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# The burden of childhood trauma among migrants in psychotherapy treatment in Germany

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#### ABSTRACT

Background: While there is empirical evidence that migrants often have traumatic experiences before, during and after migration, little is known to date about the extent to which they were affected by childhood trauma in their country of origin.

*Objective:* The aim of this study was to investigate experiences of abuse and neglect in the childhood of adult migrants undergoing psychotherapy in Germany.

Participants and setting: A total of 106 patients undergoing day clinic treatment at a psychosomatic clinic participated in the study. Half of them had their own migration experience, while the other half, serving as a comparison group, consisted of German patients.

*Methods*: The severity of trauma symptoms, depression, anxiety, and somatic symptoms was assessed using scales for self-report and for rating by the patients' therapists. The self-report scales were presented in several languages. Evidence of trauma was retrospectively assessed by the therapists using checklists for traumatic experiences in both adulthood and childhood.

Results: The migrant group scored higher on all psychopathology scales and showed more frequent evidence of lifetime trauma than the comparison group. Regarding childhood trauma, emotional abuse and neglect were prevalent in both groups, while physical abuse and neglect, as well as sexual abuse, were more common in the migrant group. Logistic regressions showed that membership in the migrant group was the strongest predictor of physical abuse and neglect, while sexual abuse was more strongly associated with sociodemographic factors.

*Conclusions:* In psychotherapy for patients with a migration background, all subtypes of childhood trauma should be considered.

#### 1. Introduction

People who decide to emigrate from their home country are often exposed to stressful or even traumatic life events before, during and after migration. In a survey of adult refugees in Germany, 87 % stated that they had been threatened by war, political persecution or forced recruitment in their home country and fled as a result. Moreover, 56 % reported experiencing adverse events such as shipwreck, violence, sexual abuse, and arbitrary detention during their flight (Brücker et al., 2019). A study of adolescent refugees arriving in various European countries found that many reported adverse experiences before and during their flight, particularly experiencing and witnessing physical violence, detention or imprisonment, war or armed military conflict, and drastic changes in the

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#### family (Pfeiffer et al., 2022).

In addition to these adverse life events, usually referred to as pre-migration stress, migrants also experience post-migration stress in their host countries. Li et al. (2016) summarize that they often encounter sociodemographic and interpersonal stressors (e.g. financial difficulties, separation from family, social discrimination) as well as challenges in the asylum process (e.g. uncertain residence status). Similarly, adolescent refugees in three European countries were found to face not only material but also social stressors, such as language barriers and difficulties in making new friends (Behrendt et al., 2022).

Pre- and post-migration stress is associated with poor mental health. Meta-analyses and reviews of studies conducted worldwide have shown that mental disorders are prevalent among refugees and asylum seekers, particularly posttraumatic-stress disorder (PTSD), depression, and anxiety disorders (Blackmore et al., 2020; Morina et al., 2018). This finding also applies to the subgroup of refugee minors (Daniel-Calveras et al., 2022; El Baba & Colucci, 2018). A meta-analysis of studies conducted in Germany focusing on PTSD and depression reported prevalence rates of 29.9 % and 39.8 %, respectively, among refugees and asylum seekers (Hoell et al., 2021). It is therefore well documented that refugees and asylum seekers often suffer from mental disorders, which also applies to refugees in Germany, who make up a substantial proportion of the migrant population in the country. At the end of 2023, 13.9 million people with foreign citizenship lived in Germany, of whom 3.2 million were refugees and asylum seekers (Statistisches Bundesamt, 2024).

While there is empirical evidence linking traumatic and stressful experiences shortly before, during, and after migration to poor mental health, the role of childhood trauma in this context has received less attention in research on migration. It is well documented that adverse childhood experiences are associated with an increased risk of mental disorders in later life (Kessler et al., 2010). This association has also been established in studies distinguishing between five subtypes of childhood trauma, as measured by the Childhood Trauma Questionnaire (CTQ), a validated and widely used measure: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect (Bernstein et al., 2003). Carr et al. (2013) found these subtypes to be associated with several psychiatric disorders, including depression, anxiety disorders, personality disorders, and schizophrenia. This finding has been further confirmed in studies specifically examining depression (Nelson et al., 2017; Neumann, 2017) and PTSD (Messman-Moore & Bhuptani, 2017).

In light of these findings, the question arises as to whether childhood trauma contributes to the poor mental health of individuals with migration experience. Regarding the traumatization of refugee children, Jud et al. (2020) note that studies on this topic reported highly variable prevalence rates, particularly for physical and sexual abuse, so that the findings are not clear overall. However, it was evident that the violence was most often perpetrated by the children's parents.

To date, relatively few studies have retrospectively examined the prevalence and severity of childhood trauma in adult migrants. Klein et al. (2020) addressed a similar research question, investigating retrospective reports by adult migrants on the quality of parental care during their childhood. Compared to participants without a migration background, the migrants recalled more rejection by their mother and more control by both parents, but also more emotional warmth from their father. These findings are therefore inconclusive, as the first two results suggest poorer parental care quality, while the third suggests better quality. It should be noted that the questionnaires were administered in German, so that only migrants with a good knowledge of this language were able to participate.

