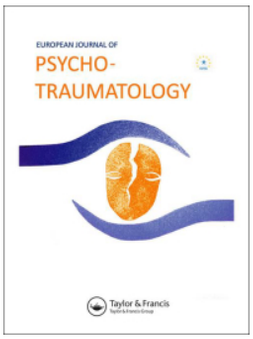

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Evaluation of a training programme for interpreters in the field of trauma-focused cognitive behavioural therapy – one year follow-up

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ABSTRACT

Background: If the patient does not speak the national language, access to the healthcare system is usually only possible via an interpreter. The need for evaluated training for interpreters working in this field is emphasized in the literature, particularly in the context of psychotherapeutic treatment. This study evaluates a TF-CBT-specific training course for interpreters over a period of one year.

Methods: The TF-CBT-specific training was conducted in the form of webinars via the online communication provider Zoom in 10 sessions with 10–15 participants each. The content of the training included the topics of trauma and PTSD, how to establish a constructive working relationship with the therapist, and the modules of TF-CBT with an explanation of the therapeutic principles. In a previous study knowledge gain and a change of an attitude that is more conductive to good cooperation was archived by the workshop in prä-post-tests. In this study the training was evaluated at the 6-month and 12-month follow-up using hierarchical linear regression.

Results: Results show that attitude change remained stable over the one-year period. Knowledge and psychotherapy support were statistically significant predictors. Knowledge gained during training decreased over time. Attitude and psychotherapy support were identified as statistically significant predictors.

Discussion: The evaluated training for interpreters, who were willing to interpret in a TF-CBT for children and adolescents, showed a stable improvement in attitudes regarding good cooperation with the therapist. Knowledge about PTSD and TF-CBT, did not remain stable over the period of one year after the training. In other comparable training courses, this could be compensated for by consolidation in supervision meetings.

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PALABRAS CLAVE
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Evaluación de un programa de formación de intérpretes en el ámbito de la terapia cognitivo-conductual centrada en el trauma (TCC-CT): seguimiento de un año

Antecedentes: Si el paciente no habla el idioma nacional, el acceso al sistema sanitario suele ser posible únicamente a través de un intérprete. La literatura enfatiza la necesidad de una formación evaluada para los intérpretes que trabajan en este campo, especialmente en el contexto del tratamiento psicoterapéutico. Este estudio evalúa un curso de formación específico en TCC-CT para intérpretes durante un período de un año.

Método: La formación específica en TCC-CT se impartió mediante webinars a través de Zoom, plataforma de comunicación en línea, en 10 sesiones con entre 10 y 15 participantes cada una. El contenido de la formación incluyó temas como el trauma y el TEPT, cómo establecer una relación de trabajo constructiva con el terapeuta y los módulos de la TCC-CT con una explicación de los principios terapéuticos. En un estudio previo, se registró la adquisición de conocimientos y un cambio de actitud que favorece una buena cooperación mediante el taller en las pruebas pre–post. En este estudio, la formación se evaluó en los seguimientos a los 6 y 12 meses mediante regresión lineal jerárquica.

Resultados: Los resultados muestran que el cambio de actitud se mantuvo estable durante el período de un año. El conocimiento y el apoyo psicoterapéutico fueron predictores estadísticamente significativos. El conocimiento adquirido durante la formación disminuyó con el tiempo. El apoyo a la actitud y el apoyo psicoterapéutico se identificaron como predictores estadísticamente significativos.

Discusión: La formación evaluada para intérpretes dispuestos a interpretar en TCC-CT para niños y adolescentes mostró una mejora estable en las actitudes respecto a la buena cooperación con el terapeuta. El conocimiento sobre el TEPT y la TCC-CT no se mantuvo estable durante el año posterior a la formación. En otros cursos de formación comparables, esto podría compensarse mediante la consolidación en reuniones de supervisión.

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1. Introduction

Interpreters are needed to provide people with a migration and refugee background who do not speak the national language access to therapy. This is especially important for trauma therapy as recommended in the NICE guidelines (NICE, 2021). Regarding the effectiveness of therapy with interpreters, most existing studies concluded that interpreter-assisted therapy delivers similarly good results as therapy without interpreters (Bauer & Alegría, 2010; Brune et al., 2011; d'Ardenne et al., 2007; Jensen et al., 2017). Only Sander et al. (2019) described better therapy results for therapy without interpreters. This could be explained regarding the challenges when an interpreter is translating the therapy. Thus, *knowledge* about the principles of therapy as well as an *attitude* associated with a clear understanding of the role of the interpreter and the therapist (Fennig & Denov, 2021; Gryesten et al., 2023; Hanft-Robert et al., 2018; Hunt & Swartz, 2017) are important to ensure good cooperation in the triad (Amouyal et al., 2020; Gryesten et al., 2023; Hanft-Robert et al., 2018; Martin et al., 2020). Research indicates that interpreter workshops and training evaluations are effective for improving healthcare providers' skills and confidence when working with medical interpreters. Studies have shown that interactive workshops led by professional interpreters and faculty can increase medical students' comfort and preparedness for interactions with limited English proficiency patients (Coetzee et al., 2020; Jones et al., 2020). These workshops typically include role-playing exercises, discussions, and practical scenarios (Fung et al., 2010; Jones et al., 2020). Key skills taught include positioning the interpreter, ensuring confidentiality, and maintaining eye contact with patients (Fung et al., 2010). Evaluations of such programmes have demonstrated significant improvements in participants' knowledge, skills, and confidence (Hasbún Avalos et al., 2013). Moreover, these workshops have been shown to fill important gaps in medical education and provide comprehensive orientation to interpretation resources and best practices (Jones et al., 2020). Overall, interpreter training programmes are valuable tools for enhancing healthcare providers' proficiency in working with medical interpreters.

