (e.g., first publication on post-test results, second publication on follow-up). There were considerable differences between characteristics of the 32 retrieved studies. Ten out of 24 samples were exclusively female, the other 14 samples included boys and girls. Ages of children included in the studies ranged from 4 to 18. Regarding sample type, there were 8 samples in which participants all showed (sub)clinical PTSD. In three studies, non-Western samples were subject to analysis (i.e., Iranian, Congolese, and Zambian).

In terms of study design, 18 of 32 studies included more than two measurement times. Fifteen of these studies included follow-up measurements, ranging from six weeks to three years after treatment. A wide array of measurement instruments were used to assess treatment outcomes (e.g., depression, anxiety, PTSD symptoms, sexualized behaviors, self-concept, general functioning and more). All studies used a total of 230 outcome measures, of which 63% was child report, 29% was parent report, 1% was teacher or clinician report, and 7% represented a parent- and child-report composite.

3.1. CBT

Five studies examined effectiveness of CBT in four different samples. Three studies found significantly more improvement in the treatment groups compared to the treatment-as-usual (TAU) or wait list (WL) control groups. First, Deblinger, Lippmann, and Steer (1996) found that children receiving CBT showed greater improvements in PTSD symptoms, depression, and externalizing behavior than children in the TAU group. No differences in effects were found for internalizing behavior and anxiety. Effects were maintained after a 2 year follow-up (Deblinger, Steer, & Lippmann, 1999). The third study by King et al. (2000) found greater improvements in the children receiving CBT than children in the WL condition immediately after treatment with regard to PTSD symptoms, fear and general functioning, but no differences in improvement on chronic anxiety, fear, and behavioral symptoms. At 12 weeks follow-up, effects were maintained for hyperarousal and reexperiencing symptoms of PTSD, but further improvements for the CBT groups were found regarding total PTSD symptoms, avoidance, fear, chronic anxiety, and general functioning. No differences were found in follow-up effects for coping with CSA and depression. Two of five studies comparing CBT to a different type of treatment (supportive treatment and pharmacotherapy, respectively) found no differences between the treatment groups in improvement in children's depression and distress related to trauma (Dominguez, 2001) and adolescent's depression and clinical improvement (Shamseddeen et al., 2011).

3.2. CBT with adaptation to CSA victims

Four studies focused on CBT with adaptation to CSA victims. Three out of four studies found stronger effects for the experimental group in comparison to nondirective supportive therapy (NST). First, Cohen and Mannarino (1998) showed larger improvements in children receiving adapted CBT in social competence and depression than children receiving NST, but no differences in improvement on anxiety, sexualized behavior, and behavioral symptoms. Second, Cohen and Mannarino (1996, 1997) showed that preschool children enrolled in CSA-specific CBT improved more than children enrolled in NST on total behavioral symptoms and internalizing behavior problems. The effects were maintained six months after treatment (Cohen & Mannarino, 1997). Between six and 12 months after treatment, the CSA-specific CBT group improved more than the NST group in terms of problematic behaviors,

total behavioral symptoms, as well as specific internalizing and externalizing symptoms. No differences were found in improvement for sexualized behaviors and social competence. A fourth study examining CSA-specific CBT for girls and their mothers showed effects as well, but in the unexpected direction. Celano, Hazzard, Webb, and McCall (1996) found that girls receiving adapted CBT and TAU both improved similarly with regard to externalizing behavior, PTSD symptoms, trauma, and global functioning, but unexpectedly the TAU group showed more improvement than the adapted CBT-group on internalizing symptoms.

3.3. TF-CBT

TF-CBT was used in 5 studies with 4 different samples. Three of these studies consistently found more improvement for the TF-CBTchildren than children in the control group. First, Kane et al. (2016) found that Zambian orphans enrolled in TF-CBT improved more than the TAU group in terms of trauma symptoms and functional impairment (large effects). Second, Cohen, Deblinger, Mannarino, and Steer (2004) showed that immediately after treatment children in the TF-CBT group improved more than child-centered therapy (CCT) controls with regard to PTSD symptoms, depressive symptoms, total behavior problems, attributions regarding credibility and trust, and shame (small effects). Both groups improved similarly in terms of anxiety, attributions regarding feeling different and negative events, social competence, and specific internalizing, externalizing and sexualized behaviors. In the third study by Cohen, Mannarino, and Knudsen (2005), researchers found that 12 months after treatment children receiving TF-CBT showed greater improvements in depressive symptoms, anxiety, and sexual problems than children receiving NST, but no differences in improvement were found for sexualized behaviors, PTSD symptoms, dissociation, anger, social competence and behavior problems.

One study found mixed results when TF-CBT was compared to CCT from post-treatment to 12-month follow-up (Deblinger, Mannarino, Cohen, & Steer, 2006). Similar 6-to-12-month follow-up improvements were found in both groups regarding PTSD, anxiety, depression, total behavioral scores, and attributions regarding negative events, credibility and trust. Regarding externalizing behavior, CCT-children improved more from the end of treatment to 12 months after treatment than their TF-CBT counterparts. Regarding internalizing behavior, CCT-children showed more improvement from the end of treatment to six months after treatment, whereas TF-CBT children improved more between six and 12 months after treatment.

In a fifth study, Cohen, Mannarino, Perel, and Staron (2007) demonstrated that TF-CBT together with sertraline was more effective in reducing global impairment than TF-CBT without sertraline (medium effect). Both groups improved in terms of presence of clinical PTSD, PTSD symptoms, anxiety, behavioral problems, and mood and feelings. There were no side effects of the psychotropic medication use.

