

Internet-based imagery rescripting intervention for adult survivors of institutional childhood abuse in the former German Democratic Republic – a pilot study

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ABSTRACT

Background: From 1949 to 1990, about 500,000 children and adolescents in the former German Democratic Republic (GDR) were placed in institutional care. Many of these individuals experienced physical and sexual abuse as well as general maltreatment. While this population group is in great need of psychosocial support, few low-threshold interventions aimed at the needs of adult survivors of institutional childhood abuse exist.

Objective: This pilot study examines the efficacy of an internet-based imagery rescripting intervention in reducing psychopathological symptoms, within a population of survivors of institutional abuse from state childcare institutions, in the former GDR. Additionally, a case study is presented, depicting the treatment of a woman suffering from PTSD after having been institutionalised in the former GDR.

Method: Participants received 10 internet-based writing assignments, based on the principles of imagery rescripting, specifically tailored to the needs of survivors of institutional childhood abuse in the GDR. The participants received personalised feedback on their assignments. Symptoms of posttraumatic stress disorder (PTSD), complex posttraumatic stress disorder (CPTSD), depression, and anxiety were assessed at pre- and post-treatment.

Results: A total of 15 participants completed the intervention (mean age 56.2 years; 66.7% female). Paired *t*-tests showed a significant reduction of PTSD, CPTSD, depression, and anxiety symptoms. Large effect sizes were found for PTSD ($d = 1.26$), CPTSD ($d = .97$), depression ($d = 1.08$) and anxiety ($d = 1.20$).

Conclusion: The results of this pilot study provide preliminary evidence for the efficacy and feasibility of the intervention in treating psychopathological symptoms in survivors of institutional abuse in the GDR. The case study additionally demonstrates the applicability of the intervention. A randomised controlled trial should be applied to further evaluate the intervention and its effects.

Trial registration: German Clinical Trials Register identifier: DRKS00020266..

Intervención de re-escritura de imágenes vía internet para adultos sobrevivientes de abuso institucional en la infancia en la antigua República Democrática Alemana – un estudio piloto

Antecedentes: Desde 1949 a 1990, alrededor de 500.000 niños y adolescentes en la antigua República Democrática Alemana (RDA) fueron internados en instituciones. Muchas de estas personas experimentaron abuso físico y sexual, así como malos tratos en general. Si bien este grupo de población tiene una gran necesidad de apoyo psicosocial, existen pocas intervenciones elementales dirigidas a las necesidades de los sobrevivientes adultos de abuso infantil institucional.

Objetivo: Este estudio piloto examina la eficacia de una intervención de reescritura de imágenes vía Internet para reducir los síntomas psicopatológicos, en una población de sobrevivientes de abuso institucional de instituciones estatales de cuidado infantil, en la antigua RDA. Además, se presenta un estudio de caso que describe el tratamiento de una mujer que sufre de TEPT después de haber sido institucionalizada en la antigua RDA.

Método: Los participantes recibieron 10 asignaciones de escritura vía Internet, basadas en los principios de la reescritura de imágenes, específicamente adaptadas a las necesidades de los sobrevivientes de abuso infantil institucional. Los participantes recibieron comentarios personalizados sobre sus tareas. Los síntomas del trastorno de estrés postraumático (TEPT), el trastorno de estrés postraumático complejo (TEPT-C), la depresión y la ansiedad se evaluaron antes y después del tratamiento.

Resultados: Un total de 15 participantes completaron la intervención (edad media 56,2 años; 66,7% mujeres). Las pruebas *t* pareadas mostraron una reducción significativa de los síntomas

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Re-escritura de imágenes; sobrevivientes adultos; abuso institucional; abuso en la infancia; depresión; ansiedad; TEPT; TEPTC; estudio de caso

关键词

意象改写; 成年幸存者; 机构虐待; 童年期虐待; 抑郁; 焦虑; PTSD; CPTSD; 案例研究

HIGHLIGHTS

- Based on the principles of imagery rescripting, this pilot study investigates a newly developed internet-based writing intervention for adult survivors of GDR childcare institutions.
- Self-reported symptoms of PTSD, CPTSD, depression, and anxiety were significantly reduced at post-treatment.
- Although further research is needed, the writing intervention seems to be a promising intervention for survivors of institutional abuse in the GDR, suffering from PTSD and other psychopathological symptoms.

TEPT, TEPT-C, depresión y ansiedad. Se encontraron tamaños de efecto grandes para TEPT ($d = 1,26$), TEPT-C ($d = 0,97$), depresión ($d = 1,08$) y ansiedad ($d = 1,20$).

Conclusión: Los resultados de este estudio piloto proporcionan evidencia preliminar de la eficacia y viabilidad de la intervención en el tratamiento de síntomas psicopatológicos en sobrevivientes de abuso institucional en la RDA. El estudio de caso demuestra además la aplicabilidad de la intervención. Se debe aplicar un ensayo controlado aleatorizado para evaluar más a fondo la intervención y sus efectos.

对前德意志民主共和国童年期机构虐待的成年幸存者进行基于互联网的意象改写干预 – 项试点研究

背景: 从 1949 年到 1990 年, 前德意志民主共和国 (GDR) 约有 500,000 名儿童和青少年被安置在机构照顾中。其中许多人经历过身体和性虐待以及一般虐待。虽然这一人群亟需社会心理支持, 很少有针对童年期机构虐待成年幸存者需求的低门槛干预措施。

目的: 本试点研究在前 GDR 国家儿童保育机构的机构虐待幸存者群体中, 检验基于互联网的意象改写干预在减轻精神病理学症状方面的效果。此外, 还提供了一个案例研究, 描述了一名在前 GDR 进入收容所后患上 PTSD 女性的治疗。

方法: 参与者收到了 10 个基于互联网的写作作业, 这些作业基于意象改写原则, 专门针对童年期机构虐待幸存者的需求。参与者收到了针对其个人作业的反馈。在治疗前后评估了创伤后应激障碍 (PTSD)、复杂性创伤后应激障碍 (CPTSD)、抑郁和焦虑症状。

结果: 共有 15 名参与者完成了干预 (平均年龄 56.2 岁; 66.7% 女性)。配对 t 检验表明 PTSD、CPTSD、抑郁和焦虑症状显著减少。发现 PTSD ($d = 1.26$)、CPTSD ($d = .97$)、抑郁 ($d = 1.08$) 和焦虑 ($d = 1.20$) 具有大效应量。