In the psychotherapeutic practice, interpreters not specifically qualified for working in psychotherapy and often lay interpreters are called in to translate when the patient does not speak the psychotherapist's native language. The importance of appropriate training for psychotherapists (O'Hara & Akinsulure-Smith, 2011; Raval, 2003; Searight & Searight, 2009) who want to work with interpreters but also for the interpreters themselves (Becher & Wieling, 2015; Fennig & Denov, 2021; Kindermann et al., 2017; Martin et al., 2020; Metzner et al., 2018) has been repeatedly emphasized. The aim of such training should be to prepare interpreters for their work in therapy. In addition to specific *knowledge* that is necessary in psychotherapy (McDowell et al., 2011; Mirdal et al., 2012) and an understanding of the therapeutic methods, an *attitude* that favours an understanding of the role of each psychotherapist and interpreter and a neutral role towards psychotherapy are also important contents, which are repeatedly addressed in best-practice examples (Morina et al., 2010; Paone & Malott, 2008). In addition to such best-practice examples and the establishment of a broad range of training courses for interpreters specializing in the topic, the evaluation of these training courses and their long-term effects should also be considered. In the previous study, knowledge increase as well as a change in attitude in favour of good collaboration with the therapist could be achieved by the training for interpreters supporting a TF-CBT (Müller et al., 2023) in the BETTER CARE Project (Rosner et al., 2020). The objective of the present study is the stability of knowledge gain and attitudes in favour of good collaboration with the therapist six months and twelve months after the training.

A positive *attitude* towards therapy and an appropriate understanding of roles may enhance knowledge retention by increasing motivation to integrate the acquired knowledge, which in turn has a positive impact on learning success (Dillard & Pfau, 2002; Kruglanski et al., 2006). Furthermore, it can be assumed that *translation in psychotherapy* and, in particular, *translation in trauma focused therapy* as an interpreter leads to the acquisition and deepening of knowledge about psychotherapy and trauma therapy. Based on the concept described above, it can also be assumed that an existing qualification as an interpreter promotes knowledge about psychotherapy and trauma therapy. This is due to the fact that the interpreters already have extensive knowledge in this area, which makes it easier to consolidate their knowledge (Bohner & Dickel, 2011; Chaiken & Maheswaran, 1994).

With regard to the maintenance of an appropriate attitude, it seems reasonable to posit that existing *knowledge* is an influential factor, as it facilitates comprehension of the therapy process and the role of the interpreter in it (Bohner & Dickel, 2011). Similarly, it can be postulated that prior experience as an interpreter *translation in psychotherapy* and translation in *translation in trauma-focused therapy* may also exert an influence on knowledge retention. An existing *qualification* as an interpreter may facilitate comprehension of an attitude that is helpful for the process of the therapy, as previous experience and knowledge in other domains already exists (Dillard & Pfau, 2002; Kruglanski et al., 2006) thereby facilitating integration and engagement with the content.

The present study thus aims to evaluate the stability of knowledge about PTSD and TF-CBT, as well as attitudes towards the role of the interpreter and cooperation with the therapist of the interpreter training in the BETTER CARE project over a period of one year. Furthermore, the study will examine influencing factors, including *translation in psychotherapy, translation in specific trauma-focused therapy* and *qualification* as an interpreter.

2. Method

2.1. Recruitment and participants

The workshop was open to all interpreters who were willing to support a TF-CBT for traumatized unaccompanied children and young people as part of the BETTER CARE Project (Rosner et al., 2020). Recruitment took place primarily via social institutions that work with interpreters. The focus was on covering the languages spoken by young unaccompanied refugees in Germany. The participating interpreters were surveyed via Qualtrics before and after the workshop as well as after 6 and 12 months, receiving a voucher worth 20 euros for each survey. In total, $n = 125$ took part in the workshop and were included in the evaluation of the training.

The average age of the participants was $M = 44.1$ ($SD = 13.2$). A total of $n = 80$ (64%) stated that they were female, $n = 41$ (32.8%) defined themselves as male and $n = 2$ (1.6%) as diverse. On average, the interpreters had lived in Germany for $M = 19$ years ($SD = 13.2$) and had worked as interpreters for $M = 6.2$ years ($SD = 6.5$). The three most common languages indicated by the interpreters as their first language were German ($n = 27$, 21.6%), Arabic ($n = 24$, 16%) and English ($n = 6.4$%), with a total of 34 languages represented. Most participants indicated as their religion Islam ($n = 63$, 50.4%). This was followed by Christianity ($n = 25$, 20%), and no religion, atheist or agnostic ($n = 19$, 15.2%). Forty (32%) of the interpreters stated that they had not undergone any training for their work as interpreters, with the range of training being between a day workshop and a completed degree in interpreting. In terms of professional training, $n = 35$ (28%) stated that they had undergone an apprenticeship, $n = 33$ (26.4%) stated that they had a bachelor's degree, $n = 28$ (22.4%) had a master's degree and $n = 5$ (4%) had a doctorate. Only $n = 12$ (9.6%) had no professional degree. The most common fields in which the interpreters worked were youth welfare offices ($n = 60$, 48%), other health care services ($n = 60$, 48%), and psychosocial services ($n = 45$, 36%) (Table 1).

Table 1. Participants' sociodemographic characteristics at post measurement ($n = 111$).

Age in years, *M* (*SD*)	44.1 (13.2)
Gender, *n* (%)	
Male	41 (32.8)
Female	80 (64)
Diverse	2 (1.6)
First language, *n* (%)	
German	27 (21.6)
Arabic	24 (16)
English	8 (6.4)
Farsi, Dari	6 (4.8)
Sorani	5 (4)
Amharic	4 (3.2)
Others*	51 (40.8)
Religion, *n (%)*	
Islam	63 (50.4)
Christianity	25 (20)
Non-religious/atheist/agnostic	19 (15.2)
Judaism	2 (1.6)
Jesidism	1 (0.8)
Hinduism	1 (0.8)
Others	12 (9.6)
Time working as interpreter in years, *M (SD)*	6.2 (6.5)
Length of stay in Germany in years, *M* (*SD*)	19 (13.2)
Professional degree, *n* (%)	
No professional degree	12 (9.6)
Apprenticeship	35 (28)
Bachelor's degree	33 (26.4)
Master's degree	28 (22.4)
Doctorate	5 (4)
Others	10 (8)
Qualification or training as translator, *n* (%)	40 (32)
Any qualification	
Translation in psychotherapy *n* (%)	60 (66.6)
Translation in trauma – focused therapy *n* (%)	52 (57.7)
Current field of activity as interpreter, *n* (%)	
Youth welfare office	60 (48)
Other health care services	60 (48)
Psychosocial services	45 (36)
Federal Office for Migration and Refugees	23 (18.4)
Court	23 (18.4)
Translation office	19 (15.2)
Community interpreter	20 (16)
Other	42 (33.26)