3.4. Group therapy

Eight studies specifically examined forms of treatment delivered in a group setting. Four studies found significant differences in improvement between clients receiving group therapy compared to clients that did not receive group therapy (waitlist or individual therapy). First, Baker (1985) found that adolescent girls enrolled in group therapy improved more than girls in individual therapy in self-concept, but not in anxiety or depression. Second, in the study of Burke (1988), girls in group therapy improved more than girls on a wait list in terms of depression, anxiety, fear regarding sexual abuse, and internalizing behavior problems, but not on general fear. Effects were maintained six weeks after treatment. Third, O'Callaghan, McMullen, Shannon, Rafferty, and Black (2013) found that Congolese adolescent girls receiving the TF-CBT group therapy improved more in terms of PTSD, depression/anxiety, conduct problems and prosocial behavior (large effects) than girls on a wait list. Effects were maintained at 3-month

follow-up for PTSD and conduct problems, and even increased moderately for depression and prosocial behavior. Lastly, Trowell et al. (2002), comparing a psychoeducational group program for sexually abused girls to focused individual therapy, showed similar decreases in PTSD symptoms of avoidance and arousal and in global impairment of functioning after treatment for all girls. Effects were maintained at one year follow-up or, with regard to global functioning, even increased at follow-up. Group therapy was only more effective than the control condition in reducing symptoms of re-experiencing at two years follow-up.

Another study (Verleur, Hughes, & Dobkin de Rios, 1986) did not statistically test whether the improvements of girls receiving group therapy were significantly different from girls receiving no treatment. Yet, the authors found that adolescent girls in group therapy improved in terms of sexual awareness and self-esteem, whereas girls receiving no treatment only showed improvements in self-esteem. A study by Deblinger, Stauffer, and Steer (2001) compared two types of group therapy: CBT-group therapy and supportive group counseling. Deblinger et al. (2001) showed that children in both treatments improved moderately on all assessed outcomes (PTSD symptoms, social and behavior function, sexual behavior, ability to recognize and respond to abusive situations) over the course of therapy with effects maintained at 3-month follow-up.

Finally, two studies found no significant differences in improvement between clients receiving group therapy compared to clients that did not receive group therapy (comparison of family treatment with or without group therapy: Hyde, Bentovim, & Monck, 1995; group therapy compared to WL: Thun, Sims, Adams, & Webb, 2002).

3.5. Other therapy types

There were 7 articles examining specific types of treatment that could not be classified in one of the abovementioned categories. Two studies examined the effects of EMDR. One study demonstrated that adolescents receiving EMDR showed more improvement directly after treatment than adolescents receiving TAU in terms of anxiety, depression, PTSD symptoms, dissociation, externalizing and internalizing behavior, but not on sexual preoccupation (Farkas, Cyr, Lebeau, Lemay, & McDuff, 2008; medium to large effects). At 3 month follow-up effects were maintained, but the TAU group showed more improvement on child-reported behavior problems than the EMDR group, although these effects were small. The second study showed that adolescent girls in the EMDR group as well as the CBT control group improved similarly on measures of PTSD symptoms and teacher-reported behavior problems (Jaberghaderi, Greenwald, Rubin, Zand, & Dolatabadi, 2004).

Four different articles compared PE-A and CCT in one sample of 61 adolescent girls with (sub)clinical PTSD symptoms (Foa et al., 2013; Kaczkurkin, Asnaani, Zhong, & Foa, 2016; McLean, Yeh, Rosenfield, & Foa, 2015; Zandberg et al., 2016). All studies found effects favoring PE-A. PE-A was more effective than CCT at end of treatment and after a one-year follow-up in terms of improvements on prevalence of PTSD, negative post-trauma cognitions, general functioning, and severity of PTSD and depressive symptoms (Foa et al., 2013; Kaczkurkin et al., 2016; McLean et al., 2015). PE-A was especially more effective than CCT in improving PTSD symptoms for girls with high state-anger (Kaczkurkin et al., 2016). Zandberg et al. (2016) examined effects on specific social-emotional behavior problems and found that PE-A was more effective (medium effect sizes) than CCT in reducing somatic complaints, attention problems, rule breaking, aggressive behavior, affective, conduct, internalizing, externalizing and total problems.

A final study by Bassett Costas (1998), comparing filial therapy (i.e., a form of play therapy) with a control group receiving no treatment, did not find any significant effects on children's behavioral symptoms, self-concept, anxiety or emotional disturbance.

3.6. Studies examining effectiveness of treatment components

Two studies by Deblinger, Mannarino, Cohen, Runyon, and Steer (2011) and Mannarino, Cohen, Deblinger, Runyon, and Steer (2012) specifically examined the effects of treatment length (8 or 16 sessions) and adding the component of 'Trauma Narration' (TN) to TF-CBT. The TF-CBT with TN group showed greater improvement in fear/discomfort and general anxiety (medium effects), whereas the TF-CBT without TN group showed greater improvement in externalizing problems (small effect). Both groups improved similarly on PTSD symptoms, fear, depression, anxiety, shame, behavior problems, sexualized behavior, and abilities to recognize and respond to abuse (Deblinger et al., 2011). Only on anxiety there was further improvement in the 12-month followup period for both TF-CBT with and without TN (Mannarino et al., 2012). Regarding the effects of treatment length on PTSD-symptoms of reexperiencing and avoidance, children who received 8 sessions of TF-CBT improved more than children who received 16 sessions, irrespective of the addition of TN (Deblinger et al., 2011).

Berliner and Saunders (1996) examined effects of stress inoculation (i.e., psycho-education about fear; teaching coping and relaxation strategies to deal with fear) and gradual exposure, but found no differences between treatment and control groups in improvement.

4. Discussion

The goal of this review was to examine which effective treatments (or components) could be identified in the literature on psychotherapy for child and adolescent CSA victims. Summarizing evidence for different treatment types (or components) provides preliminary information as to whether one specific treatment or treatment component was most effective in reducing a broad range of negative mental health consequences of CSA for child and adolescent victims. Our literature search yielded a total of 32 RCTs reporting on the effectiveness of 11 different types of treatment that could be grouped into five broader categories: CBT, CBT adapted to CSA, TF-CBT, group therapy, and 'other' treatments such as EMDR, PE-A and filial therapy. Overall, 19 of 32 studies showed effects favoring the experimental treatment over the control condition (mostly TAU or WL control groups) in improvement on at least one outcome measure of children's mental health or adaptive functioning. None of the studies demonstrated iatrogenic effects (i.e., treatment increasing negative outcomes of CSA). When effect sizes were reported, they were generally small to medium.