结论: 本试点研究结果为干预治疗 GDR 机构虐待幸存者的精神病理学症状的有效性和可行性提供了初步证据。案例研究还证明了干预措施的适用性。应该采用随机对照试验来进一步评估干预措施及其效果。

1. Introduction

From 1949 to 1990, about 500,000 children and adolescents in the German Democratic Republic (GDR) spent time in childcare institutions, such as children's homes or youth detention centers. There were various reasons for admission into state childcare, ranging from children being orphaned, neglect or negligence by caretakers, behaviour considered 'difficult,' to political reasons, such as political imprisonment of the parents or the aim of 're-education' of children and adolescents. The system of children's homes of the GDR can be roughly divided into 'normal' and 'special' facilities, with the latter including observational and transit homes and youth detention centers (Dreier & Laudien, 2012). Prison-like facilities have been described for the observational and transit homes as well as for the youth detention centers. In all types of state children's or juvenile homes, education followed socialist collective principles. While officially illegal in the GDR, many cases of physical punishment and human rights violations have been reported across all types of GDR childcare facilities (AGJ, 2012; Arp, 2017; Dreier & Laudien, 2012; Jenaer Zentrum für Empirische Sozial- und Kulturforschung, 2012). An expert report commissioned by the German Commission for Child Sexual Abuse Issues found that sexual abuse by staff and peers was also common (Mitzscherlich et al., 2019; Sachse et al., 2018). Life in GDR children's homes was characterised by rigid structures and rules. Survivors have reported arbitrary punishment, scant control of staff behaviour and the use of 'collective education,' for example, the punishment of the whole group for the 'misdoing' of one

child, or allowing the group to punish an individual as they thought fit. Work was often part of the educational concept, with no or only little financial compensation and neglect of adequate school education or qualification (Dreier-Hornig, 2016).

Maltreatment, abuse, and neglect in childhood are associated with a range of psychological, psychosocial and physiological outcomes in adulthood (Hailes et al., 2019; Jaffee, 2017). Specifically, institutional childhood abuse can lead to negative mental health outcomes, such as posttraumatic stress disorder (PTSD), other anxiety disorders, or depression (e.g. Blakemore et al., 2017; Carr et al., 2010, 2018; Lueger-Schuster et al., 2018).

For formerly institutionalised children of state childcare institutions of the GDR, evidence points to a similar pattern of outcomes, even though larger-scale quantitative psychological and medical research is lacking (Spahn et al., 2020). While the prevalence of psychopathological symptoms is suspected to be high in this population, Spahn et al. (2020) as well as Gfesser et al. (2021) have reported that people with a history of institutional upbringing in the GDR face barriers in accessing psychological, psychosocial and medical support. Mistrust, fear of stigmatisation, and shame are among the barriers described, as well as lack of knowledge and experience on the side of practitioners (Spahn et al., 2020). Still today, only few facilities and practitioners specialised in the effects of political persecution in the GDR, or even institutional child abuse, exist in Germany. Furthermore, the adult survivors of such institutions now live in different parts of Germany and abroad, and often have little

access to appropriate psychological support (Sack & Ebbinghaus, 2012). Therefore, a low-threshold, internet-based writing intervention might be a suitable and helpful intervention for people who, as children or adolescents, spent time in institutional childcare in the GDR.

A number of meta-analyses have shown that internet-based writing interventions significantly reduce symptoms of PTSD (Lewis et al., 2019; Sijbrandij et al., 2016), and internet-based interventions for PTSD are superior to active control groups (Steuibl et al., 2021). Most of these interventions have been conducted based on cognitive behavioural interventions, including exposure and cognitive restructuring.

Exposure represents the gold standard for treating PTSD, regardless of the type of traumatisation (McLean et al., 2022; Rauch et al., 2012) and can be delivered in different ways (e.g. Narrative Exposure Therapy, Written Exposure Therapy, Prolonged Exposure). While exposure has been shown to reduce associated fear reactions and avoidance, other PTSD-related emotions and cognitions such as guilt, shame, and a distorted self-image often remain unchanged (Holmes et al., 2005; Smucker et al., 1995). Recent theoretical frameworks propose imagery rescripting as an intervention that fills this gap. Here, changes in the previously formed negative self-beliefs are elicited through fostering acceptance of feelings, thereby reducing meta-emotional problems (Mancini & Mancini, 2018). To illustrate, Arntz et al. (2007) compared imaginal exposure with and without imagery rescripting in patients suffering from PTSD. The results revealed no difference regarding PTSD symptom change between the two groups, however, imaginal exposure combined with imagery rescripting appeared more effective in reducing feelings of guilt, anger and hostility. Imagery rescripting has been used as treatment for a number of disorders (e.g. PTSD, eating disorders, social anxiety disorder) and has been shown to reduce aversive imagery (Morina et al., 2017). Specifically for trauma-related childhood abuse (Smucker et al., 1995), imagery rescripting seems to be a promising form of treatment (Raabe et al., 2015).

To our knowledge, imagery rescripting has not been previously investigated as an internet-based writing intervention for participants with a history of institutional childhood abuse. Similar to written exposure interventions, which have been found to be effective in treating PTSD (Sloan et al., 2018), our study uses writing assignments which consist of self-confrontation with the traumatic event. However, through the addition of specific imagery rescripting techniques and individualised therapeutic feedback, the treatment is hypothesised to alter trauma-related beliefs and schemas through replacing the victimisation experience with a corrective imagery. Rijkeboer

et al. (2020) showed that rescripting in writing may be similarly effective as imagery rescripting.

The aim of the study was to evaluate the pilot data of an imagery-rescripting-based online intervention, specifically developed for adult survivors of institutional childhood abuse in the GDR. We hypothesised a reduction of symptoms of PTSD, CPTSD, depression, and anxiety from pre- to post-treatment.

