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Mental health and working conditions of interpreters working with refugee clients

Psychische Gesundheit und Arbeitsbedingungen von Dolmetschenden in der Arbeit mit geflüchteten Menschen

Dissertation

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Angelika Geiling, M. Sc.

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Gutachterinnen:

Erstgutachterin: Prof. Dr. Christine Knaevelsrud

Zweitgutachterin: Prof. Dr. Ulrike Kluge

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Bir lisan, bir insan. Iki lisan, iki Insan.

Eine Sprache, ein Mensch. Zwei Sprachen, zwei Menschen.

(Türkisches Sprichwort)

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Abstract

The number of refugees worldwide has been rising for years. In resettlement countries, interpreters play a central role in caring for and supporting refugees due to language barriers. In particular, qualitative studies have shown that many interpreters find themselves in a complex and precarious work situation. For example, many refugees report traumatic events they have experienced, and interpreters often translate this traumatic content in the first person. Nevertheless, unlike other professional groups, they often have no supervision or opportunities for support. In the triad of practitioners, interpreters and refugee clients, interpreters are also often confronted with different and high expectations of their role, although many have not received professional interpreter training themselves. There is little reliable research on how these difficult working conditions affect the well-being of interpreters. The present dissertation therefore comprises four studies which examine the psychological distress of interpreters as well as potential work-related risk and protective factors.

Study 1 is a systematic literature review, which summarises findings from qualitative and quantitative studies on the mental health of interpreters and their work experiences in mental health settings. The majority of the studies are qualitative and were conducted in non-German-speaking countries. Based on a thematic analysis of these studies, positive and negative emotional reactions as well as stressful working conditions and difficulties within the triadic work emerged as the main themes. The quantitative studies were mainly conducted in Germany and focused predominantly on the investigation of secondary traumatic stress or work-related distress. Moreover, there are first indications of significantly higher stress and anxiety symptoms among interpreters compared to representative samples.

Studies 2, 3 and 4 were conducted as part of an online survey of interpreters working with refugee clients. Throughout Germany, paid interpreters for spoken languages were invited to participate. The online survey consisted of two measurement points nine months apart and included various standardised questionnaires, for example regarding psychological distress, work-related exhaustion and

job satisfaction. Participants were also asked to choose a main work setting of four (psychotherapy, counselling, medical setting and authorities) in which they were mostly working at the time of the study, and to answer questions about working conditions regarding this main work settings.

The aim of **study 2** was to investigate psychological distress and work-related exhaustion in interpreting when working with refugees and to identify possible work-related correlates for psychological distress and work-related exhaustion. A total of 164 interpreters from the first measurement point of the online survey were included in the analyses. The participants had significantly higher psychological distress compared to a representative sample from Germany, and about 7% showed indications of a post-traumatic stress disorder. An exploratory regression analysis showed an association between younger age and psychological distress. In addition, dissatisfaction with pay and a higher amount of traumatic content interpreted were associated with work-related exhaustion, while a link between dissatisfaction with recognition and client-related exhaustion was identified.

Study 3 focused on the different work settings of interpreters. The aim of this study was to compare the work-related variables and possible changes in the well-being of interpreters between the four main work settings. A total of 158 interpreters were included in the cross-sectional analyses and 63 of them in the longitudinal analyses. The results showed that significantly more traumatic content was interpreted in counselling sessions and psychotherapy than in medical settings and authorities. The highest proportion of interpreters with a degree in interpreting worked for authorities. The results regarding the cross-sectional data showed that interpreters in counselling settings indicated significantly higher levels of psychological distress and work-related exhaustion than interpreters in authorities or in the medical setting. With regard to compassion satisfaction, there were no significant differences between work settings.

Study 4 presented the development and evaluation of a questionnaire on role conflicts between interpreters and challenging aspects within the triad. The exploratory factor analysis for categorical variables resulted in 23 items over four subscales (lack of emotional boundaries between interpreter and client, devaluation by practitioners, perceived formal framework of the interpreter role, emotional

distress due to the role within the triad). All subscales showed good or excellent reliability and correlational analyses gave first indications of convergent validity with psychological distress, work-related exhaustion and secondary traumatic stress. The final questionnaire (RoCo) therefore showed good psychometric properties and can help to better understand emotional stress due to role conflicts among interpreters.

Overall, the results indicate an increased level of distress of interpreters working with refugee clients. In addition, there are first indications that interpreters' distress is associated with certain working conditions. Furthermore, associations between role conflicts and psychological distress as well as work-related exhaustion and secondary traumatic stress could be identified for the first time. In summary, this points to the need for an improved work-related support structure for interpreters. In addition, the results show that collaboration between interpreters and practitioners should be strengthened in order to enable transparent communication in the triad and thus create an adequate working environment for interpreters.

Abstract in deutscher Sprache

Seit Jahren steigt die Anzahl geflüchteter Menschen weltweit. In den Ankunftsländern nehmen Dolmetschende aufgrund der Sprachbarrieren bei der Versorgung und Unterstützung von geflüchteten Menschen eine zentrale Rolle ein. Insbesondere qualitative Studien zeigten, dass sich viele Dolmetschende dabei in einer komplexen und prekären Arbeitssituation befinden. Beispielsweise übersetzen Dolmetschende häufig traumatische Inhalte in Ich-Person, da viele geflüchtete Menschen von erlebten traumatischen Ereignissen berichten. Trotzdem haben sie im Gegensatz zu anderen Berufsgruppen oft keine Supervision oder Möglichkeiten zur Unterstützung. In der Triade aus Praktiker*innen, Dolmetschenden und geflüchteten Klient*innen sind Dolmetschende zudem oft mit unterschiedlichsten und hohen Erwartungen an ihre Rolle konfrontiert, obwohl viele selbst keine professionelle Dolmetschausbildung erhalten haben. Bisher gibt es wenig belastbare Forschung, wie sich diese schwierigen Arbeitsbedingungen auf das Wohlbefinden von Dolmetschenden auswirken. Die vorliegende Dissertation umfasst daher vier Studien, welche die psychische Belastung von Dolmetschenden sowie potentielle arbeitsbezogene Risiko- und Schutzfaktoren untersuchen.

Studie 1 ist ein systematisches Literaturreview, das Erkenntnisse aus qualitativen und quantitativen Studien zur psychischen Belastung von Dolmetschenden und deren Arbeitserfahrungen in der psychologischen Gesundheitsversorgung von Geflüchteten darlegt. Der Großteil der Studien ist qualitativ und wurde im nicht-deutschen Sprachraum durchgeführt. Basierend auf einer thematischen Analyse dieser Studien kristallisierten sich hier als Hauptthemen positive und negative emotionale Reaktionen sowie belastende Arbeitsbedingungen und Schwierigkeiten innerhalb der Arbeit in der Triade heraus. Die quantitativen Studien stammen vorwiegend aus Deutschland und fokussierten zumeist auf der Untersuchung von sekundärem traumatischem Stress oder arbeitsbezogenem Stress. Vereinzelt gibt es Hinweise auf eine signifikant höhere Stress- und Angstsymptomatik bei Dolmetschenden im Vergleich zu repräsentativen Stichproben.

Die **Studien 2, 3 und 4** wurden im Rahmen einer Onlinebefragung von Dolmetschenden in der Arbeit mit geflüchteten Menschen durchgeführt. Hierbei wurden bundesweit in Deutschland bezahlte

Dolmetschende für gesprochene Sprachen eingeladen teilzunehmen. Die Onlinebefragung bestand aus zwei Messzeitpunkten im Abstand von neun Monaten und beinhaltete verschiedene standardisierte Fragebögen, unter anderem zu psychischer Belastung, arbeitsbezogener Erschöpfung und Arbeitszufriedenheit. Die Teilnehmenden wurden zudem gebeten, ein Hauptarbeitssetting von vieren (Psychotherapie, psychologische Beratung, medizinisches Setting und Behörden) zu wählen, in dem sie zum Zeitpunkt der Studie zumeist arbeiteten, und in Bezug darauf Fragen zu Arbeitsbedingungen zu beantworten.

Ziel der **Studie 2** war es, psychische Belastung und arbeitsbezogene Erschöpfung bei Dolmetschenden in der Arbeit mit geflüchteten Menschen zu untersuchen sowie mögliche arbeitsbezogene Korrelate von psychischer Belastung und arbeitsbezogener Erschöpfung zu identifizieren. Insgesamt wurden 164 Dolmetschende aus dem ersten Messzeitpunkt der Onlinebefragung in die Analysen einbezogen. Die Teilnehmer*innen wiesen eine signifikant höhere psychische Belastung im Vergleich zu einer repräsentativen Stichprobe aus Deutschland auf, und bei etwa 7 % gab es Hinweise auf eine posttraumatische Belastungsstörung (PTSD). In einer explorativen Regressionsanalyse zeigte sich ein Zusammenhang zwischen jüngerem Alter und psychischer Belastung. Darüber hinaus waren Unzufriedenheit mit der Bezahlung und ein höherer Anteil gedolmetschter traumatischer Inhalte mit arbeitsbezogener Erschöpfung assoziiert, während ein Zusammenhang zwischen Unzufriedenheit mit Wertschätzung und Klient*innen bezogener Erschöpfung identifiziert wurde.

In **Studie 3** wurden die verschiedenen Arbeitssettings der Dolmetschenden in den Fokus genommen. Ziel dieser Studie war es, die arbeitsbezogenen Variablen und mögliche Veränderungen des Wohlbefindens von Dolmetschenden zwischen den vier Hauptarbeitssettings zu vergleichen. Insgesamt wurden 158 Dolmetschende im Rahmen der querschnittlichen und von diesen 63 in den längsschnittlichen Analysen einbezogen. Die Ergebnisse zeigten, dass signifikant mehr traumatische Inhalte in Beratungssettings und in der Psychotherapie gedolmetscht wurden als in medizinischen und behördlichen Arbeitssettings. Der höchste Anteil an Dolmetschenden mit einer professionellen

Dolmetschausbildung war im Behördenbereich tätig. Die Ergebnisse zeigten im Querschnitt, dass Dolmetschende in Beratungskontexten signifikant höhere psychische Belastung und arbeitsbedingte Erschöpfung aufwiesen als Dolmetschende bei Behörden bzw. im medizinischen Setting. Hinsichtlich *Compassion Satisfaction* gab es keine signifikanten Unterschiede zwischen den Arbeitssettings.

In **Studie 4** wurde die Entwicklung und Evaluation eines Fragebogens zu Rollenkonflikten von Dolmetschenden und herausfordernden Aspekten innerhalb der Triade vorgestellt. Die explorative Faktorenanalyse für kategoriale Variablen ergab 23 Items über vier Subskalen (fehlende emotionale Abgrenzung von Klient*in, Abwertung durch Auftraggebende, wahrgenommener formaler Rahmen der Dolmetschendenrolle, emotionale Belastung durch die Rolle innerhalb der Triade). Alle Subskalen zeigten eine gute oder ausgezeichnete Reliabilität und Korrelationsanalysen gaben erste Hinweise auf konvergente Validität mit psychischer Belastung, arbeitsbezogener Erschöpfung und sekundärem traumatischen Stress. Der endgültige Fragebogen (RoCo) weist daher gute psychometrische Eigenschaften auf und kann helfen, emotionale Belastungen aufgrund von Rollenkonflikten unter Dolmetschenden besser zu verstehen.

Insgesamt deuten die Ergebnisse auf ein erhöhtes Stressniveau bei Dolmetschenden für geflüchtete Menschen hin. Darüber hinaus gibt es erste Hinweise darauf, dass die Belastung der Dolmetschenden mit bestimmten Arbeitsbedingungen korreliert. Weiterhin konnten erstmalig Zusammenhänge zwischen Rollenkonflikten und psychischer Belastung sowie arbeitsbezogener Erschöpfung und sekundärem traumatischen Stress identifiziert werden. Zusammenfassend deutet dies auf die Notwendigkeit einer verbesserten arbeitsbezogenen Unterstützungsstruktur für Dolmetschende hin. Darüber hinaus zeigen die Ergebnisse, dass die Zusammenarbeit zwischen Dolmetschenden und Praktiker*innen gestärkt werden sollte, um eine transparente Kommunikation in der Triade zu ermöglichen und damit eine adäquate Arbeitsumgebung für Dolmetschende zu schaffen.

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CHAPTER 1

1 Introduction

The number of people being forcibly displaced and migrating increases every year. There are currently almost 90 million people around the world who have lost their living environment, for reasons such as war, discrimination, human rights violations and natural disasters (UNHCR, 2021). Many refugees exhibit signs of psychological disorders having experienced traumatic events in their countries of origin, on the flight and in the countries of arrival (Blackmore et al., 2020). In addition, the challenges of seeking asylum, finding residency or a job, and raising children in a foreign country place an enormous burden on refugees.

In the resettlement countries, several professional groups are involved in the process of supporting refugees. These often include medical and administrative personnel as well as psychosocial services (Crezee et al., 2013; Wichmann et al., 2018). Language barriers are a major obstacle here. Consequently, interpreters are of great importance and must be consulted at almost every step of the process. They therefore play a major role in the inclusion of a growing number of refugees and migrants. This is set to continue into the long term. Thereby, interpreters are often confronted with highly traumatic and emotional content. Additionally, many of them have their own history of flight and migration. However, the mental health of interpreters as well as the complex circumstances of interpreting are often overlooked by practitioners and have been neglected in research (Hassan & Blackwood, 2021; Jiménez-Ivars & León-Pinilla, 2018). This is even reflected in the titles of published literature such as “Lost in translation […]” (Morina et al., 2010), “The interpreter is not an invisible being” (Gartley & Due, 2017), “Medical interpreters have feelings too” (Loutan et al., 1999) or ”Embedded Strangers in One’s Own Job? Freelance Interpreters’ Invisible Work […]” (Giustini, 2022).

Most published research regarding the work with and mental health of interpreters has been carried out in the USA, New Zealand, Australia, UK, and Europe. This has highlighted commonalities among these countries regarding the use of interpreters and the associated challenges for interpreters

(e.g., Yick & Daines, 2017). In this context, early studies reported on interpreters' reactions to the extremely traumatising experiences of refugee clients (e.g., Sande, 1998). Particularly, the difficult working conditions such as the lack of supervision were stressed (Fennig & Denov, 2021). As interpreters typically work in a triadic setting with, for example, a social worker and the refugee client, further challenges concerned the complex dynamics within the triad of practitioner, interpreter and refugee client (e.g., Hassan & Blackwood, 2021). Overall, the methodological focus has been on qualitative methods. Most of the research to date summarises individual experiences in a particular work environment.

The first aim of this dissertation was therefore to quantitatively explore and investigate the mental health of interpreters working with refugee clients to get a better comprehension of their actual psychological distress and work-related exhaustion. The second aim was to investigate correlates of interpreters' mental health to reach a better understanding of possible risk and protective factors of interpreters' mental health. These aims were addressed through several studies. First, qualitative and quantitative research was systematically reviewed on interpreters' mental health in the mental health care for refugees (**study 1**). Second, psychological distress, work-related exhaustion and associated correlates were investigated quantitatively among interpreters in refugee care through an online survey in Germany (**study 2**). Third, work settings of interpreters were compared regarding work-related characteristics and interpreters' wellbeing (**study 3**). As the role of interpreters within the triad is still highly discussed and little is known about how this is experienced in a distressing way, a questionnaire was developed to investigate interpreters' role conflicts within the triad (**study 4**). Therefore, the studies 2-4 focussed on the mental health of a group of interpreters working in Germany in various work settings enabling the identification of first indications of possible risk and protective factors for interpreting in refugee care.

The first chapter of this thesis gives a general introduction to the specifics of interpreting for refugee clients as well as relevant work settings of interpreters and working conditions. Furthermore, previous research on the mental health and associated correlates will be outlined as well as the complex

role dynamics in the triad. At the end of the first chapter, the research questions addressed in this thesis are presented. In the subsequent chapters (Chapter 2-5), the original work, which was carried out responding to the research aims and was submitted to peer reviewed journals, is outlined. The last part of the thesis (Chapter 6) first summarises the findings of this thesis and furthermore indicates implications and future research directions.

1.1 Interpreting and special features of working with refugee clients

Interpreting means the verbal translation of spoken languages, in comparison to translation, which is the translation of written words (Bundesverband der Dolmetscher und Übersetzer, English: Federal Association of Interpreters and Translators, Germany). Internationally, various terms are used for interpreting, usually public service interpreting or community interpreting (table 1.1). It becomes clear that the task of interpreting often includes more than translating spoken words, for example explaining specific meanings of words in different languages or contextualising words against the cultural background of a client (Chang et al., 2021). This way of interpreting is sometimes addressed as cultural brokering or mediating (Chang et al., 2021; Mirza et al., 2017). In Germany, both aspects of interpreting are often integrated within the term language and cultural mediation (German: Sprach- und Kulturmittlung), which is usually used in the context of interpreting for refugee clients. Therefore, in this dissertation the word interpreting and interpreter will include both aspects; language and cultural mediation.

Table 1.1

Terms used in various geonational contexts (Tipton and Furmanek, 2016)

Africa	**RSA**: liaison interpreting
Asia	**China**: *社区口译* (community interpreting)
	Japan: *komyunitī tsūyaku* (community interpreting)
	Malaysia: *interpretasi komuniti/pendatang tan kumpulan lain* (community interpreting/for migrants and other groups)
	South Korea: *keomyuniti tong-yeog* (community interpreting)
Australia and Oceania	**Australia**: *community interpreting* or *liaison interpreting*
Europe	**Austria**: *Kommunaldolmetschen* (community interpreting)
	France: *interprétation en milieu social* (social setting interpreting)
	Germany: *Sprach- und Kulturmittlung* (language and cultural mediating) or *Sprach- und Integrationsmittlung* (language and integration mediation)
	Ireland: *dialogue interpreting* or *community interpreting*
	Italy: *mediazione interculturale/linguistica* (intercultural/linguistic mediation) *interpretatzione di trattativa* (liaison interpreting)
	Poland: *tłumaczenie środowiskowe* (social setting interpreting) or *tłumaczenie ustne dla służb publicznych* (public service interpreting)
	Portugal: *interpretação comunitária* (community interpreting)
	Slovakia: *komunitný tlmočenie* (community interpreting)
	Spain: *interpretación en los servicios públicos* (public service interpreting) or *mediación intercultural* (intercultural mediation)
	Sweden: *kontakttolk* (contact interpreting) or *dialogtolk* (dialogue interpreting)
	UK: *public service interpreting*

North America	**Canada**: *community interpreting* or *cultural interpreting* **Mexico**: *interpretación comunitaria (*community interpreting) **USA**: *community interpreting*
South America	**Argentina**: *interpretación en los servicios públicos* (public service interpreting) **Brazil**: *interpretação comunitária* (community interpreting)

Note. RSA = Republic of South Africa, UK = United Kingdom

1.1.1 Professional and lay interpreters: Lack of quality assurance

Professionally trained interpreters usually learn and have to follow a code of conduct or ethics. These codes aim to implement a professional standard to ensure a higher quality of interpreting and include basic principles of interpreting. Codes of conduct for court interpreters were established as early as the 1970s. Standards for healthcare interpreting were developed and published much later by interpreter associations such as the International Medical Interpreters Association (IMIA) in 1995 (Bancroft et al., 2013). Codes of conduct normally comprise ethical principles such as confidentiality (not sharing any information which is interpreted in the session), impartiality (being equally open for both parties within the triad) and transparency (translate literally everything which is said) (Kaufert & Putsch, 1997).

A systematic review showed that the use of professional interpreters (i.e. trained and paid interpreters) improved the quality of care for LEP (Limited English Proficiency) patients compared to ad hoc interpreters (i.e. non-paid interpreters, family members) (Karliner et al., 2007). In addition, research demonstrated that healthcare and government practitioners (e.g. doctors, psychotherapists, social workers) prefer trained or professional interpreters (Bergunde & Pöllabauer, 2019) and often addressed the lack of adequately qualified or professional interpreters (Fennig & Denov, 2021; Kiselev et al., 2020; Samkange-Zeeb et al., 2020). However, research showed that refugee and migrant clients sometimes did not trust a professional interpreter and preferred a family member (Brandenberger et al., 2019; Celik & Cheesman, 2018; Resera et al., 2015). In general, it is strongly discouraged to use relatives and especially children as interpreters for reasons of privacy, emotional distress and confidentiality (Leanza et al., 2014; Morina et al., 2010).

In Germany, there are no standards or quality criteria for interpreters being deployed in the healthcare system (Kluge, 2020). In practice, usually the practitioner or the institution sets the requirements for employment. Interpreters working with refugees have undergone very different training in relation to interpreting, as there currently seems to be a wide range of training options in terms of duration and content for interpreters (Breitsprecher et al., 2020). Whereas, for example, the non-profit cooperation SprInt e.G. offers a structured 18-months education, psychosocial treatment centres for refugees frequently offer their own training for their interpreters. Research indicated furthermore that interpreters took part in training specifically addressing trauma-informed interpreting or the specifics of working with refugee clients (Wichmann et al., 2018). Due to the variety of trainings, it cannot be assumed that lay interpreters without preparation or professional interpreting training know the aforementioned principles or necessarily comply to the code of conduct.

Internationally, predefined standards regarding the permission to interpret in a certain context or regarding accreditation differ between countries. In contrast, in countries other than Germany, such as Australia and New Zealand, national agencies aim to ensure minimum standards for public service interpreting by providing certified interpreters for public service interpreting. These interpreters must have passed a performance test or a minimum level of training (Lai & Costello, 2021). However, in many resettlement countries, legal requirements for interpreters and guidelines for quality assurance are vaguely defined regarding healthcare settings (Kletečka-Pulker et al., 2019). Therefore, interpreters represent a very heterogeneous group in terms of their education and are differently integrated in the healthcare and legal system of a country. Therefore, in this dissertation, the terms will be used as follows: lay interpreter = not trained or informally trained in interpreting; professional interpreter = with an interpreting degree, interpreter: both, lay or professional interpreter.

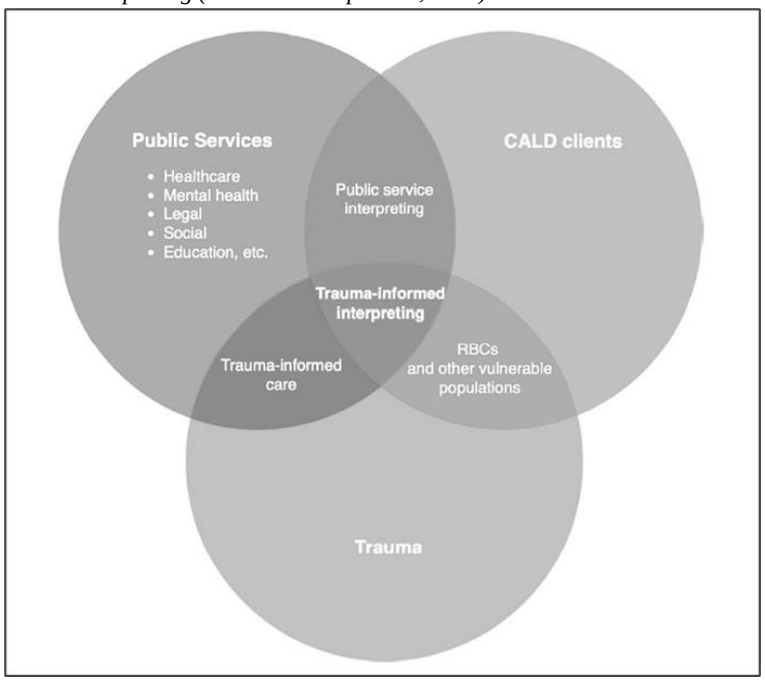
1.1.2 Refugee clients and trauma-informed interpreting

Language barriers pose difficulties to accessing public services and other structures for everyone with another preferred spoken language to the local language in a country (Lebano et al., 2020). When research articles refer to clients of interpreters several terms are used. These usually depend on the

context of research, the country and the population of interest. Commonly accepted terms differ from country to country. These include ‘migrants’ or ‘refugees’, which are used internationally, ‘person with migration background’ (in Germany), ‘LEP’ (Limited English Proficiency) clients (in English-speaking countries; e.g., USA), and CALD clients (culturally and linguistically diverse; in Australia) (Pham et al., 2021). It becomes clear that interpreters interpret for very many different population groups. This dissertation will focus on interpreting for refugee clients. Within this context, various aspects now come together which highlight the importance of trauma-informed interpreting for refugees and relevant consequences for interpreters (figure 1.1). The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) defines trauma as exposure to actual or threatened death, serious injury or sexual violence, e.g.

Figure 1.1

Trauma-informed interpreting within the broader context of trauma-informed care and public service interpreting (Gonzáles Campanella, 2022)



Note. CALD = culturally and linguistically diverse clients; RBC = Refugee-background clients

by directly experiencing or witnessing it first-hand (American Psychiatric Association, 2013). Trauma-informed interpreting here incorporates the awareness of interpreters regarding the traumatic experiences of the clients as well as coping with this situation while and after interpreting. This means, for example, centring the client and their autonomy. In particular, interpreters have to focus even more on giving voice to clients while at the same time being aware of their possible own intentions to help the clients in more ways than interpreting (Bancroft et al., 2016).

Refugees furthermore represent a special subgroup of clients with whom interpreters work as they are forced to leave their country of origin, have to apply for residency in another country and are sometimes not free to leave and to return to their country of origin or area of living without facing prosecution (Douglas et al., 2019). They consequently express needs more urgently and frequently than other clients sometimes approaching interpreters with these (Dubus, 2016). Secondly, they often have experienced potentially traumatic events and therefore represent an especially vulnerable group. In consequence, interpreters are frequently confronted with extremely traumatic content to interpret in comparison to other client groups. For these reasons, first-person interpreting (Resera, Tribe, & Lane, 2015), which is usually recommended (Morina et al., 2010), can be challenging. Thirdly, refugees use a variety of public services, such as health care and legal advice, so trauma-informed interpreting plays a role in a wide range of interpreters' work settings and has to be applied working with many different practitioners and their expectations. In sum, interpreting for refugees presents interpreters with multiple challenges which points to the need to explore and investigate interpreters' mental health.

1.2 Peculiarities regarding common work settings of interpreters

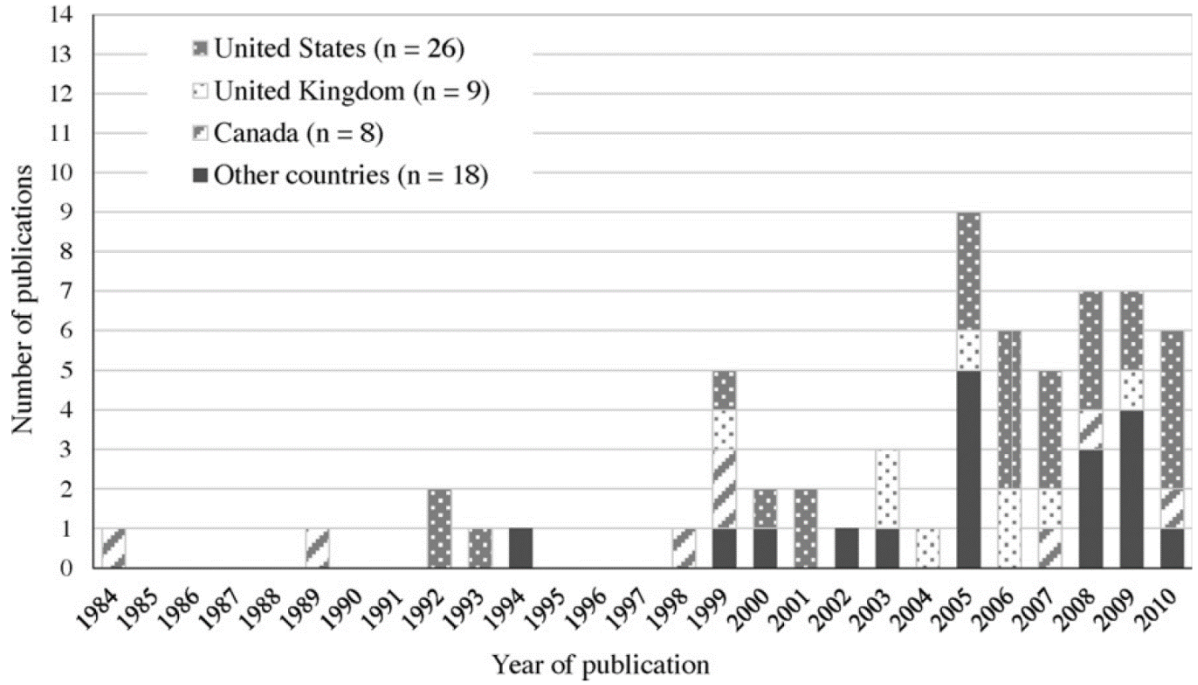
The previous section introduced the variety of work settings of interpreters when speaking of public service interpreting. This is reflected in research addressing interpreters' experiences in specific settings. However, most studies are of qualitative nature and point to specific challenging factors for the interpreter in the respective settings (Doherty et al., 2010; Hassan & Blackwood, 2021; Hsieh, 2008; Resera et al., 2015), for example in psychotherapy (e.g., Simms et al., 2021) or medical care (Hsieh, 2008; Kotovicz et al., 2018). Therefore, four frequently mentioned work settings and specific challenges of these settings will be described in the next sections.