Note: * Somali, Tigrinya, Turkish, Spanish, Sorani, Russian, Italian, Pashto, Somali, Afrikaans, Greek, Urdu, Chinese, Bulgarian, Croatian, Portuguese, Slovak, Tamil, Krio, Chechen, Bosnian, Polish, Vietnamese, Hindi, Punjabi, Tigrinya, Hungarian, Macedonian, Pothwari, Serbian, Telugu, Turkmen.

2.2. The Workshop

The workshop took place via Zoom on 10 dates with 10–15 participants each and lasted around 4 hours. The aim of the workshop was to prepare the interpreters for translating in TF-CBT for young refugees (Cohen et al., 2017). The workshop had been designed based on recommendations from existing literature (Hanft-Robert et al., 2018; Miller et al., 2005; Tribe & Morrissey, 2004) and the feedback of a focus group (more information see (Müller et al., 2023). It covered background knowledge about trauma, good cooperation between interpreters and therapists, the TF-CBT modules as well as case studies, exercises and discussions. In terms of background knowledge, basic information was provided on trauma, flight, stress, post-traumatic stress disorder and its diagnostics. Regarding good cooperation between interpreters and therapists, guidelines were presented. These should assure the quality of the therapy, but also help the interpreters to cope with stressful contents. Expectations on the task of the interpreters, the importance of confidentiality and

neutrality were discussed. Above this, the presentation of the TF-CBT modules should sensitize the interpreters to the mechanisms of psycho trauma therapy. The aim of the workshop was for the interpreters to understand how therapy works and why taboos addressing a trauma have to be broken, to help the patient. In this context, the interpreters were also given a glossary of words frequently used in TF-CBT so that they could prepare themselves for technical terms in advance. The concluding case studies and exercises were based on the TF-CBT web (Heck et al., 2015) and were intended to allow the content learned to be consolidated. In the concluding discussion, open questions were clarified.

2.3. Measures

2.3.1. Demographics

Regarding the demographic data, the interpreters' age, gender, nationality and country of birth, the languages spoken by the interpreters, the time they have lived in Germany and their years of experience as interpreters were recorded. In addition, the demographic data included the interpreters' educational background with their highest professional qualification as well as the question of any form of qualification as an interpreter. The fields of activity of the interpreters were also recorded and whether the interpreters had already *translation in psychotherapy* or *trauma-focused therapy*. To clarify translation in psychotherapy we gave the definition: 'Some people experience extremely distressing events in their lives, such as violence, the sudden death of friends or family members, or sexual abuse. These experiences are called trauma (or traumatic events). Some individuals who have experienced trauma go on to develop what is known as Post-Traumatic Stress Disorder (PTSD). People with PTSD repeatedly have distressing images or nightmares related to the trauma, withdraw from others, are often anxious or irritable, and avoid things that remind them of the traumatic event. Trauma therapy is a form of psychotherapy in which people talk about and work through these traumatic experiences so that they can start to feel better.' To clarify trauma-focused therapy we explain what a trauma is according to ICD-10 and gave the definition: 'Trauma therapy is a form of psychotherapy in which individuals talk in detail about these traumatic experiences and work through them in order to feel better.'

2.3.2. Knowledge

Knowledge was assessed using 8 of the 40 items from the TF-CBT*Web* seminar (Heck et al., 2015) These were 4 questions asking for background knowledge about PTSD. The main topics were, the symptoms of PTSD, the development of the symptoms and how to translate the conversation in an empathetic way. The other questions assessed knowledge about TF-CBT by referring to its duration, focus on children and adolescents, metaphors used, and the trauma narrative. The questions were single choice questions, so that a total of 8 points could be achieved. We got a lower internal consistency than the generally considered consistency of .7 (Kuder-Richardson-20 = .61), which is still interpretable regarding the fact that the test contains only a few items (Denis & Nsikhe, 2023).

2.3.3. Attitude

A focus group created questions based on the literature to record the cooperation in therapy, the neutrality of the interpreter and a clear division of roles. The questionnaire is made up of 8 questions regarding the attitude towards therapy and their role and duties as interpreters in therapy. Examples include 'Some content is culturally inappropriate, so I don't translate it (inverse)', 'Therapist and interpreter should act as a team in therapy', 'It is important for the therapy that all participants hear everything that is said in the conversation', 'The patient should not be reminded too much of the traumatic experience by the conversation during therapy (inverse)' etc. The questions could be answered using a five-point Likert scale. The internal consistency of the questionnaire was satisfactory (Nájera Catalán, 2019) (McDonalds Omega = .77).

2.4. Data Analysis

Of $n = 139$ data Sets, $n = 11$ had to be excluded because the participants had not taken part in the workshop, and $n = 4$ because they had not taken part in the post-survey or had not consented to the use of the data. Due to an excessive number of missing values, a further 14 data sets were excluded from the analysis, so that ultimately 111 data sets were available for evaluation. The longitudinal hierarchical model was evaluated using the lme4 package (Bates et al., 2015) in R (R Core Team, 2020). Maximum likelihood estimation was used in the evaluation (Hox, 2017; Snijders & Bosker, 2012). The null model for knowledge retention showed an adjusted ICC of .54, while the model for attitude showed an adjusted ICC of .20. In both cases, the calculation of an HLM was therefore justified. First, all theoretically relevant predictors were included in the model, which has been described in the literature as useful in an exploratory approach (Field et al., 2013). Subsequently, the individual predictors were added stepwise as a control, with the deviance serving as a measure for the addition of the predictors. A one-way ANOVA was performed for each predictor to check whether the addition to the model explained new variance (Field et al., 2013; Hox, 2017; Snijders & Bosker, 2012). The covariance

matrices of the final model showed no multicollinearity (Akinwande et al., 2015). In addition, the variance inflation factor for all predictors was well below 5, so that no multicollinearity can be assumed.