A qualitative study conducted in Norway, in which 70 adolescent refugees participated, found that half of them (34) had experienced physical abuse within in their family of origin or at school, with the fathers being the perpetrators in many cases (Bjørgo & Jensen, 2015). The study thus revealed a high prevalence of childhood physical abuse in a sample of refugees.

#### 1.1. Purpose of the present study

Overall, there are so far only a few findings on the burden of childhood trauma among adult migrants. The first aim of the present study was to examine whether previous findings could be confirmed, namely that migrants exhibit poor mental health and a high burden of trauma experienced in adulthood. The second and primary aim was to provide empirical evidence for the hypothesis that childhood trauma is more prevalent among migrants compared to individuals without a migration background. To test these assumptions, mental health and evidence of trauma were examined in two samples from a psychosomatic clinic: one consisting of patients with migration experience and the other, serving as a comparison group, of patients without a migration background. This research design allows for the assessment of mental health status and trauma-related burden among migrants diagnosed with a mental illness and undergoing psychotherapeutic treatment.

#### 2. Method

#### 2.1. Participants and setting

The study was conducted in the Department of Psychosomatic Medicine and Psychotherapy at Heinrich Heine University Düsseldorf. This facility has two day clinics for patients with mental illness: a transcultural day clinic for migrants and a general day clinic for patients who are biographically German or have lived in Germany for most of their lives. The assignment of patients to either the general or transcultural day clinic depends on their proficiency in the German language and their level of integration into German society. In both day clinics, treatment is based on the psychodynamic approach. The central elements are individual psychotherapy, group psychotherapy, and special therapies that include non-verbal interventions (body, art, and music therapy). The regular treatment duration is 12 weeks. Patients receive two individual sessions per week, totaling 24 sessions over the entire treatment period.

The transcultural day clinic was established in 2020 in addition to the general day clinic, as mentally ill migrants could often not be

adequately treated in the existing psychotherapeutic facilities, primarily due to insufficient German language skills. This new therapeutic offering thus closed a gap in care. In the transcultural day clinic, simultaneous interpreters are involved in therapy sessions if required. Beside this multilingual approach, the therapy is culturally sensitive, taking cultural particularities into account. The focus of therapy is often on traumatization, which is very common in this patient group (Joksimovic et al., 2015, 2019).

Patients from these day clinics who were admitted between May 2021 and June 2023 were screened to determine whether they met the inclusion criteria, which were as follows: Participants should be between 18 and 65 years of age, meet the criteria for a mental disorder of moderate severity, and have given their informed consent. The patients in the migrant sample should be first-generation migrants, i.e. they had their own migration experience, as they immigrated to Germany themselves and not their parents or

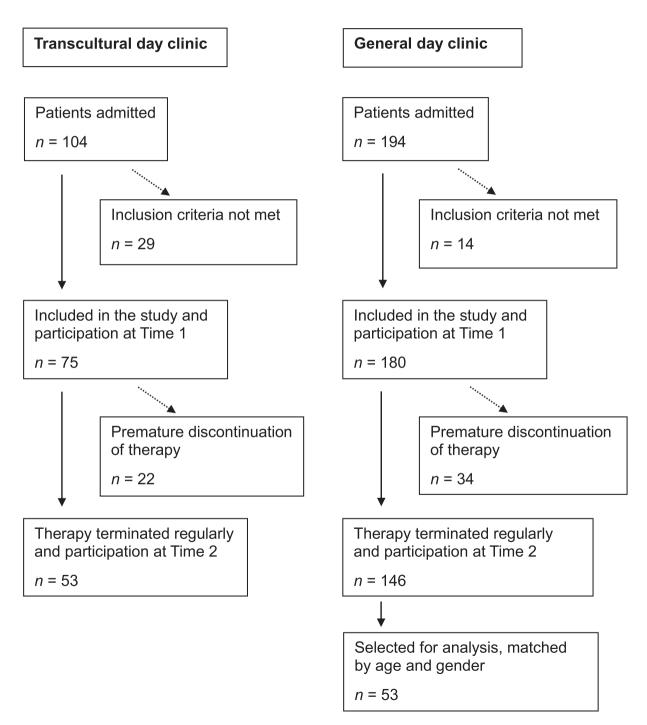


Fig. 1. Participant flowchart.

grandparents. For patients of the general day clinic, the country of birth should be Germany. Exclusion criteria were severe mental illness requiring inpatient treatment (e.g. schizophrenia, substance dependence, acute suicidal tendencies), moderate to severe intellectual disability, illiteracy, and no knowledge of one of the languages in which the self-report scales were administered.