2. Methods

2.1. Participants

Participants were recruited via media and social media outreach, as well as through informing relevant stakeholders, such as the state commissioners for the study of the repercussions of the Communist dictatorship in East Germany, and initiatives by and for people institutionalised in GDR childcare institutions. People interested in participation could register on the program website, [www.ddr-heimerfahung.de], and received further information, a declaration of consent and an invitation to an online questionnaire via e-mail. After filling out the online questionnaire and providing written consent, individuals were invited to participate in a diagnostic screening interview, conducted via telephone, to assess eligibility and answer participants' questions. Participants were included in the study if they reported having spent time in childcare institutions of the GDR and did not meet the exclusion criteria. Exclusion criteria were acute suicidal ideation, assessed with the Suicide Risk Assessment Interview (Arnoldi et al., 2000) and the suicide item of the Patient Health Questionnaire (PHQ-9; Löwe et al., 2002), a current episode of major depression or bipolar disorder, assessed with the PHQ-9 and the structured clinical interview for DSM-IV (SKID-I; Wittchen et al., 1997), substance abuse or dependence, assessed with the structured clinical interview for DSM-IV (SKID-I; Wittchen et al., 1997), risk of psychosis, assessed with the Screening Device for Psychotic Disorder (SDPD; Knaevelsrud, 2005), and borderline personality disorder, assessed with the structured clinical interview for DSM-IV (SKID-II; Wittchen et al., 1997).

2.2. Measures

Participants filled out an online questionnaire at baseline and post-treatment. At baseline, socio-demographic information such as age, age at institutionalisation, type of institution, length of stay in the institution, marital status, and employment status were assessed.

Childhood maltreatment was assessed with the Childhood Trauma Questionnaire (CTQ; Wingenfeld et al., 2010), a 25-item self-report instrument

consisting of 5 subscales. Severity ratings were calculated and dichotomised into low/moderate to severe/extreme for each subscale according to threshold scores (emotional abuse ≥ 10 ; physical abuse ≥ 8 ; sexual abuse ≥ 8 ; emotional neglect ≥ 15 ; physical neglect ≥ 8 ; Walker et al., 1999).

2.2.1. International trauma questionnaire (ITQ; Cloitre et al., 2018, German version: Lueger-Schuster et al., 2015; 2018)

The ITQ was developed to measure symptoms of PTSD and CPTSD, including functional impairment, over the past month. The ITQ assesses the three PTSD symptom groups of re-experiencing, avoidance and sense of current threat, as well as disturbances in self-organisation characteristic to CPTSD (DSO) in the three symptom groups of affective dysregulation, negative self-concept, and disturbances in relationships. Items range from 0 ('not at all') to 4 ('extremely').

2.2.2. Patient health questionnaire (PHQ-9; Kroenke et al., 2001, German version: Löwe, 2015)

The PHQ-9 is a nine-item self-report measure to assess symptoms of depression over the last 2 weeks. Items range from 0 ('not at all') to 3 ('nearly every day'). A total score of 10–14 indicates a mild, 15–19 a moderate, and a score of 20 or above a severe depression.

2.2.3. Generalised anxiety disorder (GAD-7; Spitzer et al., 2006; German version: Löwe et al., 2008)

The GAD-7 is a seven-item self-report measure to assess symptoms of generalised anxiety disorder over the last 2 weeks. Items range from 0 ('not at all') to 3 ('nearly every day'). The sum score of the GAD-7 can be used as an indicator of a probable generalised anxiety disorder. A total score of 5–9 indicates mild,

10–14 moderate, and a score of 15 or above severe symptomatology.

2.3. Procedure

Participants who met the inclusion criteria were given access to their own password-protected mailbox on the website [www.ddr-heimerfahung.de]. The writing program consisted of 10 structured writing assignments over a period of 6 weeks. Participants were asked to schedule their writing times of approximately 45 min, twice a week, and send the schedule of the first 3 weeks to their study therapist at the beginning and after their sixth assignment. Participants were assigned to a psychologist at the beginning of the program, who provided written feedback and the new writing assignments after each submitted text. After completion participants were invited to answer the post-treatment questionnaire online. The study was approved by the internal ethics committee of the Medical School Berlin.

2.4. Intervention

The intervention is based on the general principle of critical CBT components for the treatment of PTSD, as well as incorporating the three main phases of imagery rescripting to process and rescript traumatic experiences, as proposed by Schmucker and Köster (2019) (see Table 1). After each completed assignment, i.e. written text, participants received a short, individualised feedback and the instruction for the next assignment. The treatment consisted of the following stages:

Assignments 1–3 focused on participants' childhood prior to their admission into institutional care, the day of arrival in the institution, and a general description of the time spent in the institution. The aim of this phase was to activate emotional processing and childhood memories related to the institutional

Table 1. Treatment modules of the internet-based writing intervention.

No	Module	Therapeutic approach
1	Introduction	Information about the program and scheduling writing appointments
2	Review: Time before institutionalisation	Activate mental and emotional processing by writing about specific early memories, leading to the exposure tasks
3	Review: Arrival in childcare institution	Activate mental and emotional processing by writing about specific early memories, leading to the exposure tasks
4	Review: Life in the children's home	Activate mental and emotional processing by writing about specific early memories, leading to the exposure tasks
5	Self-confrontation with the most difficult event I	Exposure I: writing about the most painful memory
6	Self-confrontation with the most difficult event II	Exposure II: re-description of the most painful moment within the most painful memory (hot spot)
7	Writing a letter to the perpetrator	Imagery Rescripting I: Take control over the traumatic situation from an adult perspective and oust the perpetrator
8	Writing a letter to self as a child	Imagery Rescripting II: Reconciliation between one's 'inner child' and adult self
9	Life review I	Reflecting on the impact of the time in GDR childcare institutions on one's life; developing aims and plans for the future; developing rituals and ways to integrate the past into future life (draft)
10	Life-review II	Reflecting on the impact of the time in GDR childcare institutions on one's life; developing aims and plans for the future; developing rituals and ways to integrate the past into future life (revision and finalisation)

care and the biological family. Assignments 4–5 focused on re-experiencing the most distressing event. With the fourth assignment, participants were invited to write about their most painful experience, either from their time in institutional care or the time before or after. They were asked to write in the present tense, in first person narration, and to describe their emotions and thoughts related to this event. The fifth assignment focused on the ‘hot spot’ of the experience described in the fourth essay.

Assignments 6–7 focused on rescripting the traumatic experience. In Assignment 6, participants were instructed to write a letter to the former perpetrator. In this assignment, the participants were asked to imagine their ‘adult’ self today entering the traumatic interpersonal scene and to help the former ‘child.’