1.2.1 Medical settings

Research on medical interpreting goes back to the early 1980s, with the number of studies increasing over the past two decades (figure 1.2). Often these studies included several disciplines of medicine such as general medicine, palliative care or interpreting in emergency rooms. However, most of the following studies often focussed on LEP clients in the USA and therefore included refugee clients

Figure 1.2

Number of publications, in total and by country (Brisset et al., 2013)



but were not specifically conducted in the context of refugee care. Overall, external factors such as organisational difficulties were addressed in research such as lack of time and scheduling (Park et al., 2017; Yick & Daines, 2017). For instance, medical settings were associated with particularly unpredictable schedules, for example urgent nightly calls, emergency calls or adapting to the variable schedules of nurses and doctors (McDowell et al., 2011; Park et al., 2017) which resulted in insufficient time for appointments (Kotovicz et al., 2018). Emotionally challenging situations included interpreting end-of-life-discussion and severe illnesses such as cancer (Park et al., 2017; Schenker et al., 2012), as well as whenever stories of violent trauma or mental illness came up during assessments (Jeffery & Salt, 2022).

1.2.2 Mental healthcare: psychotherapy and counselling

A specific case of healthcare interpreting is interpreting in mental healthcare, such as in psychotherapy or in counselling sessions. The challenges and the impact of interpreting for refugees were most often investigated with regard to mental health settings for several reasons. First, verbal communication is an essential tool in psychotherapy as a means of delivering treatment (Kluge, 2020). Furthermore, previous research has shown that interpreters facilitate communication in psychiatric

contexts (Bauer & Alegría, 2010; Morina et al., 2010). Therefore, interpreters are even more crucial in this setting than in other healthcare settings. Secondly, psychotherapeutic or counselling sessions in the care of refugees often include traumatic content which was reported to be particularly stressful by interpreters (Dubus, 2016; Miller et al., 2005).

Counselling differs from psychotherapy as there are generally fewer appointments per client and it aims to find solutions for specific problems (Ziebertz & Sander, 2021). Therefore, in contrast to psychotherapy sessions, the counsellor and client do not develop a long-term professional relationship. In general, the very few studies which concentrated on counselling showed similar challenges and experiences of interpreters to those in psychotherapeutic settings, for example feeling distressed because of the trauma-related stories or being very empathic with the client (Celik & Cheesman, 2018; Mirza et al., 2017).

1.2.3 Authorities and asylum hearings

Besides health and mental healthcare, interpreters are often needed in legal contexts and governmental services such as civil or social services, at court and police stations (Crezee et al., 2013; Kindermann et al., 2017; Resera et al., 2015; Wichmann et al., 2018). In legal procedures of refugees, interpreters are especially important for asylum hearings. These are sometimes described as particularly stressful because interpreters are under a lot of pressure to interpret particularly accurately and moreover reported to be emotionally distressed when traumatic content had to be interpreted (Bergunde & Pöllabauer, 2019; Tipton & Furmanek, 2016).

1.3 Working conditions: Lack of funding and support structures

There is a considerable volume of literature pointing to numerous difficult or even stressful circumstances across work settings of interpreters. Most studies applied qualitative methodology and in general very few quantitative studies were conducted. However, the qualitative studies give an impression of possibly relevant work-related aspects indicating that interpreters face a complex working situation. Overall, various studies indicated the lack of an institutionally facilitated preparation and support structure for interpreters. This will be outlined in the next sections.

1.3.1 Lack of funding and its consequences on the deployment of interpreters

In several resettlement countries, as in Germany, there is a lack of financial funding of interpreters (Böttche et al., 2016; Fennig & Denov, 2021; Penka et al., 2012). More specifically, there is no legal regulation for the financing of interpreters in healthcare such as in psychotherapy or outpatient medical practices (Schouler-Ocak, 2015). This results in difficult circumstances for the work of interpreters.

Firstly, costs for interpreters often have to be covered by hospitals, private practitioners or even clients (Brandl et al., 2020). Some organisations have their own interpreter pools and have to pay for interpreters due to the lack of funding by the governments (Penka et al., 2012). Moreover, the salary varies depending on the work setting, for example, in Sweden, the health sector offers lower pay than other providers of the public sector (Hadziabdic & Hjelm, 2019) whereas in Germany, interpreters in asylum hearings earned considerably less than professional and sworn interpreters in the justice system (Berbel, 2020). Therefore, professional interpreters are seldomly invited to interpret (Schenker et al., 2011) and practitioners often resort to lay interpreters to reduce costs. Secondly, as it is difficult to predict migrant flow and some languages are not offered in professional trainings, practitioners are bound by the available resources (Bergunde & Pöllabauer, 2019), especially if a language is rarely spoken and the community in the area of resettlement is small. Therefore, most interpreters in refugee care work are lay interpreters and work without a formal education.

Thirdly, previous research demonstrated that most interpreters work as freelancers (Dong & Turner, 2016; Kindermann et al., 2017; Simms et al., 2021; Wichmann et al., 2018). In consequence they are dependent on an unregulated labour market which is influenced by the unsteady migration flow and the resulting different needs for languages (Norström et al., 2012). Hence, interpreters are often confronted with precarious employment and little freedom to refuse inappropriate tasks due to the structural power imbalance of being a contracted interpreter (Dong & Turner, 2016; Gallagher et al., 2017; Giustini, 2022).

1.3.2 Lost possibilities of structural support and lack of recognition

Previous literature demonstrated the lack of organisational support in terms of preparational or further training, (de-)briefings, supervision and peer-to-peer-support. For instance, interpreters pointed out the lack of training offers in several studies (Crezee et al., 2013; Holmgren et al., 2003; Lipton et al., 2002; Splevins et al., 2010; Wichmann et al., 2018) and did not feel sufficiently prepared by their employer (e.g., the interpreting agency or the NGO) before they started their work (Green et al., 2012; Holmgren et al., 2003). However, this would be particularly important for those interpreters who did not train professionally in interpreting or had not finished a degree. Additionally, various studies highlighted the wish of interpreters for training or even preparational training before starting interpreting with requested topics such as strategies of self-care, psychotherapy approaches or interpreting techniques (Crezee et al., 2013; d'Ardenne et al., 2007; Doherty et al., 2010; Miller et al., 2005).

Further possibilities of support by employers include briefings and debriefings by practitioners for interpreters, which are usually recommended - especially in mental health care of refugees (Martin et al., 2020; O'Hara & Akinsulure-Smith, 2011). However, due to financial and time constraints, this is often not possible. Previous reviews furthermore highlighted the importance and usefulness of supervision for interpreters (Fennig & Denov, 2021; Yick & Daines, 2017). Supervision is defined as the intervention of a qualified senior practitioner often of the same of profession as the supervisee. The intervention aims to enhance the supervisee's abilities and functioning in the profession (Bernard & Goodyear, 2014) and is considered a standard component of therapeutic care (Kühne et al., 2019). However, the offer of supervision is not as common for interpreters as it is for psychotherapists or social workers (Lai & Costello, 2021; Mehus & Becher, 2016). Numerous studies demonstrated that interpreters rarely have the opportunity for supervision (Crezee et al., 2013; Fennig & Denov, 2021; Wichmann et al., 2018) although supervision has been found to be helpful for the acceptance of emotional reactions and has helped in clarifying the role and responsibilities of interpreters as professionals (Crezee et al., 2013; Holmgren et al., 2003; Sande, 1998; Splevins et al., 2010; Wichmann et al., 2018). Peer-to-peer support was addressed in several studies as well. However, interpreters often

described it as a spontaneous meeting between colleagues to exchange experiences and as a stress relief (Simms et al., 2021) instead of a regular appointment organised by employers or other stakeholders.

In general, interpreters within the healthcare system or in public interpreting have often described themselves as being of low status, feeling undervalued or treated as a second-rate employee without having any power (Green et al., 2012; Holmgren et al., 2003; Lipton et al., 2002; Williams, 2005). Interpreters reported having been booked for several appointments in a row, so they had no breaks (d'Ardenne et al., 2007; Holmgren et al., 2003). This, for example, increased the pressure when clients where inattentive or arrived delayed to appointments (Doherty et al., 2010; Holmgren et al., 2003) and points out the lack of recognition for the demands of this job. Overall, interpreters were often not perceived as equally valued professionals within institutionalised systems like hospitals or organisations, which led to feeling of degradation and powerlessness (Green et al., 2012; Lipton et al., 2002; Resera et al., 2015; Williams, 2005). Overall, these reports underline the structural power imbalance that exists, in that the interpreting agencies or practitioners have the power to decide whom to hire (Gallagher et al., 2017) and how to include interpreters in the organisational processes.

1.4 Work-related and non-work-related psychological distress of interpreters

Research on the mental health of interpreters regarding the care of refugees has increased over the past two decades (Brisset et al., 2013; Fennig & Denov, 2021). Besides the complex and varying working conditions, studies have highlighted interpreters' work with refugee clients or clients who have experienced potentially traumatic experiences. For instance, refugee clients often are exposed to potentially traumatic events due to war and flight and were found to have a high prevalence of mental disorders such as post-traumatic stress disorder (PTSD) or depression (Blackmore et al., 2020; Henkelmann et al., 2020). Therefore, interpreters are frequently confronted with traumatic content, especially in trauma-focussed therapies (d'Ardenne et al., 2007). At the same time, however, it is important that interpreters interpret in the first person, which may aggravate the internalisation of and identification with the traumatic content on the side of the interpreter (Lai & Costello, 2021; Splevins et al., 2010). Additionally, they are sometimes underprepared when confronted with traumatic

experiences in comparison to practitioners who may be familiar with the case from documents or protocols. Overall, due to these stressful circumstances interpreters may be at risk of developing psychological disorders. However, very few quantitative studies on the mental health of interpreters in the care of refugees have been conducted and published (Green et al., 2012). This research mostly concentrated on work-related psychological distress. Furthermore, interpreters' own traumatic experiences were highlighted. The following sections will summarise primarily quantitative results of the main constructs investigated so far among interpreters.

1.4.1 Work-related exhaustion, fatigue, and distress

In early research regarding the work with interpreters, concerns of transference and countertransference within the triad were discussed in the context of psychotherapy (Haenel, 1997; Westermeyer, 1990). It was hypothesised that due to the traumatic experiences of refugee clients in particular, both interpreters and practitioners may experience sadness, anger or helplessness due to countertransference. More recent studies followed up on the possible impact of traumatic content, and therefore focused on investigating work-related distress in terms of compassion fatigue, vicarious traumatisation, secondary traumatic stress or burnout (e.g., Kindermann et al., 2017). As these constructs play an important role in the research of interpreters' mental health, every construct is going to be shortly described in the following.

Compassion fatigue is the broadest term and often used to describe the psychological reactions of clinicians to their clients (Newell et al., 2016). In a more narrow framework of professional quality of life according to Stamm (2010), it describes negative effects in the consequence of helping. Moreover, compassion fatigue comprises burnout and secondary traumatic stress. Burnout in this framework is described as exhaustion, frustration or anger. In contrast, compassion satisfaction therefore constitutes the positive effects of the work in contact with people and comprises the pleasure felt because of it. More specifically, compassion satisfaction comprises feeling proud of the work or the gratification of helping. According to Stamm (2010), compassion fatigue and compassion satisfaction can be experienced at the same time and therefore outweigh each other. Both constructs often were investigated

with versions of the Professional Quality of Like Questionnaire (ProQOL; Stamm, 2010). Previous research indicated that interpreters for refugees had similar high levels of compassion fatigue and compassion satisfaction to other professions (Birck, 2001; Shlesinger, 2005).

Vicarious traumatisation originally described by McCann and Pearlman (1990) can theoretically be experienced by people who work with traumatised clients, such as psychotherapists. This concept is defined by changes in the practitioner's cognitions about the world and him/herself in a negative way. Common cognitions relate to the feeling of security or trust. Until now, this construct has only been investigated once among a very small sample of interpreters (n = 5) at a psychosocial treatment centre for refugees in Germany. In this sample, minor cognitive disruptions were found among interpreters (Birck, 2001).

Like vicarious traumatisation, secondary traumatic stress can be experienced as a consequence of the work with traumatised clients. This concept includes symptoms resembling those of PTSD such as intrusive memories, hyperarousal or avoidance which refer to the client's trauma (Bride et al., 2004; Daniels et al., 2017). Regarding interpreters, for the most part either the subscale secondary traumatic stress of the ProQOL (Stamm, 2010) or the Questionnaire for Secondary Traumatization (Weitkamp et al., 2014) were applied (Denkinger et al., 2018; Kindermann et al., 2017; Mehus & Becher, 2016; Wichmann et al., 2018). Thereby, moderate secondary traumatic stress was experienced between 12 and 17% of the interpreter sample (Denkinger et al., 2018; Kindermann et al., 2017; Wichmann et al., 2018). Regarding severe secondary traumatic stress, the proportion of interpreters ranged widely, from 5-6% in two samples (Kindermann et al., 2017; Wichmann et al., 2018) to 50% in another (Denkinger et al., 2018).

Burnout originally was conceptualised in relation to work with clients in human social services and healthcare. Thereby, it comprised emotional exhaustion caused, for example, by job overload and depersonalisation (Maslach et al., 2001). In the course of research, burnout was defined in part differently by various authors (Maslach & Leiter, 2016; Maslach et al., 2001). Thus, the definition according to Maslach et al. (2001) includes a dimensional concept of burnout consisting of emotional

exhaustion, depersonalisation and reduced accomplishment. The core concept often addresses exhaustion (Cieslak et al., 2014), emotionally and/or physically. In general, burnout can be differentiated from secondary traumatic stress and vicarious traumatisation as it does not have to occur as a result of work with traumatised clients (Cieslak et al., 2014). Burnout can therefore be experienced in every area of work. With regard to interpreters, burnout has only been examined within the framework of the ProQOL, with interpreters showing lower burnout than therapists (Birck, 2001) or comparably high burnout to other professions (Mehus & Becher, 2016; Shlesinger, 2005).

1.4.2 General psychological distress among interpreters

Only two studies so far have quantitatively investigated psychological distress, depression and anxiety in interpreters, and both were conducted in Germany (Kindermann et al., 2017; Teegen & Gönnenwein, 2002). Hereby, significantly higher levels of distress and anxiety were found for interpreters working for refugees in a German city in several locations (e.g., legal counselling of non-profit organisations, hospitals, psychosocial counselling) in comparison to the representative population (Kindermann et al., 2017). Regarding depression, studies either indicated no differences to the German population (Kindermann et al., 2017) or lower levels (Teegen & Gönnenwein, 2002).

1.4.3 Trauma exposure and PTSD among interpreters

Some interpreters have themselves fled their home country, thereby being at higher risk of traumatic exposure. They may therefore suffer from posttraumatic psychological disorders such as PTSD. With specific regard to the care of refugee clients, previous research discussed the relevance of traumatic experiences interpreters experienced themselves and their possible relation to psychological distress when interpreting for refugees and other clients (Green et al., 2012; Holmgren et al., 2003; Johnson et al., 2009; Simms et al., 2021). Qualitative research indicated that the distress during and after sessions with refugees was especially high when interpreters had experienced war and combat related traumatic events (Green et al., 2012; Simms et al., 2021; Splevins et al., 2010). So far, trauma exposure and PTSD have been investigated quantitatively in two German studies (Kindermann et al., 2017; Teegen & Gönnenwein, 2002). Traumatic experiences were reported descriptively in both studies

indicating that around a third of their sample has lived in a war zone and experienced dangerous war or combat situations. On average, interpreters had experienced 2.7 traumatic events in their life (Teegen & Gönnenwein, 2002). Regarding PTSD, a prevalence of 9-10% was reported in both studies (Kindermann et al., 2017; Teegen & Gönnenwein, 2002), which is higher than in a representative German sample (2.4%; Eichhorn et al., 2014).

1.5 Correlates of outcomes regarding the mental health of interpreters

Overall, very few quantitative studies investigated the relation between mental health of interpreters and possible correlates, each of them mostly focused primarily on one outcome and its associated correlates. Those correlates can be grouped into two categories: the first group comprises personal factors such as gender or trauma exposure (Kindermann et al., 2017; Teegen & Gönnenwein, 2002). Secondly, factors related to work such as work volume (Shlesinger, 2005) or work experience (Kindermann et al., 2017). The results regarding every group will be succinctly summarised in the next sections. Hereby, most study results rely on a single study due to the lack of research in this field and therefore can only give first directions of possible associations.

1.5.1 Personal correlates

Female interpreters showed significantly higher depression, anxiety and stress symptoms than male interpreters (Kindermann et al., 2017). No other gender differences were found or investigated. Another focus of the studies was on the mental health of interpreters who have been refugees themselves and also interpreted for refugees (Crezee et al., 2013; Green et al., 2012; Holmgren et al., 2003; Johnson et al., 2009; Sande, 1998). Flight experience was investigated as a possible correlate for several outcomes (Kindermann et al., 2017; Mehus & Becher, 2016; Wichmann et al., 2018), (i.e. STS, stress anxiety, depression) and only regarding PTSD were significant differences were found: interpreters who fled their country showed significantly higher PTSD symptoms levels than those who did not flee (Kindermann et al., 2017). The exposure to traumatic experiences was investigated differently; either dichotomous if an individual had experienced a trauma, or with a standardised questionnaire. Studies showed hereby that the more traumatic experiences someone reported, the higher the symptom levels of

PTSD and depression (Teegen & Gönnenwein, 2002) and that having experienced a traumatic event in the past was associated with higher levels of burnout (Shlesinger, 2005).

1.5.2 Work-related correlates

Most quantitative studies examined work-related variables as correlates for interpreters' distress, for example work experience or the frequency of supervision. Work experience was associated with burnout (Shlesinger, 2005) but not with stress, anxiety, depression or STS (Kindermann et al., 2017). Though supervision was addressed in several studies (Crezee et al., 2013; Kindermann et al., 2017; Splevins et al., 2010; Wichmann et al., 2018), an association with mental health has only been explored in one study: group comparison showed that interpreters with supervision reported higher burnout levels than interpreters without supervision (Shlesinger, 2005). According to the author, the supervision may not have addressed the interpreters' needs and thus contributed to the burnout. Workload was investigated by examining, for example, weekly working hours with any outcome of psychological distress (Shlesinger, 2005; Wichmann et al., 2018). Results indicated that only burnout was associated with a higher workload (Shlesinger, 2005).

Though the impact of interpreted traumatic content on interpreters' mental health was outlined in previous research, studies approached the investigation of traumatic content in different ways, e.g. by taking into account the frequency of interpreted trauma exposure, proportion of clients with trauma exposure or proportion of clients who addressed trauma exposure in sessions (Teegen & Gönnenwein, 2002; Wichmann et al., 2018). Only one study found a significant association between PTSD and distress because of interpreted content: interpreters with PTSD showed more distress than interpreters without PTSD (Teegen & Gönnenwein, 2002).

1.6 Role expectations within the triad of practitioner, interpreter, and refugee client

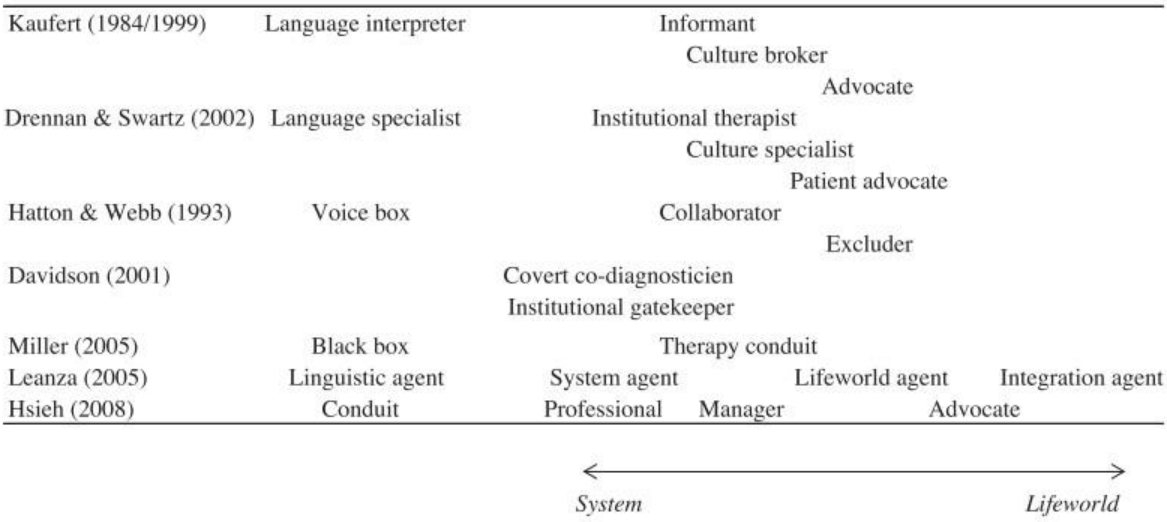
Interpreters usually translate in a triad consisting of practitioner, interpreter and client. In this triad, interpreters often take on several different roles in healthcare which is one of the most discussed topics around interpreting (Tipton & Furmanek, 2016). The varying expectations and needs on both sides (the client and the practitioner) create a tension. Importantly, due to their forced flight, refugee

clients not only have to overcome various barriers in terms of housing and finances, but also in terms of being included in the society of their resettlement country. Interpreters consequently often try to fulfil several needs beyond interpreting the foreign language (Dubus, 2016). This is contrary to the frequent assumption that interpreting in a session only involves the translation process of the spoken word and that the interpreter is basically invisible during the session. This model of interpreting is called "black box" or "conduit" (Hsieh, 2008; Westermeyer, 1990). However, this perception is critiqued as it neglects the fact that interpreters may unconsciously or consciously intervene in communication (Kluge & Kassim, 2006) and also be affected by the traumatic stories they interpret (Yick & Daines, 2017). The more common role of the cultural broker emphasises the importance for the practitioner to benefit from the interpreter's potential cultural knowledge and understanding they know or even share with the client (Gartley & Due, 2017; Tribe & Keefe, 2009).

Previous reviews and studies analysed the many roles interpreters and practitioners described, such as a conduit, cultural broker, advocate, counsellor or co-therapist (Hsieh, 2008; Sleptsova et al., 2014). An overview of a review depicting the continuum of roles can be seen in figure 1.3. Thereby, roles range between the conduit and an advocating role (Brisset et al., 2013).

Figure 1.3

Typologies of interpreter roles (Brisset et al., 2013)



Within the triad, interpreters are primarily part of two relationships: with the client and with the practitioner. Both relationships are characterised by specific expectations of each person. Simultaneously, interpreters have to manage linguistically the communication of practitioner and client, which therefore involves them in a third relationship.

1.6.1 Relationship to the client

Interpreters often express a strong sense of empathy with refugee clients (Celik & Cheesman, 2018; Splevins et al., 2010), especially when they can relate to similar experiences or have similar cultural backgrounds (Miller et al., 2005; Splevins et al., 2010).Several qualitative studies have showed that interpreters experienced difficulties in detaching themselves while or after the appointments, as they could not forget or kept on thinking about the interpreted content (Celik & Cheesman, 2018; d'Ardenne et al., 2007; Doherty et al., 2010). Moreover, during the appointments, some interpreters felt the need to calm the client or comfort them (Resera et al., 2015) and were therefore at risk of losing their professional attitude.

1.6.2 Relationship to the practitioner

As figure 1.3 showed, interpreters and practitioners perceive interpreters to be in various roles. Thereby, previous qualitative studies demonstrated various stressful aspects of the interpreter's professional relationship with practitioners. Individual studies showed that practitioners asked interpreters for information or advice that went beyond translation (Resera et al., 2015), for example regarding ethnic or cultural background (Miller et al., 2005). Nevertheless, other practitioners seemed to prefer the interpreter in the role of the conduit, as issues of power and control emerged in the triadic relationship which can be unsettling for practitioners (Fennig & Denov, 2021; Leanza et al., 2014; Tribe & Keefe, 2009). In some situations, interpreters reported that they felt devalued and downgraded (Williams, 2004; Williams, 2005), for example because they did not feel they were being perceived as professionals or equal in the triad (Grant, 2009; Holmgren et al., 2003). This was also reflected in apparently untrained practitioners who did not seem to be aware of the interpreter's demanding work, as they spoke too fast, used long sentences or difficult language (Crezee et al., 2013; Simms et al., 2021).

1.6.3 The challenge of role clarification

The many presented role perceptions in the literature demonstrates the continuum in which interpreters work. Hereby, every role is associated with different role boundaries and tasks for interpreters. The assumed neutrality or impartiality of interpreters were sometimes reported to be contrary to cultural norms, e.g. turning down invitations or not being allowed to help beyond interpreting (Green et al., 2012; Hassan & Blackwood, 2021). Additionally, clients seemed to be irritated by the professional distance and neutral attitude of interpreters which in turn seemed to put pressure on interpreters. Overall, interpreters reported unclear expectations and not being prepared sufficiently for their role (Splevins et al., 2010). Moreover, various studies demonstrated unrealistic expectations of clients and practitioners (Doherty et al., 2010; Green et al., 2012; Simms et al., 2021; Williams, 2005). In general, however, a widely reported coping strategy was to clarify boundaries and to be aware of the limitations of the interpreter's role (Doherty et al., 2010; Robertson, 2014).

1.6.4 Dynamics in the triad

While mediating linguistically between client and practitioner, interpreters reported various dynamics within the triad. For example, the relationships in the triad sometimes seemed to drift towards the interpreter in situations such as crises where the interpreter is faster to reach for the client due to the language skills (Hassan & Blackwood, 2021; Miller et al., 2005). Frequently and particularly in the beginning of a professional relationship, the interpreter was perceived by practitioners as the one with the stronger connection to the client. Especially in the conduit model of interpreting, interpreters may be perceived as rather obstacles for the relationship between client and practitioner (Miller et al., 2005). In general, interpreters reported it to be very demanding to fulfil all expectations and needs within the triad (Green et al., 2012; Splevins et al., 2010).

1.7 Scientific questions

Overall, very little quantitative research has been conducted on the psychological distress of interpreters working with refugee clients. Previous studies showed several limitations. Some studies included interpreters as part of several investigated professions, such as health professionals or social

workers (Denkinger et al., 2018; Kjellenberg et al., 2014). The subsample of interpreters was often very small (i.e. n = 8; Denkinger et al., 2018) or no data was reported specifically for interpreters (Denkinger et al., 2018; Kjellenberg et al., 2014). Moreover, almost every quantitative study focussed heavily on work-related distress such as burnout or STS (Birck, 2001; Denkinger et al., 2018; Kindermann et al., 2017; Kjellenberg et al., 2014; Shlesinger, 2005; Wichmann et al., 2018). Interpreters were mostly recruited at different working locations within a study (Kindermann et al., 2017; Wichmann et al., 2018). Therefore, it is likely that working conditions varied significantly. Regarding the research gap between quantitative and qualitative studies, two important issues emerge from the research findings to date. Studies regarding interpreters' mental health in the care of refugees were conducted most often in the mental health setting (Celik & Cheesman, 2018; Green et al., 2012; Mirza et al., 2017; Resera et al., 2015; Simms et al., 2021) and were mostly conducted qualitatively (Darroch & Dempsey, 2016). As a result, there has been insufficient research conducted on interpreters' mental distress in other areas. Furthermore, despite the discussion on the role of interpreters, little is known about interpreters' psychological distress due to the lack of role clarification.