Fig. 1 shows the participant flowchart. The difference in the number of patients admitted to the transcultural and general day clinic is due to the fact that the latter has more treatment places. Accordingly, more patients from the general day clinic completed the therapy. The higher dropout rate in the transcultural day clinic compared to the general day clinic also played a role here (29.3 % versus 18.9 %). In this study, the data of patients who provided complete data sets at both measurement times were analyzed. This applied to 53 patients of the transcultural day clinic and 146 patients of the general day clinic. To obtain equal group sizes, the data from 53 of the 146 patients from the general day clinic who matched the patients from the transcultural day clinic in terms of age and gender were selected for the analysis.

According to the matching criteria, the mean age was almost the same in the two samples (transcultural day clinic: M = 37.83, SD = 11.90, range 18-62 years, general day clinic: M = 38.68, SD = 10.55, range 18-62 years). The gender distribution showed an exact match and, moreover, equal proportions for women and men (Table 1). Further demographic and clinical data, which are also listed in Table 1, reveal differences between the two groups. In the migrant sample, the number of patients who had no school-leaving qualification and were unpartnered was significantly higher. The diagnostic assessments also differed: PTSD was more frequently assigned as the main diagnosis in the migrant sample.

The countries of origin of the migrant patients were in the following regions: Western Asia n = 18 (34.0 %), Eastern Europe n = 10 (18.9 %), West Africa n = 8 (15.1 %), Central Asia 6 (11.3 %), other regions n = 11 (20.7 %). These patients had been living in Germany for a median of 6 years (M = 9.45, SD = 10.69, range 0–42 years). According to the inclusion criteria for the group from the general day clinic, these patients were all born in Germany (n = 53, 100 %).

The residence status of the migrant patients was as follows: no residence permit n = 4 (7.5 %), tolerated stay, suspension of deportation n = 15 (28.3 %), temporary residence permit n = 17 (32.1 %), permanent residence permit n = 10 (18.9 %), German citizenship n = 7 (13.2 %). The first three categories, which represent an uncertain residence status, account for a total of 36 patients (67.9 %). A total of 17 patients (32.1 %) fell into the last two categories and therefore had a secure residence status.

#### 2.2. Measures

#### 2.2.1. Self-report scales

Many of the patients of the transcultural day clinic had little or no knowledge of German. Therefore, the self-report scales used in this study should be available in several languages. The majority of patients spoke one of the following languages: English, German, French, Spanish, Serbian, Croatian, Romanian, Russian, Turkish, Arabic and Farsi. The search for self-report scales that measure trauma symptoms, depression, anxiety, and somatic complaints and are available in these languages led us to two instruments: the

Table 1
Sociodemographic and clinical data.

	Transcultural day clinic		General day	clinic
	n	%	n	%
Gender				
Women	27	50.9 %	27	50.9 %
Men	26	49.1 %	26	49.1 %
Relationship status				
Single	20	37.7 %	7	13.2 %
Unmarried in a romantic relationship	4	7.6 %	18	33.9 %
Married	11	20.8 %	20	37.7 %
Separated/divorced/widowed	18	33.9 %	8	15.1 %
Children				
No children	25	47.2 %	34	64.2 %
1 child or more	28	52.8 %	19	35.8 %
Education				
No school-leaving certificate/elementary school only	22	41.5 %	1	1.9 %
Graduation from secondary school	16	30.2 %	15	28.3 %
University entrance qualification	7	13.2 %	15	28.3 %
University degree	8	15.1 %	22	41.5 %
Main diagnosis				
Depression	38	71.7 %	46	86.8 %
Posttraumatic stress disorder	12	22.6 %	2	3.8 %
Somatoform disorder	3	5.7 %	3	5.7 %
Other	0		2	3.8 %

PTSD Checklist for DSM-5 (PCL-5) and the Patient Health Questionnaire (PHQ). Therefore, the PCL-5 and three modules derived from the PHQ were used in this study, with respondents given the opportunity to choose the language in which they wanted to answer the questionnaires. They completed the questionnaires at the beginning of the therapy in the day clinic (Time 1).

- 2.2.1.1. PTSD Checklist for DSM-5 (PCL-5). The PCL-5 is a 20-item self-report scale for assessing trauma symptoms (Weathers, Litz, et al., 2013). Each item reflects one of the 20 PTSD symptoms according to the DSM-5 (e.g. "Repeated, disturbing, and unwanted memories of the stressful experience"). Respondents are asked to rate on a 5-point Likert scale from 0 (not at all) to 4 (extremely) how bothered they felt by the symptoms in the past month.
- 2.2.1.2. Patient Health Questionnaire Depressive Symptom Severity Scale (PHQ-9). The PHQ-9 is a module from the Patient Health Questionnaire (Kroenke et al., 2001). The nine items (e.g. "Feeling down, depressed, or hopeless") describe the diagnostic criteria of a major depressive disorder. Respondents are asked to rate the frequency of these symptoms in the last two weeks on a 4-point Likert scale from 0 (not at all) to 3 (nearly every day).
- 2.2.1.3. Generalized Anxiety Disorder 7-Item Scale (GAD-7). The GAD-7 is another module derived from the Patient Health Questionnaire (Spitzer et al., 2006). The seven items (e.g. "Feeling nervous, anxious or on edge") describe the criteria of a generalized anxiety disorder and have the same answer format as the PHQ-9.
- 2.2.1.4. Patient Health Questionnaire Somatic Symptom Severity Scale (PHQ-15). The third module derived from the Patient Health Questionnaire, the PHQ-15, is used to assess the severity of somatic symptoms in the last 4 weeks (Kroenke et al., 2002). The 15 items describe somatic symptoms (e.g. "Back pain") and are rated on a 3-point Likert scale from 0 (not bothering at all) to 2 (bothering a lot).