3. Results

The evaluation results of the interpreter workshop indicate that the mean of knowledge varied across the three time points (T0: M = 5.74, *SD* = 1.84; T1: M = 4.57, *SD* = 2.25; T2: M = 4.91, *SD* = 2.06). The results on attitude change show that the mean values of attitudes at the three time points remained constant (T0: M = 33.49, *SD* = 5.26; T1: M = 33.41, *SD* = 4.79; T2: M = 33.3, *SD* = 5.25).

3.1. Knowledge

Upon inclusion of all predictors in the model to explain *knowledge retention* over the 12-month period, *Time of measurement (T0,T1,T2)* ($p < .001$), *attitude* ($p < .001$), and *translation in psychotherapy* ($p < .001$) were identified as statistically significant factors. *Translation in trauma-focused therapy* ($p = .7$) and *qualification* ($p = 0.37$) were not found to be statistically significant. The stepwise addition of the individual model parameters resulted in a deviance of 1021.2 (AIC = 1027, BIC = 137.9) for the null model. The addition of the predictor *occasion* resulted in a reduction of the deviance to 1014.2 (AIC = 1022.2, BIC = 1036.4), and the *p*-value (χ^2) = .0078 was found to be statistically significant in the ANOVA ($\chi^2 = 7.08$). As the parameter *attitude* was added in a stepwise manner, the deviance value decreased to 1002.2 (AIC = 1012.2, BIC = 130.0; $\chi^2 = 11.99$, *p* (χ^2) < 0.0001). This was accompanied by a similar decrease in the deviance value for *translation in psychotherapy* (deviance = 969.54, AIC = 991.5, BIC = 1012.8; $\chi^2 = 22.67$, *p* (χ^2) < 0.0001). These results indicated that the model should be increased by those factors. The results of the analysis indicated that the deviance value for *translation in psychotherapy* was 969.54, with an AIC of 991.5 and a BIC of 1012.8. The chi-squared value was 22.67, with a *p*-value of less than 0.0001, which further supported adding it to the model. The addition of the predictors *translation in trauma-focused therapy* (deviance = 979.1, AIC = 993.1, BIC = 1018.0; $\chi^2 = .39$, *p* (χ^2) = 0.53) and *qualification* prior to the interpreter-workshop (deviance = 978.5, AIC = 992.5, BIC = 1017.4; $\chi^2 = 1.03$, *p* (χ^2) = 0.31) to the model did not result in the explanation of any additional variance in the ANOVA. Consequently, these predictors were excluded from the final model. Thus, the *occasion*, as well as the predictors *attitude* and *translation in psychotherapy* were included in the final model (see Table 2). The model's fixed effects explained 21.1% of the variance (marginal R^2), while the combined fixed and random effects accounted for 54.4% of the variance (conditional R^2). This substantial increase suggests that individual differences captured by the random effects contribute meaningfully to the outcome, highlighting a moderate to large effect size and underlining the importance of accounting for participant-level variability in the analysis.

Table 2. Knowledge final model.

Fixed effects:	Estimate	Std. Error	Df	*T*	*P*
Intercept	1.47	0.78	247.57	1.87	.063
Time of measurment	−0.30	0.11	170.81	−2.88	.00454**
Attitude	0.07	0.02	249.03	3.23	.00142**
Psychotherapy	1.37	0.27	109.42	4.99	.000***

Note: Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1, psychotherapy = supporting a psychotherapy.

3.2. Attitude

Upon the addition of all predictors to the model, which was designed to elucidate the change in attitude over the 12-month period, only two predictors, namely *knowledge* ($p < .0001$) and *translation in psychotherapy* ($p < .05$), were found to be statistically significant. The addition of *knowledge* to the null model yielded a statistically significant result (deviance = 1553.4, AIC = 1559.4, BIC = 1570.1). The resulting value was 1533.9, with an AIC of 1541.9 and a BIC of 1556.2. The chi-squared value was 19.472, with a *p*-value less than 0.0001. The addition of *translation in psychotherapy* resulted in a reduction of the deviance to 1530.8 (AIC = 1640.8, BIC = 1558.5), which was statistically significant ($p < .05$) ($\chi^2 = 3.16$). The addition of the predictors *occasion* (deviance = 1530.2, AIC = 1542.2, BIC = 1563.6; $\chi^2 = .55$, *p* (χ^2) = 0.46), *translation in trauma-focused therapy* (deviance = 1529.6, AIC = 1541; $\chi^2 = .39$, *p* (χ^2) = 0.53), and *qualification* (deviance = 1530.5, AIC = 1542.5, BIC = 1563.9; $\chi^2 = 0.25$, *p* (χ^2) = 0.62) did not yield statistically significant results (see Table 3). The fixed effects of this model explained 10.7% of the variance (marginal R^2), while the full model including random effects accounted for 30.1% of the variance (conditional R^2). These results suggest a relatively small to moderate effect size of the fixed predictors, with individual variability playing a notable but less dominant role compared to the previous model.

Table 3. Attitude final model.

Fixed effects	Estimate	Std. error	Df	*T*	*P*
Intercept	0.04	0.34	106.51	0.12	.91
knowledge	0.65	0.17	236.89	3.81	.000177***
psychotherapy	1.29	0.72	121.36	1.79	.076

Note: Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1, Psychotherapy = supporting a psychotherapy.