Study 1 (Chapter 2) focusses on summarising the current state of research regarding the mental health of interpreters in the mental healthcare. This study has the following aims:

1) *To systematically identify and summarise quantitative and qualitative studies regarding interpreters' mental health in the mental health care of refugees*
2) *To explore potentially associated risk and protective factors of interpreters' mental health in the care of refugees*

The overview helps to give a better picture of the existing literature. However, there is a lack of quantitative studies on the psychological distress of interpreters. Additionally, working conditions and their associations with the psychological distress are under-examined. **Study 2** (Chapter 3) therefore focuses on the psychological distress and work-related exhaustion of interpreters. Furthermore, work-related correlates were explored. This study has the following aims:

1) *To explore the level of psychological distress, work-related exhaustion as well as war and flight related experiences and rates of PTSD among interpreters for refugees*
2) *To identify possible correlates of psychological distress and work-related exhaustion among interpreters in refugee care*

Study 2 indicates work-related correlates of psychological distress and work-related exhaustion across several work settings. However, qualitative research pointed to different challenges depending on the work settings of interpreters, which in consequence may be associated with the wellbeing of interpreters. Overall, recent quantitative studies often recruited interpreters in several settings and investigated psychological distress overall. Therefore, little is known about the differences of working conditions between the various work settings of interpreters and whether interpreters show similar levels of psychological distress regardless of their work setting. Therefore, **study 3** (Chapter 4) has the following aims:

1) *To compare working conditions and characteristics of interpreters in refugee care between the different work settings*
2) *To compare and identify possible changes in psychological distress work-related exhaustion, and CS of interpreters working in different work settings in refugee care*

Qualitative studies furthermore indicated that interpreters experience distress due to the various expectations they are confronted with. Thereby, many role perceptions by interpreters, practitioners and refugee clients were highlighted. However, role conflicts and challenges have not yet been quantified with a questionnaire. Therefore, a questionnaire was developed and applied in the present online survey for the first time. Hence, the aims of **study 4** (Chapter 5) are:

1) *To evaluate a newly developed questionnaire regarding the emotional distress of interpreters' due to role conflicts*
2) *To investigate the convergent construct validity of the questionnaire*

CHAPTER 2

2 Mental Health and Work Experiences of Interpreters in the Mental Health Care of Refugees: A Systematic Review

- Study 1 -

The following paper was published as:

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The article can be accessed via:

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Abstract

Background: Interpreters often play a crucial role in the health care of refugees. Although interpreters working with refugees are regularly confronted with emotionally stressful content, little is known about their work-related stress and psychological well-being. Primarily qualitative studies indicate increased emotional stress in interpreters, and difficulties in handling the traumatic content from their clients. Additionally, the working conditions of interpreters appear to be demanding, due to low payment and a lack of supervision or adequate preparation.

Objective: The presented systematic review aimed to identify and summarise quantitative and qualitative research on the mental health of interpreters in the mental health care of refugees.

Method: A systematic search was performed in five databases, and specific interpreting journals were searched. After removal of duplicates, 6920 hits remained. Eligible studies included quantitative, qualitative and mixed-methods studies as well as case studies and grey literature. The studies aimed to examine mental health aspects or work experiences of spoken language interpreters in mental health care settings for adult refugees.

Results: Altogether, 25 studies were identified, including six quantitative and 19 qualitative studies. Studies were analysed and presented narratively. In the analysis of the qualitative studies, three themes emerged: “Emotions, behaviour, and coping strategies”, “Working in a triad”, and “Working environment”. In the quantitative studies, interpreters showed heightened levels of emotional stress and anxiety, and secondary traumatic stress reactions. In several qualitative studies, interpreters described a devaluing health care system and stressful working conditions with a lack of support structures.

Conclusion: Overall, the results indicate a high level of stress among interpreters working with refugees. Quantitative data are sparse, and studies employ heterogeneous assessments in diverse study settings. Therefore, future quantitative research is necessary to consistently investigate interpreters’ mental health in different mental health care settings.

Keywords: interpreter, mental health, refugee[3], stress, trauma, secondary stress, health care

Introduction

Interpreters play a central role in providing equal access to health care for refugees and immigrants (Leanza et al., 2014). Without an interpreter, communication may be limited, as refugees and staff members like counsellors, physicians or civil servants in the resettlement countries in particular often do not speak the same language (Dubus, 2016; Gartley & Due, 2017). In addition to translating, interpreters frequently give cultural explanations or advice (Hsieh, 2008) and are therefore also considered as cultural brokers (Sleptsova et al., 2014).

The use of interpreters in public service is generally underregulated (Lai et al., 2015). It appears to be difficult to organise professional interpreters, and clinical staff are often unaware of the importance of professional interpreters. Therefore, family members or friends often serve as ad-hoc interpreters (Leanza et al., 2014). Moreover, health insurance companies do not generally cover the costs of interpreters (Schouler-Ocak, 2015), even though it is strongly recommended to work with professional or at least trained interpreters (Böttche et al., 2016). Interpreters who are affiliated or registered with a professional interpreting service or institute are sometimes bound by a code of conduct that emphasises, for example, confidentiality, impartiality or the benefits of supervision, as in the 'code of ethics' and 'code of conduct' of the AUSIT (Australian Institute of Interpreters and Translators) in Australia or the 'code of ethics and standards of practice' of the National Council on Interpreting in Health Care Develops National Standards for Interpreters (NCIHC) in the USA. Additionally, several guidelines and policy articles have provided advice and suggestions for work with interpreters in the context of mental and physical health, e.g. clarifying role expectations of the interpreter, and brief feedback meetings before and after consultations/therapy sessions (e.g.,O'Hara & Akinsulure-Smith, 2011). However, a recent review indicated a lack of support in terms of supervision, training or preparation for interpreters (Yick & Daines, 2017).

Usually, interpreters work in a triadic setting with a client and, for example, a therapist. Role expectations and dynamics regarding the interpreter's role have therefore been discussed with respect to how they affect the interpreter's work experience (Hsieh, 2008; Sleptsova et al., 2014). In their literature review, Sleptsova et al. (2014) outlined that each party in the triad expresses different expectations of the interpreter's role: Practitioners often expect interpreters to remain impartial, while clients wish for help and guidance in the health care system. A study addressing interpreters' own perceptions of their roles in health care settings identified several different roles, e.g. functioning as an advocate by empowering the client or being a conduit by only translating (Hsieh, 2008). Additionally, interpreters are under pressure within their work situation, as mostly, the practitioner decides whether the interpreter will return for another appointment (Gallagher et al., 2017), thus creating a power imbalance.

A growing body of qualitative literature indicates physical and mental exhaustion among interpreters in various settings und with different client populations, e.g. refugees, migrants or clients with limited English proficiency (LEP) in English-speaking countries (e.g., Holmgren et al., 2003; Lai et al., 2015; Loutan et al., 1999; McDowell et al., 2011). Besides reported stress reactions, interpreting has been described as meaningful and resourceful with respect to the interpreter's own traumatic experiences, as the interpreters indicated that interpreting for clients with similar helped them to process their own experiences (Johnson et al., 2009). Moreover, compassion satisfaction (CS), which comprises the satisfaction and fulfilment due to work, was found to be significantly higher in an interpreter sample than in other professions (Mehus & Becher, 2016).

Working with refugee clients stands out from the regular work of an interpreter (Dubus, 2016). Many refugees have experienced war- and flight-related traumatic events (Steel et al., 2009) and show a high prevalence of trauma-related mental disorders such as depression and posttraumatic stress disorder (PTSD) (Bogic et al., 2015). Therefore, interpreters working with refugees are frequently confronted with highly traumatic content (Morina et al., 2010; Resera et al., 2015). As interpreters often translate in the first person, it has been suggested that the effect of the traumatic content is even more

stressful for the interpreter (Becker & Bowles, 2001). Stress reactions as a consequence of another person's trauma are often referred to as secondary traumatic stress (STS), vicarious traumatization (VT), or compassion fatigue (CF, i.e. STS and burnout, Stamm, 2010). These constructs have been frequently investigated in helper populations in which practitioners are indirectly confronted with the trauma of another person, e.g. trauma therapists or social workers (Deighton et al., 2007; Sprang et al., 2007). Therefore, Mehus and Becher (2016) investigated STS in interpreters in the USA, who had heard traumatic content as part of their work, and found significantly higher levels of STS compared to other professions.

In the therapeutic context, language is key to facilitating treatment (Tribe & Keefe, 2009), and some skills are particularly useful for interpreters (Leanza et al., 2014), e.g. knowledge of psychopathology as well as correct terminology. Two recent studies addressed difficulties for interpreters specific to the mental health setting (Gallagher et al., 2017; Resera et al., 2015), and emphasised that the mental health care structures require complex roles and emotionally demanding skills.

So far, several studies have investigated interpreters' experiences regarding patients with general limited English proficiency (LEP) (e.g., Hsieh, 2008; Mehus & Becher, 2016). However, little is known about the mental health of interpreters in the mental health care of refugees. To the best of our knowledge, only one meta-synthesis has investigated interpreters' experiences in health and mental health care settings, and this was based exclusively on qualitative studies (Yick & Daines, 2017). A scoping review also synthesised research on challenges and opportunities in interpreter-assisted mental health setting with refugee clients (Fennig & Denov, 2021). Therefore, the aim of this review is to systematically summarise and report the mental health and work experiences of spoken language interpreters in both qualitative and quantitative studies in order to gain a better and more comprehensive understanding of stress reactions and potentially associated risk and protective factors due to interpreting for refugee clients.

Methods

The review was registered at PROSPERO (CRD42019117948) and is reported in accordance with the PRISMA statement (Moher et al., 2009).

Search strategy and inclusion criteria

The following inclusion criteria for eligible studies were defined according to the PI(E)CO schema (Moher et al., 2015): Population - paid spoken language interpreters for adult refugee clients; Exposure - mental health setting (e.g. counselling or therapy) as one of the interpreters' mentioned work settings; Comparison – (no) comparison group was investigated; Outcome - interpreters' mental health and/or work experiences reported by interpreters themselves (not by a third person). As recent research indicated that there might be a difference in psychological strain between paid and voluntary interpreters (Kindermann et al., 2017), the present review focussed on studies in which paid interpreters participated. Studies were included if mental health was mentioned as one of the work settings. Accordingly, exclusion criteria regarding the population of interpreters were as follows: 1) interpreters for children and adolescents only, 2) interpreters for any form of sign language only, 3) interpreters working on a volunteer basis only and therefore not paid, 4) sample did not include interpreters working in a mental health setting, 5) client population did not include refugees or asylum seekers, 6) children and/or adolescents working as interpreters. Articles had to be written in the English or German language and to report qualitative, quantitative or mixed-methods studies. Journal articles, book chapters and dissertations were included, whereas reviews and Master and Bachelor theses were excluded.

Study selection

Articles were retrieved between the 5th and 7th November 2018. The search was updated on the 1st September 2020. The English search terms were: interpreter* OR translat* AND stress* OR trauma* OR mental health OR health care OR work* OR experience* AND refugee* OR asylum seeker* OR survivor* OR migrant* OR immigrant* OR limited english proficien* OR migration* OR immigration*.

Six databases were searched (PsycINFO, PsycARTICLES, Web of Science, PubMed, PSYNDEX and Proquest). No time frame for publication date was applied. After the screening of eligible studies, further literature was identified by snowballing. Additionally, a backward citation search was conducted based on all included studies. Furthermore, publications of the Critical Link Conference and of the International Journal of Interpreter Education were searched. Two independent researchers screened titles/abstracts and full texts (first rater: AG, second rater: initial search: TW/updated search: VB). Interrater reliability was calculated using Cohen's kappa (Cohen, 1960). In all screening stages, any disagreements were resolved by discussion.

Risk of bias

Two independent researchers (first rater: AG (100%), second rater: TW (88%)/CM(12%)) rated five items (items 2, 4, 6, 8, and 9) of the CASP (*Critical Appraisal Skills Programm UK*, n.d.) for qualitative studies and the Mixed Methods Appraisal Tool (MMAT) for quantitative studies (Hong et al., 2018). Possible responses were "yes", "no", or "can't tell".

Data extraction

Two piloted codebooks for data extraction for qualitative and for quantitative studies were written and discussed with a second researcher (NS). Sample characteristics and study design for both types of studies were extracted by one researcher (AG) and 50% randomly chosen studies were double-checked by a second researcher (JK). For qualitative studies, the complete results sections of every qualitative study were first extracted, and 50% of the studies were then screened for relevant parts independently by two researchers (AG, MM). All results of quantitative studies were extracted by one researcher (AG).

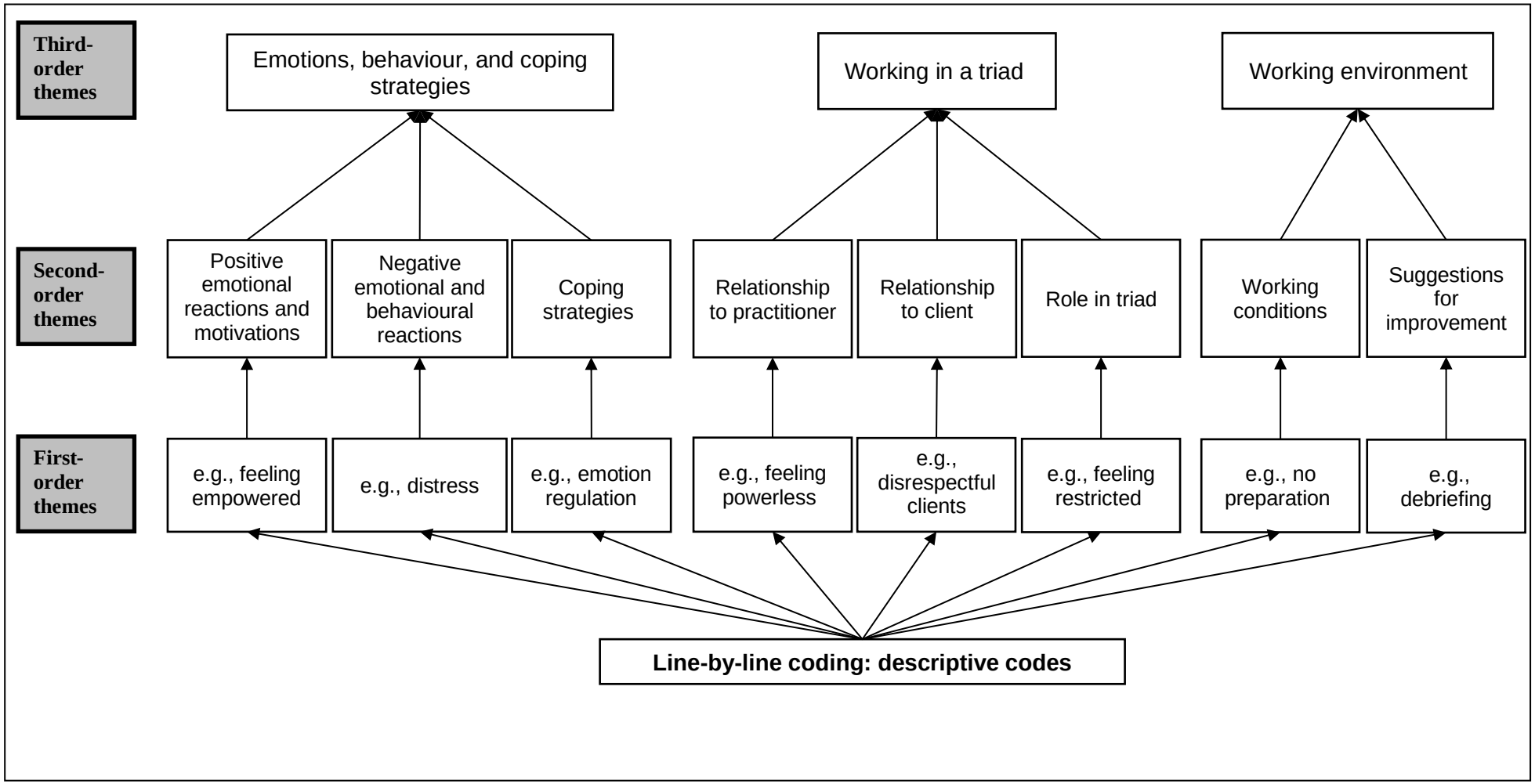
Synthesis

Qualitative. The coding for qualitative studies was processed in three steps based on principles of thematic analysis (Terry et al., 2017; Thomas & Harden, 2008). The themes were structured into first-

order, second-order, and third-order themes. First-order themes emerged as descriptive and interpretative themes from the codes after the line-by-line coding. The descriptive themes were clustered into second-order themes. Lastly, the third-order themes, at the top of the hierarchical thematic structure, summarised the first- and second-order themes (Fig. 1). Two independent researchers (AG, MM) coded around 50% of the studies during the line-by-line coding and clustered 20% randomly chosen codes into first-order themes. The remaining codes were clustered by one researcher (AG), and unclear codes were discussed with an independent researcher (JK). The computer software MAXQDA 2018 (VERBI *MAXQDA 2020*, 2019) was used for qualitative coding.

Figure 1

Hierarchical structure of first-, second- and third-order themes. First-order themes were numerous (n=88) and are only shown as examples



Quantitative. It was not possible to carry out a meta-analysis because too few quantitative studies were available. Therefore, study characteristics and key findings are presented.

Overall synthesis. The results of qualitative and quantitative studies are reported narratively according to the qualitative thematic structure and complemented with thematically corresponding quantitative key findings.

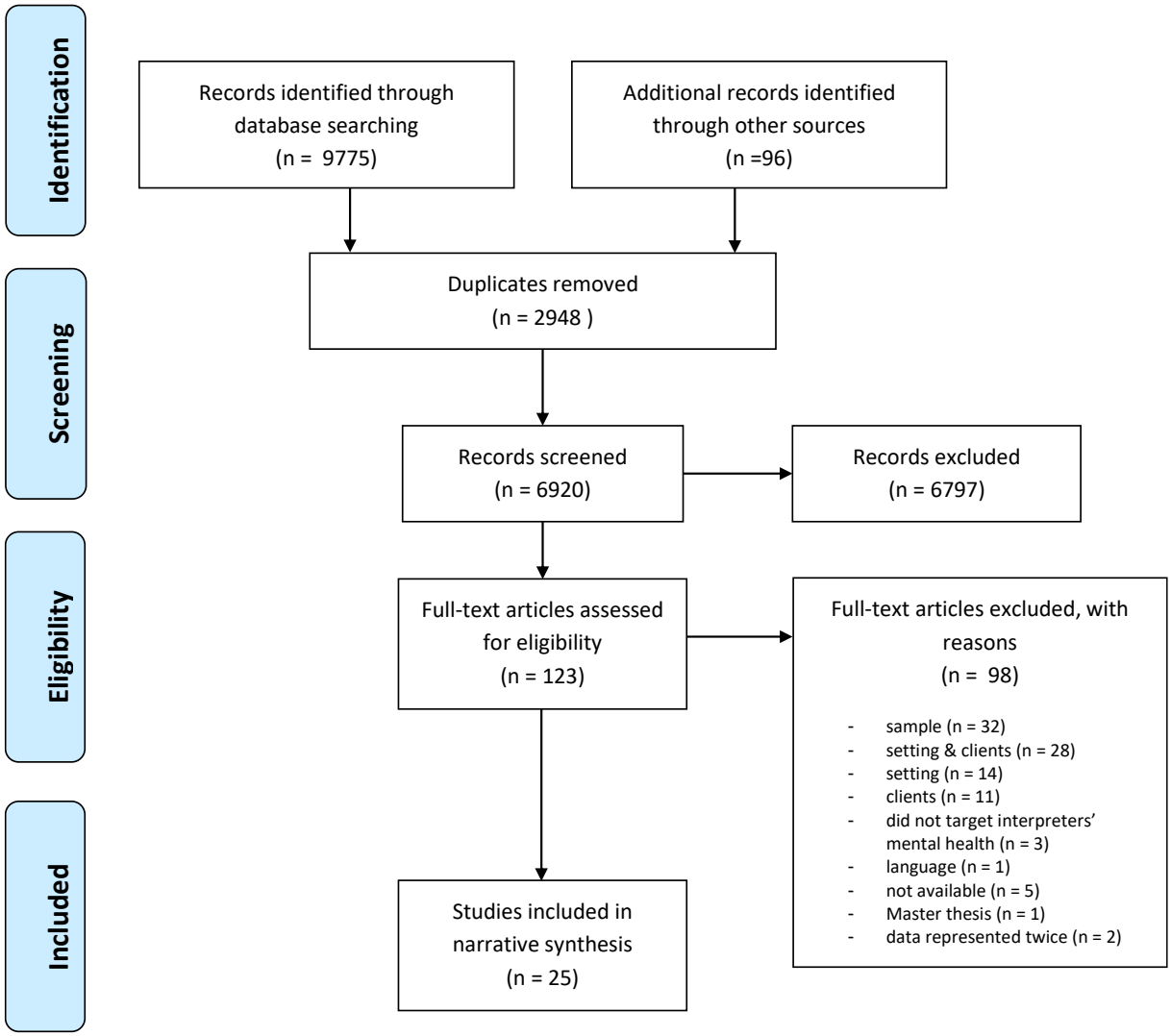
Results

Included studies and study characteristics

In total, 25 studies (nineteen qualitative and six quantitative) were included. The flow chart of included and excluded studies is depicted in Fig. 2. Interrater reliability was calculated for the full-text screening using Cohen's Kappa for categorical variables (Cohen, 1960), and lay at κ = .86, showing good agreement. Two studies were represented twice, and the article with the most comprehensive information was chosen in each case (Crezee et al., 2013; Wichmann et al., 2018). Sample and study characteristics are displayed in table 1. The eligible studies also included five dissertations (Grant, 2009; Myler, 2017; Robertson, 2014; Shlesinger, 2005; Williams, 2004). Sample sizes varied between n = 3 and n = 90.

Figure 2

Flowchart of study identification and selection according to the PRISMA flow diagram (Moher et al., 2009)



The studies were carried out in Canada (k = 1), USA (k = 5), Australia (k = 1), New Zealand (k = 1), England (k = 8), Scotland (k = 1), Wales (k = 1), Denmark (k = 2), and Germany (k = 5). Seven studies did not focus specifically on interpreters and also included other professions, such as caregivers, therapists, or administration staff (Birck, 2001; d'Ardenne et al., 2007; Denkinger et al., 2018; Miller et al., 2005; Mirdal et al., 2012; Mirza et al., 2017; Robertson, 2014). Regardless of profession, the third person besides the refugee client and the interpreter will henceforth be referred to as the practitioner, denoting any person who carries out any kind of care for refugees, e.g. a therapist, a civil servant, or a counsellor.

Eight studies were conducted in a mixed setting describing interpreters' experiences in the mental health setting and other settings (e.g. general internal medicine or court, Crezee et al., 2013; Denkinger et al., 2018; Dubus, 2016; Holmgren et al., 2003; Kindermann et al., 2017; Teegen & Gönnenwein, 2002; Wichmann et al., 2018; Williams, 2005). In one study, 44% of the interpreters were paid whereas the rest worked voluntarily (Kindermann et al., 2017). Three studies did not indicate how many interpreters were paid (Celik & Cheesman, 2018; Shlesinger, 2005; Williams, 2005). In one study, 3% of the sample were sign language interpreters (Wichmann et al., 2018). One quantitative study investigated several measurements of mental health and will therefore be presented in more detail (Kindermann et al., 2017).

Table 1

Sample and study characteristics

Reference (first author & publication year)	Study location	Sample size	Recruitment location	Method for data collection	Gender: female (%)	Age (mean)	Interpreting experience (mean in years)	Education as interpreter (%)	Receiving supervision (%)	Own flight experience (%)	Own trauma experience
Qualitative studies											
Butler (2006)	England	3	health service	Interview	100%	NA	NA	NA	NA	NA	NA
Celik (2017)	Wales	25	mixed[a]	Semi-structured interview	NA	NA	NA	20%	100%	NA	NA
Crezee (2013)	New Zealand	90	interpreting service/agency	Online survey, focus group	75.6%	NA	NA	19.6%	NA	22%	NA
D'Ardenne (2007)	England	3	interpreting service/agency[b]	Focus group	NA	NA	NA	100%	NA	NA	NA
Doherty (2010)	Scotland	18	interpreting service/agency[b]	Online survey	NA	NA	6.1	NA	NA	NA	NA
Dubus (2016)	USA	36	interpreting service/agency	Semi-structured interview	50%	NA	NA	NA	NA	NA	NA
Grant (2009)	Canada	4	mixed[a,b]	Interview; focus group	100%	NA	NA	100%	NA	25%	NA
Green (2012)	England	6	mixed[a]	Semi-structured interview	33%	40.5	11.33	NA	NA	100%	NA
Holmgren (2003)	Denmark	12	humanitarian/ refugee care organisation	Semi-structured interview	66%	30	NA	NA	NA	91%	NA
Lipton (2002)	Australia	15	interpreting service/agency[b]	Ethnographic interview	NA	NA	NA	NA	NA	NA	NA
Miller (2005)	USA	15	humanitarian/ refugee care organisation	Semi-structured interview	NA	NA	NA	NA	NA	NA	NA

Mirdal (2012)	Denmark	8	humanitarian/ refugee care organisation	Semi-structured interview	75%	NA	NA	100%	100%	NA	NA
Mirza (2017)	USA	5	humanitarian/ refugee care organisation	Interview	20%	NA	4.2	60%	NA	NA	NA
Myler (2017)	England	8	interpreting service/agency	Semi-structured interview	75%	42.6	8.69	37.5%	NA	NA	NA
Resera (2015)	England	12	humanitarian/ refugee care organisation[b]	Focus group	83%	NA	NA	42%	NA	NA	NA
Robertson (2015)	England	3	health service	Semi-structured interview	NA	NA	NA	0%	NA	NA	NA
Splevins (2010)	USA	8	humanitarian/ refugee care organisation	Semi-structured interview	75%	46	NA	NA	NA	NA	100%
Williams, K. (2004)	USA	9	interpreting service/agency	Semi-structured interview	44%	NA	3.1	22%	NA	100%	NA
Williams, L. (2005)	England	8	health service	Semi-structured interview	NA	NA	NA	NA	NA	NA	NA
Quantitative studies											
Birck (2001)	Germany	5	humanitarian/ refugee care organisation	self-report questionnaire	NA	NA	NA	NA	NA	NA	NA
Denkinger (2018)	Germany	11	humanitarian/ refugee care organisation	self-report questionnaire	NA	NA	NA	NA	NA	45.5%	27.3%
Kindermann (2017)	Germany	64	mixed[a]	self-report questionnaire	56.2%	37.3	3.3	NA	23%	25.5%	58%
Shlesinger (2006)	USA	52	humanitarian/ refugee care organisation[b]	self-report questionnaire	71.1%	40.1	NA	NA	40%	NA	51%

Teegen (2002)	Germany	51	humanitarian/ refugee care organisations	self-report questionnaire	73%	35	4	NA	41%	NA	90%
Wichmann (2018)	Germany	60	mixeda	self-report questionnaire	73%	NA	NA	55%	25%	33%	50%

Note. [a]various recruitment locations, e.g. hospitals, services, charities, [b]mixed client population: refugees/asylum seekers and other clients (e.g. migrants, LEP clients), NA = not available

Overall synthesis

Three superordinate third-order themes emerged, which summarise the first- and second-order themes in the thematic analysis of qualitative studies: (1) “Emotions, behaviour, and coping strategies”, (2) “Working in a triad”, and (3) “Working environment”. These are split into eight second-order themes (negative emotional and behavioural reactions, positive emotional reactions and motivations, coping strategies, relationship to client, relationship to practitioner, role in triad, working conditions, suggestions for improvement of the work as an interpreter) and 88 first-order themes. The third-order theme “Emotions, behaviour, and coping strategies” describes reactions and coping behaviour of interpreters as a consequence of their job, whereas the third-order themes “Working in a triad” and “Working environment” primarily include work experiences and their potential impact on interpreters’ mental health and job satisfaction. Every second-order theme is first described with selected examples of first-order themes, and then supplemented with the corresponding results of the quantitative studies. Table 2 provides an overview of the contribution of quantitative study results to the second- and third-order themes. Additionally, an overview of the questionnaires used in the quantitative studies can be found in the supplementary material.