Therapist example:

In this letter, describe how you experienced the situation back then and write to [perpetrator] how you would intervene in this situation today as an adult, or how you would deal with it. Always imagine that you are a grown-up woman/man today, and no longer the little girl/boy from back then. Try to imagine that you could defend yourself against him/her today! How would you defend yourself against him/her, what would you say to him/her or what would you do?

The participants were asked to conclude this letter with a reflection of how they would like to cope with the experienced injustice in the future.

Next, the participants were asked to write a comforting letter (Assignment 7) to the self as a child in the traumatic situation, validating the child’s suffering and meeting the child’s unmet needs (Schmucker & Köster, 2019). In this assignment, an ‘adult-nurturing-child’ imagery (Smucker et al., 1995) was fostered.

Therapist example:

When you think of the ‘little Mary’ at that time, what comforting words would you address to her? What would the ‘little Mary’ have needed during that difficult time?

You went through a lot as a young adolescent at that time, and your boundaries were often not respected. What would you write to the ‘little Mary’ from today’s perspective?

The intervention closed with a letter to the adult self, extending the focus on imagery rescripting (Assignments 8–9). Participants were asked to reflect on their experiences in the child care institution and, if applicable, events connected to it, in relation to their current self. The instruction was to explicitly focus on the past, present and future, guiding participants to express personal strategies on how to cope with the traumatising events and their effects, as well as strategies for self-care and personal visions for their future.

2.5. Statistical analyses

Paired *t*-tests were conducted in order to examine the symptom severity in pre- and in post-treatment. Effect sizes (Cohen’s *d*) were additionally calculated in order to facilitate the interpretation of the magnitude of differences observed between pre- and post-treatment outcomes. A statistical level of $\alpha = 0.05$ (two-tailed) was used.

3. Results

In total, 38 registrations with completed baseline-questionnaires were included in the pilot study. Twenty candidates were excluded from participation on the basis of the predefined exclusion criteria, and 18 were included. Three participants dropped out during the intervention. For this pilot study, data derives from 15 participants who completed the intervention (66.7% female; age: $M = 56.2$, $SD = 9.53$, range: 42.0–72.0) (see Table 2). Participants had been admitted to institutional care at an average age of 7.5 years ($SD = 4.47$, range: 0.0–16.0) and had lived in 1–4 facilities, while staying in the facilities for an average of 7.4 years ($SD = 4.71$, range: 1.0–18.0). A total of 93.3% of the participants had already experienced psychotherapeutic or psychiatric treatment prior to our online intervention. In total, 66.7% of the participants scored above the cut-off score for emotional abuse, 40% for physical abuse, 73.3% for emotional neglect, 80% for physical neglect, 40% for sexual abuse.

Table 3 shows the pre–post mean scores, standard deviations and effect sizes of the ITQ, PHQ, and GAD.

Changes in PTSD and CPTSD symptoms. Paired *t*-tests revealed a significant reduction in PTSD symptoms between the pre- and the post-treatment ITQ PTSD score ($t(14) = 4.91$, $p < .001$), yielding a large

Table 2. Sociodemographic characteristics of sample.

Characteristics	Percentage (%)
Female sex	66.7%
Education	
Primary	66.7%
Secondary	6.7%
Higher	26.6%
Employment	
Full-time employed	33.3%
Disability pensioned	20.0%
Retired	26.7%
Unemployed	6.7%
Other (e.g. part-time)	13.3%
Marital status	
In a relationship	20.0%
Married	46.7%
Divorced	26.7%
Widowed	6.7%
Living situation	
Living alone	33.3%
Living with partner/spouse	66.7%
Past psychotherapeutic help (yes)	93.3%

Table 3. Means, standard deviations, paired *t*-test statistics for mean changes and effect sizes between pre- and post-treatment ($n = 15$).

	Pre-Treatment M (SD)	Post-Treatment M (SD)	<i>t</i>	<i>p</i>	<i>d</i>
ITQ (PTSD)	11.27 (7.68)	4.00 (2.80)	4.91	<.001	1.26
Re	2.47 (2.50)	1.20 (1.52)	3.02	.009	0.78
Av	4.06 (3.26)	1.40 (1.45)	3.80	.002	0.98
Th	4.73 (3.06)	1.40 (1.24)	4.66	<.001	1.20
ITQ DSO (CPTSD)	8.53 (6.21)	3.53 (4.19)	3.75	.002	0.97
AD	3.20 (2.27)	1.40 (1.18)	3.60	.003	0.93
NSC	2.07 (2.31)	0.80 (1.82)	2.24	.042	0.58
DR	3.27 (2.66)	1.33 (2.02)	3.28	.005	0.85
PHQ	8.27 (5.74)	4.00 (2.90)	4.18	.001	1.08
GAD	8.13 (5.38)	3.20 (3.14)	4.68	<.001	1.20

Notes: ITQ = International Trauma Questionnaire; ITQ Re = Re-experiencing in the here and now score; ITQ Av = Avoidance; ITQ Th = Sense of current Threat; ITQ PTSD: Sum of Re, Av and Th Subscales; ITQ AD = Affective Dysregulation; ITQ NSC = Negative Self-Concept; ITQ DR = Disturbances in Relationships; ITQ DSO = Disturbances in Self-Organisation, Sum of AD, NSC and DR subscales; PHQ = Patient Health Questionnaire; GAD = Generalised Anxiety Disorder Questionnaire.

pre-post effect size (Cohen's $d = 1.26$). A significant reduction emerged also for the CPTSD symptoms between pre- and post-treatment ITQ DSO scores ($t(14) = 3.75$, $p = .002$), with a large effect of change (Cohen's $d = 0.97$).

Changes in depressive and anxiety symptoms. Paired *t*-tests showed a significant reduction in depressive symptoms between the pre- and the post-treatment ($t(14) = 4.18$, $p = .001$), yielding large effect sizes (Cohen's $d = 1.08$). Similarly, a significant reduction emerged for anxiety symptoms ($t(14) = 4.68$, $p < .001$), indicating a large pre-post effect size (Cohen's $d = 1.20$).

3.1. Case study

Mrs. A. is a 61-year old married woman who works full-time. Her adult children have already moved out of her household. She reported having previous experience with psychotherapy but stated that so far, her experiences in GDR childcare facilities had not been the focus of the treatment. According to the baseline assessment, Mrs. A. showed an increased symptom burden and impairment (see Table 4).