4.1. CBT

When we look at the findings for the specific treatment types separately, it appears that general CBT might not suffice for CSA victims. Studies only found effects favoring CBT in comparison to no treatmentcontrol groups or highly heterogeneous TAU groups, and in samples with (sub)clinical PTSD symptoms. Effects disappeared when CBT was compared to another form of treatment, such as supportive therapy or pharmacotherapy. The mixed findings fit with a previous meta-analysis concluding that the evidence base for CBT was weaker than implied in most previous reviews (Macdonald et al., 2012). A possible explanation for the mixed findings could be that the core activity of cognitive restructuring in general CBT is insufficient for the persistent symptoms related to CSA, since these symptoms are related to a specific traumatic event. The symptoms become more salient through trauma reminders faced by the child in post-abuse life (Cohen & Mannarino, 2017). Therefore, it has been suggested that adding CSA- or trauma-specific components to CBT treatment could enhance effectiveness of CBT (Deblinger, Mannarino, Cohen, Runyon, & Heflin, 2015).

4.2. CBT with adaptation to CSA victims

Treatment adapted to CSA victims in general and treatment adapted

to CSA victims of preschool age were more effective than NST in reducing several negative outcomes of CSA in three studies. These effects underline the importance of CSA-related adaptations to CBT as well as age-related adaptations for the subgroup of children being abused before the age of 6 (one third, Putnam, 2003). However, a fourth study found no differences between CSA-specific CBT and TAU in improvement on a range of mental health outcomes, except that TAU was more effective than CSA-specific CBT in improving internalizing symptoms (Celano et al., 1996). An explanation for the differences between studies could be that TAU had the advantage of greater flexibility, compared to the more structured CSA-specific CBT or NST treatment, which made it easier for therapists to address their clients' most pressing issues. Another explanation could be that the three studies by Cohen and Mannarino included children who experienced CSA within the past 6 months, whereas the Celano study included children who experienced CSA within the past 3 years. As a consequence children in the Celano study may have improved already considerably because of the passage of time, which might explain the ceiling effects on many of the outcome variables.

4.3. TF-CBT

Studies found more improvement for TF-CBT in comparison to TAU, NST or CCT on a wide range of outcomes. Effects of TF-CBT were largest for a sample with highly vulnerable and traumatized Zambian children (Kane et al., 2016), which is not surprising considering the treatment's focus on gradual exposure and trauma symptoms (Cohen & Mannarino, 2017). The effects found when comparing TF-CBT to NST and CCT were somewhat conflicting. Both studies favored TF-CBT for improvement in depressive symptoms. However, TF-CBT was only found to be more effective with regard to PTSD and behavioral symptoms when compared to CCT (Cohen et al., 2004), but not when compared to NST (Cohen et al., 2005). The difference in findings can be explained by the fact that the TF-CBT versus CCT-study only included participants with (sub)clinical PTSD, so finding reductions on that symptom domain (with possible comorbidity of behavioral symptoms) seems logical. On the other hand, TF-CBT was more effective for reducing anxiety symptoms when compared to NST, but not when compared to CCT. Since comparisons with NST were made at 12 month follow-up and comparisons with CCT were made directly after treatment, TF-CBT might have 'sleeper effects' on anxiety. The somewhat unexpected 6-12 month improvements on behavior problems that were larger in the CCT group compared to the TF-CBT group (Deblinger et al., 2006) might reflect a floor effect in the TF-CBT group. Children in the TF-CBT group already showed considerable improvements in behavior problems directly after treatment compared to children in the CCT group (Cohen et al., 2004).

4.4. Group therapy

We also found that group therapy leads to more favorable mental health outcomes in children when compared to individual therapy or WL-conditions in four studies, whereas three studies did not find effects favoring group therapy. Interestingly, the samples in the 4 studies demonstrating effectiveness of group therapy were completely female, whereas two of the three studies finding no effects also included boys. The social aspects of group therapy might better fit with girls' more communal characteristics and interests (Wood & Eagly, 2012). For male CSA victims specifically, therapeutic benefits of group treatment might be insufficient for alleviating their symptoms, which can deflate overall treatment effects (Grayston & De Luca, 1995). Duration of group therapy ranged from five weeks to six months, which does not fully fit the premise that group treatment is often favored in practice due to low labor intensiveness and low costs (McCrone et al., 2005; Reeker et al., 1997). In addition, the studies demonstrating efficacy of group therapy included adolescents as well as pre-adolescent children. Even though group treatment is the preferred treatment for adolescents (Glodich & Allen, 1998) it might also be appropriate and effective for child CSA victims

4.5. Other types of therapy

EMDR was found to be more effective than TAU (Farkas et al., 2008), but not more effective than CBT (Jaberghaderi et al., 2004), possibly because CBT also teaches coping skills that can be more broadly applied. Differences between these two studies could however also be because of the higher number of EMDR sessions (12) in the study by Farkas et al. (2008) or the small sample size in the Jaberghaderi et al. (2004) study. EMDR was only used with adolescent CSA victims, even though previous research showed that EMDR with age-appropriate adaptations can be just as effective with pre-school children as with school-aged children and adolescents (Hensel, 2009).

PE-A was more effective than CCT for reducing a broad range of PTSD, depressive and behavioral symptoms, also in girls with high state-anger. Yet, effects were demonstrated in one sample (4 studies). The main working mechanisms of PE-A are in vivo and imaginal exposure to trauma reminders. There is however no clear evidence yet that exposure is an essential element in treatment of trauma (Berliner & Saunders, 1996; Carey, 2011; Resick et al., 2008).