4. Discussion

The present study evaluates a training course designed for interpreters interested in translating in the field of psycho trauma therapy, thus responding to the need for training in this field that has been repeatedly highlighted in the literature (Butler, 2008; Butow et al., 2012; Farooq & Fear, 2003; Hsieh, 2008; Jeffery & Salt, 2021; Morina et al., 2010; Paone & Malott, 2008; Villalobos et al., 2021). This study is the first to evaluate a training course specifically designed for interpreters in the field of trauma therapy (Rousseau et al., 2011) for a one year period. Furthermore, the potential influencing factors on the course of the change in knowledge and attitude during the 12-month period, were identified, including the predictors *translation in psychotherapy*, *translation in trauma-focused therapy*, and the *qualification as interpreter* prior to the training.

4.1. Knowledge

The knowledge gain demonstrated in the evaluation of the training programme (Müller et al., 2023) in the context of BETTER CARE (Rosner et al., 2020) did not remain stable over the 12-month period, but rather exhibited a decline over time. This phenomenon has also been observed in other training programmes, such as those involving therapists in TF-CBT (Sansen et al., 2020) or in the context of suicide prevention training for community members (Montiel & Mishara, 2024), where acquired knowledge has been found to decline over time. In the literature, the utility of consultations is highlighted as a means of addressing this issue (Edmunds et al., 2013; Miller et al., 2004).

A positive *attitude* towards therapy, which facilitates collaboration with the therapist, has been shown to have a beneficial impact on knowledge stability. This finding is consistent with those observed in other areas (Sansen et al., 2020). Similarly, interpreters who have internalized clear understanding of their roles and an attitude that is helpful in psychotherapy may have been more receptive to knowledge about trauma psychotherapy and may have retained it more effectively. Contrary to our expectations, *translation in trauma-focused therapy* as interpreter was not a statistically significant predictor of knowledge stability. The knowledge questionnaire posed in the present study exclusively pertained to TF-CBT, regarding its length and specific mechanisms. This focus on TF-CBT may have introduced confusion for interpreters engaged in other therapeutic modalities such as other trauma focused CBT treatments (e.g. cognitive processing therapy, EMDR) or even approaches not classified as CBT (e.g. psychodynamic or humanistic procedures). Cognitive Processing Therapy (CPT), Eye Movement Desensitization and Reprocessing (EMDR), and Trauma-Focused Cognitive Behavioural Therapy (TF-CBT) are all trauma – focused but differ in their core techniques, with CPT emphasizing cognitive restructuring of maladaptive beliefs, EMDR utilizing bilateral stimulation during the recall of traumatic memories to facilitate adaptive processing, and TF-CBT combining cognitive–behavioural strategies with gradual exposure and psychoeducation to address trauma-related symptoms (Schnyder, 2014). However, *translation in psychotherapy* appears to have a beneficial effect on knowledge stability. Interpreters who are already engaged in psychotherapy possess practical experience in this field. This may have contributed to more effective knowledge integration and the consolidation of learning through its implementation in practice (Dillard & Pfau, 2002; Kruglanski et al., 2006).

The fact that some participants had already obtained qualifications as interpreters prior to the training did not affect the stability of knowledge. This finding was to be expected, given that the training of interpreters in Germany is not uniform (Hsieh, 2008) and that those who have undergone such training are not necessarily prepared for work in the field of psychotherapy, particularly in the context of trauma psychotherapy. In the literature, the need for specific training in the medical and psychotherapeutic fields is expressed (Butow et al., 2012; Villalobos et al., 2021). This suggests that existing qualifications as interpreters necessitate such specific training to effectively convey and retain knowledge in this specialized domain.

4.2. Attitude

The change in attitudes remained stable over time, which is in line with existing research as role plays and discussions in training have proved to be more likely to result in attitude change (Lyon et al., 2011). The existing literature repeatedly points to difficulties and challenges in interpreter-assisted therapy due to different understandings of the role and expectations of the interpreter's tasks in therapy (Butow et al., 2012; Farooq & Fear, 2003; Hsieh, 2008; Mirdal et al., 2012; Morina et al., 2010). The results suggest that in our cohort there was an improve in attitudes towards cooperation between interpreters and therapists and a clear understanding of each other's role over a period of one year and thus possibly the quality of the translation and could help to overcome those challenges.

The results of the study suggest that *knowledge* about PTSD and *translation in psychotherapy* was a relevant factor in the interpreters trained influencing the maintenance of attitude change. The results suggest that pre-existing experience and *knowledge*

about PTSD and TF-CBT may have helped to develop and consolidate positive *attitudes*. This may be due to the fact that this content requires fewer cognitive resources to be integrated compared to new content (Dillard & Pfau, 2002; Kruglanski et al., 2006). The assumption that qualification as interpreters existing before the workshop could have an influence on attitude retention has proven to be incorrect. This can be explained by the fact that there is no standardized training for interpreters in Germany and the type of qualification is highly heterogeneous in terms of content (Hsieh, 2008). It can therefore be assumed that, as with *knowledge* about PTSD, the training of interpreters did not include enough content related to *attitudes* towards good cooperation in the psychotherapeutic setting. The fact that *translation in trauma-focused therapy* had no influence on attitude retention could also be explained by the heterogeneity of the various trauma therapies (Kowalski et al., 2024; Schnyder et al., 2015) and the different understanding of the role of an interpreter.

4.3. Limitations

This study represents the first evaluation of a training course for interpreters over a period of one year. However, the results are of an exploratory nature as no control group was included. The evaluation was based solely on knowledge tests and self-reporting by the participants without validated Instruments. Furthermore, we didn´t capture an external criterium, as we did not measure the quality of therapy or the translation.

A further limitation of the present study is the lack of consideration of motivational factors that may influence training effects. Given the established role of motivation in adult learning and professional development Bilodeau Clarke (2023), it is possible that such factors moderated the observed outcomes. Future research should consider incorporating motivational constructs, such as learning goal orientation or self-determined motivation, either as covariates or as potential mechanisms of change to better understand for whom and under which conditions training interventions are most effective.