#### 2.2.2. Therapist rating scales

Depression and anxiety should also be assessed by experts, in this study the patients' individual therapists in the day clinic. For this purpose, the therapists also completed two questionnaires at the beginning of the therapy (Time 1), which were presented in German, as no other language versions were required for them.

- 2.2.2.1. Hamilton Depression Scale (HAM-D). The HAM-D is an expert rating scale for assessing the severity of depression (Hamilton, 1959). The 17 items of this instrument describe psychological and physical symptoms of depression (e.g. "Depressed mood", "Loss of weight"). The expert is asked to rate the extent to which these symptoms have occurred in the patient in the last week, using scales from 0 to 4 or 0 to 2, the points of which are labeled differently.
- 2.2.2.2. Hamilton Anxiety Scale (HAM-A). Similar to the HAM-D, the HAM-A measures anxiety taking into account psychological and physical symptoms (Hamilton, 1960). For the assessment of the severity of symptoms in the last week, 14 items are available (e.g. "Anxious mood", "Cardiovascular symptoms"), which are answered by the experts on a 5-point Likert scale from 0 (not present) to 4 (very severe).

#### 2.2.3. Trauma checklists for therapist assessment

The most established scale for assessing childhood trauma is the Childhood Trauma Questionnaire (CTQ, Bernstein et al., 2003). Unfortunately, there are no versions of this scale in some of the languages spoken by many of the patients of the transcultural day clinic. It would have been methodologically questionable to simply translate the CTQ or any other childhood trauma questionnaire into the languages relevant to this study and use these translated versions without prior determination of their reliability and validity. We therefore decided not to use such a self-report questionnaire but to have experts assess whether there were any indications of childhood trauma in the patients. These experts were the therapists, all of them medical or psychological psychotherapists, who conducted the individual psychotherapy sessions with the respective patients. To apply the same methodology to the assessment of lifetime trauma, we also asked these therapists to assess whether there were indications of trauma in later life. Since traumas suffered can be a difficult topic for patients, so that they often only report them as the therapy progresses, we had the therapists carry out these assessments at the end of the therapy (Time 2).

- 2.2.3.1. Checklist for Lifetime Trauma (CLT). The assessment of lifetime trauma followed the Life Events Checklist for DSM-5 (LEC-5, Weathers, Blake, et al., 2013). This measure lists 16 events that are risk factors for the development of PTSD (e.g. natural disaster, assault with a weapon). A final item serves to assess events that are not included in the list. For each of these events, therapists were asked to assess whether there was evidence in therapy that the patient had experienced it by choosing one of three responses: no indications, a few indications, or clear indications.
- 2.2.3.2. Checklist for Childhood Trauma (CCT). Trauma suffered in childhood was measured analogously to the five subscales of the CTQ (emotional, physical and sexual abuse and emotional and physical neglect). Using the same three response options as for lifetime trauma, the therapists rated the evidence for each subtype of childhood trauma. Because many of the migrant patients came from families with a low sociodemographic status, the subscale "physical neglect" was provided with the note that this trauma should not be assessed as present if the parents themselves did not have sufficient access to resources such as food, clothing and medical care. The

CCT is shown in Fig. 2.

#### 2.3. Statistical analysis

For the self-report and therapist rating scales, Cronbach's alpha was determined as the value for internal consistency. Means and standard deviations were also calculated. Differences between the patients of the two day clinics were tested using *t*-tests, and the effect size was determined by calculating Cohen's *d*.

For the two trauma checklists, it was found that the therapists very rarely selected the response option "a few indications". We therefore decided to combine the two response options "a few indications" and "clear indications" into a new, overarching category: "indications". As a result, the subsequent analysis was based on the distinction between "no indications" and "indications", rather than on the original three options.

The frequencies of these two categories were reported for all traumas recorded by the two checklists. For lifetime trauma, only these descriptive data were reported, since the requirements for chi-squared tests were not met in many cases (cells with a patient number

#### Checkliste für Kindheitstraumata

Checklist for Childhood Trauma (CCT)

Instruktion: Im Folgenden finden Sie eine Liste von traumatischen Erlebnissen in der Kindheit und Jugend (bis zum Alter von 18 Jahren). Bitte beurteilen Sie für jedes Erlebnis, inwieweit sich in der Therapie Hinweise darauf ergeben haben, dass die Patientin/der Patient ihm ausgesetzt war.

Instruction: Below you will find a list of traumatic experiences in childhood and adolescence (up to the age of 18). For each experience, please assess the extent to which there were indications during therapy that the patient was exposed to it.