Mrs. A. reported that she had never met her biological parents and knew very little about them. She had gathered what she knew through her own research which she started later in life. To her knowledge, she was unwanted by her parents as well as her grandparents. This led to her admission into state childcare when she was a few months old. In total, she spent about 12 years in various facilities. From preschool-age onwards she had a foster parent who took her home on weekends and with whom she stayed for longer periods of time when she first entered school. She stated that she could not form an emotional bond with her foster mother and was unable to confide in her about the abuse and neglect she had

Table 4. Pre- and post-treatment measures of Mrs. A.

	Pre-treatment	Post-treatment
ITQ (PTSD)	17	1
Re	4	0
Av	5	0
Th	8	1
ITQ DSO (CPTSD)	8	1
AD	4	1
NSC	0	0
DR	4	0
PHQ	6	4
GAD	16	1

Notes: ITQ = International Trauma Questionnaire; ITQ Re = Re-experiencing in the here and now score; ITQ Av = Avoidance; ITQ Th = Sense of current Threat; ITQ PTSD: Sum of Re, Av and Th Subscales; ITQ AD = Affective Dysregulation; ITQ NSC = Negative Self-Concept; ITQ DR = Disturbances in Relationships; ITQ DSO = Disturbances in Self-Organisation, Sum of AD, NSC and DR subscales; PHQ = Patient Health Questionnaire; GAD = Generalised Anxiety Disorder Questionnaire.

experienced in the institutions. Mrs. A. had experienced multiple and repeated traumatic experiences over an extended period of time. She was subjected to physical and emotional abuse and neglect such as isolation, fixation, beatings, the use of hot and cold water for punishment, or verbal abuse by institutional staff and peers for many years of her life in institutional care. The violence she experienced often came unexpectedly and uncontrollably. She lived in a constant state of loneliness, anxiety, and insecurity. In one of her texts, she stated: 'These years [...] have made a lasting impact on my life. I am distrustful, I have difficulties subordinating. [...] To be in groups of many people is difficult for me ...'.

3.2. Course of treatment

In the first assignment, Mrs. A. was asked to describe her life prior to the institutionalisation and her biological family. It became apparent that she had gathered a lot of information about this life period, and she reconstructed what had happened to her. Mrs. A. focused in her second writing assignment on the first three childcare institutions she had lived in. She referred to her preschool years (ages 3-7) as the worst time of her life. She related this to one specific institution in which she was frequently made to stand in hallways or staircases in the cold and dark for long periods of time, locked out, publicly shamed and punished for enuresis, or being forced to eat, which went as far as being forced to eat vomited food. She described in detail the punishment of standing on a dark staircase with the door locked and sleeping in a 'punishment bed,' isolated from the other children, and her feelings of fear and disgust. In one instance, the director pulled out her hair as punishment. Mrs. A. also depicted how she was lured into an examination room by two childcare workers and fixated and isolated on a bed for five days, with interruptions only to go to the toilet or eat. When she was released, there was no further mention of the event

nor explanation why she had to go through this ‘punishment.’ Her feelings of loneliness and isolation were clearly noticeable: ‘There was nobody, neither among the children, whom I could share my pain with.’ There were no supportive or caring relationships between peers nor warmth or attention from the childcare staff.

For the two subsequent assignments (self-confrontation), Mrs. A. was invited to describe the most distressing experience from the time in the institution. Mrs. A. chose to write about her fixation. She was encouraged to write a narrative in the present tense, to vividly describe the situation, and to include the associated feelings. In these texts, her confusion, anxiety and pain were tangible.

After the imaginal exposure phase was concluded, Mrs. A. was asked to write the ‘letter to the perpetrator’ from an adult perspective. Mrs. A. wrote her letter to the deputy director of one of the institutions she had been placed in as a child. This person had been involved in various situations of abuse, including the fixation. In her letter, Mrs. A. confronted this person with the pain she had caused her. She developed the idea of screaming back at her in one specific situation. She imagined the fear she could cause her, if this deputy director would ever threaten to hurt her again. In her letter, Mrs. A. described other ways of resistance such as fighting back physically or getting support from others to stop her. Her anger and strength were vividly present in her text, also when she confronted the deputy director:

You are a bad person. You are a brutal woman, who knows only violence, directed against those who are unable to defend themselves. You are not a childcare worker. You are a violent unhappy woman who never knew love. Who gave you the right to interfere with little humans’ lives like this? ...

Mrs. A. ended her letter describing how she would deal with the perpetrator in future:

There [in the corner of my memories] is a black hole, I am pouring these memories into it. This is where you’ll stay. You are staying inside and nobody is getting you out. Nobody! Because nobody can hear you. [...] You’ll burst of envy, when I am enjoying my life, when I’m listening to music, or making music. When I sing loudly and frisk cheerfully like a child. You’re unable to imagine, [name of perpetrator]. But I, I am able to, and I’ll show you.

In the letter to her child-self (Assignment 7), Mrs. A. was able to comfort her child-self in many ways. She promised the ‘little girl’ to always be present, to support her in the future, and explained to her that what had happened was not her fault. In one letter, she re-imagined the most distressing event with her adult-self getting in contact with her child-self, playing games with her, telling her stories, comforting her, and keeping her company:

I’ll lay down next to you in bed, we’ll look up at the lamp together, and we’ll try to figure out the color of the cars passing by. [...] And when they’ll come inside to bring you food and take you to the bathroom I’ll hide under the bed ...

In the last two assignments, Mrs. A. was invited to write a letter to her current self, reflecting on the impact that her experiences in the childcare institutions had had on her life and about plans for her future. This aimed to activate resources and personal visions. Mrs. A. wrote a moving, warm letter to herself, encouraging to be herself and to show her feelings, with the image of two parts of her coming together, the past and present, forming a ‘really strong woman.’ She made clear that she was in charge of her memories and warmly appreciated herself for everything she had achieved:

You are your own boss! You’re the one to decide what you want. You can defend yourself when there is something you don’t like. You can say it without fear. You have to say it, so that the fear can’t accumulate within you. Take a moment to think about what you want to say and then say it. Be brave! Stop conforming. You don’t have to please everyone. You’re allowed to be angry, you’re allowed to be sad, you’re allowed to laugh loudly, and to cry. You’re allowed to be yourself entirely ...