4.4. Implication

The training for interpreters carried out as part of BETTER CARE (Rosner et al., 2020) showed a stable positive change in attitude in favour of good cooperation with the therapist over a period of one year. Therefore, similar training could help to overcome the repeatedly emphasized challenges of working with interpreters. In terms of knowledge about PTSD and TF-CBT, regular supervision and booster session could help to consolidate the acquired knowledge. While the initial four-hour interpreter workshop provided a valuable introduction to trauma-informed principles and interpreter-therapist collaboration, the augmentation of training effects could benefit from a more detailed discussion of potential follow-up measures. For instance, booster sessions held at regular intervals (e.g. monthly or quarterly) could reinforce key concepts and allow for the integration of new experiences from practice. In addition, practical components such as supervised role-plays, peer exchange formats, and case discussions may help consolidate skills and enhance confidence in emotionally challenging interpreting situations. From a dosing perspective, a stepped-care approach could be considered, in which more intensive or individualized training elements are offered to interpreters working with high-risk populations or those who report difficulties in implementing trauma-informed practices. Finally, the inclusion of reflective elements and spaces for emotional processing (e.g. group supervision) may support the well-being of interpreters and contribute to the sustainability of training outcomes. A limitation of this study is the absence of a control group, which limits the ability to attribute observed effects solely to the intervention. Therefore, the results should be interpreted with caution. Future research should include controlled study designs to more rigorously evaluate the effectiveness of the training and to establish causal relationships.

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Authors' contribution

All authors read and approved the final manuscript. LRFM developed and conducted the workshops and supervised the study process. MH helped to conduct the workshops, collected the data, carried out the data analysis, and drafted the manuscript. RR was the principal investigator of the study and supervised the study process.

Ethics approval and consent to participate

The Institutional Review Board of the Catholic University Eichstätt-Ingolstadt approved the research protocol. Written informed consent was obtained from all interpreters.

Availability of data and materials

Given the sensitive and potentially identifiable participant information the datasets generated and analysed during this study are not publicly available but are available on request from the corresponding author.

References

Akinwande, M. O., Dikko, H. G., & Samson, A. (2015). Variance inflation factor: As a condition for the inclusion of suppressor variable(s) in regression analysis. *Open Journal of Statistics*, *05*(07), 754–767. https://doi.org/10.4236/ojs.2015.57075

Amouyal, M., Wu, R., & Patterson, P. (2020). Woven voices: Recommendations for counsellors working with professional interpreters. *Canadian Journal of Counselling and Psychotherapy*, *54*(1), 50–70. https://cjc-rcc.ucalgary.ca/article/view/61255

Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting linear mixed-effects models Using**lme4**. *Journal of Statistical Software*, *67*(1). https://doi.org/10.18637/jss.v067.i01

Bauer, A. M., & Alegría, M. (2010). Impact of patient language proficiency and interpreter service use on the quality of psychiatric care: A systematic review. *Psychiatric Services (Washington, D.C.)*, *61*(8), 765–773. https://doi.org/10.1176/ps.2010.61.8.765

Becher, E. H., & Wieling, E. (2015). The intersections of culture and power in clinician and interpreter relationships: A qualitative study. *Cultural Diversity & Ethnic Minority Psychology*, *21*(3), 450–457.

Bohner, G., & Dickel, N. (2011). Attitudes and attitude change. *Annual Review of Psychology*, *62*(1), 391–417. https://doi.org/10.1146/annurev.psych.121208.131609

Brune, M., Eiroá-Orosa, F. J., Fischer-Ortman, J., Delijaj, B., & Haasen, C. (2011). Intermediated communication by interpreters in psychotherapy with traumatized refugees. *International Journal of Culture and Mental Health*, *4*(2), 144–151. https://doi.org/10.1080/17542863.2010.537821

Butler, C. (2008). Speaking the unspeakable: Female interpreters' response to working with women who have been raped in war. *Clinical Psychology Forum*, 192, 22–26.

Butow, P. N., Lobb, E., Jefford, M., Goldstein, D., Eisenbruch, M., Girgis, A., King, M., Sze, M., Aldridge, L., & Schofield, P. (2012). A bridge between cultures: Interpreters' perspectives of consultations with migrant oncology patients. *Supportive Care in Cancer*, *20*(2), 235–244. https://doi.org/10.1007/s00520-010-1046-z

Chaiken, S., & Maheswaran, D. (1994). Heuristic processing can bias systematic processing: Effects of source credibility, argument ambiguity, and task importance on attitude judgment. *Journal of Personality and Social Psychology*, *66*(3), 460–473. https://doi.org/10.1037/0022-3514.66.3.460

Coetzee, D., Pereira, A. G., Scheurer, J. M., & Olson, A. P. J. (2020). Medical student workshop improves student confidence in working with trained medical interpreters. *Journal of Medical Education and Curricular Development*, *7*, 2382120520918862. https://doi.org/10.1177/2382120520918862

Cohen, J. A., Mannarino, A. P., & Deblinger, E. (2017, November 3). *Treating trauma and traumatic grief in children and adolescents* (2nd ed.). Gary.

d'Ardenne, P., Farmer, E., Ruaro, L., & Priebe, S. (2007). Not lost in translation: Protocols for interpreting trauma-focused CBT. *Behavioural and Cognitive Psychotherapy*, *35*(3), 303–316. https://doi.org/10.1017/S1352465807003591

Denis, U., & Nsikhe, U. (2023). The theoretical and empirical equivalence of Cronbach Alpha and Kuder-Richardson formular-20 reliability coefficients. *International Research Journal of Innovations in Engineering and Technology*, *7*(5), 17–23. https://doi.org/10.47001/IRJIET/2023.705003

Dillard, J. P., & Pfau, M. W. (2002). *The persuasion handbook: Developments in theory and practice*. SAGE Publications.