	Keine Hinweise	Einige wenige Hinweise	Deutliche Hinweise
	No indications	A few indications	Clear indications
Emotionaler Missbrauch z.B. Abwertung, Beleidigung durch Bezugspersonen, starker Leistungsdruck, Rollenumkehr, d.h. Kind/Jugendlicher musste sich um die Eltern oder Geschwister kümmern  Emotional abuse e.g. devaluation, insults from caregivers, intense performance pressure, role reversal, meaning the child/adolescent had to take care of parents or siblings			
Körperlicher Missbrauch z.B. Schlagen, Einsperren  Physical abuse e.g. beating, locking up			
Sexueller Missbrauch Sexuelle Handlungen am und mit dem Kind/Jugendlichen durch eine ältere Person  Sexual abuse Sexual acts on and with the child/adolescent by an older person			
Emotionale Vernachlässigung Bezugspersonen, die gegenüber dem Kind unaufmerksam oder gleichgültig oder stark mit eigenen Angelegenheiten beschäftigt waren  Emotional neglect Caregivers who were inattentive or indifferent to the child or preoccupied with their own affairs			
Körperliche Vernachlässigung Keine angemessene Versorgung mit Nahrung, Kleidung, medizinischer Behandlung u.ä. Physical neglect No adequate provision of food, clothing, medical treatment, etc.			

Note. The checklist was presented in German in this study. For international readers, English

translations are shown here in italics.

Fig. 2. Checklist for Childhood Trauma (CCT).

below 5 or even 0). For childhood trauma, differences between the patients of the two day clinics were tested using chi-squared tests. Cramer's *V* was determined as a measure of effect size.

Finally, binomial logistic regression analyses were conducted for all five trauma subtypes to examine whether group membership (transcultural day clinic patient vs. comparison group) predicted the presence of indications for each trauma subtype. Sociodemographic variables (age, gender, educational level, and relationship status) were included as control variables. Trauma subtypes were coded as 0 (no indications) and 1 (indications). To ensure consistency in measurement levels across all variables included in the model, non-dichotomous predictors (age, educational level, and relationship status) were dichotomized. The categories were defined as follows: older age (above the median of 39 years) vs. younger age (below the median); higher educational level (secondary school graduation or higher graduation) vs. low educational level (no school-leaving certificate/elementary school only); and partnered (unmarried in a romantic relationship or married) vs. unpartnered (single, separated, divorced, or widowed). Categories assumed to be associated with a higher risk of childhood trauma - namely, younger age, female gender, low educational level, unpartnered status, and patient status in the transcultural day clinic - were coded as 1, with the respective reference categories coded as 0.

All analyses were performed using SPSS 28.

#### 3. Results

#### 3.1. Severity of trauma symptoms, depression, anxiety, and somatic symptoms

The scales used in this study demonstrated acceptable to excellent internal consistency, as indicated by Cronbach's alpha (Table 2). This finding applied not only to the therapist rating scales, which were presented uniformly in German, but also to the self-report scales administered in multiple languages.

Table 2 also shows that the patient group from the transcultural day clinic scored higher on all scales than the group from the general day clinic, regardless of whether the assessments were based on self-report or therapist ratings. The differences were highly significant. Cohen's d indicated a strong effect for trauma symptoms and moderate effects for depression, anxiety, and somatic symptoms.

#### 3.2. Evidence of lifetime trauma

The frequencies of lifetime trauma are shown in Table 3. In 15 of the 17 events listed here, the number of patients with evidence of trauma was higher in the transcultural day clinic than in the general day clinic. The differences were most pronounced for physical assault, assault with a weapon, sexual assault, combat or exposure to a war zone, and severe human suffering.

#### 3.3. Evidence of childhood trauma

Table 4 presents the frequencies of patients with evidence of childhood trauma and the results of the tests for differences between the groups. The two types of emotional trauma, emotional abuse and neglect, were found in many patients in both groups, with no significant differences between the groups. In contrast, physical and sexual abuse and physical neglect were found less frequently overall but significantly more often in the patients of the transcultural day clinic than in the comparison group. The effect sizes of these differences were moderate.

#### 3.4. Prediction of childhood trauma by migration background and sociodemographic factors

The results of the five logistic regression analyses assessing the predictive value of group membership and sociodemographic factors for subtypes of childhood trauma are summarized in Table 5. The models predicting emotional abuse and emotional neglect were not statistically significant and exhibited poor model fit, as indicated by low values of Nagelkerke's  $R^2$ . In contrast, physical abuse,

 Table 2

 Severity of trauma-symptoms, depression, anxiety and somatic symptoms.