Only one study examined filial therapy (a type of play therapy) and found no evidence for its effectiveness, which might be due to the small sample size (Bassett Costas, 1998).

Last, one study found evidence for the effectiveness of sertraline medication on top of TF-CBT in reducing global impairment (Cohen et al., 2007), possibly due to the anxiolytic effects of sertraline (Schreiber, Melon, & De Vry, 1998). Pharmacotherapy has not been widely accepted as ideal for use in children with mental health problems, yet research has shown rapid increases of use in clinical practice over the last decades (Zito et al., 2003). However, as a previous review also concluded, more research (especially RCTs) are necessary to demonstrate the effectiveness of pharmacotherapy in preventing CSA-related PTSD in children (Cummings et al., 2012).

4.6. Summarizing evidence for the different therapy types

When we summarize the effectiveness of the most often used treatment types (i.e., CBT, CSA-specific CBT, TF-CBT, group therapy) no single treatment type appears to be more consistently effective across studies than the other treatment types. For all treatment types results from the different studies are mixed with some studies finding evidence for the effectiveness of a certain treatment type compared to a control group, whereas other studies report no differences in effectiveness between treatment and control groups. In addition, the different treatment types each were effective in improving a broad range of symptoms instead of being effective for a specific type of symptoms. These findings are in line with an earlier review by Greenspan et al. (2013) that concluded that for all included therapy types there was some evidence for their effectiveness in reducing CSA-related symptoms and that there were no clear differences between the treatment types in the types and range of symptoms they reduced. These findings seem to indicate that any type of treatment might be better that no treatment at all in the context of preventing (some) of the negative mental health con-

Yet, most of the treatment types included in this review contained elements of CBT, such as restructuring of maladaptive thoughts, or exposure to trauma reminders. Therefore, it is possible that (some) CBT components are specifically effective in reducing the negative consequences of CSA for child mental health. Unfortunately, only three studies included in this review specifically examined the effectiveness of certain treatment components or treatment characteristics: i.e., treatment length and trauma narration (Deblinger et al., 2011; Mannarino et al., 2012), stress inoculation and gradual exposure

(Berliner & Saunders, 1996). These studies demonstrated that trauma narration might be a critical mechanism for producing positive outcomes after CSA, especially with regard to children's abuse-related fear and general anxiety, but not for externalizing problems (Deblinger et al., 2011). Children themselves also often mentioned that talking, drawing or writing about the sexual abuse specifically was the most helpful part of therapy (Deblinger et al., 2011; Deblinger et al., 2006). Trauma narration might be such an essential element of therapy, because therapists can build on the narrative in several other CBT components such as gradual exposure to the traumatic memories and restructuring maladaptive thoughts in the narrative (Deblinger et al., 2015).

Furthermore, shorter TF-CBT (8 sessions) seemed to be more effective than longer TF-CBT for improving children's PTSD symptoms in particular. This finding is in contrast with a meta-analytic finding that longer interventions were more effective than shorter interventions for child and adolescent CSA victims (Trask et al., 2011). Children in the two studies examining effects of treatment length in our review were relatively young (mean age of 7). So, shorter treatments might be particularly effective for younger children because they might be more appropriate for the developmental level of this age group (Stice, Shaw, Bohon, Marti, & Rohde, 2009). It is also possible that benefits of shorter treatment length might be specific for TF-CBT. The above findings indicate that uncovering 'best practice' in therapy for CSA still requires additional research, especially more research on effectiveness of certain treatment components.

More knowledge of effective treatment components also opens up possibilities for combining different effective treatment modalities into one brief treatment program. Combining treatment modalities might be fruitful for CSA victims considering the complexity of their mental health problems and the fact that no conclusive evidence was found for any of the examined individual treatment types in this review (Kazdin, 1996). Also, there is accumulating evidence for the effects of intensive, but brief, multimodal treatments for children and adolescents with psychiatric disorders (Leichtman, Leichtman, Barber, & Neese, 2001; Öst & Ollendick, 2017). Combining different treatment modalities is common practice for therapists (Kazdin, 1996) and several of the therapies examined in this review already integrate techniques and methods from different theoretical perspectives (i.e., TF-CBT, CSAspecific CBT). However, as of yet there are no RCTs that compare the effectivity of different treatment combinations on mental health outcomes of child CSA victims.

4.7. Limitations and future directions for effectiveness studies on CSA treatment

Having reviewed all included studies in detail, several limitations need to be addressed. A first limitation is the small sample size of most studies, which may have reduced the power to find effects of the experimental treatment group. For future RCTs researchers should conduct a priori power analysis to determine the number of subjects in each condition. Second, a very wide range of outcomes was measured with vastly different instruments used across studies, making comparisons across studies difficult. In addition, some studies assessed outcomes (e.g. social competence) that are insufficiently shown to relate to CSA or the specific aims of treatment at hand. We recommend future research to employ more uniformity in the use of validated measures to assess outcomes that have consistently been related to CSA (e.g., PTSD, depression, anxiety, sexualized behavior, behavior problems). Third, a substantial number of outcome measures was parent-reported. In studies with young children, this is to be expected. However, in many treatment types parents are also actively involved, which makes it more difficult for them to provide objective assessments of therapy outcomes. Future research can overcome this limitation by using multi-informant data. Fourth, only one third of the studies conducted long-term followups (12 months or longer). As treatment can have important 'sleeper effects' future research should invest in including long-term follow-up assessments. Fifth, we were unable to compare the effectiveness of different treatment types, because most RCTs compared one type of treatment to a waitlist control group or a heterogeneous TAU group. The field needs more RCTs that directly compare different treatment types.