Edmunds, J. M., Beidas, R. S., & Kendall, P. C. (2013). Dissemination and implementation of evidence-based practices: Training and consultation as implementation strategies. *Clinical Psychology: Science and Practice*, *20*(2), 152–165. https://doi.org/10.1111/cpsp.12031

Farooq, S., & Fear, C. (2003). Working through interpreters. *Advances in Psychiatric Treatment*, *9*(2), 104–109. https://doi.org/10.1192/apt.9.2.104

Fennig, M., & Denov, M. (2021). Interpreters working in mental health settings with refugees: An interdisciplinary scoping review. *The American Journal of Orthopsychiatry*, *91*(1), 50–65. https://doi.org/10.1037/ort0000518

Field, A., Miles, J., & Field, Z. (2013). *Discovering statistics using R*. SAGE Publications Ltd.

Fung, C.-C., Lagha, R. R., Henderson, P., & Gomez, A. G. (2010). Working with interpreters: How student behavior affects quality of patient interaction when using interpreters. *Medical Education Online*, *15*, 5151. https://doi.org/10.3402/meo.v15i0.5151

Gryesten, J. R., Brodersen, K. J., Lindberg, L. G., Carlsson, J., & Poulsen, S. (2023). Interpreter-mediated psychotherapy – a qualitative analysis of the interprofessional collaboration between psychologists and interpreters. *Current Psychology*, *42*(2), 1420–1433. https://doi.org/10.1007/s12144-021-01345-y

Hanft-Robert, S., Römer, M., Morgenroth, O., Redlich, A., & Metzner, F. (2018). Handlungsempfehlungen für die dolmetschergestützte Psychotherapie mit Flüchtlingen und Asylbewerbern: Ergebnisse qualitativer Interviews mit Psychotherapeuten und Dolmetschern zu Chancen und Herausforderungen in der Triade. *Verhaltenstherapie*, *28*(2), 73–81. https://doi.org/10.1159/000480667

Hasbún Avalos, O., Pennington, K., & Osterberg, L. G. (2013). Revolutionizing volunteer interpreter services: An evaluation of an innovative medical interpreter education program. *Journal of General Internal Medicine*, *28*(12), 1589–1595. https://doi.org/10.1007/s11606-013-2502-5

Heck, N. C., Saunders, B. E., & Smith, D. W. (2015). Web-Based training for an evidence-supported treatment: Training completion and knowledge acquisition in a global sample of learners. *Child Maltreatment*, *20*(3), 183–192. https://doi.org/10.1177/1077559515586569

Hox, J. J. (2017). *Multilevel analysis: Techniques and applications* (3rd ed.). Routledge. https://doi.org/10.4324/9781315650982

Hsieh, E. (2008). "I am not a robot!" interpreters' views of their roles in health care settings. *Qualitative Health Research*, *18*(10), 1367–1383. https://doi.org/10.1177/1049732308323840

Hunt, X., & Swartz, L. (2017). Psychotherapy with a language interpreter: Considerations and cautions for practice. *South African Journal of Psychology*, *47*(1), 97–109. https://doi.org/10.1177/0081246316650840

Jeffery, A. J., & Salt, R. J. (2021). Voices of the community: Exploring the experiences of resettled refugee interpreters at a refugee clinic in a large multicultural city in Texas, United States of America. *Health & Social Care in the Community*. Advance online publication, https://doi.org/10.1111/hsc.13574

Jensen, R. S., Hansen, T. M. N., & Carlsson, J. M. (2017). Effekt af brug af tolk i psykoterapi. *Ugeskrift for Læger* [Online], *179*(2).

Jones, J., Rice, K., Cueto, V., Del Valle Mojica, C., Stawitcke, M., Salem, S. L., Talley, E., & Blankenburg, R. (2020). Increasing health care workers' proficiency with using professional medical interpretation: A workshop. *MedEdPORTAL*, *16*, 11017. https://doi.org/10.15766/mep_2374-8265.11017

Kindermann, D., Schmid, C., Derreza-Greeven, C., Huhn, D., Kohl, R. M., Junne, F., Schleyer, M., Daniels, J. K., Ditzen, B., Herzog, W., & Nikendei, C. (2017). Prevalence of and risk factors for secondary traumatization in interpreters for refugees: A cross-sectional study. *Psychopathology*, *50*(4), 262–272. https://doi.org/10.1159/000477670

Kowalski, J., Elżanowski, A., & Śliwerski, A. (2024). Przegląd wybranych psychoterapii PTSD, ich skuteczności i zaleceń terapeutycznych w terapii osób dorosłych [A review of selected psychotherapies for PTSD, their efficacy and treatment guidelines in adults]. *Psychiatria Polska*, *58*(2), 315–328. https://doi.org/10.12740/PP/OnlineFirst/157105

Kruglanski, A. W., Chen, X., Pierro, A., Mannetti, L., Erb, H-P, & Spiegel, S. (2006). Persuasion according to the unimodel: Implications for cancer communication. *Journal of Communication*, *56*(suppl_1), S105–S122. https://doi.org/10.1111/j.1460-2466.2006.00285.x

Lyon, A. R., Stirman, S. W., Kerns, S. E. U., & Bruns, E. J. (2011). Developing the mental health workforce: Review and application of training approaches from multiple disciplines. *Administration and Policy in Mental Health*, *38*(4), 238–253. https://doi.org/10.1007/s10488-010-0331-y

Martin, W. B., Benedetto, N. N., Elledge, D. K., Najjab, A., & Howe-Martin, L. (2020). Beyond the language barrier: Recommendations for working with interpreters in individual psychotherapy. *Professional Psychology: Research and Practice*, *51*(6), 623–629. https://doi.org/10.1037/pro0000350

McDowell, L., Hilfinger Messias, D. K., & Estrada, R. D. (2011). The work of language interpretation in health care: Complex, challenging, exhausting, and often invisible. *Journal of Transcultural Nursing: Official Journal of the Transcultural Nursing Society*, *22*(2), 137–147. https://doi.org/10.1177/1043659610395773

Metzner, F., Dingoyan, D., Wichmann, ML-Y, Hanft-Robert, S., & Pawils, S. (2018). Das Vertrauen muss da sein. *Konfliktdynamik*, *7*(1), 30–39. https://doi.org/10.21706/kd-7-1-30