Table 2

Contribution of quantitative studies to second- and third-order themes of the thematic analysis

Reference (first author)	**Emotions, behaviour, and coping strategies**			**Working in a triad**			**Working environment**	
	Positive emotional reactions and motivations	*Negative emotional and behavioural reactions*	*Coping strategies*	*Relationship to practitioner*	*Relationship to client*	*Role in triad*	*Working conditions*	*Suggestions for improvement*
Birck (2001)	X	X						
Denkinger (2018)		X						
Kindermann (2017)		X	X				X	X
Shlesinger (2006)	X	X						
Teegen (2002)		X	X					
Wichmann (2018)	X	X	X	X	X	X	X	X

Note. Second-order themes in italic, third-order themes in bold.

Emotions, behaviour, and coping strategies. The third-order theme "Emotions, behaviour, and coping strategies" comprises three second-order themes (negative emotional and behavioural reactions, positive emotional reactions and motivations, and coping strategies) and 39 first-order themes which emerged from the qualitative studies (table 3). The first third-order theme comprises all emotional reactions identified in quantitative and qualitative studies, as well as reported coping mechanisms as a consequence of the work as an interpreter.

Table 3

Emotions, behaviour, and coping strategies as third-order theme specified by first-order and second-order themes

Second-order theme	First-order theme	Reference (first author)
Negative emotional and behavioural reactions	sadness and crying	Butler, Celik, Crezee, D'Ardenne, Doherty, Green, Holmgren, Miller, Myler, Splevins, Williams K.
	helplessness	Crezee, Holmgren, Splevins
	hopelessness	Doherty, Splevins
	powerlessness	Celik, Doherty, Williams K.
	feeling useless	Doherty, Williams K.
	social withdrawal	Doherty, Holmgren
	feeling torn	Dubus, Resera
	fear	D'Ardenne, Holmgren, Miller, Splevins, Williams K., Williams L.
	guilt	Doherty, Holmgren
	exhaustion	D'Ardenne, Doherty, Holmgren, Lipton, Miller, Myler
	distress	Crezee, D'Ardenne, Dubus, Holmgren, Lipton, Splevins
	anger	Butler, Doherty, Myler, Splevins, Williams K.
	struggle in handling own emotions	Crezee, D'Ardenne, Doherty, Green, Holmgren, Myler, Resera, Williams K.
	hyperarousal	Holmgren, Lipton, Miller, Williams K.
	experiencing intrusions	Celik, Dubus, Green, Holmgren, Miller
	experiencing physical reactions	Holmgren, Miller, Splevins
	lack of job satisfaction	Holmgren, Lipton
	emotional reactions over time	Celik, Doherty, Miller, Splevins
	traumatic content stressful	Butler, Celik, Crezee, D'Ardenne, Doherty, Dubus, Green, Lipton, Miller, Resera, Splevins
	developing negative perceptions of world and self	Butler, Green, Lipton, Splevins, Williams K.
	difficult to be detached	Celik, D'Ardenne, Doherty, Holmgren, Williams K.
Positive emotional reactions and motivations	feeling empowered	Grant, Williams K.

	satisfying job	Celik, Doherty, Grant, Lipton, Miller, Myler, Williams K.
	motives to be an interpreter	Celik, Dubus, Green, Holmgren, Lipton, Myler, Williams K., Williams L.
	seeing client's recovery as satisfying	Celik, Doherty, Resera, Splevins
	personal growth	Celik, Doherty, Grant, Green, Miller, Splevins
	developing positive world perceptions	Celik, Splevins
	self-healing through interpreting	Green, Lipton, Miller, Myler, Splevins, Williams K.
Coping strategies	distracting activities	Crezee, Doherty, Holmgren, Myler, Splevins
	interpreting is just a job	D'Ardenne, Doherty, Myler, Robertson
	cognitive strategies	Butler, Celik, Crezee, Doherty, Green, Holmgren, Miller, Robertson, Williams K.
	emotion regulation	Crezee, Holmgren, Myler, Resera, Splevins, Williams K.
	religious practices	Doherty, Splevins
	social support	Butler, Doherty, Green, Holmgren, Lipton
	maladaptive or lack of coping strategies	Crezee, Doherty, Holmgren, Lipton
	limiting or quitting work	Crezee, D'Ardenne, Doherty, Holmgren, Lipton, Williams K.
	separation of private and work life	Celik, Doherty, Myler, Williams K.
	support by staff	Doherty, Green, Lipton, Myler, Splevins
	training and work experience help	Doherty, Myler, Splevins, Williams K.

Negative emotional and behavioural reactions. Interpreters reported specific negative emotions related to the interpreting, e.g., distress (k = 6), hyperarousal (k = 4), physical exhaustion (k = 6), or feeling anxious (k = 6). Across all qualitative studies, sadness and crying (k = 11) were the most frequently mentioned reactions. Interpreters reported several reasons for feeling sad, e.g. because of the client's story (Butler, 2008; Splevins et al., 2010) or when stories were perceived to be similar to their own experiences (Doherty et al., 2010; Williams, 2004). For some interpreters, the traumatic content was associated with feelings such as shock (Celik & Cheesman, 2018; Doherty et al., 2010; Splevins et al., 2010) or disbelief (Celik & Cheesman, 2018; Splevins et al., 2010). Regarding psychological stress over time, some interpreters reported that they experienced an initial peak when they first began their job as interpreters (Miller et al., 2005). Sometimes, the stress decreased after a time (Miller et al., 2005; Splevins et al., 2010; Williams, 2004), or interpreters became accustomed to it (Splevins et al., 2010) and showed no long-term mental health effects (Miller et al., 2005). Particularly when coping strategies were acquired (Splevins et al., 2010), feelings of stress seemed to change into a sense of fulfilment and work pleasure (Celik & Cheesman, 2018; Splevins et al., 2010).

A German quantitative study investigated stress, depression, and anxiety symptoms in voluntary and paid interpreters (Kindermann et al., 2017). Interpreters showed significantly higher stress and anxiety symptoms than in representative population samples, and depressive symptoms indicated a non-significant trend towards higher symptom levels than in a representative population. Clinically relevant anxiety symptoms were found in 16.1% of the sample, and 8% showed moderate to severe depressive symptoms. Voluntary interpreters had significantly higher levels of depressive symptoms than did paid interpreters, whereas no differences were found for stress and anxiety. *The authors suggested that voluntary interpreters probably would receive no informal debriefings or adequate trainings as their paid colleagues and may therefore have reported higher depression levels than paid interpreters (Kindermann et al., 2017).* Female interpreters reported significantly higher symptom levels for stress, anxiety, and depression than did male interpreters. No significant associations were found regarding interpreters' own flight and work experiences. Additionally, stress, depression, and anxiety were significantly negatively correlated with a secure attachment style, whereas anxiety was positively

associated with a dismissing and preoccupied attachment style. However, significant negative correlations emerged between psychological strain (stress, anxiety, depression) and social support and sense of coherence. In another German study, interpreters showed significantly lower levels of depressive symptoms compared to the normal population (Teegen & Gönnenwein, 2002). The authors suggested that interpreters might have downplayed distress in general, as 20% of the sample completing the depression questionnaire had to be excluded from the analysis of depressive symptoms based on the lie criterion.

Two studies reported on the prevalence of PTSD in interpreters, which ranged from 9-10% (Kindermann et al., 2017; Teegen & Gönnenwein, 2002). In one study, interpreters who had a refugee background had significantly higher PTSD symptoms than those who did not (Kindermann et al., 2017). The higher PTSD symptoms could therefore be caused by their own traumatic experiences. Another study compared interpreters with and without (partial) PTSD (Teegen & Gönnenwein, 2002). Partial PTSD was assumed if the criteria A1, A2 were fulfilled as well as 2 criteria of B-D and full PTSD if criteria A1, A1, and B-D were fulfilled according to the DSM-IV. Participants with (partial) PTSD in the study of Teegen and Gönnenwein (2002) reported significantly more stress because of interpreted traumatic content, had higher depressive symptoms, and significantly more chronic diseases (e.g. allergies, migraine, tinnitus). Interpreters with partial or full PTSD also reported seeking more professional help and speaking less often with their partners about their work compared to interpreters without a (partial) PTSD. Additionally, PTSD symptoms in the same study were generally significantly positively associated with depression, emotional communication ability, and traumatic content at work. PTSD was not significantly related to the use of supervision. In addition, eighty percent of the total sample felt fear, helplessness and terror while interpreting traumatic content. Several situations were mentioned as especially stressful: interpreting rape, interpreting for emotionally devastated clients, contact with clients who wanted to let out their sadness on the interpreter, and coping with clients' statements which bore serious consequences for the clients (Teegen & Gönnenwein, 2002).

STS was the most frequently investigated construct in quantitative studies, and was assessed using the same questionnaire (Questionnaire for Secondary Traumatization, FST, Weitkamp et al., 2014)

in three studies. Between 12-17% of the interpreters had experienced moderate STS and between 5-50% severe STS (Denkinger et al., 2018; Kindermann et al., 2017; Wichmann et al., 2018). In one study, a mediation analysis was conducted for STS, and a secure attachment style was found to partially mediate the effect of primary traumatization on STS (Kindermann et al., 2017). A non-significant trend for women having higher STS symptoms than men was found (Kindermann et al., 2017), although no such differences were detected in another interpreter sample (Wichmann et al., 2018). STS showed a significant negative correlation with social support and sense of coherence, and a significant positive correlation with a preoccupied attachment style (Kindermann et al., 2017). No significant correlations emerged for work experience, flight experience, or employment (Kindermann et al., 2017). Wichmann et al. (2018) also examined several factors regarding STS and challenges in a triadic setting, e.g. first-person interpreting or feeling equal in the triad, but no significant findings emerged. Moreover, no significant results were reported for vicarious or secondary traumatization (Birck, 2001; Shlesinger, 2005).

Burnout was investigated in two studies (Birck, 2001; Shlesinger, 2005). Interpreters who had experienced trauma in the past or received supervision showed significantly higher burnout levels than did interpreters without trauma or supervision (Shlesinger, 2005). The author of the latter study suggested that supervision might not have addressed the interpreters' issues and was hence not efficient in reducing stress. Additionally, interpreters who underwent supervision might have also experienced more work-related stress, e.g. because of higher workload or more complex client. Work experience (number of months working as an interpreter) and workload (weekly hours) were significantly positively correlated with burnout (Shlesinger, 2005). CF and burnout symptoms were low for interpreters compared to the norm of the applied questionnaire, and therapists had significantly higher compassion fatigue and burnout levels than did interpreters (Birck, 2001).

Positive emotional reactions and motivations. Interpreters reported various positive reactions which were related to the concept of CS (k = 7), such as feeling rewarded (Doherty et al., 2010) or doing a meaningful job (Grant, 2009). Moreover, they described a healing process through interpreting regarding their own war-related distress (k = 6). Some interpreters picked up coping strategies (Splevins

et al., 2010) or techniques such as sleep hygiene (Green et al., 2012). Several interpreters explained their motivation for interpreting (k = 8), including achieving a professional status (Lipton et al.; Williams, 2005) or working with people (Celik & Cheesman, 2018; Dubus, 2016; Williams, 2005). Other motivations were rather personal, such as helping one's countrymen (Holmgren et al., 2003; Lipton et al., 2002; Williams, 2005), feeling responsible (Myler, 2017; Williams, 2004), and personal reasons such as helping themselves (Green et al., 2012; Holmgren et al., 2003; Lipton et al.; Williams, 2005).

In a quantitative study, all interpreters experienced their work as rather or very meaningful (Birck, 2001). Compassion satisfaction was examined in two studies (Birck, 2001; Shlesinger, 2005), and showed a significant negative correlation with the number of hours spent working with traumatized clients per week (Shlesinger, 2005). One possible reason for this finding could be that these interpreters experienced high levels of stress, but by working fewer hours they reached a level where they were still satisfied with their work. In one study, interpreters reported the motivation for their work as follows: wish to help (57%), financial reasons (27%), personal or professional development (13%), empathy with refugee clients (13%), and being an interpreter (12%, Wichmann et al., 2018).

Coping strategies. Interpreters mentioned several adaptive coping strategies, e.g. distracting activities (k = 5) or emotion regulation (k = 6). Cognitive strategies (k = 9) included distancing through professional explanations (Butler, 2008) or writing clients' stories down (Butler, 2008; Green et al., 2012). Some interpreters sought social support from family, friends (Doherty et al., 2010; Green et al., 2012), health care staff (Doherty et al., 2010; Lipton et al., 2002), and peers (Doherty et al., 2010; Green et al., 2012; Splevins et al., 2010). However, maladaptive strategies were mentioned as well as some interpreters were overwhelmed by their job and started to avoid assignments in the mental health setting (Doherty et al., 2010; Williams, 2004). In three studies, interpreters reported to have quit their work as interpreters (Crezee et al., 2013; d'Ardenne et al., 2007; Holmgren et al., 2003).

In quantitative studies, social support in terms of talking to friends, family, or health care staff (Teegen & Gönnenwein, 2002; Wichmann et al., 2018) was also mentioned as an adaptive coping strategy. Further adaptive coping strategies included hobbies and sports (Teegen & Gönnenwein, 2002;

Wichmann et al., 2018), religion (Teegen & Gönnenwein, 2002), seeking professional help (Teegen & Gönnenwein, 2002; Wichmann et al., 2018), separation of private and work life (Wichmann et al., 2018), and a sense of meaningfulness at work (Wichmann et al., 2018). In one study, 35% of the interpreters indicated to have sought psychological help at some point in their life (Wichmann et al., 2018). At the time of the survey, 13% indicated to currently receive psychological treatment and 13% expressed a wish for treatment (Wichmann et al., 2018). However, maladaptive coping strategies were mentioned as well such as rumination (Teegen & Gönnenwein, 2002), and alcohol consumption (Teegen & Gönnenwein, 2002; Wichmann et al., 2018).

Working in a triad. The second third-order theme, "Working in a triad", consists of three second-order themes (relationship to client, relationship to professional, and role in triad) and 27 first-order themes (table 4). It covers problematic situations and dynamics regarding the relationship to the client, to the practitioner, and the role in the triad. These experiences were often related to the interpreters' emotions and satisfaction with their work. The second-order theme "relationship to client" highlights the interpreters' conflicts, which were often associated with keeping a distance from the client and uncertainties about how to shape their relationship with the client. The second-order theme "relationship to practitioner" is primarily characterised by negative experiences with practitioners, which seemed to affect interpreters' job satisfaction. The second-order theme "role in triad" describes the frequent contradictions between the various role expectations faced by interpreters and their own intentions and perspectives. Only one quantitative study contributed to this third-order theme (Wichmann et al., 2018), and provided information particularly about the dynamics in the triad.

Table 4

Working in a triad as third-order theme specified by first-order and second-order themes

Second-order theme	First-order theme	Reference (first author)
Relationship to client	strong sense of empathy	Celik, D'Ardenne, Lipton, Mirza, Myler, Resera, Splevins, Williams K.
	shared experiences/origin helpful and challenging	Butler, Crezee, Doherty, Green, Holmgren, Myler, Robertson, Splevins, Williams K., Williams L.
	ambivalent feelings towards client	Doherty, Dubus, Grant, Mirdal, Myler, Williams K., Williams L.
	trying to be neutral to client	Doherty, Dubus, Grant
	keeping distance from client	Green, Resera, Robertson, Williams K.
	acting informal is helpful	Celik, Myler, Robertson, Splevins
	trust is important and how to create it	Celik, Dubus, Grant, Miller, Myler, Resera, Robertson, Williams K.
	disrespectful clients	Miller, Williams K., Williams L.
	clients' wrong expectations of interpreters	Dubus, Grant, Myler, Resera, Robertson, Williams K., Williams L.
Relationship to practitioner	feeling disrespected by practitioner	Crezee, Grant, Green, Holmgren, Lipton, Williams K., Williams L.
	concerned about practitioner’s attitude	Doherty, Mirdal, Myler, Williams K., Williams L.
	feeling powerless	Lipton, Myler, Williams L.
	positive and productive relationship	Grant, Holmgren, Mirdal, Mirza, Myler, Resera, Robertson, Williams K.
	staff's limited understanding of interpreter work	Crezee, Doherty, Green, Williams L.
Role in triad	sensitive position in triad	Grant, Holmgren, Mirza, Resera, Robertson, Williams K., Williams, L.
	interpreter's role interferes with motivation to help	Doherty, Dubus, Grant, Green, Miller, Myler, Resera, Robertson, Williams K., Williams L.
	doing more than interpreting	Doherty, Dubus, Lipton, Mirdal, Williams K., Williams L.
	feeling restricted	Green, Myler, Resera
	valuing a neutral role	Grant, Green, Miller, Resera
	impartiality important but challenging	Grant, Green, Resera, Robertson, Splevins, Williams L.
	dilemma between showing and containing emotions	Crezee, D'Ardenne, Doherty, Green, Myler, Splevins

handling various expectations	Grant, Green, Splevins, Williams K., Williams L.
interpreting demands	Butler, Crezee, Doherty, Grant, Green, Holmgren, Mirza, Myler, Resera, Robertson, Williams K.
being an active part in therapy	Celik, Grant, Green, Mirza, Myler, Resera
triad as positive workplace	Doherty, Grant, Mirdal, Myler, Robertson
experience and therapy as resources	Holmgren, Myler, Williams L.
what is an ideal interpreter	Butler, Crezee, Miller, Mirza, Myler, Resera, Splevins

Relationship to client. Interpreters reported ambivalent feelings and motivations regarding the client (k = 7), e.g. strong sympathy (Doherty et al., 2010; Myler, 2017) and hospitality (Mirdal et al., 2012), along with feeling burdened (Myler, 2017). Moreover, some interpreters faced negative attitudes (k = 3) and high expectations of clients (k = 7), e.g. because clients thought that the interpreter was the decision-maker (Williams, 2005) or had high expectations because the interpreter was from the same country (Robertson, 2014). Shared origin and/or experiences resulted in advantages and disadvantages for the interpreter (k = 10). On the one hand, it helped to develop a productive working relationship (Butler, 2008; Robertson, 2014; Williams, 2004; Williams, 2005), as interpreters understood clients more easily (Robertson, 2014) or the shared cultural background helped them to be an adequate interpreter (Williams, 2005). On the other hand, interpreters also felt reminded of their own past trauma in a stressful way (Doherty et al., 2010; Green et al., 2012; Holmgren et al., 2003; Myler, 2017).

Trust emerged as a separate theme (k = 8), with interpreters emphasising the importance of trust within the triad, especially with refugee clients (Dubus, 2016). They elaborated that creating trust needed time (Miller et al., 2005; Williams, 2004) and sometimes developed first between the client and the interpreter (Robertson, 2014) and then extended to the practitioner (Williams, 2004). Interpreters mentioned various factors as trust-enhancing and comforting for the client, such as body language (Dubus, 2016; Grant, 2009; Resera et al., 2015), the shared culture and history (Grant, 2009; Myler, 2017; Williams, 2004), knowing about the client's trauma history (Dubus, 2016), transparency (Grant, 2009), and saying positive things about the practitioner (Williams, 2004).

In a quantitative study, interpreters mentioned several challenging aspects regarding the client, such as culturally caused conflicts (17%), culturally caused taboos (22%), mistrust towards the practitioner (27%), and mistrust towards the interpreter (7%) (Wichmann et al., 2018).

Relationship to practitioner. Most of the first-order themes referred to negative experiences with practitioners such as 'feeling disrespected by practitioner', 'staff's limited understanding of interpreter work' or 'feeling powerless'. Negative experiences with the practitioners (e.g. psychotherapist, clinician) were for example: feeling powerless, low level of respect (Grant, 2009; Green et al., 2012;

Holmgren et al., 2003; Williams, 2004), and feeling like an object (Holmgren et al., 2003; Lipton et al., 2002; Williams, 2004). Many practitioners were perceived as misunderstanding the interpreter's job (Crezee et al., 2013; Doherty et al., 2010; Green et al., 2012; Williams, 2005). Nevertheless, interpreters described positive and cooperative relationships too, in which they were asked for their opinions and ideas (Grant, 2009; Resera et al., 2015).

Interpreters reported several challenging aspects regarding the practitioner in a quantitative study, e.g. worry that the therapeutic relationship could be weakened (18%), fear of mistranslations (22%), lack of knowledge/understanding of cultural particularities (33%), and lack of knowledge/understanding of the client's social and socioeconomic background (22%) (Wichmann et al., 2018).

Role in triad. The role in the triad with practitioners and clients was found to be versatile. Translating between practitioner and client was described as being of a sensitive nature (Grant, 2009; Holmgren et al., 2003; Mirza et al., 2017; Resera et al., 2015; Williams, 2004), as interpreters wanted to help without crossing professional boundaries (Mirza et al., 2017; Resera et al., 2015). However, interpreters mentioned several activities which went beyond the interpreter's role in the session (k = 6), e.g. practical help with authorities (Mirdal et al., 2012) or advocating that the client leaves the practitioner (Williams, 2004). Acting as a conduit was either perceived as safe as they preferred not to be involved to much (Green et al., 2012; Miller et al., 2005) or as restricting as some interpreters wanted to do more than translating to help clients (Green et al., 2012; Myler, 2017). Some saw their active role positively (Grant, 2009; Myler, 2017; Resera et al., 2015), while others felt it to be a burden (Grant, 2009). Impartiality was perceived as important (Grant, 2009; Resera et al., 2015; Robertson, 2014; Splevins et al., 2010; Williams, 2005) but demanding (Green et al., 2012; Splevins et al., 2010) and conflicting with cultural values (Green et al., 2012).

Interpreters described several positive feelings within the triad (Doherty et al., 2010; Grant, 2009; Mirdal et al., 2012), e.g. feeling appreciated (Doherty et al., 2010) or accepted (Mirdal et al., 2012). However, the interpreter's work was also perceived as demanding (Butler, 2008; Doherty et al.,

2010; Green et al., 2012; Holmgren et al., 2003). For example, cultural misunderstandings and difficulties were mentioned as stressful (Holmgren et al., 2003; Robertson, 2014), as were problems regarding the translation process, e.g. clients mumbling, or too long sentences (Crezee et al., 2013).

In various studies, interpreters' thoughts about how they should act appeared to be idealistic (k = 7), e.g., being able to cope with everything (Crezee et al., 2013), having excellent knowledge about the client's culture and language, positive interpersonal attitude, good communication skills (Resera et al., 2015), containing one's own emotions (Butler, 2008; Miller et al., 2005; Splevins et al., 2010).

In the quantitative study, 82% of the interpreters regarded themselves as language and cultural brokers, 52% saw themselves as advocates or helpers, and 32% identified only as interpreters. They also reported several aspects which helped to maintain neutrality, such as emotional/social/mental distance (23%) or work experience or education (12%). Several interpreters supported clients in other ways than translating, e.g. assistance in dealing with authorities (28%), translating documents (28%), help in filling out documents (23%), invitations (e.g., to private parties) (12%). Overall, interpreters received information about the working conditions (57%). and experienced a clear distribution of responsibilities (98%), personal recognition by practitioners (93%), professional recognition by practitioners (97%), and equality in the cooperation with practitioners (85%). Moreover, the majority reported that practitioners clarified misunderstandings (83%), responded to difficulties encountered (72%), and provided feedback (72%). The importance of trained practitioners for work with interpreters was emphasised by 85% of the sample. In this study, 93% considered the cooperation as medium, good or very good (Wichmann et al., 2018).

Working environment. The final third-order theme "Working environment" deals with various organisational aspects of the work and their consequences for the interpreters' professional and personal well-being. It is divided into two second-order themes: "working conditions" and "suggestions for improvement" (table 5). In this regard, interpreters described and complained about working conditions that often revealed deficits in the support system and stressful circumstances with which they had to

deal. In addition, various suggestions for improvement were made regarding the working conditions of interpreters.

Table 5

Working environment as third-order theme specified by first-order and second-order themes

Second-order theme	First-order theme	Reference (first author)
Working conditions	mental health setting is special	Doherty, Green, Holmgren, Mirza, Myler, Resera, Splevins
	clients require special attention	Doherty, Dubus, Resera, Williams K., Williams L.
	having to get to know Western therapy	Grant, Myler, Williams K.
	more trust in community interpreter than agency interpreter	Celik Grant, Williams L.
	working in own community challenging	Dubus, Robertson, Williams K., Williams L.
	confidentiality important but difficult	Doherty, Grant, Lipton, Myler, Resera
	organisational difficulties	Butler, D'Ardenne, Doherty, Holmgren, Miller, Resera, Robertson, Williams K.
	noticing racism towards client	Williams K., Williams L.
	often lack of recognition of staff and agency	Green, Holmgren, Lipton, Myler, Resera, Williams K., Williams L.
	poor remuneration	Doherty, Holmgren
	no preparation	D'Ardenne, Green, Holmgren, Lipton
	rare briefing	Crezee, Doherty, Holmgren, Robertson
	debriefing important but rare	Crezee, Holmgren, Lipton, Miller, Myler, Splevins, Williams K.
	often lack of supervision	Crezee, Holmgren, Splevins
	possibility to get support	Butler, Crezee, Holmgren, Lipton, Miller, Mirdal, Myler, Splevins, Williams K.
	no training, training is important, no training can prepare, training is not sufficient	Crezee, Holmgren, Lipton, Myler, Splevins, Williams K.
Suggestions for improvement	briefing	Crezee, D'Ardenne, Doherty, Dubus, Green, Robertson
	debriefing	Crezee, D'Ardenne, Doherty
	training	Crezee, D'Ardenne, Doherty, Holmgren, Miller
	professional support	Crezee, Holmgren, Lipton
	more awareness by and training for professionals	Crezee, Doherty, Holmgren, Williams K.
	work setting	D'Ardenne,Doherty, Green, Holmgren, Splevins

Working conditions. The mental health setting was perceived as unique (Mirza et al., 2017), demanding (Green et al., 2012; Holmgren et al., 2003), and requiring more attention compared to other work settings (Resera et al., 2015; Williams, 2005). The concept of therapy was not always known or clear to interpreters (Grant, 2009; Myler, 2017; Williams, 2004).

Various types of potential support by employers were mentioned. Interpreters reported possibilities for briefing (k = 4), debriefing (k = 7), training (k = 6), and supervision (k = 3). Interestingly, some described access to training to be vital (Williams, 2004), whereas others believed that no amount of training would adequately prepare them for appointments with refugee clients (Crezee et al., 2013), or stated that the training obtained lacked certain aspects like interpretation ethics or techniques, e.g. translating everything or maintaining confidentiality in support groups (Holmgren et al., 2003; Lipton et al., 2002; Myler, 2017). Likewise, it was suggested that the specific characteristics of mental health settings should be included in training programmes for interpreters, as they are intensely confronted with traumatic content (Miller et al., 2005). In several studies, interpreters reported devaluing experiences regarding the service with which they worked (Green et al., 2012; Holmgren et al., 2003; Lipton et al., 2002; Myler, 2017; Williams, 2005). Interpreters felt pressured (Holmgren et al., 2003), treated as second-rate employees (Lipton et al., 2002), or abused by the service with which they worked (Myler, 2017). Payment was perceived as poor (Doherty et al., 2010; Holmgren et al., 2003), and external conditions, like inattentive clients (Doherty et al., 2010) and lack of time and breaks (Butler, 2008; Holmgren et al., 2003), were perceived as hindering for the interpreter job. Racism towards the clients was also observed (Williams, 2004; Williams, 2005), and negatively affected the interpreters (Williams, 2004).

Interpreters reported actively seeking support from their employers (Crezee et al., 2013; Miller et al., 2005; Myler, 2017; Splevins et al., 2010) and peers (Holmgren et al., 2003). Reasons for not accessing or seeking support were no offer by the employer (Butler, 2008; Crezee et al., 2013), strict confidentiality rules (Holmgren et al., 2003; Lipton et al., 2002), financial and time pressures or feeling unworthy of support (Myler, 2017), and no knowledge to whom to turn to for support (Crezee et al.,

2013; Williams, 2004). Whereas some interpreters tried to deal with their work without support (Crezee et al., 2013), others expressed that interpreters would not need such support as they were mentally strong (Myler, 2017; Williams, 2004).