Regarding sample characteristics, only three studies included non-Western samples (Iranian, Zambian, and Congolese). More research is necessary to examine whether CSA treatments that are mostly developed in Western countries are similarly effective (or not) in non-Western countries in which the extent and severity of CSA-experiences might not be comparable to the experiences of Western victims. Furthermore, most studies included primarily girls and several studies did not even include boys. This is not surprising considering that girls are more often the victim of CSA. However, future researchers should aim to include a more balanced number of boys and girls in their RCTs to be able to examine possible gender differences in treatment effectivity.

4.8. Conclusion and implications for clinical practice

Overall, we conclude that the RCT literature evaluating the effectiveness of psychotherapy for child and adolescent CSA victims does not clearly point to one treatment type as 'best practice' in reducing negative mental health consequences of CSA. For each treatment type there is at least some evidence for its effectiveness in reducing some of the negative mental health outcomes of CSA. The literature does provide some preliminary pointers for 'best practices' with certain groups of clients. First, general CBT might be an appropriate choice for clients with (sub)clinical PTSD symptoms. Second, CSA-specific CBT could be used with preschool as well as older children and their parents, and might be particularly effective when commenced shortly after the CSA experiences. Third, TF-CBT might be most effective for highly vulnerable and traumatized clients. Fourth, group therapy might be more effective for girls than for boys. Last, PE-A might be the preferred therapy for clients with high state anger. With regard to effective treatment components, focusing on creating a narrative of the child's traumatic CSA experiences in therapy seems promising but preliminary considering the small number of studies examining specific treatment components. Therefore, more research on the effectiveness of other treatment components (e.g., treatment length, exposure, cognitive restructuring) is critical for advancing treatment for CSA victims. Only, then the field will be able to formulate evidence-based 'best practices' to prevent the wide range of negative mental health outcomes associated with CSA.

CRediT authorship contribution statement

Henny K. Tichelaar: Conceptualization, Investigation, Formal analysis, Writing - original draft. **Maja Deković:** Conceptualization, Funding acquisition, Writing - review & editing. **Joyce J. Endendijk:** Conceptualization, Funding acquisition, Formal analysis, Supervision, Writing - original draft.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Code book data extraction

Authors + date

• When there are studies using the same samples/participants, they

are marked with the same superscript.

Experimental condition

- Experimental group
- Which type of therapy was object of research? Which type of therapy did participants in the experimental group receive? Abbreviation is sufficient (e.g., CBT).
- When it is unclear which treatment type can be considered the experimental group, the hypotheses of the study were guiding.

Control condition

• Control group

Which type of control group was used? Alternative treatment, treatment as usual [TAU], wait-list condition [WL], no treatment?

Duration (experimental/control condition)

- Any information relating to the intensity of treatment. How many times a week/month? How many months does the total treatment trajectory last? Number of sessions totally received?
- Most treatments take place with weekly sessions and therefore state, for example, '8 weeks' instead of '8 sessions'. When only the number of sessions is provided, we stated the number of sessions, e.g., '8 sessions'.
- When the study includes a no treatment- or wait list-control group, only duration/sessions of the experimental group are stated. When there is another treatment type functioning as control group and duration/sessions differ from that of the experimental group, this information is also stated in this column.

N

• Total sample size

%F

- Percentage of female participants in the study.
- When descriptive statistics are indicated for experimental versus control group separately, an overall mean is calculated.

Mage

- Mean age of participants.
- When there is no mean age stated, this column included information on the age range of participants.
- When descriptive statistics are indicated for experimental versus control group separately, an overall mean is calculated.

Other sample specifics

 Any information regarding the type of sample (other than being CSA-victim and ≤ 18), for example regarding present psychopathology (PTSD, known anxiety disorders, limited to intrafamilial abuse victims, only rape victims, specificity regarding ethnicity of participants, etc.).

Random [Y/N/.]

- Was randomization successful i.e. were EG and CG sufficiently similar? Are there any differences between groups (that could influence results) stated by researchers?
- Answering 'Y' or 'N' can be based on explicitly stated information or provided tables/figures.

- Extra measures undertaken by researchers to enhance group similarity do not prohibit answering 'Y' in this column.
- '.' is stated, when there is no information provided regarding similarity of groups.

Number of Ts

- How many times did researchers conduct a certain measurement?
- Since only RCTs were included, minimum value in this column is '2'
 for a pretest and posttest. When there is a higher number stated in
 this column, there was at least one follow-up measure conducted at
 some time after posttest.

Outcome

- Outcomes reflect the outcomes measured within each sample.
- The measurement constructs stated were listed as a result of what researchers explicitly stated or were derived from the measurements instruments used.

Informant

- Measurement type used by researcher, relating to the source of information gained.
- Example of possible input: Parent report.

Findings (time * group)

- Significant differences in the amount of change found for the different groups (EG/CG).
- Changes are reflected by the use of ' Δ '.
- ' > ' and ' < ' are used according to their usual meaning, '=' is used when there are no significant changes between change in EG(s) and change in CG(s).
- Only significant differences are stated in this column, when there
 are no significant effects of time, this is reflected by 'ns'.
- In case of omission of certain outcomes, we assume there is nonsignificance found and so 'ns' was sued.

Effect size (time * group-effect)

- Qualification of effect size found/stated by authors regarding significant differences between the changes in different groups.
- This column states 'small', 'medium', 'large' or a combination of these depending on the measure of effect size used.
- When there is no effect (in case of 'ns'), this column contains '.'.

Appendix B. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.childyouth.2020.105519.

References

Baker, C. R. (1985). A comparison of individual and group therapy as treatment of sexually abused adolescent females. (Unpublished doctoral dissertation). University of Maryland, Washington, Maryland.

Bassett Costas, M. (1998). Filial therapy with non-offending parents of children who have been sexually abused. (Unpublished doctoral dissertation). University of North Texas, Denton, Texas.

Berliner, L., & Saunders, B. E. (1996). Treating fear and anxiety in sexually abused children: Results of a controlled 2-year follow-up study. *Child Maltreat*, 1(4), 294–309

Bifulco, A., Brown, G. W., & Adler, Z. (1991). Early sexual abuse and clinical depression in adult life. *British Journal of Psychiatry*, 159(1), 115–122.