Miller, K. E., Martell, Z. L., Pazdirek, L., Caruth, M., & Lopez, D. (2005). The role of interpreters in psychotherapy with refugees: An exploratory study. *The American Journal of Orthopsychiatry*, *75*(1), 27–39. https://doi.org/10.1037/0002-9432.75.1.27

Miller, W. R., Yahne, C. E., Moyers, T. B., Martinez, J., & Pirritano, M. (2004). A randomized trial of methods to help clinicians learn motivational interviewing. *Journal of Consulting and Clinical Psychology*, *72*(6), 1050–1062. https://doi.org/10.1037/0022-006X.72.6.1050

Mirdal, G. M., Ryding, E., & Essendrop Sondej, M. (2012). Traumatized refugees, their therapists, and their interpreters: Three perspectives on psychological treatment. *Psychology and Psychotherapy*, *85*(4), 436–455. https://doi.org/10.1111/j.2044-8341.2011.02036.x

Montiel, C., & Mishara, B. L. (2024). Evaluation of the outcomes of the Quebec provincial suicide prevention gatekeeper training on knowledge, recognition of attitudes, perceived self-efficacy, intention to help, and helping behaviors. *Suicide & Life-Threatening Behavior*, *54*(1), 108–121. https://doi.org/10.1111/sltb.13022

Morina, N., Maier, T., & Schmid Mast, M. (2010). Lost in translation?-Psychotherapie unter Einsatz von Dolmetschern [lost in translation?-psychotherapy using interpreters]. *Psychotherapie, Psychosomatik, Medizinische Psychologie*, *60*(3-4), 104–110. https://doi.org/10.1055/s-0029-1202271

Müller, L. R. F., Herold, M. L., Unterhitzenberger, J., & Rosner, R. (2023). Development and evaluation of a training program for interpreters in the field of trauma-focused cognitive behavioral therapy. *Frontiers in Psychology*, *14*, 1148690. https://doi.org/10.3389/fpsyg.2023.1148690

Nájera Catalán, H. E. (2019). Reliability, population classification and weighting in multidimensional poverty measurement: A monte Carlo study. *Social Indicators Research*, *142*, 887–910. https://doi.org/10.1007/s11205-018-1950-z

NICE. (2021, January 6). *Recommendations | Post-traumatic stress disorder | Guidance | NICE*. https://www.nice.org.uk/guidance/ng116/chapter/Recommendations#management-of-ptsd-in-children-young-people-and-adults.

O'Hara, M., & Akinsulure-Smith, A. M. (2011). Working with interpreters: Tools for clinicians conducting psychotherapy with forced immigrants. *International Journal of Migration, Health and Social Care*, *7*(1), 33–43. https://doi.org/10.1108/17479891111176287

Paone, T. R., & Malott, K. M. (2008). Using interpreters in mental health counseling: A literature review and recommendations. *Journal of Multicultural Counseling and Development*, *36*(3), 130–142. https://doi.org/10.1002/j.2161-1912.2008.tb00077.x

R Core Team. (2020). *R: A language and environment for statistical computing* [Computer software]. R Foundation for Statistical Computing. https://www.R-project.org/.

Raval, H. (2003). Therapists' experiences of working with language interpreters. *International Journal of Mental Health*, *32*(2), 6–31.

Rosner, R., Sachser, C., Hornfeck, F., Kilian, R., Kindler, H., Muche, R., Müller, L. R. F., Thielemann, J., Waldmann, T., Ziegenhain, U., Unterhitzenberger, J., & Pfeiffer, E. (2020). Improving mental health care for unaccompanied young refugees through a stepped-care approach versus usual care+: study protocol of a cluster randomized controlled hybrid effectiveness implementation trial. *Trials*, *21*(1), 1013. https://doi.org/10.1186/s13063-020-04922-x

Rousseau, C., Measham, T., & Moro, M-R. (2011). Working with interpreters in Child Mental Health. *Child and Adolescent Mental Health*, *16*(1), 55–59. https://doi.org/10.1111/j.1475-3588.2010.00589.x

Sander, R., Laugesen, H., Skammeritz, S., Mortensen, E. L., & Carlsson, J. (2019). Interpreter-mediated psychotherapy with trauma-affected refugees - A retrospective cohort study. *Psychiatry Research*, *271*, 684–692. https://doi.org/10.1016/j.psychres.2018.12.058

Sansen, L. M., Saupe, L. B., Steidl, A., Fegert, J. M., Hoffmann, U., & Neuner, F. (2020). Development and randomized-controlled evaluation of a web-based training in evidence-based trauma therapy. *Professional Psychology: Research and Practice*, *51*(2), 115–124. https://doi.org/10.1037/pro0000262

Schnyder, U., Ehlers, A., Elbert, T., Foa, E. B., Gersons, B. P. R., Resick, P. A., Shapiro, F., & Cloitre, M. (2015). Psychotherapies for PTSD: What do they have in common? *European Journal of Psychotraumatology*, *6*, 28186. https://doi.org/10.3402/ejpt.v6.28186

Searight, H. R., & Searight, B. K. (2009). Working with foreign language interpreters: Recommendations for psychological practice. *Professional Psychology: Research and Practice*, *40*(5), 444–451. https://doi.org/10.1037/a0016788

Snijders, T. A. B., & Bosker, R. J. (2012). *Multilevel analysis: An introduction to basic and advanced multilevel modeling* (2nd ed.). SAGE Publications.

Tribe, R., & Morrissey, J. (2004). Good practice issues in working with interpreters in mental health. *Intervention: Journal of Mental Health and Psychosocial Support in Conflict Affected Areas*, *2*(2), 129–142. https://repository.uel.ac.uk/item/868wv

Villalobos, B. T., Orengo-Aguayo, R., Castellanos, R., Pastrana, F. A., & Stewart, R. W. (2021). Interpreter perspectives on working with trauma patients: Challenges and recommendations to improve access to care. *Professional Psychology: Research and Practice*. Advance Online Publication, https://doi.org/10.1037/pro0000404