After finishing the intervention Mrs. A. showed marked symptom and impairment reduction (see Table 4). While her baseline data indicated a diagnosis of PTSD and GAD, her symptom load at post-treatment was minimal.

In a feedback letter to her study therapist, Mrs. A. reported that the writing had helped her to ‘go deeper’ in processing her traumatic experiences. She described, how, in the process of writing, memories which she had forgotten ‘for centuries’ emerged, and how this had not negatively impacted her. She experienced it as especially helpful that the therapist’s feedback had validated her traumatic experiences.

4. Discussion

This is the first pilot study to examine the efficacy of an internet-based intervention for survivors of institutional childhood abuse. The comparison of pre- and post-intervention assessments showed significant symptom reductions for PTSD, CPTSD, depression and anxiety. A significant symptom reduction for all symptom clusters of PTSD was found, findings comparable to Raabe et al. (2015), who studied a sample of childhood abuse survivors in a face-to-face therapeutic setting. Our results are also in line with studies demonstrating a reduction in symptoms of depression and anxiety (Boterhoven De Haan et al., 2020; Moritz et al., 2018).

As our case study illustrates, the instructions successfully activated and rescripted traumatic memories, which led to a large symptom reduction at post-treatment. As described by Smucker et al. (1995), the 'letter to the perpetrator' elicited images of mastery and control, escalating to a detailed vision of banishing the perpetrator into a 'black hole' in the 'corner of memories.' In the letter to the former self, the participant imagined her adult self present in the traumatic situation, comforting and supporting the child she had been. Texts in phase 1–3 were characterised by vivid descriptions and emotional activation, related to the incident as well as the imagined responses by the 'adult self' confronting the perpetrator and supporting the 'child self.' It was also evident that the participant worked on her current perception and expression of emotions, for example, when she encouraged herself to express anger or sadness, 'be herself entirely,' something that she had had difficulties with. The comforting letter to the former 'child' and the letter to the perpetrator served towards meeting unmet needs of the child. Participants' feelings and thoughts relating to the traumatic experiences were validated and acknowledged (Arntz & Weertman, 1999; Mancini & Mancini, 2018). The participant in the case study explicitly stated that her study therapist's feedback further validated the weight of what had happened to her, something that might be of additional significance as victims of institutional abuse in GDR children's homes often still face prejudice and stigmatisation (Spahn et al., 2020).

Generally, internet-based interventions reach individuals with higher educational levels (Andersson & Titov, 2014). However, our results reveal that our internet-based writing intervention was also feasible for a sample with a low- to medium-socioeconomic status and educational level. Furthermore, our findings suggest that a relatively short internet-based program of 6 weeks could reduce not only symptoms of PTSD but also of CPTSD with comparable effect sizes.

Participant adherence to the intervention showed that the implementation of imagery rescripting in an internet-based setting, was possible and was experienced as helpful. To our knowledge, no other online interventions targeted to the specific experiences of survivors of state childcare in the GDR exist. Existing writing interventions for survivors of childhood abuse are primarily based on expressive writing (Meston et al., 2013). Lange et al. (2003) reported that a proportion of their participants in the *Interapy* intervention named sexual abuse or abuse as trauma; however they did not specify the circumstances or age of the trauma nor did they specify outcomes for these groups.

There are a number of limitations to this pilot study that should be noted. First, the participants were self-

selected, based on media and social media outreach, perhaps leading to selection bias. For example, people with no or little access to these channels of communication, or those with higher levels of avoidance, might not have registered. Additionally, a high percentage of individuals were excluded from study participation due to our exclusion criteria. Finally, there was no control group and the sample size was small. The intervention should be further evaluated in a randomised controlled trial with a comparison group.

5. Conclusion

In conclusion, the results of this study suggest that the internet-based imagery rescripting intervention is a promising treatment form in reducing PTSD, CPTSD, depressive, and anxiety symptoms in survivors of institutional childhood abuse. However, due to the pilot character of our study, the results should be interpreted with caution.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Data availability statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request. The data are not publicly available because they contain information that can compromise the privacy of the study participants.

References

- AGJ, Arbeitsgemeinschaft für Kinder- und Jugendhilfe. (2012). *Aufarbeitung der Heimerziehung in der DDR*. Berlin. Retrieved from: https://www.fonds-heimerziehung.de/fileadmin/de.fonds-heimerziehung/content/de/dokumente/RTH_Abschlussbericht.pdf.
- Andersson, G., & Titov, N. (2014). Advantages and limitations of Internet-based interventions for common mental disorders. *World Psychiatry*, 13(1), 4–11. <https://doi.org/10.1002/wps.20083>
- Arnoldi, J., Van de Ven, J., Schrieken, B., & Lange, A. (2000). *De Risico Taxatielijst-eigenschappen van een kort screeningsinstrument* [Suicide Risk Assessment-a short screening tool]. Unpublished manuscript, University of Amsterdam.
- Arntz, A., Tiesema, M., & Kindt, M. (2007). Treatment of PTSD: A comparison of imaginal exposure with and without imagery rescripting. *Journal of Behavior Therapy and Experimental Psychiatry*, 38(4), 345–370. <https://doi.org/10.1016/j.jbtep.2007.10.006>
- Arntz, A., & Weertman, A. (1999). Treatment of childhood memories: Theory and practice. *Behaviour Research and*