Bratton, S. C., Ray, D., Rhine, T., & Jones, L. (2005). The efficacy of play therapy with children: A meta-analytic review of treatment outcomes. *Professional Psychology: Research and Practice*, 36(4), 376–390.

Burke, M. M. (1988). Short-term group therapy for sexually abused girls: A learning

- theory based treatment for negative affect. (Unpublished doctoral dissertation). University of Georgia, Athens, Georgia.
- Carey, T. A. (2011). Exposure and reorganization: The what and how of effective psychotherapy. Clinical Psychology Review, 31(2), 236–248.
- Celano, M., Hazzard, A., Webb, C., & McCall, C. (1996). Treatment of traumagenic beliefs among sexually abused girls and their mothers: An evaluation study. *Journal of Abnormal Child Psychology*, 24(1), 1–17.
- Choudhary, V., Satapathy, S., & Sagar, R. (2016). Review of randomized controlled trials on psychological interventions in child sexual abuse: Current status and emerging needs in the Indian context. *Indian Journal of Psychological Medicine*, 38(4), 279–284.
- Cohen, J. A., & Mannarino, A. P. (1996). A treatment outcome study for sexually abused preschool children: Initial findings. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35(1), 42–50.
- Cohen, J. A., & Mannarino, A. P. (1997). A treatment study for sexually abused preschool children: Outcome during a one-year follow-up. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36(9), 1228–1235.
- Cohen, J. A., & Mannarino, A. P. (1998). Interventions for sexually abused children: Initial treatment outcome findings. *Child Maltreat*, 3(1), 17–26.
- Cohen, J. A., Deblinger, E., Mannarino, A. P., & Steer, R. A. (2004). A multisite, randomized controlled trial for children with sexual abuse-related PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 393–402. https://doi.org/10.1097/01.chi.0000111364.94169.f9.
- Cohen, J. A., Mannarino, A. P., & Knudsen, K. (2005). Treating sexually abused children: 1 year follow-up of a randomized controlled trial. *Child Abuse & Neglect*, 29(2), 135–145
- Cohen, J. A., Mannarino, A. P., Perel, J. M., & Staron, V. (2007). A pilot randomized controlled trial of combined trauma-focused CBT and sertraline for childhood PTSD symptoms. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46(7), 811–819
- Cohen, J. A., Mannarino, A., P., & Deblinger, E. (2017). Treating trauma and traumatic grief. The Guilford Press.
- Cummings, M., Berkowitz, S. J., & Scribano, P. V. (2012). Treatment of childhood sexual abuse: An updated review. Current Psychiatry Reports, 14(6), 599–607.
- Davis, J. L., Combs-Lane, A. M., & Jackson, T. L. (2002). Risky behaviors associated with interpersonal violence: Comparisons based on type, number, and characteristics of assault incidents. *Journal of Interpersonal Violence*, 17, 611–629. https://doi.org/10. 1177/0886260502017006002.
- Deblinger, E., Lippmann, J., & Steer, R. (1996). Sexually abused children suffering posttraumatic stress symptoms: Initial treatment outcome findings. *Child Maltreatment*. 1(4), 310–321.
- Deblinger, E., Steer, R. A., & Lippmann, J. (1999). Two-year follow-up study of cognitive behavioral therapy for sexually abused children suffering post-traumatic stress symptoms. Child Abuse & Neglect, 23(12), 1371–1378.
- Deblinger, E., Stauffer, L. B., & Steer, R. A. (2001). Comparative efficacies of supportive and cognitive behavioral group therapies for young children who have been sexually abused and their nonoffending mothers. *Child Maltreat*, 6(4), 332–343.
- Deblinger, E., Mannarino, A. P., Cohen, J. A., & Steer, R. A. (2006). A follow-up study of a multisite, randomized, controlled trial for children with sexual abuse-related PTSD symptoms. *Journal of the American Academy of Child & Adolescent Psychiatry*, 45(12), 1474–1484.
- Deblinger, E., Mannarino, A. P., Cohen, J. A., Runyon, M. K., & Heflin, A. H. (2015). Child sexual abuse: A primer for treating children, adolescents, and their nonoffending parents. New York, NY: Oxford University Press.
- Deblinger, E., Mannarino, A. P., Cohen, J. A., Runyon, M. K., & Steer, R. A. (2011). Trauma-focused cognitive behavioral therapy for children: Impact of the trauma narrative and treatment length. *Depression and Anxiety*, 28(1), 67–75.
- Dominguez, R. Z. (2001). Evaluation of cognitive-behavioral and supportive treatments for sexually abused children: Analyzing the process of change using individual growth curve analyses. (Unpublished doctoral dissertation). University of Houston, Houston, Texas.
- Ernst, C., Angst, J., & Földényi, M. (1993). The zurich study: XVII. Sexual abuse in childhood. Frequency and relevance for adult morbidity data of a longitudinal epidemiological study. European Archives of Psychiatry and Clinical Neuroscience, 242(5), 293–300.
- Farkas, L., Cyr, M., Lebeau, T., Lemay, J., & McDuff, P. (2008). Treatment effectiveness of MASTR-EMDR therapy for sexually abused adolescents. Revue Québécoise de Psychologie, 29, 101–115.
- Finkelhor, D. (1987). The trauma of child sexual abuse: Two models. *Journal of Interpersonal Violence*, 2(4), 348–366.
- Finkelhor, D. (1994). The international epidemiology of child sexual abuse. Child Abuse & Neglect, 18(5), 409–417.
- Finkellor, D., Ormrod, R., Turner, H., & Hamby, S. (2005). The victimization or children and youth: A comprehensive, national survey. *Child Maltreatment, 10*(5), 5–25. https://doi.org/10.1177/1077559504271287.
- Foa, E. B., McLean, C. P., Capaldi, S., & Rosenfield, D. (2013). Prolonged exposure vs supportive counseling for sexual abuse–related PTSD in adolescent girls: A randomized clinical trial. *JAMA*, 310(24), 2650. https://doi.org/10.1001/jama.2013. 282829
- Glodich, A., & Allen, J. G. (1998). Adolescents exposed to violence and abuse: A review of the group therapy literature with an emphasis on preventing trauma reenactment. *Journal of Child and Adolescent Group Therapy*, 8(3), 135–154.
- Grayston, A. D., & De Luca, R. V. (1995). Group therapy for boys who have experienced sexual abuse: Is it the treatment of choice? *Journal of Child and Adolescent Group Therapy*, 5(2), 57–82. https://doi.org/10.1007/2FBF02548959.
- Greenspan, F., Moretzsohn, A. G., & Silverstone, P. H. (2013). What treatments are available for childhood sexual abuse, and how do they compare? *International Journal*