$\alpha$		Transcultur	al day clinic	General day clinic		General day clinic		t(104)	p	d
		M	SD	M	SD					
Self-report										
PCL-5	0.94	53.64	18.36	34.19	16.25	5.78	<.001	1.12		
PHQ-9	0.85	17.64	6.08	14.51	5.75	2.72	<.01	0.53		
GAD-7	0.86	15.26	5.27	12.25	4.64	3.13	<.01	0.61		
PHQ-15	0.79	14.75	5.64	12.08	5.18	2.55	.01	0.49		
Therapists' ra	ting									
HAM-D	0.72	21.13	5.04	17.68	6.62	3.02	<.01	0.59		
HAM-A	0.86	24.55	7.05	19.06	8.19	3.70	<.001	0.72		

Note.  $\alpha = \text{Cronbach's alpha}$ , M = mean, SD = standard deviation, p = significance level, d = Cohen's d.

**Table 3**Number of patients with evidence of lifetime trauma.

	Transcultural day clinic		General	day clinic
	n	%	n	%
Natural disaster	3	5.7 %	2	3.8 %
Fire or explosion	12	22.6 %	0	
Transportation accident	2	3.8 %	2	3.8 %
Serious accident at work, home, or during recreational activity	1	1.9 %	0	
Exposure to toxic substance	0		0	
Physical assault	35	66.0 %	9	17.0 %
Assault with a weapon	23	43.4 %	1	1.9 %
Sexual assault	24	45.3 %	6	11.3 %
Other unwanted or uncomfortable sexual experience	18	34.0 %	9	17.0 %
Combat or exposure to a war-zone	20	37.7 %	0	
Captivity	15	28.3 %	1	1.9 %
Life-threatening illness or injury	11	20.8 %	1	1.9 %
Severe human suffering	36	67.9 %	4	7.5 %
Sudden violent death	18	34.0 %	6	11.3 %
Sudden accidental death	12	22.6 %	1	1.9 %
Serious injury, harm, or death caused by the patient to someone else	4	7.5 %	0	
Any other very stressful event or experience	10	18.9 %	4	7.5 %

**Table 4**Differences in the number of patients with evidence of childhood trauma.

	Transcultural day clinic		General day clinic		$\chi^{2}(1)$	p	V
	N	%	n	%			
Emotional abuse	45	84.9 %	39	73.6 %	2.07	.15	0.14
Physical abuse	35	66.0 %	14	26.4 %	16.74	<.001	0.40
Sexual abuse	16	30.2 %	5	9.4 %	7.19	<.01	0.26
Emotional neglect	44	83.0 %	43	81.1 %	0.06	.80	0.03
Physical neglect	22	41.5 %	4	7.5 %	16.51	<.001	0.40

Note. n = number of patients,  $\chi^2 =$  chi square, p = significance level, V = Cramer's V.

sexual abuse, and physical neglect were significantly predicted by group membership and sociodemographic variables, with all three models demonstrating acceptable model fit.

Regarding the contribution of the individual independent variables, transcultural day clinic patient status emerged as a significant predictor of indications of both physical abuse and physical neglect. For these two trauma subtypes, it was the only variable to reach statistical significance and represented the strongest predictor, with odds ratios of 3.88 and 5.32, respectively. This finding provides evidence that patients from the transcultural day clinic were nearly four times more likely to show indications of physical abuse and more than five times more likely to show indications of physical neglect compared to patients from the general day clinic.

For sexual abuse, transcultural day clinic patient status was not a significant predictor. However, two sociodemographic variables female gender and low educational level - were statistically significant and showed the highest odds ratios for this trauma subtype (OR = 3.52 and OR = 3.90, respectively). Accordingly, variance in indications of sexual abuse was better explained by sociodemographic factors than by group membership.

#### 4. Discussion

The present study sheds light on the mental health of migrants undergoing psychotherapy in Germany and their stress caused by trauma in different stages of their lives. The research questions were investigated by comparing two groups of patients receiving day-clinic psychosomatic treatment. The first group consisted of patients with their own migration experience who received specific transcultural psychotherapy. The second group, serving as a comparison group, was recruited from the general day clinic, where the usual psychosomatic therapy is carried out. As noted in the introduction, traumatic experiences are frequently found in the life histories of individuals with mental disorders. The research design of this study facilitated a comparison between two groups that were similar in terms of clinical presentation but differed with respect to migration experience. In this way, the relationship between migration background and trauma burden could be examined while controlling for the role of mental disorders by ensuring the similarity of this factor in both groups. This approach highlights the potential role of migration background as an independent factor in trauma exposure.

The findings on mental health status and lifetime trauma corroborate previous studies. Consistent with the meta-analyses cited in the introduction (Blackmore et al., 2020; Morina et al., 2018), we found that psychopathological symptoms were highly pronounced in the migrant patients. Compared to the comparison group, they scored higher on scales measuring PTSD symptoms, depression, and anxiety. The burden of PTSD symptoms, in particular, was very high among the migrant patients. In addition to the earlier studies, this

Table 5
Logistic regressions predicting indications of childhood trauma from sociodemographic factors and transcultural day clinic patient status.