- Therapy*, 37(8), 715–740. [https://doi.org/10.1016/S0005-7967\(98\)00173-9](https://doi.org/10.1016/S0005-7967(98)00173-9)
- Arp, A. (2017). Annäherung an die Gewalterfahrungen ehemaliger Heimkinder aus DDR-Spezialheimen: Eine oral history-Untersuchung. *BIOS – Zeitschrift für Biographieforschung, Oral History und Lebensverlaufsanalysen*, 30(1), 235–258. <https://doi.org/10.3224/bios.v30i1-2.15>
- Blakemore, T., Herbert, J. L., Arney, F., & Parkinson, S. (2017). The impacts of institutional child sexual abuse: A rapid review of the evidence. *Child Abuse & Neglect*, 74, 35–48. <https://doi.org/10.1016/j.chiabu.2017.08.006>
- Boterhoven De Haan, K. L., Lee C. W., Fassbinder, E., van Es, S., Menninga, S., Meewisse, M. L., Rijkeboer, M., Kousemaker, M., & Arntz, A. (2020). Imagery rescripting and eye movement desensitisation and reprocessing as treatment for adults with post-traumatic stress disorder from childhood trauma: Randomised clinical trial. *The British Journal of Psychiatry*, 217 (5), 609–15. <https://doi.org/10.1192/bjp.2020.158>
- Carr, A., Dooley, B., Fitzpatrick, M., Flanagan, E., Flanagan-Howard, R., Tierney, K., White, M., Daly, M., & Egan, J. (2010). Adult adjustment of survivors of institutional child abuse in Ireland. *Child Abuse & Neglect*, 34(7), 477–489. <https://doi.org/10.1016/j.chiabu.2009.11.003>
- Carr, A., Duff, H., & Craddock, F. (2018). A systematic review of the outcome of child abuse in long-term care. *Trauma, Violence, & Abuse*, 21(4), 660–677. <https://doi.org/10.1177/1524838018789154>
- Cloitre, M., Shevlin, M., Brewin, C. R., Bisson, J. I., Roberts, N. P., Maercker, A., Karatzias T., Hyland, P. (2018). The international trauma questionnaire: Development of a self-report measure of ICD-11 PTSD and complex PTSD. *Acta Psychiatrica Scandinavica*, 138(6), 536–546. <https://doi.org/10.1111/acps.12956>
- Dreier, A., & Laudien, K. (2012). *Einführung: Heimerziehung der DDR*. (9783933255402). Schwerin: Landesbeauftragte für Mecklenburg-Vorpommern für die Unterlagen des Staatssicherheitsdienstes der ehemaligen Deutschen Demokratischen Republik.
- Dreier-Hornig, A. (2016). *Streckenläufer. "Erziehung zur und durch Arbeit" in den Jugendwerkhöfen der ehemaligen Nordbezirke der DDR: Mecklenburg-Vorpommern/ Der Landesbeauftragte für die Unterlagen des Staatssicherheitsdienstes der Ehemaligen Deutschen Demokratischen Republik*.
- Gfesser, T., Rechenberg, T., Glaesmer, H., & Schomerus, G. (2021). [Stigma as a barrier to treatment for former residents of GDR children's homes - A qualitative study with members of the "Betroffeneninitiative Missbrauch in DDR-Kinderheimen"]. *Psychiatrische Praxis*, 48(5), 244–249. <https://doi.org/10.1055/a-1328-0060>
- Hailes, H. P., Yu, R., Danese, A., & Fazel, S. (2019). Long-term outcomes of childhood sexual abuse: An umbrella review. *The Lancet Psychiatry*, 6(10), 830–839. [https://doi.org/10.1016/S2215-0366\(19\)30286-X](https://doi.org/10.1016/S2215-0366(19)30286-X)
- Holmes, E. A., Grey, N., & Young, K. A. (2005). Intrusive images and "hotspots" of trauma memories in posttraumatic stress disorder: An exploratory investigation of emotions and cognitive themes. *Journal of Behavior Therapy and Experimental Psychiatry*, 36(1), 3–17. <https://doi.org/10.1016/j.jbtep.2004.11.002>
- Jaffee, S. R. (2017). Child maltreatment and risk for psychopathology in childhood and adulthood. *Annual Review of Clinical Psychology*, 13(1), 525–551. <https://doi.org/10.1146/annurev-clinpsy-032816-045005>
- Jenaer Zentrum für Empirische Sozial- und Kulturforschung. (2012). *Zur sozialen Lage ehemaliger DDR-Heimkinder in Thüringen: Forschungsbericht im Auftrag des Thüringer Ministeriums für Soziales, Familie und Gesundheit*. (978-3-934761-93-3).
- Knaevelsrud, C. (2005). *Efficacy of an Internet-driven Therapy (Interapy) for Posttraumatic Stress and the Online Therapeutic Alliance*. Unpublished doctoral dissertation, Zürich.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Lange, A., Rietdijk, D., Hudcovicova, M., Van De Ven, J.-P., Schrieken, B., & Emmelkamp, P. M. (2003). Interapy: A controlled randomized trial of the standardized treatment of posttraumatic stress through the internet. *Journal of Consulting and Clinical Psychology*, 71(5), 901–909. <https://doi.org/10.1037/0022-006X.71.5.901>
- Lewis, C., Roberts, N., Simon, N., Bethell, A., & Bisson, J. (2019). Internet-delivered cognitive behavioural therapy for post-traumatic stress disorder: Systematic review and meta-analysis. *Acta Psychiatrica Scandinavica*, 140 (6), 508–521. <https://doi.org/10.1111/acps.13079>
- Löwe, B. (2015). *Gesundheitsfragebogen für Patienten (PHQ-9)*. <https://www.uke.de/dateien/institute/institut-und-poliklinik-fc3BCr-psychosomatische-medizin-und-psychotherapie/downloads/phq-9.pdf> [02.07.2020]
- Löwe, B., Decker, O., Müller, S., Brähler, E., Schellberg, D., Herzog, W., & Herzberg, P. Y. (2008). Validation and standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the general population. *Medical Care*, 46(3), 266–274. <https://doi.org/10.1097/MLR.0b013e318160d093>
- Löwe, B., Spitzer, R. L., Zipfel, S., & Herzog, W. (2002). *PHQ-D: Gesundheitsfragebogen für Patienten; Manual Komplettversion und Kurzform*. Pfizer GmbH.
- Lueger-Schuster, B., Knefel, M., & Maercker, A. (2015/2018). *Der Internationale Trauma Questionnaire–Deutsche Version [International Trauma Questionnaire–German version]*. <https://www.psychologie.uzh.ch/dam/jcr:ad66be44-4cd9-44c3-9911-488253de04cc/> [02.07.2020]
- Lueger-Schuster, B., Knefel, M., Glück, T. M., Jagsch, R., Kantor, V., & Weindl, D. (2018). Child abuse and neglect in institutional settings, cumulative lifetime traumatization, and psychopathological long-term correlates in adult survivors: The Vienna Institutional Abuse Study. *Child Abuse & Neglect*, 76, 488–501. <https://doi.org/10.1016/j.chiabu.2017.12.009>
- Mancini, A., & Mancini, F. (2018). Rescripting memory, redefining the self: A meta-emotional perspective on the hypothesized mechanism (s) of imagery rescripting. *Frontiers in Psychology*, 9, 581. <https://doi.org/10.3389/fpsyg.2018.00581>
- McLean, C. P., Levy, H. C., Miller, M. L., & Tolin, D. F. (2022). Exposure therapy for PTSD: A meta-analysis. *Clinical Psychology Review*, 91, 102115. <https://doi.org/10.1016/j.cpr.2021.102115>
- Meston, C. M., Lorenz, T. A., & Stephenson, K. R. (2013). Effects of expressive writing on sexual dysfunction, depression, and PTSD in women with a history of childhood sexual abuse: Results from a randomized clinical trial. *The Journal of Sexual Medicine*, 10(9), 2177–2189. <https://doi.org/10.1111/jsm.12247>
- Mitzscherlich, B., Ahbe, T., Diederich, U., Wustmann, C., & Eisewicht, P. (2019). *Sexueller Kindesmissbrauch in Institutionen und Familien der DDR: Fallstudie zu den Anhörungen und Dokumenten der Aufarbeitungskommission*.