- of Advances in Psychology, 2, 232–241. https://doi.org/10.14355/ijap.2013.0204.07. Hazzlett-Stevens, H., & Craske, M. G. (2002). Brief cognitive-behavioral therapy:
- Definition and scientific foundations. In F. W. Bond, & W. Dryden (Eds.). Handbook of brief cognitive behavioral therapy (1–20). John Wiley & Sons Ltd.
- Hensel, T. (2009). EMDR with children and adolescents after single-incident trauma. Journal of EMDR Practice and Research, 3, 2–9. https://doi.org/10.1891/1933-3196.3. 1.2.
- Hyde, C., Bentovim, A., & Monck, E. (1995). Some clinical and methodological implication of a treatment outcome study of sexually abused children. *Child Abuse & Neglect*, 19, 1387–1399. https://doi.org/10.1016/0145-2134(95)00096.
- Jaberghaderi, N., Greenwald, R., Rubin, A., Zand, S. O., & Dolatabadi, S. (2004). A comparison of CBT and EMDR for sexually-abused Iranian girls. Clinical Psychology and Psychotherapy, 11(5), 358–368.
- Kaczkurkin, A. N., Asnaani, A., Zhong, J., & Foa, E. B. (2016). The moderating effect of state anger on treatment outcome in female adolescents With PTSD*: Moderating effect of state anger on PTSD outcome. *Journal of Traumatic Stress*, 29(4), 325–331.
- Kane, J. C., Murray, L. K., Cohen, J., Dorsey, S., Skavenski van Wyk, S., Galloway Henderson, J., Imasiku, M., Mayeya, J., & Bolton, P. (2016). Moderators of treatment response to trauma-focused cognitive behavioral therapy among youth in Zambia. *Journal of Child Psychology and Psychiatry*, 57(10), 1194–1202.
- Kazdin, A. E. (1996). Combined and multimodal treatments in child and adolescent psychotherapy: Issues, challenges, and research directions. Clinical Psychology: Science and Practice, 3, 69–100. https://doi.org/10.1111/j.1468-2850.1996.tb00059.x.
- Kazdin, A. E. (2003). Psychotherapy for children and adolescents. Annual Review of Psychology, 54(1), 253–276.
- Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin*, 113, 164–180. https://doi.org/10.1037/0033-2909.113.1.164.
- King, N. J., Tonge, B. J., Mullen, P., Myerson, N., Heyne, D., Rollings, S., ... Ollendick, T. H. (2000). Treating sexually abused children with posttraumatic stress symptoms: A randomized clinical trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39(11), 1347–1355.
- Leichtman, M., Leichtman, M. L., Barber, C. C., & Neese, D. T. (2001). Effectiveness of intensive short-term residential treatment with severely disturbed adolescents. *American Journal of Orthopsychiatry*, 71, 227–235. https://doi.org/10.1037/0002-9432.71.2.227.
- Macdonald, G., Higgins, J. P. T., Ramchandani, P., Valentine, J. C., Bronger, L. P., Klein, P., ... Taylor, M. (2012). Cognitive-behavioural interventions for children who have been sexually abused: A systematic review. Campbell Systematic Reviews, 8(1), 1–111.
- Zito, J. M., Safer, D. J., dosReis, S., Gardner, J. F., Magder, L., Soeken, K., ... Riddle, M. A. (2003). Psychotropic practice patterns for youth: A 10-year perspective. Archives of Pediatrics and Adolescent Medicine, 157(1), 17. https://doi.org/10.1001/archpedi. 157 1 17
- Mannarino, A. P., Cohen, J. A., Deblinger, E., Runyon, M. K., & Steer, R. A. (2012). Trauma-focused cognitive-behavioral therapy for children: sustained impact of treatment 6 and 12 months later. *Child Maltreatment*, 17(3), 231–241.
- Mathews, B., & Collin-Vézina, D. (2019). Child sexual abuse: Toward a conceptual model and definition. *Trauma, Violence, & Abuse, 20*(2), 131–148.
- McCrone, P., Weeramanthri, T., Knapp, M., Rushton, A., Trowell, J., Miles, G., & Kolvin, I. (2005). Cost-effectiveness of individual versus group psychotherapy for sexually abused girls. Child and Adolescent Mental Health, 10, 26–31. https://doi.org/10.1111/j.1475-3588.2005.00113.x.
- McElvaney, R. (2015). Disclosure of child sexual abuse: Delays, non-disclosure and partial disclosure. What the research tells us and implications for practice: Disclosure patterns in child sexual abuse. *Child Abuse Review*, 24(3), 159–169.
- McLean, C. P., Yeh, R., Rosenfield, D., & Foa, E. B. (2015). Changes in negative cognitions mediate PTSD symptom reductions during client-centered therapy and prolonged exposure for adolescents. *Behaviour Research and Therapy*, 68, 64–69.
- O'Callaghan, P., McMullen, J., Shannon, C., Rafferty, H., & Black, A. (2013). A rando-mized controlled trial of trauma-focused cognitive behavioral therapy for sexually exploited war-affected Congolese girls. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52(4), 359–369. https://doi.org/10.1016/j.jeac.2013.01.013.
- Öst, L.-G., & Ollendick, T. H. (2017). Brief, intensive and concentrated cognitive behavioral treatments for anxiety disorders in children: A systematic review and meta-analysis. Behaviour Research and Therapy, 97, 134–145.
- Parker, B., & Turner, W. (2014). Psychoanalytic/psychodynamic psychotherapy for sexually abused children and adolescents: A systematic review. Research on Social Work Practice, 24(4), 389–399.
- Passarela, C. M., Mendes, D. D., & Mari, J. J. (2010). A systematic review to study the efficacy of cognitive behavioral therapy for sexually abused children and adolescents with posttraumatic stress disorder. Revista de Psiquiatria Clínica, 37(2), 69–72.
- Piaget, J. (1952). The origins of intelligence (M. Cook, Trans.). International Universities Press, Inc.
- Putnam, F. W. (2003). Ten-year research update review: Child sexual abuse. Journal of the American Academy of Child and Adolescent Psychiatry, 42(3), 269–278. https://doi. org/10.1097/01.CHI.0000037029.04952.72.
- Reeker, J., Ensing, D., & Elliott, R. (1997). A meta-analytic investigation of group treatment outcomes for sexually abused children. Child Abuse & Neglect, 21(7), 669–680.
- Resick, P. A., Galovski, T. E., Uhlmansiek, M. O. B., Scher, C. D., Clum, G. A., & Young-Xu, Y. (2008). A randomized clinical trial to dismantle components of cognitive processing therapy for posttraumatic stress disorder in female victims of interpersonal violence. *Journal of Consulting and Clinical Psychology*, 76, 243–258. https://doi.org/10.1037/0022-006X.76.2.243.
- Rodenburg, R., Benjamin, A., De Roos, C., Meijer, A. M., & Stams, G. J. (2009). Efficacy of EMDR in children: A meta-analysis. Clinical Psychology Review, 29(7), 599–606. https://doi.org/10.1016/j.cpr2009.06.008.