In quantitative studies, 23-38% of the interpreters reported having the opportunity for supervision or case reviews (Kindermann et al., 2017; Wichmann et al., 2018). Between 23-35% stated having briefings or debriefings (Wichmann et al., 2018), 17% had team meetings, and 7% were given the opportunity to undergo training (Wichmann et al., 2018).

Suggestions for improvement. Regarding the support from employers, interpreters wished for various offers: training (k = 5), briefing (k = 6), debriefing (k = 3), and counselling or support groups (k = 3).

Related to their work setting, interpreters suggested shorter sessions, better coordination or a separate waiting area for the interpreter and the client (d'Ardenne et al., 2007; Doherty et al., 2010; Green et al., 2012; Holmgren et al., 2003). Interpreters requested that practitioners should also receive training before working with interpreters (Crezee et al., 2013; Holmgren et al., 2003; Williams, 2004). Moreover, they suggested more sensitivity regarding the interpreter's role (Crezee et al., 2013; Doherty et al., 2010) and to be made aware of the practitioner's expectations towards the interpreter (Doherty et al., 2010).

In quantitative studies, 22 - 40% requested debriefing sessions, case reviews, or supervisions (Kindermann et al., 2017; Wichmann et al., 2018) , and 2% (Wichmann et al., 2018) and 41% (Kindermann et al., 2017) respectively wished for training, e.g. to deal with difficult situations (Kindermann et al., 2017). Additionally, 20% of the sample would prefer to have additional psychological support (Kindermann et al., 2017) or team meetings (Wichmann et al., 2018).

Risk of bias

The risk of bias rating is displayed separately for qualitative studies (table 6) and quantitative studies (table 7). No study was excluded due to risk of bias. However, for several qualitative studies, due to a lack of information, items were rated with "can't tell". In particular, there was a lack of reporting regarding the recruitment strategy (k = 9) and the relationship between participants and researcher in terms of the development of questions and study design (k = 12). Measurements were widely appropriate for quantitative studies, but the elaboration of response bias was missing for qualitative studies (k = 3). Three studies were declared as pilot studies or small-scale research projects by the authors (Holmgren et al., 2003; Lipton et al., 2002; Williams, 2005). In two studies, translation and interpreting researchers were involved in the development of the study (Celik & Cheesman, 2018; Crezee et al., 2013). Therefore, these studies could rather be characterised as assuming a translator's perspective as compared to studies conducted by psychologists, sociologists, or physicians. For example, psychological issues may have been given less weight in studies conducted by translating and interpreting researchers, while there may have been a better understanding of the difficulties and techniques of translation.

Table 6

Risk of bias rating for qualitative studies

Reference (first author)	1. Is a qualitative methodology appropriate?	2. Was the recruitment strategy appropriate to the aims of the research?	3. Has the relationship between researcher and participants been adequately considered?	4. Was the data analysis sufficiently rigorous?	5. Is there a clear statement of findings?
Butler	yes	can't tell	can't tell	can't tell	no
Celik	yes	yes	yes	can't tell	yes
Crezee	yes	can't tell	can't tell	can't tell	no
D'Ardenne	yes	yes	can't tell	yes	can't tell
Doherty	yes	yes	can't tell	can't tell	no
Dubus	yes	can't tell	can't tell	yes	yes
Grant	yes	can't tell	yes	yes	yes
Green	yes	yes	can't tell	yes	yes
Holmgren	yes	yes	can't tell	can't tell	no
Lipton	yes	can't tell	can't tell	can't tell	no
Miller	yes	can't tell	can't tell	yes	yes
Mirdal	yes	yes	yes	yes	yes
Mirza	yes	can't tell	can't tell	yes	yes
Myler	yes	yes	yes	yes	can't tell
Resera	yes	can't tell	can't tell	yes	no
Robertson	yes	yes	yes	yes	yes
Splevins	yes	yes	yes	yes	yes
Williams (2004)	yes	yes	yes	yes	yes
Williams (2005)	yes	can't tell	can't tell	can't tell	no

Table 7

Risk of bias rating for quantitative studies

Reference (first author)	1. Is the sampling strategy relevant to address the research question?	2. Is the sample representative of the target population?	3. Are the measurements appropriate?	4. Is the risk of non-response bias low?
Birck	can't tell	yes	yes	yes
Denkinger	yes	yes	yes	yes
Kindermann	can't tell	can't tell	yes	yes
Shlesinger	can't tell	yes	yes	no
Teegen	can't tell	can't tell	yes	no
Wichmann	yes	yes	can't tell	no

Discussion

This systematic review examined mental health and work experiences of interpreters working in mental health care settings for refugees. Overall, 19 qualitative studies and six quantitative studies were identified. The sample sizes varied extensively between the studies (ranging from 3 to 90), with several qualitative studies having only three to five participants. In total, a third of the included studies were conducted in a mixed setting that did not specifically focus on experiences in the mental health setting. Therefore, work settings were very heterogeneous. A thematic analysis was applied to identify themes in qualitative studies. The emerging themes were similar to those found in a review focussing on interpreters' experiences in health and mental health settings (Yick & Daines, 2017). The three superordinate themes of the thematic analysis were "Emotions, behaviour, and coping strategies", "Working in a Triad", and "Working Environment". In general, the results rely on mostly qualitative studies with small sample sizes and less on quantitative studies with heterogeneous samples with exception of one second-order theme ("negative emotional reactions and behaviour"). Here, a strong imbalance becomes apparent in terms of the contribution of qualitative and quantitative studies to the different themes, as most quantitative studies focused on mental health. At the same time, there are very few quantitative studies so far, so the quantitative results have been broken down as precisely as possible and this second-order theme includes particularly many results of quantitative studies. Qualitative studies provided an insight into the different emotions felt by interpreters during and after their work. Moreover, the interpreter's position in the triad appeared complex and was perceived in multiple ways. It was not possible to carry out a meta-analysis as almost every quantitative study focussed on a different measurement of psychological strain. Overall, interpreters showed elevated stress and anxiety levels in a quantitative study (Kindermann et al., 2017). Also, PTSD prevalence was higher in interpreters (Kindermann et al., 2017; Teegen & Gönnenwein, 2002) than in a representative sample of the German population (2.3%, Maercker et al., 2008), and STS was investigated most extensively in quantitative studies.

1.1 Illustration of a model of risk and protective factors of interpreters

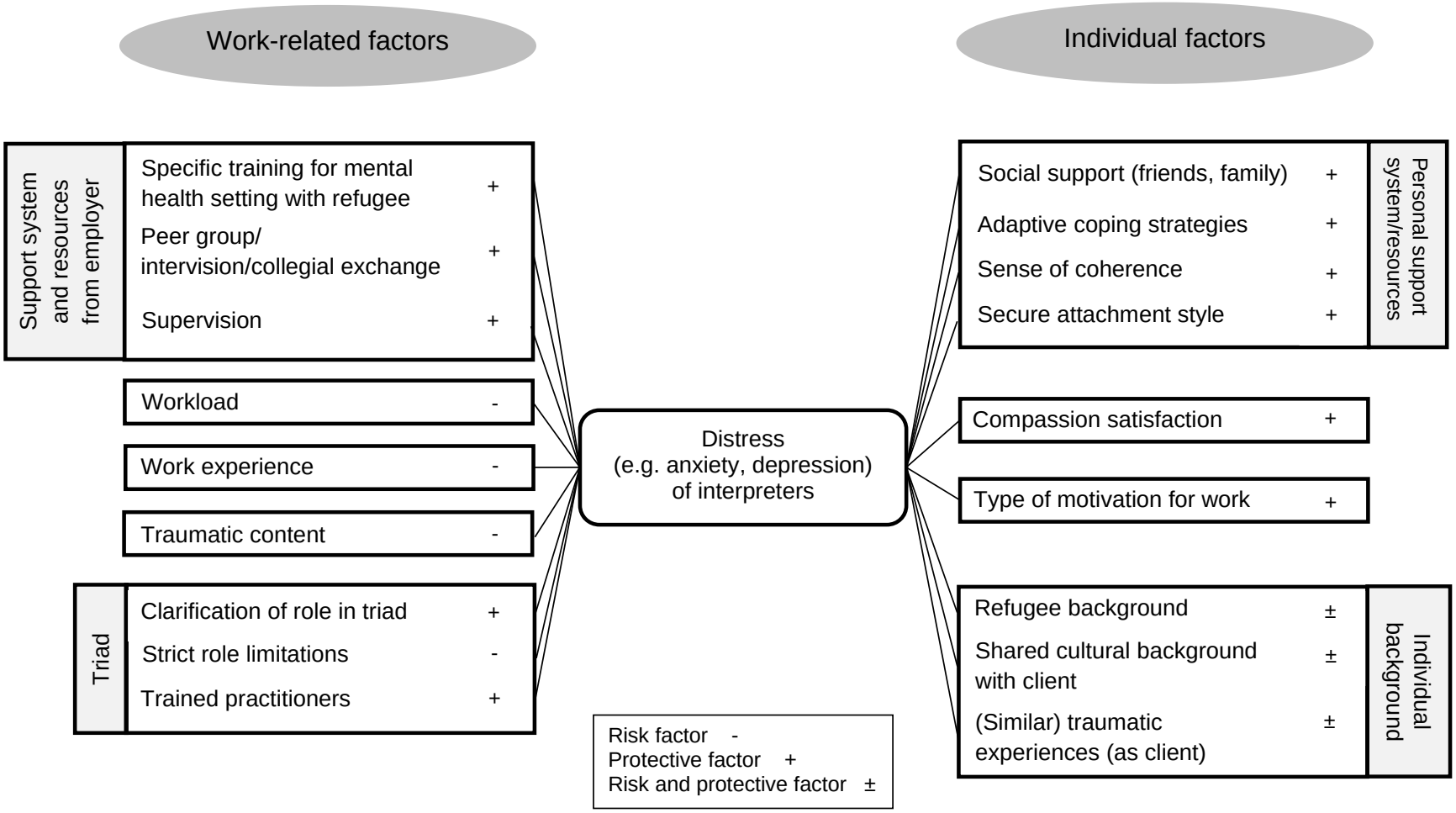
Most of the quantitative and qualitative results rely on singular studies with heterogeneous samples. However, they might give directions for risk and protective factors regarding the distress among interpreters. Therefore, a theoretical model is presented in Fig. 3, which summarises the qualitative and quantitative results and assigns them to possible risk and protective factors for distress of interpreters. Some factors are presented as both protective and risk factors, because the results were ambiguous (e.g., refugee background was not associated with STS in a quantitative study whereas some reports in qualitative studies indicated that having a refugee background was associated with difficult emotions while interpreting).

The qualitative and descriptive quantitative results regarding "negative emotional and behavioural reactions" (second-order theme) are summarised as distress in the middle of the model. However, the first-order theme "traumatic content stressful" of this second-order theme is represented as risk factor (left-hand side: "traumatic content") as it was associated with distress in the results. The risk and protective factors are divided into work-related and individual-related factors. The results of the third-order themes "Working conditions" and "Working in a triad" are summarised on the left-hand side of the figure as part of the work-related factors, because these themes consider the dynamics and conditions in the interpreter's work situation. Only one first-order theme ("shared experiences/origin helpful and challenging".") of "Working in a triad" is presented as a single factor within "individual factors" on the right-hand side. Individual factors were therefore derived from the second-order themes positive emotional reactions and motivations and coping strategies.

Some of the included risk and protective factors were shown to be correlated with psychological strain (e.g., workload, work experience). Other factors were investigated on a descriptive level in quantitative studies and were related to psychological strain in qualitative studies (e.g., functional coping strategies). In the following sections, we discuss the role of the postulated risk and protective factors in greater detail.

Figure 3

Illustration of a theoretical model for possible risk and protective factors of interpreters' distress



Support system and resources from employer. The quantitative and qualitative results of the present review indicate that interpreters are longing for supervision, but rarely have access to it. Supervisions as suggested for trauma-informed practice could include topics such as helping interpreters structure their workload or developing cognitive strategies to better separate their work with refugee traumatised clients from their private lives (Berger & Quiros, 2014). In terms of seeking support, the results of the present review are similar to those reported in a Australian study with public service interpreters (Lai et al., 2015) that was not included in the review as clients and setting were not specified. In this study, a lack of knowledge about where to get support, a lack of money, or misconceptions about professionalism as well as a lack of role models for interpreters appeared to be barriers to seeking support. Therefore, a support system (e.g., supervision) from the employer was classified as a protective factor in the model. The concept of supervision might also be unfamiliar to some interpreters and should be introduced before beginning the job. Additionally, in order to investigate the interpreters' job satisfaction and burnout, the quality of supervision should be adequately evaluated and taken into account. In general, the lack of recognition, support, and organisation might also contribute to a higher degree of burnout, distress, and frustration, but these associations have yet to be investigated.

Work experience, workload, and traumatic content. Work-related factors such as experience and workload showed positive (Shlesinger, 2005) as well no correlations (Kindermann et al., 2017; Wichmann et al., 2018) with psychological strain. Little is known about whether interpreters work full-time or part-time. In one study though, almost 50% worked part-time (Wichmann et al., 2018). A high workload and/or low professional experience could therefore contribute to higher levels of distress and thus be risk factors for the interpreter's well-being. However, as all of the included studies were cross-sectional, there is no evidence about emotional stress over time. It remains to be investigated whether work experience serves as buffer against psychological stress and/or whether acquired coping strategies might help, as qualitative studies suggested. Additionally, interpreters might also report stress at a specific time, e.g. when they accompany severely traumatized clients. The qualitative results also indicate an impact of traumatic content on the interpreter's distress. One study in the present review explored the relation of STS of interpreters with the caseload of traumatized clients and with clients who

talk about their trauma, and revealed no significant findings (Wichmann et al., 2018). Hence, future studies should consider work stressors (e.g., traumatic content, workload, possibility to take breaks) in the interpreter's work when investigating mental health, especially regarding freelance interpreters. Overall, the results suggest that guidelines on how to work with interpreters in refugee settings would be helpful in order to improve the situation for interpreters, e.g. by offering paid supervision or ensure break time between sessions.

Triad. Several aspects regarding the role and relationships within the triad emerged as themes in the qualitative analysis but were barely explored in quantitative studies. The perceived discrepancy between the formally assigned role by the mental health practitioners and the actually executed role of interpreters is a widely discussed topic (Hsieh, 2008; Sleptsova et al., 2014). On the interpreter's side, the results of the review suggest an ambiguity regarding the interpreters' preferred and actual involvement in the process of the therapeutic session. This confirms the findings of a previous review exploring interpreter roles in the clinical setting (Sleptsova et al., 2014), which identified roles such as cultural broker, clarifier, or patient advocate. In various guidelines, it is outlined that contact between client and interpreters outside sessions should be limited (O'Hara & Akinsulure-Smith, 2011) and private contacts are not allowed (Morina et al., 2010). At this point, a general clarification of the interpreter's role does not yet appear to have been accomplished in terms of global or even national guidelines. This is due to the various employment situations and different degrees of education and training of interpreters. However, in light of the present review findings, a clarification of the role within the triad could serve as a protective factor for the interpreter's well-being. There is therefore an urgent need to develop a general job description that defines tasks and responsibilities for interpreters. This could then be written into contracts and job descriptions to create more transparency for all involved. Importantly, this should be developed and discussed jointly between practitioners and interpreters in order to avoid misunderstandings and to include both perspectives. Additionally, there appear to be no networks for interpreters working with refugees in this field. As there is still little or no lobby for interpreters, their need for support remains poorly addressed and sometimes, as in Germany there is no legal entitlement for professional interpreters. Networks could help bring together mental health experts such as policy

makers, practitioners, and interpreters to develop new structures that provide a better working environment for interpreters and a more effective care for refugee clients.

The thematic analysis also revealed that interpreters often perceive themselves to be a technical tool or feel restricted because some interpreters wanted to give more advice, be more involved in the therapy process. Furthermore, they also described this role as stressful or conflictual. Too strict role limitations could therefore be a risk factor. Hence, practitioners should set clear role expectations before sessions and be open to regular exchange between practitioner and interpreter. In preparatory trainings, interpreters could furthermore be advised on how to behave when they feel they want to intervene and when this is allowed. This might improve the interpreter's perceived safety and enhance the relationship between practitioner and interpreter.

Qualitative review findings showed that from the interpreters' perspective, it appeared that practitioners often do not understand the interpreters' role and have different expectations. As stated in a guideline article (O'Hara & Akinsulure-Smith, 2011), practitioners rarely receive training in working with interpreters, even though this is recommended. A recent scoping review moreover strongly emphasised that interpreter and practitioner should form a cooperative relationship and can even be trained and supervised together (Fennig & Denov, 2021). Thus, working with trained practitioners could be a protective factor. Generally, the present results reinforce the idea of a professional team in which both sides are trained regarding the work with one another.

Personal support system/resources. In particular, social support, e.g., from family and friends, and functional coping strategies such as sports or hobbies, were described as a personal resource in several qualitative and quantitative studies. A sense of coherence and a secure attachment style were derived as protective factors. Kindermann et al. (2017) suggested that interpreters may benefit from trainings with a focus on sense of coherence as they were proved to be helpful for health care workers in rescue services. Additionally, they suggested that feedback and supervision may be helpful for interpreters for insecure attachment style. However, as those factors are based on the results of a single included study, they need to be interpreted with caution. In general, there is little research on

interpreters' personal resources. However, research on personal resources could contribute to a better understanding of stress and be helpful in developing preparatory training for interpreters.

Compassion satisfaction and type of motivation for work. None of the included quantitative studies investigated CS in relation to psychological strain, although several studies qualitatively reported experiences similar to CS, e.g. valuing work or doing a meaningful job. The qualitative reports indicate a strong positive association between CS and interpreters' wellbeing, for example when interpreters felt satisfied or stimulated by their work. Also, research with interpreters for LEP clients shows a negative correlation between CS and burnout (Mehus & Becher, 2016). In addition, relations between interpreters' job motivation and distress have not yet been examined, but could act a possible correlate for interpreters' mental health based on the presented qualitative findings. For example, interpreters who pursue the profession because they want to help people from similar cultural backgrounds may experience stress differently than those who pursue the profession for financial reasons. In some reports, motivation was clearly linked to well-being, e.g. satisfying a need for belonging, regaining self-confidence or working to reduce one's frustration (Holmgren et al., 2003; Lipton et al., 2002). Overall, this may indicate that motivations can have an impact on distress. Future studies should therefore consider the relationships between CS and motivation with distress and job satisfaction, as these may act as protective factors.

Individual background. The relation between trauma exposure on the part of the interpreter and work-related psychological strain was primarily pointed out in qualitative studies. Only one quantitative study examined trauma exposure of the interpreter, but the respective information was very limited (i.e. participants were merely asked whether they had ever experienced a trauma). Although shared experiences were perceived differently, the advantage of shared experiences with the client was emphasised several times by the interpreters. Therefore, trauma exposure, especially war- and flight-related, might even mitigate negative emotions related to interpreted traumatic content if the interpreter has processed his/her trauma successfully. Sharing the same or a similar cultural background might also positively influence the work in the triad. However, in a study that was excluded as the clients were not specified, STS, burnout, and CS of the interpreter were not linked to a refugee status of the interpreters

(Mehus & Becher, 2016). By contrast, in a study with refugees (who were not interpreters), the number of experienced trauma and post-migration stressors like loss of culture and support were reported as significant correlates for emotional stress (Carswell et al., 2011). As the association between postmigration factors and psychopathology is a common finding in refugee populations, it is to be expected that this is also the case with interpreters who were refugees themselves. Therefore, all factors of the individual background are presented as both risk and protective factors. Additionally, flight-associated variables such as post-migration stressors and trauma load might be more relevant as possible risk and protective factors for interpreters' distress, as they reflect more specific overlaps with the client's case. Therefore, interpreters in particular, who have had similar traumatic experiences as the refugee clients, should be prepared in advance for potentially traumatic content and ways of coping.

Evaluation of the model of risk and protective factors. Overall, little is known about risk and protective factors regarding interpreters' general and work-related mental health. The presented model might therefore give an overview of relevant aspects for working as and with interpreters. However, most factors refer to a single quantitative outcome in particular studies which differ from each other in methodological terms. Some factors are based almost exclusively on qualitative studies, but these studies often have very small and specific samples. Therefore, the association between mental health and the proposed factors has to be interpreted with caution because the individual components in this model are equally weighted, even though they are based on different numbers of participant reports. Future studies should investigate the proposed risk and protective factors in order to gain a better understanding of their individual impact on interpreters' mental health. Nevertheless, this is the first model that summarises risk and protection factors based on a systematic review and can therefore provide implications for improved work with refugee clients in mental health care.

Limitations

While the presented systematic review focussed on mental health settings, one third of the included studies did not exclusively refer to such settings. Nevertheless, among the qualitative studies, more studies from the mental health setting contributed to first-order themes than mixed-settings studies.

Two quantitative surveys (Teegen & Gönnenwein, 2002; Wichmann et al., 2018) recruited interpreters primarily from psychosocial treatment centres, where mostly psychological support was provided. Therefore, it can be assumed that the majority of the interpreters in these studies worked in mental health care and associated their experiences with the mental health setting.

All studies had a cross-sectional design with convenience samples. The proposed risk and protective factors only provide hints as to how the interpreters' distress might be influenced, and should, for the time being, be seen as correlates in rather specific cases. Moreover, qualitative studies in particular showed small sample sizes and often had heterogeneous participants. Most of the results cannot be related to specific work environments and sociodemographic characteristics of interpreters, as these were often not reported. Therefore, the qualitative results can only be interpreted and generalised with great caution. Additionally, the risk of bias rating showed a lack of information regarding the study design in several studies. Hence, it is often not clear how participants were recruited and how the researchers' role affected the study process. The quantitative results are generally very scarce and include heterogeneous work settings (e.g., mental health care and court combined), samples (voluntary and paid interpreters) and measurements (e.g., stress, anxiety). In general, results for a specific outcome were available only in single samples. Therefore, a meta-analysis was not possible due to outcome and sample heterogeneity. Moreover, all of the studies were carried out in Western countries, and are therefore likely to represent a Westernized system of interpreting work and health care systems. Five of the six quantitative studies were conducted in Germany, and their findings might therefore also be influenced by the characteristics of the German health system.

Depending on the country and setting, paid interpreters are sent by agencies, the respective health service in the country under study or are employed by humanitarian organisations (Tribe & Keefe, 2009). Samples in the included studies were recruited in NGOs, hospitals, or through anonymous surveys. Therefore, interpreters had different employment conditions (e.g., freelancer or employed interpreter) and were probably subject to various different policies, rules, and instructions. In

consequence, interpreters might have expressed concerns relating to their own very specific work situation. Overall, however, the results suggest shortcomings in all of the different work environments.

Conclusions and implications

To the best of our knowledge, this is the first systematic review to examine and summarise qualitative and quantitative studies on mental health and related work experiences of interpreters working in the mental health setting with refugee clients. The two different methodological approaches allowed us to identify and compare quantitative and qualitative results. Although all studies included in this review applied only cross-sectional designs, it can be assumed that interpreters are highly affected by their work. A model of possible risk and protective factors is presented. However, several of the presented factors are based on results of individual studies and must therefore be interpreted with caution.

Various factors associated with the work environment, such as payment, recognition, and support by employers, have not yet been investigated with a quantitative approach, which should therefore be considered in future studies. Interpreters still appear to be unseen by practitioners, and the constant wish for more support suggests a gap between published policies and current practice. Moreover, the varying employment conditions give rise to a complex situation, in which it remains to be clarified who has to provide support and training depending on the employment situation.

More quantitative research is needed regarding interpreters' experiences specifically in the mental health setting. All included studies were published in the last two decades, which emphasises the increasing importance of the interpreter's situation and mental health. The overall analysis also reveals an increased psychological strain in interpreters, not only in the mental health setting but in diverse settings. Future studies should therefore focus on interpreters' mental health related to specific work settings. Moreover, identifying potential protective and risk factors will improve the development of treatment and care for refugees in the specific settings.

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Supplementary materials

The following supplementary materials related to **study 1** are available in the **Appendix A**: Questionnaires applied in quantitative studies

CHAPTER 3

3 Psychological distress, exhaustion, and work-related correlates among interpreters in refugees' care: Results of a nationwide online survey in Germany

- Study 2 -

The following paper was published as:

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Abstract:

Background: Due to language barriers, interpreters are crucial for refugee care in the countries of resettlement. However, interpreters are often faced with distressing working conditions, such as precarious work circumstances, lack of supervision, or exposure to their clients' traumatic experiences. Recent studies examining interpreters' mental health focussed primarily on secondary traumatic stress. The present study aimed to gain a better understanding of psychological distress and exhaustion among interpreters in refugee care by examining these factors in the work context as well as their possible work-related correlates. Method: An online survey was carried out in Germany, which included several standardized questionnaires regarding distress, work- and client-related exhaustion, job satisfaction, and trauma exposure (BSI-18, CBI, JSS, HTQ, PCL-5). Interpreters were recruited primarily through psychosocial treatment centres and interpreter pools in Germany. Results: In total, 164 interpreters were included in the analyses. The participants showed increased psychological distress, and around 7% screened positive for posttraumatic stress disorder (PTSD). In an exploratory regression analysis, younger age (β = -.25, p = .004) emerged as correlate of psychological distress, whereas dissatisfaction with payment (β = -.21, p = .04) and a higher amount of traumatic content (β = .22, p = .001) were associated with work-related exhaustion, and dissatisfaction with recognition was associated with client-related exhaustion (β = -.35, p = .001). Conclusion: The results point to increased stress levels among interpreters for refugees. Moreover, they indicate that interpreters' distress is primarily correlated with work-related circumstances, thus suggesting the need for a greater work-related support structure for interpreters.

Keywords: interpreters, refugees, distress, exhaustion, trauma, working conditions

Highlights:

- In a nationwide online survey in Germany, psychological distress, exhaustion, and their correlates were investigated among interpreters working in refugee care
- Work-related variables and age were found to be correlates of psychological distress and exhaustion.

1 Introduction

Interpreters play a crucial role for the adequate treatment and healthcare of refugees in non-native-speaking countries of resettlement (Böttche et al., 2016), as the use of interpreters reduces communication errors and improves clinical outcomes (Fennig & Denov, 2021; Karliner et al., 2007). However, interpreters working in refugee care contexts frequently face difficult and precarious working conditions such as low payment or lack of training (Green et al., 2012; Holmgren et al., 2003; Splevins et al., 2010). Most interpreters have no access to supervision (Crezee et al., 2013; Kindermann et al., 2017), despite the fact that due to the clients' trauma exposure, interpreters in refugee care often have to handle traumatic content (Doherty et al., 2010; Splevins et al., 2010).

Previous qualitative research has indicated a wide range of emotional reactions among interpreters in refugee care, such as sadness, helplessness, and exhaustion (e.g., Crezee et al., 2013; Doherty et al., 2010). Quantitative research on psychological distress among interpreters is general still scarce (Geiling et al., 2021; Green et al., 2012). Previous studies focussed on rather work-related distress such as burnout or secondary traumatic stress (Birck, 2001; Kjellenberg et al., 2014; Shlesinger, 2005; Wichmann et al., 2018). To the best of our knowledge, only two quantitative studies have investigated psychological strain among interpreters working in refugee care (Kindermann et al., 2017; Teegen & Gönnenwein, 2002). The first study, consisting of a nationwide survey in Germany, found that interpreters have significantly fewer depressive symptoms compared to the general German population (Teegen & Gönnenwein, 2002). The second, more recent study revealed that interpreters working with refugee clients in a German city had significantly higher stress and anxiety levels compared to representative population samples (Kindermann et al., 2017). In the same study, volunteer interpreters showed significantly higher depression symptoms than did paid interpreters.