	$X^{2}(5)$	p	$R^2_{(pseudo)}$		β	SE	p	OR
Emotional abuse	8.01	.16	0.11					
				Younger age	0.14	0.52	.79	1.15
				Female gender	1.13	0.53	.03	3.09
				Low educational level	0.32	0.79	.69	1.37
				Unpartnered	0.62	0.58	.28	1.86
				Transcultural day clinic patient	0.35	0.62	.57	1.43
Physical abuse	23.20	<.001	0.26					
				Younger age	0.45	0.45	.31	1.57
				Female gender	-0.47	0.45	.29	0.62
				Low educational level	1.10	0.62	.08	2.99
				Unpartnered	0.04	0.48	.94	1.04
				Transcultural day clinic patient	1.36	0.52	<.01	3.88
Sexual abuse	18.90	<.01	0.26					
				Younger age	1.15	0.59	.05	3.17
				Female gender	1.26	0.61	.04	3.52
				Low educational level	1.36	0.63	.03	3.90
				Unpartnered	0.11	0.62	.86	1.11
				Transcultural day clinic patient	0.95	0.69	.17	2.60
Emotional neglect	4.82	.44	0.07					
				Younger age	-0.08	0.55	.88	0.92
				Female gender	0.95	0.55	.09	2.58
				Low educational level	0.61	0.78	.43	1.84
				Unpartnered	-0.44	0.60	.46	0.65
				Transcultural day clinic patient	0.09	0.63	.89	1.09
Physical neglect	26.68	<.001	0.33					
-				Younger age	1.09	0.56	.05	2.97
				Female gender	0.81	0.56	.15	2.25
				Low educational level	0.98	0.59	.10	2.65
				Unpartnered	0.67	0.60	.26	1.95
				Transcultural day clinic patient	1.67	0.68	.01	5.32

Note.  $X^2 = \text{chi-square}, p = \text{significance level}, R_{(pseudo)}^2 = \text{Nagelkerke's } R^2, \beta = \text{regression coefficient}, SE = \text{standard error}, OR = \text{odds ratio}.$ 

study also examined somatic symptoms, which, like the psychological symptoms, were more pronounced in the migrant patients than in the comparison group.

Also in line with previous findings (Brücker et al., 2019; Pfeiffer et al., 2022), the therapists' assessments in this study showed that evidence of trauma in lifetime was very common among the patients of the transcultural day clinic. They were strikingly frequently affected by traumas involving physical violence. As many of these patients came from war zones (particularly in Syria, Afghanistan and Ukraine), this result is not surprising.

The main question of this study concerned the role of childhood trauma in patients with migration experience. In contrast to trauma experienced in adulthood, especially close to the time of migration, traumatic experiences in childhood have received little attention in research to date. This research question was addressed here on the basis of the distinction between five subtypes of childhood trauma. In both groups, the therapists found very frequent evidence of the two subtypes related to the emotional domain (emotional abuse and emotional neglect). This result is consistent with previous findings showing that mental disorders in clinical samples are mainly related to emotional abuse and neglect (e.g. Nelson et al., 2017; Spertus et al., 2003). In contrast, the frequencies of the other three subtypes of childhood trauma differed in the two groups, as the number of patients with indications of these traumas was significantly higher in the transcultural day clinic than in the general day clinic. The differences between the two groups were especially pronounced with regard to physical abuse and neglect; the highest effect sizes were found for these two subtypes.

Logistic regressions examining the predictive value of group membership for the five childhood trauma subtypes, while controlling for sociodemographic variables, yielded largely consistent results. The regression models were not significant for emotional abuse and emotional neglect, but reached significance for physical abuse, sexual abuse, and physical neglect. Physical abuse and neglect were best predicted by status as a patient in the transcultural day clinic, whereas sexual abuse was more strongly associated with sociodemographic factors, including female gender. These results show, in line with the findings of Bjørgo and Jensen (2015), that first-generation migrants with a diagnosed mental disorder are highly affected by childhood trauma associated with physical violence and inadequate care for their physical needs.

Overall, the pattern of results underscores the relevance of all types of childhood trauma for people leaving their home country. Severe childhood traumas are probably not the crucial factor in the decision to emigrate. Nevertheless, they may have led to those affected feeling less attached to their family, which makes it easier for them to leave the social relationships in their home country. Whether this assumption is actually true would be an interesting research question for future studies.

#### 4.1. Strengths and limitations

The present study is monocentric and was conducted with patients from a psychosomatic clinic. The number of treatment places in

this clinic limited the number of participants that could be recruited for this study. The findings, therefore, need to be confirmed in future studies with larger samples.

Furthermore, the study is not a randomized controlled trial (RCT), as the allocation of patients to the transcultural or general day clinic could not be randomized but was based on sociodemographic and medical criteria. The group of patients from the general day clinic is therefore not a control group but a comparison group. However, many studies on the topic of migration do not have a control or comparison group, as Uphoff et al. (2020) note in their Cochrane review of studies on the treatment of mental disorders in refugees and asylum seekers. It is therefore a strength of this study that the migrant group could be compared with another group that does not have a migration background but is similar in terms of a diagnosed mental disorder requiring psychotherapeutic treatment.