- Morina, N., Lancee, J., & Arntz, A. (2017). Imagery rescripting as a clinical intervention for aversive memories: A meta-analysis. *Journal of Behavior Therapy and Experimental Psychiatry*, 55, 6–15. <https://doi.org/10.1016/j.jbtep.2016.11.003>
- Moritz, S., Ahlf-Schumacher, J., Hottenrott, B., Peter, U., Franck, S., Schnell, T., Schneider, B. C., & Jelinek, L. (2018). We cannot change the past, but we can change its meaning. A randomized controlled trial on the effects of self-help imagery rescripting on depression. *Behaviour Research and Therapy*, 104, 74–83. <https://doi.org/10.1016/j.brat.2018.02.007>
- Raabe, S., Ehring, T., Marquenie, L., Olf, M., & Kindt, M. (2015). Imagery rescripting as stand-alone treatment for posttraumatic stress disorder related to childhood abuse. *Journal of Behavior Therapy and Experimental Psychiatry*, 48, 170–176. <https://doi.org/10.1016/j.jbtep.2015.03.013>
- Rauch, S. A., Eftekhari, A., & Ruzek, J. I. (2012). Review of exposure therapy: A gold standard for PTSD treatment. *Journal of Rehabilitation Research and Development*, 49(5), 679–688. <https://doi.org/10.1682/jrrd.2011.08.0152>
- Rijkeboer, M. M., Daemen, J. J., Flipse, A., Bouwman, V., & Hagenaars, M. A. (2020). Rescripting experimental trauma: Effects of imagery and writing as a way to reduce the development of intrusive memories. *Journal of Behavior Therapy and Experimental Psychiatry*, 67, 101478. <https://doi.org/10.1016/j.jbtep.2019.04.004>
- Sachse, C., Knorr, S., & Baumgart, B. (2018). *Sexueller Missbrauch in der DDR: Historische, rechtliche und psychologische Hintergründe des sexuellen Missbrauchs an Kindern und Jugendlichen in der DDR*. VS Verlag für Sozialwissenschaften.
- Sack, M., & Ebbinghaus, R. (2012). Was hilft ehemaligen Heimkindern der DDR bei der Bewältigung ihrer komplexen Traumatisierung? In Beauftragter der Bundesregierung für die Neuen Bundesländer (Ed.), *Aufarbeitung der Heimerziehung in der DDR – Expertisen* (pp. 299–397). Berlin: Arbeitsgemeinschaft für Kinder- und Jugendhilfe.
- Schmucker, M., & Köster, R. (2019). ?? ... und wie reagiert das KIND? *Diagnostik und Heilung durch Innere-Kind-Arbeit in der IRRT (Imagery Rescripting & Reprocessing Therapy)*. Klett-Cotta.
- Sijbrandij, M., Kunovski, I., & Cuijpers, P. (2016). Effectiveness of internet-delivered cognitive behavioral therapy for posttraumatic stress disorder: A systematic review and meta-analysis. *Depression and Anxiety*, 33(9), 783–791. <https://doi.org/10.1002/da.22533>
- Sloan, D. M., Marx, B. P., Lee, D. J., & Resick, P. A. (2018). A brief exposure-based treatment vs cognitive processing therapy for posttraumatic stress disorder: A randomized noninferiority clinical trial. *JAMA Psychiatry*, 75(3), 233–239. <https://doi.org/10.1001/jamapsychiatry.2017.4249>
- Smucker, M. R., Dancu, C., Foa, E. B., & Niederee, J. L. (1995). Imagery rescripting: A new treatment for survivors of childhood sexual abuse suffering from posttraumatic stress. *Journal of Cognitive Psychotherapy*, 9(1), 3–17. <https://doi.org/10.1891/0889-8391.9.1.3>
- Spahn, C., Reuter, L., Wagner, B., & Glaesmer, H. (2020). Langzeitfolgen der Heimunterbringung in der DDR. *Psychotherapeutenjournal*, 3, 213–221.
- Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine*, 166(10), 1092–1097. <https://doi.org/10.1001/archinte.166.10.1092>
- Steuibl, L., Sachser, C., Baumeister, H., & Domhardt, M. (2021). Mechanisms of change in Internet-and mobile-based interventions for PTSD: A systematic review and meta-analysis. *European Journal of Psychotraumatology*, 12(1), 1879551. <https://doi.org/10.1080/20008198.2021.1879551>
- Walker, E. A., Gelfand, A., Katon, W. J., Koss, M. P., Von Korff, M., Bernstein, D., & Russo, J. (1999). Adult health status of women with histories of childhood abuse and neglect. *The American Journal of Medicine*, 107(4), 332–339. [https://doi.org/10.1016/s0002-9343\(99\)00235-1](https://doi.org/10.1016/s0002-9343(99)00235-1)
- Wingenfeld, K., Spitzer, C., Mensebach, C., Grabe, H. J., Hill, A., Gast, U., Schlosser, N., Höpp, H., Beblo, T., & Driessen, M. (2010). [The German version of the Childhood Trauma Questionnaire (CTQ): preliminary psychometric properties]. *Psychotherapie, Psychosomatik, Medizinische Psychologie*, 60(11), 442–450. <https://doi.org/10.1055/s-0030-1247564>
- Wittchen, H.-U., Zaudig, M., & Fydrich, T. (1997). *Skid. Strukturiertes klinisches Interview für DSM-IV. Achse I und II. Handanweisung*. Hogrefe.