Two constructs referring to work-related psychological stress have been especially frequently studied among interpreters for refugees, i.e., secondary traumatic stress (STS) and compassion fatigue

(CF) (Kindermann et al., 2017; Wichmann et al., 2018). Both constructs refer to the distress a person experiences as a consequence of exposure to another person's trauma (Sprang et al., 2019), e.g., by translating or listening to an account of the trauma. STS comprises symptoms such as intrusive thoughts related to the trauma of another person, depression, or concentration difficulties (Daniels et al., 2017; Sprang et al., 2019). CF has been conceptualized as a combination of STS and burnout (Stamm, 2010). In this theoretical framework, burnout, as a negative consequence of caring, includes various symptoms such as exhaustion, frustration, and depression.

In particular, qualitative studies have often reported work-related exhaustion or distress among interpreters in refugee care (e.g., Crezee et al., 2013; Doherty et al., 2010; Holmgren et al., 2003). From a quantitative perspective, however, burnout among interpreters has only been examined as part of CF, within the respective subscale of the Professional Quality of Life Questionnaire (ProQOL; Stamm, 2010). This subscale has not shown evidence of satisfactory construct validity (Heritage et al., 2018), and exhaustion as a consequence of interpreting and working with clients may therefore not have been sufficiently captured by the applied questionnaire.

The literature has also addressed the fact that some interpreters have themselves fled and experienced traumatic events (Green et al., 2012; Kindermann et al., 2017). Qualitative research indicates that interpreters are especially stressed if they interpret similar war and flight experiences to their own (Crezee et al., 2013; Doherty et al., 2010; Green et al., 2012). Quantitative studies have not yet specifically addressed war- and refugee-related trauma among interpreters. Furthermore, the trauma experience has not been examined in relation to interpreters' psychological distress.

Taken together, studies examining interpreter's mental health in refugees' care have mostly been qualitative in nature and have included small or heterogeneous samples with different employment situations. Moreover, the small number of quantitative studies have shown a number of limitations (e.g., sole focus on STS, mixed sample of paid and voluntary interpreters). Work-related aspects such as workload, frequency of supervision, or job satisfaction have not yet been investigated in association with psychological distress. Therefore, the present study sought to 1) examine the level of psychological

distress, exhaustion, flight- and war-related trauma experiences, and rates of PTSD among interpreters in refugee care, and 2) identify correlates (i.e., sociodemographic characteristics, own trauma and refugee-specific, work-related circumstances) of psychological distress and exhaustion.

2 Methods

2.1 Data collection and study sample

A Germany-wide anonymous online survey was conducted using the online survey platform Unipark (*Questback GmbH. Published 2017. EFS Survey, Version Summer 2017. Köln: Questback GmbH*). The study comprised two measurement time points, of which only the results of the first are reported here. To achieve the largest possible sample size, all participants who took part at both time points received a 25 Euro voucher. The first author reached out to 44 psychosocial centres for refugees of the BAfF (German Association of Psychosocial Centres for Refugees and Victims of Torture), which is an umbrella organisation for psychosocial treatment centres for victims of human rights violations and political persecution. In addition, further psychosocial centres for refugees were contacted, as well as refugee care organisations, clinics working with interpreters, and interpreter pools (e.g., community interpreter services) in Germany. Institutions were contacted by telephone and/or email. Inclusion criteria for participating in the study were 1) age ≥ 18 years and 2) being paid for interpreting spoken languages for refugee clients. Interpreters could participate in the survey between April 2019 and July 2019. Before answering the survey questions, participants were informed about the study and provided consent. The study was approved by the ethics committee of the of the Freie Universität Berlin, Germany, (224/2019).

Overall, 291 participants gave their consent to participate. Only after the participants had agreed to participate did the data collection begin. A further 34 participants were excluded as they did not create a pseudonym and were therefore not forwarded to the next page of the survey, and 19 participants dropped out from the following page (sociodemographic variables). Further 55 participants dropped out over the course of the survey with an average of 2.89 participants dropping out per page. Overall, 183 interpreters (63% of the 291 who gave their consent) completed the whole survey. From the final

analyses, 11 participants were excluded because they did not fulfil the inclusion criterion of being a paid interpreter, and eight participants were excluded because their participation behaviour and email address indicated repeated participation by the same person. Therefore, the final sample included n = 164 participants.

2.2 Instruments

Sociodemographic questions. Sociodemographic questions included age, gender, country of origin, marital status, number of years of education, highest level of education, and flight experience ('Have you ever fled or been displaced?'). Participants were asked if they had a degree in interpreting (no/yes, at a university or college) and if they had received any kind of training regarding their job as an interpreter for refugees (no/yes).

Questions related to interpreting in the main work setting. Interpreters were asked to choose one of the five following settings in which they currently interpret for the greatest amount of time: 1) psychotherapy, 2) psychosocial counselling (i.e., drug counselling, family counselling), 3) medical setting (i.e., hospital or doctor's office), 4) authorities (i.e., *German Federal Office for Migration and Refugees*), court, police, social services, agency for work, job centre, 5) other setting (please name).

All of the subsequent work-related questions referred to the main work setting chosen. These included questions regarding participants' weekly workload ('How many hours a week on average do you work in this setting?' − 1-10 hrs; 11-20 hrs; 21-30 hrs; 31-40 hrs; more than 40 hrs) and the amount of interpreted traumatic content per week ('How much traumatic content in percent do you interpret on average per week?' – 0%; 10%; 20%; 30%; 40%; 50%; 60%; 70%; 80%; 90%; 100%). Participants were also asked about their type of employment (freelancer, employed, both), their work experience in years, and the frequency of supervision (never, less than once every 6 months, every 6 months, every 3 months, once a month, more than once a month).

Psychological Distress. The Brief Symptom Inventory (BSI-18, Derogatis, 2000) was applied to measure psychological distress, which was the primary outcome of interest. The questionnaire

consists of 18 items, with six items for each of the three subscales (anxiety, depression, and somatization). Items are rated on a 5-point Likert scale (0 = 'not at all' to 4 = 'extremely'), with higher scores indicating higher distress. The items of each scale can be added up to a sum score (0-24). Furthermore, the sum of all scales together represents the General Severity Index (GSI; 0-72). Norms are available for a German representative population (Franke et al., 2017). Internal consistencies were calculated for all scales in the present study: anxiety: α = .83, depression: α = .83, somatization: α = .76, and GSI: α = .90.

Work- and client-related exhaustion. Two of three subscales of the Copenhagen Burnout Inventory (CBI, Kristensen et al., 2005) were applied to assess work- and client-related exhaustion. This questionnaire captures fatigue and exhaustion as a consequence of work. The CBI contains 19 items rated on a 5-point Likert scale and comprises three subscales measuring different areas of exhaustion (personal, work-related, and client-related exhaustion). In the present analysis, we used the latter two subscales. The subscale regarding work-related exhaustion covers seven items referring to the exhaustion a person associates with his/her work (e.g., 'Do you feel worn out at the end of the working day?'). Client-related exhaustion comprises six items referring to the exhaustion a person experiences as a consequence of his/her work with clients (e.g., 'Does it drain your energy to work with clients?'). Items are rated on a 5-point Likert scale ranging from 'never/almost never' or 'to a very low degree' to 'always' or 'to a very high degree' (for scoring purposes: 0, 25, 50, 75, 100), a mean for each subscale is calculated. The subscales showed the following internal consistencies in the current study: work-related exhaustion: α = .86, client-related exhaustion: α = .87.

Job Satisfaction. The Job Satisfaction Survey (JSS, Spector, 1985) was used to measure satisfaction with pay and contingent reward. The JSS consists of a total of nine subscales containing four items each, of which we used two subscales in the present study. The perceived satisfaction with pay and remuneration possibilities at work was measured with the subscale 'pay'. Example items are 'I feel I am being paid a fair amount for the work I do' or 'raises are too few and far between'. The scale 'contingent rewards' comprises items regarding appreciation, recognition, and rewards for good work

(e.g., ‘When I do a good job, I receive the recognition for it that I should receive.’). The participants were asked to refer to their main work setting in their responses. Items from both subscales are rated a 6-point Likert scale (1 = disagree very much to 6 = agree very much), with the sum of items for each subscale representing the sum score (4-24). The JSS is widely used and internal consistencies were calculated for the current study (pay: α = .78, contingent reward: α = .78). Comparison scores are available online (Spector, 2021) for different professional groups in several countries.

The JSS and CBI were translated from English into German by the first author and back-translated by a second researcher as no German version was available. Any disagreements were resolved by discussion between the two researchers.

Trauma exposure and PTSD. Trauma exposure was assessed using a stepwise approach. First, the Primary Care PTSD Screen for DSM-5 (PC-PTSD-5; Prins et al., 2016) was applied which asks whether one has ever experienced a traumatic event. If a participant answered yes to this item, he/she was directed to the first part of the Harvard Trauma Questionnaire (HTQ; Mollica et al., 1992) and the Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5, Weathers et al., 2013). Only the first part of the HTQ was used to explore possible traumatic events. The HTQ has been interculturally validated and the first part showed a reliability of α = .90. To assess PTSD symptoms, we applied the PCL-5. The PCL-5 consists of 20 items rated on a 5-point Likert scale ranging from 0 (not at all) to 4 (extremely), and with an internal consistency of α = .93 in the present sample. The scale measures symptom severity (0-80) and is indicative of a possible diagnosis of PTSD according to the DSM-5 criteria (Weathers et al., 2013).

2.3 Statistical analysis

Characteristics of interpreters were analysed descriptively. One sample t-tests were conducted to compare the means of the BSI-18 regarding psychological distress to a representative sample of the German population. Correlates were investigated in two steps and are referred to here as variables that correlate with psychological stress and exhaustion or served as independent variables in the regression analyses. First, correlations were assessed using Spearman’s rho for non-normally distributed

continuous variables and point-biserial correlations for dichotomous variables. According to Cohen (1988), correlation effect sizes of .10 are described as small, .30 as medium and .5 as large. In a second step, exploratory multiple hierarchical stepwise regression analyses were conducted to investigate possible sociodemographic and workplace-specific correlates of psychological distress (BSI-18) and exhaustion. Due to the exploratory nature of these analyses and the lack of knowledge regarding relations between psychological distress and working conditions, variables were included as independent variables in the regression analysis if they significantly correlated with the outcome variable in the correlation analysis and all the analyses were not corrected for the alpha level. P-values are reported for all independent variables in the regression analyses. There was no indication of multicollinearity due to the variance inflation factor. Regarding the regression analyses with work- and client-related exhaustion as outcome, the Pagan-Breusch test indicated heteroskedasticity, and the Huber-White estimator of standard errors was therefore applied for these regression analyses using the package '*sandwich*' (Zeileis, 2004; Zeileis et al., 2020) and '*lmtest*' (Zeileis & Hothorn, 2002) in R. All statistical analyses were conducted using R version 4.1.0 (R Core Team, 2021).

3 Results

3.1 Sample description, characteristics of interpreting work and psychopathology

Sociodemographic characteristics are displayed in table 1. Participants originated from 43 different countries (supplementary material), with the highest numbers being from Germany (21%), Iran (11%) and Syria (9%). The mean age was 39 years (SD = 12.35, range: 18-71) and the majority of participants were female (70.1%). On average, participants reported 17 years of education (SD = 3.42, range: 6-26). About a quarter of the sample had fled or been displaced themselves.

Table 1

Sociodemographic and workplace-specific characteristics regarding the main work setting

Sample characteristic	*n*	*%*	*M*	*SD*	*Mdn*	*IQR*
Sociodemographic Variables						
Gender: Female	115	70.1 %	-	-		
Age	-	-	38.84	12.35	38	21
Marital status						
Single	70	42.7 %	-	-		

In a relationship	16	9.8 %	-	-		
Married	58	35.4 %	-	-		
Divorced	13	7.9 %	-	-		
Widowed	3	1.8 %	-	-		
Other	4	2.4 %	-	-		
Years of education	-	-	16.80	3.42	17	4
Highest professional education/degree						
No professional education	23	14.0%	-	-		
Completed apprenticeship or comparable qualification	27	16.5%	-	-		
Bachelor	54	32.9%	-	-		
Master craftsman or comparable qualification	3	1.8%	-	-		
Diploma/Master/State examination	51	31.1%	-	-		
PhD or higher degree	6	3.7%	-	-		
Ever fled or displaced	45	27.4 %	-	-		
Ever experienced a trauma (PC-PTSD-5)	83	50.6 %	-	-		
Degree in interpreting (university or college)	24	14.6 %	-	.		
Training for interpreting for refugees	110	67.1 %	-	.		
Main work setting						
Psychotherapy	38	23.2 %				
Authorities	59	36.0 %				
Medical	22	13.4 %				
Counselling	39	23.8 %				
Other Setting	6	3.7 %				
Interpreter-specific work variables related to the main work setting						
Work experience in years			5.17	5.97	3	3.25
Employment situation						
Freelancer	108	65.9 %				
Employed	37	22.6 %				
Both	19	11.6 %				
Weekly working hours						
1-10 h	114	69.5 %				
11-20 h	18	11.0 %				
21-30 h	12	7.3 %				
31-40 h	19	11.6 %				
>40 h	1	0.6 %				
Traumatic content in sessions in %			34.94	28.70	20	50
Frequency of supervision						
Never	78	47.6%				
Less than once every 6 months	36	22.0%				
Every 6 months	29	17.7%				
Every 3 months	11	6.7%				
Once a month	7	4.3%				
More than once a month	3	1.8%				

Only 15% of the sample had completed education as an interpreter at a university or college, but over 64% had completed training as an interpreter for refugee clients (table 1). Most interpreters reported "authorities" as their main work setting. On average, the interpreters had five years of work experience in their main work setting (Range: 0-30). The majority worked 1-10 hours in their main work setting, and 66% worked as freelance interpreters. Across all main settings, on average, participants reported that the proportion of interpreted traumatic content in sessions lay at 35% (Range = 0-100). Almost half of the participants indicated that they had never had supervision in their main work setting.

The descriptive results regarding the psychopathological questionnaires are displayed in table 2. The GSI, anxiety, depression and somatization values were significantly higher than in a representative German population (table 2; Franke et al., 2017).

Table 2

Descriptive statistics of the psychopathology and work-related variables (n = 164)

	M	SD	Range	Mdn	IQR	M (SD) representative sample [a]	t(163)
BSI-18 GSI	9.02	9.07	0-43	6	11	4.66 (7.44)[a]	6.1546***
BSI-18 – depression	3.74	4.15	0-18	2.5	5.25	1.76 (3.23)[a]	6.1049***
BSI-18 – anxiety	3.01	3.32	0-17	2	3	1.44 (2.59)[a]	6.0555***
BSI-18 – somatization	2.27	2.94	0-15	1	3.25	1.46 (2.58)[a]	3.5192***
CBI – work-related exhaustion	25.78	18.31	0-93	23.32	28.57	-	-
CBI – client-related exhaustion	21.06	19.14	0-96	16.67	29.17	-	-
JSS – contingency reward	16.05	4.49	4-24	16	7	-	-
JSS – pay	13.65	4.84	4-24	13.5	7	-	-

Note. $*p < .05$. $**p < .01$. $***p < .001$. BSI-18 GSI: Brief Symptom Inventory-18 General Severity Index; CBI: Copenhagen Burnout Questionnaire; JSS: Job Satisfaction Survey [a] representative survey from Franke et al. (2017)

Approximately half of the total sample (51%, $n = 83$) indicated that they had experienced at least one traumatic event based on the screening instrument PC-PTSD-5. According to the HTQ trauma

checklist, on average, these participants (n = 83) had experienced M = 2.89 different potentially traumatic events (SD = 3.3, Range: 0-15). The most frequently mentioned self-experienced traumatic events were forced separation (31%, n = 26), unnatural death (30%, n = 25) and being close to death (26%, n = 22) (supplementary material). Results from the whole sample indicated that approximately 7% (n = 12) of the participants screened positive for PTSD according to the DSM-5 criteria. Among the participants who had experienced at least one traumatic event in their lives (n = 83), the mean level of PTSD symptom severity lay at M = 16.28 (SD = 13.11, Range: 0-54).

3.2 Correlates of distress and exhaustion

Correlations between sociodemographic variables, interpreter-specific variables and the applied questionnaires are displayed in table 3. Overall, mostly small correlation coefficients were found for workplace-specific variables. Psychological distress, work-related exhaustion and client-related exhaustion were negatively correlated with having a degree in interpreting, meaning that interpreters without a professional education showed significantly higher distress than interpreters with a professional education. However, being trained to work as an interpreter did not correlate with psychological distress or exhaustion. For ease of interpretation, supervision was dummy-coded into a binary variable (0 = never having had supervision, 1 = have supervision: less than once every six months, every six months, every three months, once a month, more than once a month). Having supervision was related to lower general distress (r = -.23, p < .01) and lower work-related exhaustion (r = -.19, p < .05).

Table 3

Correlations of sociodemographic, work-specific and psychopathological variables (n = 164)

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Female gender [a]														
2 Age [b]	-0.02													
3 Flight [a]	-0.19*	0.10												
4 Trauma [a]	-0.03	-0.05	0.21**											
5 Interpreter education [a]	-0.11	0.22**	-0.18*	-0.14										
6 Training [a]	0.05	0.06	-0.11	-0.03	0.07									
7 Work experience [b]	0.00	0.57***	0.17*	-0.13	0.16*	0.06								
8 Weekly working hours [b]	-0.19*	0.20**	-0.02	-0.15*	0.38***	0.23**	0.22**							
9 Traumatic content [b]	0.05	-0.07	0.05	0.15*	-0.11	0.20**	-0.03	0.12						
10 Supervision [a]	-0.10	0.10	-0.13	-0.11	0.23**	0.17*	-0.02	0.21**	-0.01					
11 BSI-18 GSI [b]	0.07	-0.36***	-0.02	0.19*	-0.27***	-0.04	-0.17*	-0.13	0.15*	-0.24**				
12 CBI – work [b]	-0.03	-0.17*	0.05	0.12	-0.29***	-0.04	-0.08	-0.09	0.24**	-0.19*	0.60***			
13 CBI – client [b]	-0.14	-0.19*	0.09	0.01	-0.23**	-0.09	0.01	-0.10	0.12	-0.14	0.42***	0.65***		
14 JSS – reward [b]	0.00	0.08	-0.07	-0.13	0.19**	0.11	0.08	0.22**	0.02	0.10	-0.18*	-0.37***	-0.48***	
15 JSS – pay [b]	-0.04	-0.10	-0.01	-0.10	0.15	0.03	-0.06	0.18*	0.02	0.09	-0.17*	-0.37***	-0.36***	0.67***

Note. *$p < .05$. **$p < .01$. ***$p < .001$. Gender: 0 = male, 1 = female; Flight: 0 = no, 1 = yes; Trauma exposure to trauma according to the PC-PTSD-5: 0 = no, 1 = yes; interpreter education: 0 = no degree in interpreting, 1 = degree in interpreting; training: 0 = no training; 1 = ever completed training for interpreting for refugee clients; supervision: 0 = never had supervision, 1 = have supervision (less than once every 6 months, every 6 months, every 3 months, once a month, more than once a month) BSI-18 GSI: Brief Symptom Inventory-18 General Severity Index; CBI: Copenhagen Burnout Questionnaire, work = work-related exhaustion, client = client-related exhaustion; JSS: Job Satisfaction Survey, reward = contingency reward; [a] point-biserial correlation; [b] Spearman rank correlation

The results of the three regression analyses are shown in tables 4 and 5. Variables were entered into the regression analysis if they correlated significantly with the outcome variable. To test the incremental difference in the explanatory variance between the variables, for every outcome (i.e., distress, work-related exhaustion and client-related exhaustion), variables were added to the model in the following four steps: 1) sociodemographic variables, 2) interpreter education and experience-related variables, 3) variables related to working conditions in the main work setting, and 4) variables related to job satisfaction regarding the main work setting.

For the outcome distress, eight variables were entered into the regression analyses in four steps. Younger age emerged as significant correlate throughout all steps. The third model additionally indicated lack of supervision as a significant correlate of distress (β = -.15, p < .045) and accounted for 15% of the variance. In the final step, only age was significantly associated with distress (table 4). However, the increase in R^2 from model 3 to 4 was not significant.

With regard to work-related exhaustion, six variables were entered into the regression analysis in four steps. Age was significantly associated with work-related exhaustion only in the first step. When added to the model, interpreter education was significantly associated with work-related exhaustion, but was no longer significant once job satisfaction was entered in the next step. Moreover, compared to the previous steps, the highest amount of variance was explained by adding satisfaction with recognition and pay (ΔR^2 = .14) in the final step, with a total R^2 = 28%. The final model therefore indicated that amount of traumatic content (β = -.22, p = .001) and satisfaction with payment (β = -.21, p = .04) were significantly associated with work-related exhaustion. In every step, the change in R^2 was significant.

For the regression analyses regarding client-related exhaustion, four variables were included in the regression analysis. The increase in R^2 was only significant in the third and final step, when satisfaction with recognition and pay were added. Moreover, only satisfaction with recognition emerged as a significant correlate of client-related exhaustion (β = -.35, p = .001). This model explained 21% of the variance.

Table 4

Hierarchical regression for psychological distress (BSI-18)

Variable	B	SE B	β	p
Step 1[a]				
Constant	15.81	2.38		<.001
Age	-0.21	0.05	-.28***	<.001
Trauma	2.36	1.35	.13	.08
Step 2[b]				
Constant	15.96	2.42		<.001
Age	-0.20	0.06	-.28**	.002
Trauma	2.11	1.37	.12	.12
Interpreter education	-3.42	1.97	-.13	.08
Work experience[e]	0.07	0.13	.04	.61
Step 3[c]				
Constant	15.67	2.59		<.001
Age	-0.18	0.06	-.25**	.004
Trauma	1.52	1.37	.08	.27
Interpreter education	-2.33	1.99	-.09	.24
Work experience[e]	0.03	0.13	.02	.81
Traumatic content[e]	0.04	0.02	.13	.10
Supervision[e]	-2.77	1.38	-.15*	.04
Step 4[d]				
Constant	20.62	3.49		<.001
Age	-0.19	0.06	-.25**	.003
Trauma	1.11	1.37	.06	.42
Interpreter education	-1.48	2.01	-.06	.46
Work experience[e]	0.02	0.13	.01	.88
Traumatic content[e]	0.04	0.02	.14	.07
Supervision[e]	-2.64	1.37	-.15	.06
Satisfaction with pay[e]	-0.27	0.20	-.14	.17
Satisfaction with recognition[e]	-0.06	0.21	-.05	.78

Note. *$p < .05$. **$p < .01$. ***$p < .001$; Trauma exposure (PC-PTSD-5): 0 = no, 1 = yes; interpreter education: 0 = no degree in interpreting, 1 = degree in interpreting; supervision: 0 = never had supervision, 1 = have supervision (less than once every 6 months, every 6 months year, every 3 months, once a month, more than once a month) [a] $R^2 = .10$, $p < .001$ [b] $\Delta R^2 = .02$, $p = .18$ [c] $\Delta R^2 = .03$, $p = .04$ [d] $\Delta R^2 = .03$, $p = .09$ [e]in main work setting

Table 3

Hierarchical regression for work-related and client-related exhaustion

Work-related exhaustion					Client-related exhaustion				
Variable	**B**	**SE B**	**β**	**p**	**Variable**	**B**	**SE B**	**β**	**p**
Step 1[a]					**Step 1**[e]				
Constant	35.34	4.14		<.001	Constant	29.64	4.35		<.001
Age	-0.25	0.10	-.16*	.01	Age	-0.22	0.11	-.13	0.06
Step 2[b]					**Step 2**[f]				
Constant	34.39	4.15		<.001	Constant	28.45	4.37		<.001
Age	-0.18	0.10	-.12	0.08	Age	-0.16	0.11	-.10	0.15
Interpreter education	-11.49	4.08	-.22**	0.01	Interpreter education	-7.44	4.55	-.14	0.10
Step 3[c]					**Step 3**[g]				
Constant	31.24	4.69		<.001	Constant	56.29	6.54		<.001
Age	-0.15	0.10	-.10	0.11	Age	-0.15	0.11	-.10	0.19
Interpreter education	-8.52	3.95	-.16*	0.03	Interpreter education	-2.87	4.04	-.05	0.48
Traumatic content[h]	0.13	0.04	.21**	<.01	Satisfaction with pay[h]	-0.36	0.40	-.09	0.37
Supervision[h]	-5.40	2.89	-.15	0.06	Satisfaction with[h] recognition	-1.50	0.46	-.35**	.001
Step 4[d]									
Constant	55.31	6.33		<.001					
Age	-0.17	0.09	-.11	0.07					
Interpreter education	-4.26	3.16	-.08	0.18					
Traumatic content[h]	0.14	0.04	.22**	<.01					
Supervision[h]	-4.55	2.54	-.12	0.07					
Satisfaction with pay[h]	-0.81	0.38	-.21*	0.04					
Satisfaction with recognition[h]	-0.86	0.44	-.21	0.05					

Note. *$p < .05$. **$p < .01$. ***$p < .001$; interpreter education: 0 = no degree in interpreting, 1 = degree in interpreting; supervision: 0 = never had supervision, 1 = have supervision (less than once every 6 months, every 6 months, every 3 months, once a month, more than once a month) [a] $R^2 = .03$, $p < .05$ [b] $\Delta R^2 = .04$, $p = .008$ [c] $\Delta R^2 = .07$, $p = .002$ [d] $\Delta R^2 = .14$, $p < .001$ [e] $R^2 = .02$, $p < .05$ [f] $\Delta R^2 = .02$, $p = .12$ [g] $\Delta R^2 = .17$, $p < .001$ [h] in main work setting

4 Discussion

This cross-sectional study explored distress and exhaustion of interpreters in refugee care in Germany and sought to identify possible correlates. Overall, the sample showed increased levels of psychological distress. Approximately a quarter of the participants had experienced war and flight themselves. In particular, work-related factors and younger age were associated with distress and exhaustion.

4.1 Psychological strain and job satisfaction among interpreters for refugees

According to our findings, the interpreters in the present study showed significantly higher psychological distress on the BSI-18 overall and on all of its subscales (anxiety, depression, and somatization) as compared to a representative German sample (Franke et al., 2017).

In contrast to previous studies, the current study sought to identify whether interpreters may themselves have traumatic experiences in the context of war and flight. Indeed, up to a quarter of the sample had experienced war- and flight-related trauma such as combat situations or forced separation. The PTSD rate of 7% in the whole sample was higher than in a representative German sample (2.4%, Eichhorn et al., 2014) and comparable to a recent study with interpreters in Germany (9%, Kindermann et al., 2017).

The present study also applied work-related questionnaires (exhaustion and facets of job satisfaction) to interpreters working with refugee clients. To the best of our knowledge, there are no comparable studies examining the CBI and the JSS in German interpreter samples that could provide a meaningful comparison for our findings. As such, we believe that the present study is the first to apply these measures to a sample of interpreters in Germany. The participants showed lower work- and client-related exhaustion compared to the average values from a Danish sample, which included several professions in social care and psychiatric and medical contexts (e.g., social workers, nurses, administrative staff, doctors) (Kristensen et al., 2005). Two studies investigating burnout according to

the definition of Stamm (2010), found average high burnout levels among interpreters for traumatized clients (Mehus & Becher, 2016) and lower burnout levels for interpreters than for therapists (Birck, 2001). However, the measurement of burnout in this framework must be interpreted with caution due to the psychometric characteristics of the corresponding questionnaire (Roberts et al., 2021). Furthermore, the interpreters in the present study reported slightly higher levels of satisfaction with pay and contingent rewards than did mental health workers in the US (Spector, 2021).

Overall, the results regarding psychological distress contribute to previous qualitative and quantitative findings (e.g., Doherty et al., 2010; Kindermann et al., 2017). However, the results regarding exhaustion and job satisfaction revealed that compared to other professions, the interpreters in our sample had lower levels of work- or client-related exhaustion and, on average, high satisfaction with their work. One possible reason for this might be that most interpreters reported working up to 10 hours per week in their main work setting, which could have prevented high levels of exhaustion. As job satisfaction was explored for the main work setting, it might be the case that interpreters spent the greatest proportion of time in this main work setting because they found the working conditions to be satisfactory.

4.2 Correlates of psychological distress and exhaustion

The regression analyses revealed that age was the only significant correlate of psychological distress in the present sample. Traumatic content and satisfaction with pay emerged as significant correlates of work-related exhaustion, whereas satisfaction with recognition was the only significant correlate of client-related exhaustion.