In addition to the non-random assignment to the two groups, the study sample was further limited by the inclusion of only those patients who had completed the therapy as scheduled. This selection was necessary, as data from both the beginning and the end of therapy were essential for the analysis. However, it is possible that this led to the exclusion of a specific group of patients, namely those characterized by low levels of self-regulation and therapy motivation. This limitation is particularly relevant to the transcultural day clinic, where the dropout rate was higher than in the general day clinic.

A strength of this study is that the self-report scales that were used here were offered in different languages. This approach made it possible for patients without a good knowledge of German to participate in the study, which was the case for most patients of the transcultural day clinic. The internal consistencies of the self-report scales were acceptable to excellent, indicating that the scales were reliable. This finding provides evidence that the different language versions captured the same construct. In addition, the results of the self-report scales agreed with the therapists' ratings, which indicate the validity of the scales. However, these conclusions should be regarded as preliminary and need to be confirmed in studies with larger samples.

With regard to lifetime trauma, it should be considered that traumas that occur shortly before migration are often used to justify the asylum application. Two thirds of the patients of the transcultural day clinic had uncertain residence status. It cannot be ruled out that these patients overemphasized traumatic experiences in the recent past in order not to endanger their right to stay in Germany. The prevalence of trauma in adult life may therefore have been overestimated in this study. However, this limitation does not apply to childhood traumas, as these are generally not given as a reason for seeking asylum.

Childhood trauma was not measured with a standardized and validated self-report questionnaire but with a new checklist for assessment by the patients' therapists. This approach was chosen because established questionnaires on childhood trauma were not available in all languages required for this study. The measure for ratings by therapists only needed to be available in German, as all therapists were fluent in this language. It can be assumed that they were able to make a valid assessment. Firstly, they were all trained psychotherapists and therefore experts in this field. Secondly, the therapies were based on the psychodynamic approach, which focuses on interpersonal experiences in childhood and adulthood; it is therefore likely that childhood trauma, if it had occurred, was addressed in the therapy. Thirdly, the treatment in the day clinics comprised 24 individual sessions, so that the therapists knew the patients well at the time they made their assessments (end of therapy). Fourthly, the therapists very rarely chose the response option "a few indications", they almost always opted for no indications or clear indications. This shows that they did not need the response that stands for uncertainty with regard to the occurrence of the trauma, but were almost always certain whether the trauma had occurred or not. All these points suggest that the therapists' assessments were sufficiently valid.

It should be noted, however, that the therapists did not obtain information on the traumas through a standardized procedure, but instead assessed them based on the impressions they gathered from the patients during therapy. In future studies, the validity of the ratings could likely be improved by implementing a semi-structured interview with pre-specified questions regarding trauma experiences.

Moreover, the therapists gave us feedback that they had some difficulties with the physical neglect scale. It was sometimes difficult to assess whether the parents were not adequately meeting the child's physical needs or whether the whole family did not have sufficient access to resources such as food, clothing, medical care, etc. Since the checklist was intended to capture interpersonal trauma, it was specified that only the first case should be considered as physical neglect. Because therapists found this distinction difficult, it is possible that cases of physical deprivation affecting the whole family were incorrectly seen as physical neglect of the child, and the frequency of this trauma may have been overestimated.

Therefore, it would be worth investigating whether the results of this study are confirmed when one of the established self-report measures is used. The CTQ in particular could be considered here. This measure is not yet available in all the languages spoken by many migrants in Germany. It would be helpful for future research if validated versions of the CTQ were developed in these languages and utilized in studies. Such studies are needed for a more comprehensive evaluation of this study's findings.

#### 4.2. Implications for psychotherapy practice

The present study indicates that psychotherapy patients with and without a migration background differ in their experiences of childhood trauma. While many patients in both groups showed evidence of emotional abuse and neglect, physical abuse and neglect and sexual abuse were more frequently observed in patients with a migrant background. The findings suggest that first-generation migrants carry a high burden of childhood trauma. The opportunity to address and process traumatic experiences in psychotherapy is therefore crucial for them. Therapists should be prepared for the possibility that not only emotional trauma but also trauma involving physical and sexual violence may be brought up. A therapeutic approach characterized by openness, sensitivity, and empathy will be helpful for patients in processing these traumas.

#### Study registration

The study was entered in the German Clinical Trials Register (DRKS00031828).

#### CRediT authorship contribution statement

**Eva Neumann:** Writing – original draft, Project administration, Methodology, Funding acquisition, Formal analysis, Conceptualization. **Silke Michalek:** Writing – review & editing, Software, Project administration, Methodology, Investigation, Data curation. **Ulrike Dinger:** Writing – review & editing, Supervision, Methodology. **Jörg Rademacher:** Writing – review & editing, Supervision, Funding acquisition, Conceptualization.

#### Informed consent

Written informed consent was obtained from all individual participants included in the study.

#### Ethics approval

The study was approved by the Ethics Committee of the Medical Faculty of the Heinrich Heine University Düsseldorf (2022–2028).

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#### **Declaration of competing interest**

None.

#### Data availability

Data will be made available on reasonable request.

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