- Schreiber, R., Melon, C., & De Vry, Jean (1998). The role of 5-HT receptor subtypes in the anxiolytic effects of selective serotonin reuptake inhibitors in the rat ultrasonic vocalization test. *Psychopharmacology*, 135(4), 383–391.
- Shamseddeen, W., Asarnow, J. R., Clarke, G., Vitiello, B., Wagner, K. D., Birmaher, B., ... Brent, D. A. (2011). Impact of physical and sexual abuse on treatment response in the treatment of resistant depression in adolescent study (TORDIA). *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(3), 293–301.
- Shapiro, F. (2007). EMDR and case conceptualization from an adaptive information processing perspective. In F. Shapiro, F. W. Kaslow, & L. Maxfield (Eds.). EMDR and family therapy processes (pp. 3–34). John Wiley Sons Inc.
- Stice, E., Shaw, H., Bohon, C., Marti, C. N., & Rohde, P. (2009). A meta-analytic review of depression prevention programs for children and adolescents: Factors that predict magnitude of intervention effects. *Journal of Consulting and Clinical Psychology*, 77, 486–503. https://doi.org/10.1037/a0015168.
- Stoltenborgh, M., van IJzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A global perspective on child sexual abuse: Meta-analysis of prevalence around the world. *Child Maltreatment*, 16(2), 79–101.
- Thun, D., Sims, P. L., Adams, M. A., & Webb, T. (2003). Effects of group therapy on female adolescent survivors of sexual abuse: A pilot study. *Journal of Child Sexual Abuse*, 11(4), 1–16.
- Trask, E. V., Walsh, K., & DiLillo, D. (2011). Treatment effects for common outcomes of child sexual abuse: A current meta-analysis. Aggression and Violent Behavior, 16(1), 6–19
- Trickett, P. K. (1997). Sexual and physical abuse and the development of social

- competence. In S. S. Luthar, J. A. Burack, D. Cicchetti, & J. R. Weisz (Eds.). *Developmental psychopathology: Perspectives on adjustment, risk and danger.* Cambridge University Press.
- Trowell, J., Kolvin, I., Weeramanthri, T., Sadowski, H., Berelowitz, M., Glasser, D., & Leitch, I. (2002). Psychotherapy for sexually abused girls: Psychopathological outcome findings and patterns of change. *British Journal of Psychiatry*, 180(3), 234–247.
- Verleur, D., Hughes, R. E., & Dobkin de Rios, M. (1986). Enhancement of self-esteem among female adolescent incest victims: A controlled comparison. Adolescence, 21, 843–854
- Vuijsje, H. (2016). Ik kijk niet weg: Eindrapport taskforce kindermishandeling en seksueel misbruik. https://www.huiselijkgeweld.nl/dossiers/taskforce.
- Widom, C. S., & Ames, M. A. (1994). Criminal consequences of childhood sexual victimization. Child Abuse & Neglect, 18(4), 303–318.
- Wood, W., & Eagly, A. H. (2012). Biosocial construction of sex differences and similarities in behavior. In J. M. Olson, & M. P. Zanna (Vol. Eds.), Advances in experimental social psychology: Vol. 46, (pp. 55–123). New York, NY: Elsevier.
- World Health Organization (n.d.) Guidelines for medico-legal care for victims of sexual violence: Childhood sexual abuse. https://www.who.int/violence_injury_prevention/resources/publications/en/guidelines_chap7.pdf.
- Zandberg, L., Kaczkurkin, A. N., McLean, C. P., Rescorla, L., Yadin, E., & Foa, E. B. (2016). Treatment of adolescent PTSD: The impact of prolonged exposure versus client-centered therapy on co-occurring emotional and behavioral problems: Treatment of adolescent PTSD. *Journal of Traumatic Stress*, 29(6), 507–514.