In the regression analyses for psychological distress, age emerged as significant correlate in all steps. This is in line with a meta-analysis that demonstrated a significant negative correlation between age and emotional exhaustion among mental health professionals (Lim et al., 2010). The authors suggested that accumulating life experience and emotional maturity may serve as a coping strategy. Until job satisfaction was included in the regression analysis, lack of supervision was found to be a

correlate of higher psychological distress among interpreters, possibly indicating that lack of supervision might be a risk factor for psychological distress. For German psychotherapists in training, supervision by a trained psychotherapist is a mandatory part within their training and includes techniques such as role plays, case report and the use of videotapes of sessions for direct feedback (Weck et al., 2017). Additionally, it is relevant for growing own expertise and competencies in any stage of practicing psychotherapy (Kühne et al., 2019). In the context of the work with refugees, supervision may help for example to acknowledge the external restrictions due to political decisions and express feelings of frustration in a safe space (Apostolidou & Schweitzer, 2015). Overall, this finding would support interpreters' suggestions for more supervision, as reported in quantitative (Kindermann et al., 2017; Wichmann et al., 2018) and qualitative studies (Crezee et al., 2013; Doherty et al., 2010; Holmgren et al., 2003). It is also in accordance with a recent scoping review, which recommended a systemic change regarding supervision for interpreters, for instance by only permitting institutions to hire interpreters if supervision is also embedded (Fennig & Denov, 2021).

Interestingly, work experience in the main work setting was significantly correlated with psychological distress. However, it did not emerge as a significant correlate in the regression analysis for psychological distress. Nevertheless, it has to be considered that the distribution regarding work experience in the main setting was highly skewed, as the vast majority of interpreters had up to five years of work experience in the main setting.

Work-related exhaustion was found to be significantly associated with a higher amount of interpreted traumatic content. Similar findings were also reported in qualitative studies, in which participants stated, for example, that traumatic content was too much to handle (Green et al., 2012), was very demanding (Doherty et al., 2010) or made it impossible to switch off (Splevins et al., 2010). Likewise, in previous studies, interpreters have stressed the impact of the traumatic content and suggested preparatory training to learn more about PTSD and how to cope with interpreted traumatic content (e.g., Crezee et al., 2013; Miller et al., 2005). Although work-related exhaustion was significantly correlated with having a degree in interpreting in the current study, in the regression

analyses, it was only associated with work-related exhaustion until satisfaction with pay and recognition were entered into the model. Furthermore, work-related exhaustion was associated with satisfaction with payment. The organisation and funding of interpreters generally seems to be difficult and was addressed in several countries (Böttche et al., 2016; Fennig & Denov, 2021; Jaeger et al., 2019). Currently, there is no regulated funding for interpreters in the German healthcare system (Schouler-Ocak, 2015), which probably contributes to low fees for interpreters.

Client-related exhaustion was correlated with having a degree in interpreting and with dissatisfaction with payment and recognition. In the final step of the regression analyses of client-related exhaustion, only dissatisfaction with recognition emerged as a correlate. Qualitative studies have revealed that refugee clients are perceived as having high expectations of the interpreters in terms of their ability to help them (e.g., Resera et al., 2015) and that professionals are perceived as showing less recognition or even disrespect for the interpreters (Green et al., 2012; Holmgren et al., 2003). Altogether, this situation might therefore contribute to dissatisfaction and exhaustion, and underscores the relevance of recognition in terms of pay and appreciation of interpreters. Compared to, for example, psychotherapists or medical staff who are not only trained for this work but also employed and thus embedded in team structures, this is often an unusually difficult situation for interpreters, which needs to be recognised more (Hassan & Blackwood, 2021).

Overall, the regression analyses showed that satisfaction with recognition and pay, and the amount of interpreted traumatic content correlated only with work- and client-related exhaustion, and not with psychological distress. This suggests that these variables were especially related to work-related exhaustion but might perhaps not be associated with psychological distress overall. Furthermore, there was no significant correlation between training and psychological distress or exhaustion, whereas having an interpreting degree was associated with less psychological distress and exhaustion. Interpreters who have studied may be better prepared for the job in terms of interpreting techniques or professional ethics, and may therefore experience less distress. Compared to having a degree in interpreting, the question referring to training might not have been sufficiently specific, as the prevention of distress may be

dependent on the duration and intensity of training. However, this also reflects the very heterogeneous training situation for interpreters in Germany: There is still no nationwide agreement on the duration and content of (preparatory) training for interpreters without an interpreting degree (Kluge, 2020). Future studies may ask more precisely for the extent of training completed in order to gain a better overview of the training programs offered to interpreters and their potential buffering effect on work-related distress.

Taken together, the results give a first impression of the relationships of psychological distress and symptoms of exhaustion and possible associated working conditions in interpreters working in refugee settings. Though the analyses were conducted at a very exploratory level, they in general support previous studies and reviews (Fennig & Dennov, 2021; Kindermann et al., 2017). The results indicate that offering supervision and preparatory training for interpreters (e.g., by employers and interpreter agencies) might be helpful to cope with the exhausting consequences of traumatic content. This would however depend heavily on the need for sustainable financial regulations in refugee care to enable organisations to provide better pay for their interpreters and improve their working conditions.

4.3 Limitations

Some limitations of the present study should be mentioned. In order to achieve a large sample size, we recruited a convenience sample, which is therefore not a representative sample of interpreters in Germany. The choice of an anonymous online survey entails the risk that some individuals who do not belong to the target population may have participated. However, to mitigate this risk, we carefully selected the locations for advertising the study. Additionally, we asked some indicative questions (e.g., regarding the employment situation) and closely monitored the participation process. As the study was only promoted through contact persons in the various organisations and was never forwarded directly to interpreters, it is unclear how intensively the study was advertised and forwarded, and to how many potential participants. As such, we cannot be certain what kind of institutions the interpreters came from and how many different institutions they represented. Furthermore, as the online survey took about 30-45 minutes to complete, some participants may have dropped out due to tiredness, or it is likely that

only very committed interpreters completed the survey. Overall, however, a reasonably large sample was reached and the dropout rate was relatively low. Most of the work-related variables specific to interpreting referred to the work setting in which interpreters currently spent the greatest amount of time. Therefore, other work settings and their associated work conditions, which may, for example, be perceived as more stressful than the main work setting, were not considered. Lastly, the data are based on a cross-sectional design and the variables were included in the regression analyses due to their significant correlation with the outcomes. The selection of variables for the regression analyses thus might have introduced bias. Additionally, the regression analyses for work- and client-related exhaustion showed heteroskedasticity. The regression analyses were thus exploratory in nature and the findings should be interpreted with caution.

4.4 Conclusions and Implications

The present study examined psychological strain and work-related correlates in a large sample of interpreters in Germany, and revealed increased psychological distress in this group. Younger age, workplace-specific factors and facets of job satisfaction were identified as correlates of psychological distress and exhaustion in exploratory regression analyses. The findings thus underpin calls for improved structural regulations and support structures for interpreters in general, such as independent paid supervision, preparatory training, and the possibility for peer support, in order to reduce work-related distress for interpreters and foster an appreciative working atmosphere.

Nevertheless, there is a need for further research, as these results are preliminary due to limitations and, in particular, the identified correlates need to be confirmed in further studies. Additionally, future studies may concentrate on specific locations in order to reach a more homogeneous sample in terms of working conditions. This would contribute to a better understanding of the psychological wellbeing of interpreters working with refugees in specific work contexts. Moreover, it might inform the development of preparatory training, workshops, and supervisions for interpreters in different work contexts within refugee care, thus potentially contributing to improved working conditions for interpreters.

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Supplementary materials

The following supplementary materials related to **study 2** are available in the **Appendix B**: Detailed description of the statistical approach.

CHAPTER 4

4 A comparison of interpreters' wellbeing and work-related characteristics in the care of refugees across different work settings

- Study 3 -

The following paper was published as:

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Abstract:

Background: Interpreters in the care of refugees work in various different settings. Qualitative studies suggest that interpreters are confronted with a variety of demands depending on the context in which they work, which may in turn influence their wellbeing. To date, no larger-scale study has investigated differences between work settings regarding interpreters' work-related characteristics or wellbeing. Objective: The aim of this study was to compare the work-related characteristics and possible changes in the wellbeing of interpreters between four main work settings (psychotherapy, counselling, medical setting, and authorities) in the care of refugees. Method: Interpreters in refugee care were recruited for a nationwide online survey in Germany with two measurement time points. Participants provided socio-demographic data and answered questions about the working conditions in their respective main work setting. In addition, psychological distress (Brief Symptom Inventory, BSI-18), work-related exhaustion (Copenhagen Burnout Inventory, CBI), and compassion satisfaction (Professional Quality of Life, ProQOL) were assessed. Results: Overall, 158 interpreters were included at t1, of whom 63 were also included at t2. Significantly more traumatic content was interpreted in counselling settings and psychotherapy than in medical and authorities settings (H (3) = 26.09, $p < .001$). The highest proportion of interpreters with an interpreting degree worked in the authorities setting (Fisher's exact test, p = .002). Significant differences between the four settings were found for psychological distress (Kruskal-Wallis-test, H (3) = 12.02, p = .01) and work-related exhaustion (Kruskal-Wallis-test, H (3) = 8.10, p = .04) but not for compassion satisfaction. Conclusion: The presented results indicate differences regarding working conditions, psychological distress, and work-related exhaustion between different work settings of interpreters. Future studies may explore each setting in greater detail and include a larger sample size to reach a better understanding of the relationship between setting-specific challenges and interpreters' wellbeing.

Keywords: Interpreter, refugees, work settings, stress, compassion satisfaction, trauma, translation

Background

Interpreters are of great importance in various areas of refugee care. Common areas of work include psychotherapy and counselling, medical settings, or legal and administrative settings such as asylum hearings (Crezee et al., 2013; Resera et al., 2015; Wichmann et al., 2018). Across all of the different work settings, the employment situation poses several challenges, as most interpreters work as freelancers (Wichmann et al., 2018). They often suffer from time pressure and are dependent on an unregulated labour market (Norström et al., 2012), which can result in a lack of steady income and discontinued payments in the case of illness. Several other problems have also been identified across various work settings, including a lack of breaks, training, supervision, and preparation (Crezee et al., 2013; Kindermann et al., 2017).

However, some requirements and challenges are specific to particular work settings or situations. For example, interpreters describe interpreting in psychotherapy as especially intense and as having an emotional impact on them (Doherty et al., 2010; Miller et al., 2005; Resera et al., 2015). In particular, listening to the traumatic experiences of clients in psychotherapy is experienced as distressing or demanding (e.g., Doherty et al., 2010; Dubus, 2016; Splevins et al., 2010). Closely related to the psychotherapy setting is psychosocial counselling which will be referred to as counselling from now on. While interpreters in psychotherapy are typically assigned to a specific case and therefore regularly see both the client and the practitioner (e.g., a psychotherapist) multiple times (Martin et al., 2020), counselling sessions are often described as brief interventions with few appointments, which aim to support a client in dealing with a specific problem (Ziebertz & Sander, 2021). Only a small number of studies have focused on interpreters solely in a counselling setting (Celik & Cheesman, 2018; Mirza et al., 2017), reporting similar experiences to those found for psychotherapy, such as an emotional impact on interpreters due to the clients' traumatic experiences (Celik & Cheesman, 2018).

In medical settings, the specific circumstances pose several organisational difficulties. For example, insufficient time for appointments renders it challenging for interpreters and practitioners to fulfil refugee clients' high levels of needs, which can be frustrating for all parties in the triad of

practitioner, client and interpreter (Kotovicz et al., 2018). Moreover, a high workload, with unpredictable and long working hours without a break (for example because of urgent night-time calls to the emergency room), contribute heavily to physical and mental exhaustion among interpreters (McDowell et al., 2011).

Interpreters in refugee care translate within different contexts of legal services and authorities, such as immigration and refugee resettlement services or in court (Bancroft et al., 2013; Wichmann et al., 2018). In such settings, interpreting for asylum seekers is perceived as especially emotionally intense and pressured when interpreters feel the need to help their clients (Bancroft et al., 2013). Specifically in court, interpreting traumatic content in the context of war, death and torture has been associated with psychological pressure (Carstensen & Dahlberg, 2017). In comparison to counselling settings, the legal context and authorities present generally a context in which refugee clients are required to apply for certain funds from the government in the resettlement countries. Thereby, the civil servant has to decide over financial aids which they can give to the refugee client for example regarding housing or living expenses. In counselling contexts however, the counsellor usually supports and advocates the client in finding their individual decision for example regarding health or family problems or refers them to other helping institutions.

Overall, various studies have pointed out the negative emotional impact on interpreters as a consequence of interpreting in refugee care, such as burnout, exhaustion, and psychological distress (Birck, 2001; Kindermann et al., 2017). However, several studies have also revealed positive consequences, such as compassion satisfaction (CS) (Birck, 2001; Mehus & Becher, 2016). CS comprises the satisfaction someone experiences by working with or helping others (Stamm, 2010). The concept further includes feelings like happiness about doing the job or being proud of the work. So far, however, CS has only been investigated among interpreters working in psychotherapy (Birck, 2001; Shlesinger, 2005).

In summary, the various work settings may pose different challenges for interpreters, which in turn may affect their psychological distress and their satisfaction with interpreting for refugees. Previous

studies focused either on individual qualitatively reported experiences in specific settings, for example in psychotherapy (i.e., Hassan & Blackwood, 2021; Resera et al., 2015), or examined heterogeneous samples, which were recruited at various locations such as hospitals or in legal settings (Kindermann et al., 2017; Wichmann et al., 2018). In Germany, there still is no funding for the use of interpreters in healthcare (Schouler-Ocak, 2015) which probably results in very different working conditions.

The main research objective of the present study was to compare four main work settings of interpreters in the care of refugees (psychotherapy, counselling, medical setting, and authorities). A twofold approach to this comparison was chosen: First, work-related characteristics of interpreters (e.g., degree in interpreting, frequency of supervision, weekly working hours) were compared between the four main work settings. Second, interpreters' psychological distress, work-related exhaustion, and CS were compared across the four settings. For this purpose, the outcomes were first compared using a cross-sectional design and subsequently in a longitudinal design to determine whether the effects found in the cross-sectional analyses remained stable over time. The longitudinal design was used here to achieve a better understanding of interpreters' work-related wellbeing (work-related exhaustion and CS) and psychological distress. In the further course, the constructs mentioned will be calculated and considered individually, but for better readability we summarize the constructs in the written part of the article and use the overall term "wellbeing" for this purpose. The longitudinal design aimed to analyse whether interpreters' wellbeing is stable between measurements and to compare possible changes in wellbeing between different work settings.

Methods

Procedure and sample

The survey was conducted using the online survey program Unipark (*Questback GmbH. Published 2017. EFS Survey, Version Summer 2017. Köln: Questback GmbH*). Recruitment took place in Germany. We contacted psychosocial treatment centres affiliated with the BAfF (German Association of Psychosocial Centres for Refugees and Victims of Torture), which is an umbrella organisation for psychosocial treatment centres for victims of human rights violations and political persecution.

Additionally, we approached other psychosocial centres, interpreter pools, clinics working with interpreters, and refugee care organisations. Inclusion criteria for the present analyses were 1) age ≥ 18 years, 2) working as a paid interpreter (e.g., as an employed interpreter or freelancer) in refugee care, and 3) current work in one of the four given main work settings: psychotherapy, counselling, medical setting, or authorities (*German*: Behörden). The study consisted of two measurements. At the end of the first measurement (t1), participants were asked whether they would participate a second time nine months later (t2). If they agreed, they were then contacted again at t2. The first measurement (t1) took place between April and July 2019 and the second measurement (t2) took place between February and April 2020. Data from t1 and t2 were matched using a pseudonym that was created by the participants at t1 and re-entered at t2. All participants who completed both surveys received a 25 EUR shopping voucher. Before answering the survey questions, participants were informed about the study and informed consent was obtained from all participants. The study was approved by the Ethics Committee of the Freie Universität Berlin.

Instruments

Socio-demographic questions. Socio-demographic questions included age, gender, marital status, education (in years), and flight experience ('Have you ever fled or been displaced?'). Participants were also asked whether they had a degree in interpreting from a university or college. With the exception of some of the socio-demographic questions (i.e.., education, marital status, flight experience, having a degree in interpreting), all of the following questions were asked at both measurement time points:

Questions related to interpreting in the main work setting. At both measurement time points, participants were asked to select one of the following five settings in which they currently interpreted for the majority of their working time: 1) psychotherapy, 2) counselling (i.e., psychosocial counselling, e.g., drug counselling, family counselling), 3) medical setting (i.e., hospital or doctor's office), 4) authorities (i.e., asylum hearings, court, police, social services, employment agency, job centre), 5) other setting. If a participant indicated a setting other than the predefined settings and described what kind of

institution or workplace it was, the first author allocated them to one of the predefined settings if possible and discussed each decision with a second researcher (NS).

All of the subsequent questions referred to the main work setting as indicated by the participants. These included questions regarding how many hours a participant spent interpreting on average without a break (less than 1 hour or 1 hour, 2 hours, 3 hours, 4 hours, 5, hours, 6 hours) and the amount of interpreted traumatic content per week ('On average, what percentage of your interpreting work per week contains traumatic content?' – 0%, 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80%, 90%, 100%). Traumatic content was referred to in the survey as 'for example stories about violence, sexual or physical assault, torture or accidents'. Participants were also asked about their employment status (freelancer, employed, both), their work experience in years, and the frequency of supervision and peer-to-peer counselling (never, less than once every six months, every six months, every three months, once a month, more than once a month). Additionally, participants indicated how often they underwent training (never, once per year, 2-4 times per year, 5-7 times per year, more than 8 times per year).

Psychological distress. The short form of the Brief Symptom Inventory (BSI-18) was applied to measure psychological distress (Franke et al., 2017). The questionnaire comprises three subscales: depression, anxiety, and somatization, each consisting of six items. Items are rated on a 5-point Likert scale from 0 = 'not at all' to 4 = 'extremely'. Adding all 18 items (0-72) yields a General Severity Index (GSI), which provides an overall score of psychological distress. The internal consistency in this sample was α = .91.

Work-Related Exhaustion. To examine the level of work-related exhaustion, we applied the work-related burnout subscale of the Copenhagen Burnout Inventory (CBI) (Kristensen et al., 2005). The subscale (CBI-work) consists of seven items, which are rated on a 5-point Likert scale ranging from 'to a very high degree' or 'always' to 'to a very low degree' or 'never'. Example items are 'Do you feel that every working hour is tiring for you?' and 'Does your work frustrate you?'. To calculate the total score of the subscale, the Likert scale is converted to 0-25-50-75-100, and the total score is the average of all item scores. Internal consistency in the present sample lay at α = .86.

Compassion Satisfaction. To measure CS, the respective subscale of the Professional Quality of Life Questionnaire (ProQOL) was applied (Stamm, 2010). The subscale (ProQOL-CS) consists of ten items, which are rated on a 5-point Likert scale from 1 = 'never' to 5 = 'very often'. Example items are 'I get satisfaction from being able to [help] people' and 'I believe I can make a difference through my work'. In line with the manual, in the present study, the word 'help' was replaced with 'interpret for' to focus on the interpreter's context. Items are added up to calculate a sum score. The internal consistency in the present sample was $\alpha = .89$.

Distress due to the COVID-19 pandemic. Since for some participants, the second measurement fell within the period when the COVID-19 pandemic began, we added an extra question about much the participants felt more psychologically stressed overall than usual due to the pandemic, which was answered on a 7-point Likert scale ranging from 1 = not at all to 7 = very strongly.

Statistical Analysis

Descriptive results are presented for the interpreter characteristics and the applied questionnaires of the cross-sectional sample and the longitudinal sample. To investigate the first research aim, we compared the work-related characteristics of participants in the four main settings at t1. For these group comparisons, Fisher's exact tests for categorical variables and Kruskal-Wallis tests were applied for non-normally distributed data. If a group comparison was significant, Bonferroni-corrected post-hoc tests were conducted to identify differences between the groups. If participants were both employed and freelance, they were classified as employed in the group comparison because they performed at least some of their work as an employee and were assumed to have at least a partially stable work situation. The second aim of this study was to compare the main work settings regarding interpreters' wellbeing (i.e., psychological distress, work-related exhaustion, and CS) for cross-sectional and longitudinal data. The first three comparisons investigated psychological distress, work-related exhaustion, and CS in the four groups at t1. To determine whether interpreters' wellbeing changed between t1 and t2 and whether the effects of the cross-sectional analyses remained stable over time, three further group comparisons were carried out using the longitudinal data. For this analysis, an average change score was calculated

by subtracting the BSI-18, CBI-work, and ProQOL-CS questionnaire scores at t1 from those at t2, respectively. An ANOVA was conducted for normally distributed change scores and Kruskal-Wallis tests were conducted for non-normally distributed change scores. In the case of significant group comparisons, Bonferroni-corrected post-hoc tests were conducted. Statistical analyses were performed using the R environment version 4.1.3 (R Core Team, 2021).

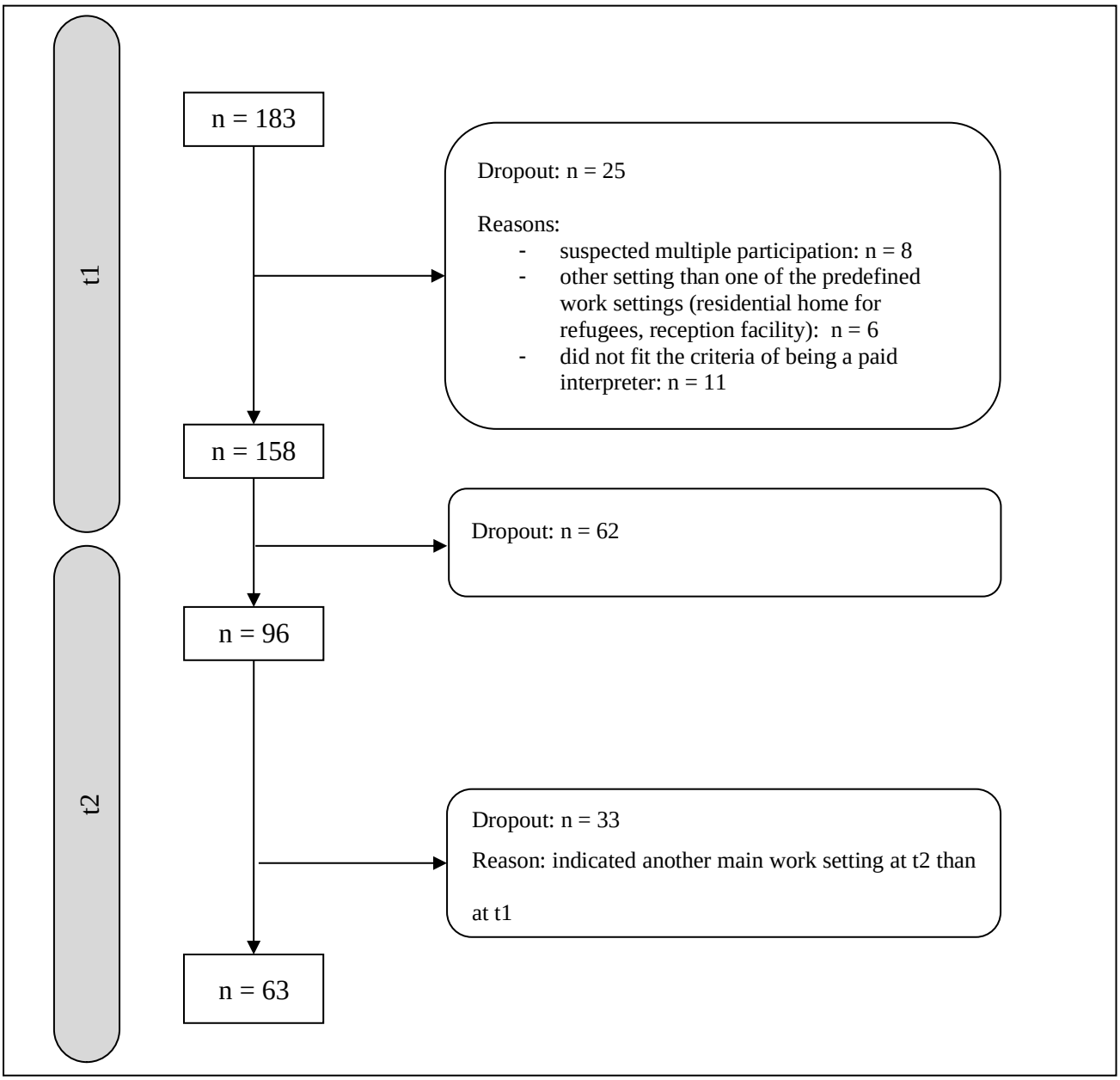
Results

Sample description

In total, 183 participants completed the survey at t1. Of these, $n = 158$ participants were included in the analyses for the first measurement and 63 interpreters were included in the longitudinal analyses (Fig. 1). Details on the recruitment strategy and flow of participants regarding t1 are reported in Geiling et al. *(2022b).* A Kruskal-Wallis test showed no significant differences in psychological distress and work-related exhaustion at t1 between the longitudinal sample ($n = 63$) and participants who were excluded either because they indicated a different work setting at t2 than at t1 ($n = 33$) or dropped out between t1 and t2 ($n = 62$): BSI-18 GSI: $H(2) = 1.5749$, $p = 0.46$; CBI-work: $H(2) = 0.406$, $p = 0.82$).

Figure 1

Flow of participants



Sample characteristics at both measurement time points are displayed in table 1. The mean age of the sample participating at t1 was 39.09 years. The majority of participants were female (n = 112, 70.9%) and quarter of the sample indicated a refugee background of their own. Participants had been working as interpreters in their main working setting for an average of 5.29 years (Range: 0-30). At both measurements, most participants indicated authorities as their main work setting. Interpreters in the longitudinal sample reported that they had been working for refugees for an average of *Mdn* = 5 years (*Range*: 0-30). According to the Wilcoxon rank-sum test, there was no difference in the BSI-18 GSI (for t2) between participants who took part before the outbreak of the pandemic (n = 42) and those who took part during the early stages of the pandemic (n = 21; W = 386.5, p = .42).

Table 1

Sample characteristics of samples included in cross-sectional and longitudinal analyses

	Cross-sectional sample [a] (*n* = 158)	**Longitudinal sample [b] (*n* = 63)**
Age in years, *mean (SD*)	39.09 (12.51)	39.86 (12.93)
Male gender, *n* (*%*)	46 (29.1)	23 (36.5)
No own flight experience, *n (%)*	117 (74.1)	50 (79.4)
Education in years, *mean (SD*)	16.81 (3.40)	17.67 (2.91)
BSI-18 GSI at t1		
mean (SD)	9.06 (9.16)	8.17 (8.41)
Median (*IRQ*)	6 (7)	5 (12.5)
CBI-work at t1		
mean (SD)	25.52 (18.43)	24.55 (17.42)
Median (*IRQ*)	21.43 (27.68)	25 (21.43)
ProQOL-CS at t1		
mean (SD)	40.78 (6.93)	41.37 (6.67)
Median (*IRQ*)	42 (8.75)	43 (7)
Main work setting at t1: *n (%)*		
Psychotherapy	38 (24.1)	12 (19.0)
Counselling	39 (24.7)	13 (20.6)
Medical setting	22 (13.9)	8 (12.7)
Authorities	59 (37.3)	30 (47.6)

Note. SD = Standard deviation, BSI-18 GSI = Brief Symptom Inventory 18 General Severity Index, CBI-work = work-related burnout subscale of the Copenhagen Burnout Inventory, ProQOL-CS = Compassion Satisfaction subscale of the Professional Quality of Life Questionnaire [a] sample included in cross-sectional analyses at 1 [b] sample included in longitudinal analysis

Comparison of the work conditions between the work settings

Group comparisons regarding the amount of interpreted traumatic content revealed significant differences between the main work settings (H (3) = 26.0863, $p < .001$, table 2). Post-hoc tests indicated that interpreters who worked mainly in psychotherapeutic and counselling settings reported translating significantly higher proportions of traumatic content compared to those who worked mainly in medical (psychotherapy: p = 001., counselling: p = .01) and authority settings (psychotherapy: p < 001., counselling: $p < .001$). Furthermore, the percentage of interpreters with an interpreting degree differed significantly between the work settings, Fisher's exact test, p = .002. The post-hoc test revealed significant differences between interpreters in the authorities setting and the counselling setting regarding the amount of interpreters with an interpreting degree, $p < .01$. In addition, the weekly working hours reported by the interpreters differed significantly across the four main work settings, Fisher's exact test, p = .04. However, no significant differences were found in the post-hoc tests. No other significant differences between the four work settings emerged for work-related characteristics or supportive working conditions.

Table 2

Interpreter-related characteristics and working conditions among the main work settings at t1

	Total sample	**Psychotherapy (*n* = 38)**	**Counselling (*n* = 39)**	**Medical setting (*n* = 22)**	**Authorities (*n* = 59)**	***p***
Work-related characteristics						
Degree in interpreting						**.002**
No	134 (84%)	34 (89%)	38 (97%)	20 (91%)	42 (71%)	
Yes, from college or university	24 (16%)	4 (11%)	1 (3%)	2 (9%)	17 (29%)	
Work experience in years (*Mdn*)	3	4	2	3	4	.06
Employment as interpreter						.10
Freelance	107 (67%)	28 (74%)	31 (79%)	14 (64%)	34 (58%)	
Employed	51 (33%)	10 (26%)	8 (21%)	8 (36%)	25 (42%)	

Weekly working hours						**.04**
1-10 hrs	111 (70%)	29 (76%)	34 (87%)	15 (68%)	33 (56%)	
11-20 hrs	17 (11%)	4 (11%)	3 (8%)	4 (18%)	6 (10%)	
21-30 hrs	12 (8%)	3 (8%)	1 (3%)	1 (5%)	7 (12%)	
31-40 hrs	18 (11%)	2 (5%)	1 (3%)	2 (9%)	13 (22%)	
Hours interpreting without break (*Mdn*)	2	1.5	2	2	2	.23
Traumatic content in % (*Mdn*)	20	50	50	10	10	**<.001*** **
Supportive working conditions						
Frequency of supervision: *n (%)* [a]						.22
Never	75 (47%)	18 (47%)	15 (38%)	15 (68%)	27 (46%)	
Irregular	73 (46%)	17 (45%)	21 (54%)	5 (23%)	30 (51%)	
Regular	10 (6%)	3 (8%)	3 (8%)	2 (9%)	2 (3%)	
Frequency of peer-to-peer counselling: *n (%)* [a,b]						.64
Never	57 (36%)	14 (38%)	15 (38%)	9 (41%)	19 (32%)	
Irregular	78 (50%)	16 (43%)	17 (44%)	12 (55%)	33 (56%)	
Regular	22 (14%)	7 (19%)	7 (18%)	1 (5%)	7 (12%)	
Training: *n (%)* [c,d]						.05
Never	46 (30%)	9 (24%)	7 (18%)	9 (41%)	21 (38%)	
Once per year	59 (38%)	19 (50%)	15 (39%)	10 (45%)	15 (27%)	
More than once per year	49 (32%)	10 (26%)	16 (42%)	3 (14%)	20 (36%)	

Note. p < .01*, p < .001**; [a] never: never; irregular: less than half a year, half a year every, every three months, regular: once per month, more than once per month [b] n = 1 was excluded as there was no answer available [c] more than once per year = 2-4 times per year, 5-7 times per year, 8-10 times per year more than 10 times per year [d] n = 4 were excluded as there was no answer available

Group comparisons regarding wellbeing in the main work settings

Regarding interpreters' psychological distress, the Kruskal-Wallis test revealed significant differences between the four work settings, $H(3) = 12.02$, $p = .01$. Interpreters who indicated counselling as their main work setting showed a higher level of psychological distress (*Mdn* = 11) compared to the other main work settings (psychotherapy: *Mdn* = 5, medical setting: *Mdn* = 7, authorities: *Mdn* = 4). Moreover, post-hoc tests indicated a significant difference between the counselling and authorities

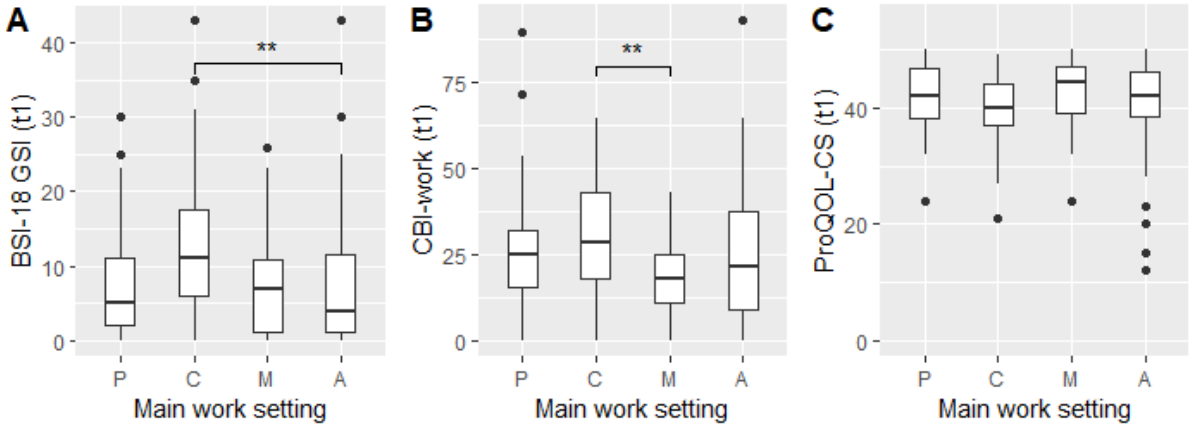
settings (p = .003), with the counselling group reporting more psychological distress than the authorities group (figure 2A).

Regarding work-related exhaustion, the Kruskal-Wallis test likewise revealed significant differences between the four work settings, H (3) = 8.10, p = .04. Interpreters who indicated counselling as their main work setting descriptively showed a higher level of work-related exhaustion (*Mdn* = 28.57) compared to the other main work settings (psychotherapy: *Mdn* = 25, medical setting: *Mdn* = 17.86, authorities: *Mdn* = 21.43). Moreover, post-hoc tests indicated a significant difference between the counselling and medical settings (p = .02), with the counselling group reporting more work-related exhaustion than the medical setting group (figure 2B).

For CS, no significant differences were found between the four main work settings according to the Kruskal-Wallis test, H (3) = 4.19, p = .24, with the following values for each work setting: psychotherapy: *Mdn* = 42, counselling: *Mdn* = 40, medical setting: *Mdn* = 44.5, authorities: *Mdn* = 42 (figure 2C).

Figure 2

Box plots of the BSI-18 GSI, the CBI-work and the ProQOL-CS grouped by the four work settings



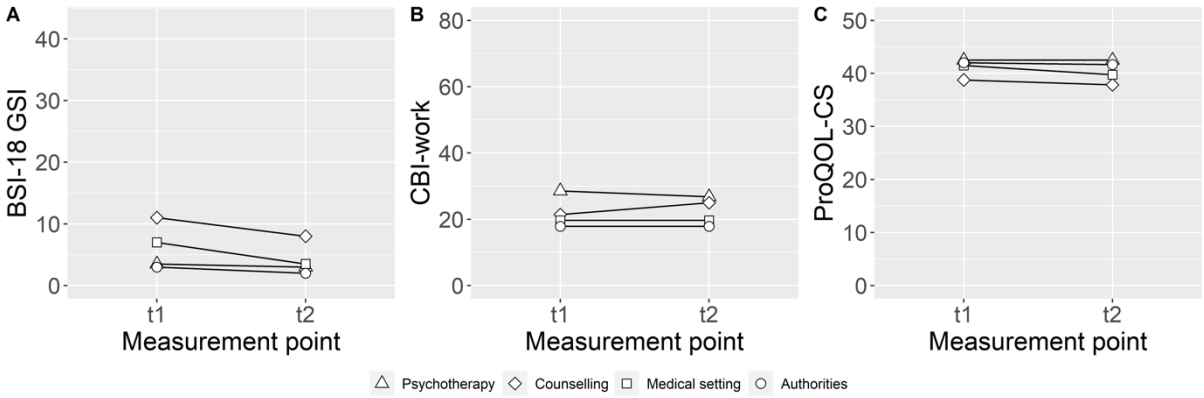
Note. BSI-18 GSI = Brief Symptom Inventory 18 General Severity Index, CBI-work = work-related burnout subscale of the Copenhagen Burnout Inventory, ProQOL-CS = Compassion Satisfaction subscale of the Professional Quality of Life Questionnaire. P = Psychotherapy; C = Counselling, M = Medical Setting, A = Authorities; Box plots are shown for each of the four main work settings at t1 (n = 158). Points show data points beyond the end of the whiskers ** p < .01.

For the longitudinal sample, when examining psychological distress, the Kruskal-Wallis test showed no significant differences between the four groups in the average change score, H (3) = 6.7032,

p = .08. In the counselling and medical settings, the average change score was *Mdn* = -4, meaning that these interpreters showed an average reduction of 4 points on the BSI-18, whereas the level of psychological distress in the other main work settings changed only slightly (psychotherapy: *Mdn* = -1, authorities: *Mdn* = 0). Furthermore, no significant differences emerged for the average change scores of work-related exhaustion, H (3) = 1.7465, p = .63 (psychotherapy: *Mdn* = 0, counselling: *Mdn* = 7.14, medical setting: *Mdn* = 3.57, authorities: *Mdn* = 0). An ANOVA revealed no significant differences between the average change scores of the four groups regarding CS, F(3, 59) = 0.388, p = .76 (psychotherapy: $\bar{x}$ = 0, counselling: $\bar{x}$ = -0.92, medical setting: $\bar{x}$ = -1.75, authorities: $\bar{x}$ = -0.33). For a better understanding of the changes in the average scores between the two measurement times, figure 3 shows the median or mean value of each group for both measurements.

Figure 3

BSI-18, CBI-work and ProQOL-CS of the longitudinal sample (n = 63) for at t1 and t2



Note. BSI-18 GSI = Brief Symptom Inventory 18 General Severity Index, CBI-work = work-related burnout subscale of the Copenhagen Burnout Inventory, ProQOL-CS = Compassion Satisfaction subscale of the Professional Quality of Life Questionnaire. Figure A: Medians for each work setting at each measurement point are shown Figure B: Medians for each work setting at each measurement point are shown. Figure C: Means for each work setting at each measurement point are shown.

Discussion

The aim of the cross-sectional and longitudinal study was to compare interpreters' work-related characteristics and wellbeing (psychological distress, work-related exhaustion, and CS) between four different main work settings (psychotherapy, counselling, medical setting, authorities) in the care of refugees. Overall, the results indicate differences between the four settings regarding work-related

characteristics. Specifically, the settings differed with respect to the proportion of interpreters with a degree in interpreting, the weekly working hours, and the amount of interpreted traumatic content. Additionally, mostly female interpreters participated in the study, which was similar as in previous studies with interpreters in Germany (Kindermann et al., 2017; Wichmann et al., 2018). Moreover, significant differences in interpreters' wellbeing emerged across the settings. Interpreters in the counselling setting showed the highest levels of psychological distress and work-related exhaustion, whereas no significant differences between the four work settings were found for CS.

Differences regarding interpreter characteristics and working conditions

A primary aim of this study was to explore and compare work-related characteristics between the four work settings in order to gain a better understanding of the various context-related difficulties with which interpreters may be confronted.

In this regard, interpreting in an authorities setting stood out from the other work settings in terms of several work-related characteristics. First, this setting was most often indicated as the main work setting in both the cross-sectional and longitudinal sample. Furthermore, the highest proportion of interpreters with an interpreting degree, and of interpreters with the most working hours (31-40h per week), indicated authorities as their main work setting. One reason for these findings might be that the authorities setting included a broad spectrum encompassing different work environments, such as social services, but also police stations, court, and asylum hearings. Furthermore, all refugees have to go through the process of asylum hearings, while only some require general and mental healthcare. Asylum hearings imply specific conditions within the authorities context, as sworn or professional interpreters are preferred over lay or untrained interpreters (Bergunde & Pöllabauer, 2019; Gibb & Good, 2014). Assuming that interpreters with a degree are more likely to work for authorities due to their qualification, this might explain why the highest proportion of interpreters with a degree was found in the authorities setting.

In addition, significant differences emerged with regard to the traumatic content that was reported by the interpreters in their main work settings. The highest amount of traumatic content was interpreted in counselling and psychotherapy settings. This is in line with several qualitative studies in which interpreters frequently reported interpreting traumatic experiences in psychotherapy and counselling (e.g., Celik & Cheesman, 2018; Hassan & Blackwood, 2021). Moreover, in trauma-focused therapies, reporting traumatic experiences is an essential part of the therapy.

The frequency of supervision, peer-to-peer support, and training did not differ significantly between the main work settings. There are still no regulations or criteria on the frequency of support structures such as training or recommendations for qualifications for interpreters in Germany (Kluge, 2020). Therefore, it is not specified whether and with what kind of preparatory training interpreters can start their work and in what way further training should be offered to interpreters during the performance of their work. Consequently, the training that prepares or accompanies interpreters' work can vary greatly. Although the BAfF recommends regular supervision and intervision (in terms of peer-to-peer support) in its guide for practitioners and interpreters in the care of refugees (German Association of Psychosocial Centres for Refugees and Victims of Torture, 2020), our data suggest that these recommendations may not yet have been implemented sufficiently in practice. Future studies may focus on examining in more detail the different types of training interpreters have received in order to get an overview of the extent to which interpreters have been prepared for their work and how this might affect their wellbeing.

Differences in psychological distress, work-related exhaustion, and CS

Our second aim was to compare interpreters' wellbeing in terms of psychological distress, work-related exhaustion, and CS between the four main work settings. Significant differences in psychological distress and work-related exhaustion were found. Interpreters working mainly in the counselling setting showed significantly higher psychological distress than those in the authorities setting and significantly higher work-related exhaustion than those in the medical setting.

The increased levels of psychological distress and work-related exhaustion in the counselling setting may be related to the traumatic content, as interpreters working in the counselling setting reported interpreting the highest amount of traumatic content. A systematic review found higher rates of secondary traumatic stress (STS) among professionals (e.g., counsellors, therapists) confronted with a high trauma caseload (Hensel et al., 2015). Such findings may reflect mechanisms similar to those found in our sample regarding traumatic content and work-related exhaustion and psychological distress. The differences regarding psychological distress and work-related exhaustion may further lie in the frequency with which patients are seen and the objectives of the treatment they receive. In the counselling setting, clients are not usually treated on a long-term basis, and interpreters do not get the opportunity to experience a potential improvement in symptoms, which could contribute to higher psychological distress. Indeed, in previous research, seeing traumatized clients recover was often reported as rewarding in the context of interpreting in a therapy setting (e.g., Hassan & Blackwood, 2021; Resera et al., 2015) and as eliciting positive feelings such as a sense of growth, hope and inspiration (Splevins et al., 2010). Besides witnessing the course of treatment and probably also the recovery process, another reason for the lower level of psychological distress in the psychotherapy setting may be that interpreters are assigned to a case or a psychotherapist who is fully responsible for long-term treatment (Gallagher et al., 2017; Martin et al., 2020; Morina et al., 2010). This may help to establish a solid and trustful working relationship within the triad and therefore reduce distress.

Interpreters in the authorities setting showed less psychological distress and work-related exhaustion than those in the other three settings. Altogether, interpreters in the authorities setting indicated the highest level of experience in their work setting, worked the most hours per week, were more likely to have a university degree, and almost half reported being employed (as opposed to freelance) in this field. In general, this may point to a more settled working situation compared to the other settings, which may contribute to the lower psychological distress and work-related exhaustion. However, asylum hearings as a specific work location within the authorities setting may pose a highly stressful and pressured situation for interpreters due to the responsibility of the interpreter in the process of the asylum hearing (Berbel, 2020; Bergunde & Pöllabauer, 2019; Carstensen & Dahlberg, 2017).

Therefore, it may be relevant to investigate this specific context separately within the authorities setting in future research.

With regard to CS, no significant differences emerged in any of the group comparisons; thus, the values for CS were relatively similar in all four work environments in both the cross-sectional and longitudinal analyses. Interpreters in our study showed similar CS levels to other psychosocial professionals like mental health or clinical counsellors and social workers (Martin-Cuellar et al., 2021). Our results thus indicate that the work setting may not have an influence on interpreters' CS. This is in line with previous studies in medical, counselling, and healthcare settings, in which interpreters often stated that their motivation to work with refugees was simply to help them (Celik & Cheesman, 2018; Dubus, 2016; Simms et al., 2021). In legal contexts, interpreters most frequently report challenges such as the difficult position in the asylum hearings and the emotional nature of the work (Bancroft et al., 2013; Carstensen & Dahlberg, 2017). A reason for the similarly high levels of CS in the authorities setting may be that helping through interpreting is an integral part of interpreters' work, regardless of the main work setting. As such, CS may be experienced in the authorities setting in the same way as in the other main work settings.

The longitudinal analyses showed no significant differences between the four groups regarding the average changes in interpreters' wellbeing in any of the investigated areas. In particular, the four groups had similarly high scores for psychological distress and CS in both the longitudinal and cross-sectional data. This might indicate that the average change does not differ between the groups and that effects in the cross-sectional analyses may be stable over time in all four work settings.

In general, it is difficult to investigate the interpreters' wellbeing regarding a specific work setting because interpreters usually work in several work settings. Therefore, we applied the concept of the main work setting, as we assumed that this would have the greatest impact on the interpreters' wellbeing. Future studies may ideally examine wellbeing for different work settings to gain a better understanding of the relationship between specific work settings and wellbeing.

Strengths and Limitations

First, due to the voluntary nature of the online survey, it is likely that a highly motivated convenience sample was reached. In addition, only paid interpreters were included in the study, which excluded all volunteer interpreters. Overall, the present sample may therefore not be representative of interpreters in Germany. However, due to the online approach, a reasonably large sample took part at t1 and more than two thirds of the participants took part at t2. To the best of our knowledge, this is the first longitudinal study to investigate interpreters' wellbeing in the care of refugees and the study with the largest cross-sectional sample in this area. Second, the study sought to investigate differences in work-related characteristics between main work settings of refugee care. The four main work settings were determined and assigned by the authors and discussed with interpreters at the Zentrum ÜBERLEBEN. Accordingly, some of the main work settings comprise several work locations, e.g., the authorities setting included job centres and asylum hearings among other locations, and might have been categorized differently by other researchers. Additionally, encounters between psychiatrists and clients in an inpatient psychiatric setting may not have been clearly assigned to one of the settings (e.g., medical setting or psychotherapy) which may have confounded the results. Third, even though the working conditions were asked regarding the main work setting this was not the case for the outcomes regarding the interpreters' wellbeing. The small groups did not allow us to explore relationships between the interpreters' wellbeing and work-related characteristics in a specific work setting. Possible explanations for differences in wellbeing were only inferred from exploratory group comparisons, meaning that it is not possible to draw causal conclusions regarding the wellbeing due to the main work setting. Replacing the word help in the ProQOL with 'interpret' may also have influenced the results. However, we thought the word 'interpret' may have helped to focus better on the interpreting context.

Taken together, interpreters in the counselling setting seemed to be under the highest amount of burden. Furthermore, stable work-related circumstances such as secure employment, professional

vocational training and work experience might mitigate high levels of psychological distress and work-related exhaustion. Due to insufficient sample sizes in each group, we were unable to conduct regression analyses to examine the relationships between working conditions and the investigated outcomes for each setting. Therefore, the results need to be interpreted with caution, against the background of the methods carried out, and further research with larger sample sizes is needed.

Conclusion

The present results indicate that the different work settings of interpreters in refugee care differ in terms of work-related characteristics (proportion of interpreters with an interpreting degree, weekly working hours, proportion of traumatic content interpreted). Furthermore, interpreters with the main setting of counselling reported the highest level of stress and work-related exhaustion. . However, no differences were found for CS, which appears to be experienced regardless of the setting in which an interpreter works. Interpreters who work mainly for authorities seem to be less distressed and may be better trained and more intensively involved in their work setting in terms of working time. In general, each of the work settings in our study covered several fields. Future quantitative studies should investigate each setting separately regarding protective and risk factors of work-related characteristics. This may be especially relevant for counselling, as interpreters in this setting seemed to be burdened the most.

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CHAPTER 5

2 Development and validation of a questionnaire to assess role conflicts among interpreters working with refugee clients: The Role Conflicts Questionnaire (RoCo)

- Study 4 -

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Abstract

Objectives: The aim of this study was to develop and validate a questionnaire to assess interpreters' role conflicts and the challenging aspects within this triad. **Methods:** A questionnaire was developed based on previous literature. Its factor structure and construct validity were assessed in an online survey of 164 interpreters working with refugee clients. Psychological distress (BSI-18), work-related exhaustion (CBI), and secondary traumatic stress (ProQOL) were measured to test the questionnaire's convergent validity. **Results:** Exploratory factor analysis for categorical variables resulted in 23 items across four subscales. All subscales showed good or excellent reliability (ω = .81 to ω = .93) and correlation analyses indicated convergent validity. **Conclusion:** The final questionnaire (RoCo) shows good psychometric properties and may help to identify emotional distress due to role conflicts among interpreters. Future studies should validate the questionnaire in different samples.

Keywords: interpreters, role conflicts, expectations, emotional distress, refugee clients

1 Introduction

In public service interpreting, interpreters usually work within a triad consisting of practitioner, interpreter, and client. They translate between two languages and mediate cultural codes (Jiménez-Ivars & León-Pinilla, 2018), thus often embodying the role of a language and cultural mediator between practitioner and client. Generally, interpreters are required to follow principles such as confidentiality, impartiality, and accuracy (Crezee et al., 2020; Kaufert & Putsch, 1997). In many contexts, however, the role of the interpreter is not clearly defined, which leads to confusion regarding the roles of the triad members.

Working with refugee clients can be especially challenging because interpreters are confronted with clients' stressful situations, such as insecure living situations and traumatization (Dubus, 2016; Mirdal et al., 2012). In this regard, adherence to principles such as impartiality may conflict with clients' expectations, for instance when clients ask interpreters for help (Resera et al., 2015).

So far, the distress experienced by interpreters due to their role within the triad has mainly been described in qualitative studies. Research in this area has identified four overarching stressful role dynamics among interpreters working in triads: First, the predominantly qualitative studies have frequently addressed emotional distress in the relationship with the client, especially in relation to interpreters' confrontation with traumatic content (Doherty et al., 2010; Green et al., 2012; Resera et al., 2015; Simms et al., 2021). For instance, interpreters have reported feeling overwhelmed during appointments (Green et al., 2012) as well as difficulties in remaining emotionally detached (Resera et al., 2015) and in controlling their own emotional reactions (Doherty et al., 2010). Moreover, two quantitative studies showed that interpreters can experience secondary traumatic distress (STS) (Kindermann et al., 2017; Wichmann et al., 2018), which refers to the distress resulting from the work with traumatized clients (Daniels et al., 2017). Besides the emotional distress due to traumatic content, interpreters can be faced with the dilemma of feeling the need to comfort clients during sessions (Green et al., 2012; Resera et al., 2015) despite this not being part of their role.

Second, interpreters' relationship with the practitioner can lead to further distress. For instance, research has shown that interpreters may perceive a lack of acknowledgement or respect from practitioners (Green et al., 2012; Holmgren et al., 2003; Williams, 2005). Indeed, several qualitative studies reported that interpreters felt that they were merely seen as a technical tool and thus felt devalued, for example regarding their experience and knowledge (Hassan & Blackwood, 2021; Holmgren et al., 2003; Lipton et al., 2002).

Third, one of the most frequently discussed aspects of an interpreter's work is the clarification of the interpreter's role and the associated tasks. Previous research revealed that practitioners and clients have hugely varying expectations regarding the roles of interpreters, ranging from a perception of interpreters as cultural brokers to patient advocates, mediators, and basically invisible translators (Brisset et al., 2013; Sleptsova et al., 2014). Especially with regard to the client's expectations, interpreters were found to be under increased pressure when they feel that clients have expectations beyond interpreting (Dubus, 2016; Resera et al., 2015; Williams, 2005), such as translating documents and providing help regarding housing. Principles such as neutrality and impartiality, which are

prerequisites for interpreting, were also sometimes experienced as contradicting cultural norms and led, for instance, to interpreters declining personal invitations from clients (Hassan & Blackwood, 2021). As coping strategies, interpreters generally mentioned setting clear boundaries and trying to accept the limitations of their role (Doherty et al., 2010).

Finally, in the process of interpreting between practitioner and client, in certain situations, the relationship with the client shifts from the practitioner to the interpreter, in terms of more eye contact or body language towards the interpreter (Miller et al., 2005), such as at the beginning of the triadic relationship (Hassan & Blackwood, 2021) or in crisis situations as the interpreter is more easily accessible for the client (Miller et al., 2005). In general, interpreters reported that it is challenging to fulfill the expectations of both sides (McDowell et al., 2011; Resera et al., 2015) and pointed out their sensitive position between client and practitioner (Holmgren et al., 2003; Resera et al., 2015).

Previous qualitative studies have indicated a relationship between role dynamics and psychological distress, especially work-related distress, among interpreters (Green et al., 2012; Hassan & Blackwood, 2021; Williams, 2005). However, the influence of role dynamics has not yet been systematically assessed, and the association between role conflicts and mental health has consequently not been adequately examined. To date, there is no questionnaire that measures role conflicts among interpreters and thus quantifies the relationship of role conflicts with distress. The aim of this research was therefore to develop and validate a questionnaire that measures role conflicts and challenging aspects of interpreters' relationships within the triad of interpreter, practitioner, and client.

2 Methods

2.1 Sample and sampling

A Germany-wide anonymous online survey was conducted using the online survey platform Unipark EFS Survey (Questback GmbH, 2019). The study comprised two measurement time points, of which only the results of the first are reported here. Psychosocial and public institutions working with interpreters for refugees were contacted by the first author (AG) by telephone or email, who in turn

forwarded the study invitation to the interpreters working with them. The sample was recruited via opportunity and snowball sampling. Inclusion criteria for participation were (1) age ≥ 18 years and (2) being paid for interpreting spoken languages for refugee clients. Interpreters could participate between April 2019 and July 2019. All participants provided written informed consent prior to participation and were informed that they could withdraw from the survey at any time. The study was approved by the Ethics Committee of the Department of Education and Psychology at the Freie Universität Berlin (224/2019). Overall, 291 participants gave their consent to participate, of whom N = 164 participants were included in the analysis. Further details regarding the recruitment process are provided elsewhere (Geiling et al., 2022).

2.2 Development of the Role Conflicts Questionnaire

The development of the Role Conflicts Questionnaire - German Version (RoCo) began with a non-systematic search of the literature on interpreters' various roles and the perceived difficulties of interpreting in different work settings. Based on findings of qualitative studies regarding interpreters' roles and their role conflicts in working environments, a working definition of role conflicts was developed, comprising four areas: 1) emotional reactions due to the client's stories, 2) difficulties in the relationship with practitioners, 3) lack of clarification of the interpreter's role, and 4) difficult dynamics within the triad. The first author (AG) generated 32 items in the form of statements regarding the understanding of one's role and personally perceived difficulties. Subsequently, the content and wording of the items were discussed and revised with an experienced researcher and clinical psychologist for refugee care (NS). The 32 items were then grouped into four subscales based on the working definition and described in detail. Next, the items were randomized and eight experienced refugee care professionals from a specialized center for the treatment of war and torture victims (n = 2 staff contact persons for interpreters, n = 2 interpreters, n = 1 psychotherapist, n = 3 researchers) were asked to rate their allocation to the four predefined subscales. The results of the ratings and item allocation were discussed by NS and AG and the number of items was reduced by five items based on the raters' comments and inconclusive assignment to the subscales. The survey was conducted using the final questionnaire with 27 items. Depending on each respondent's main work setting, the word 'practitioner'

was replaced accordingly (psychotherapy: psychotherapist, counseling: counsellor; authorities: authority employee; medical settings: doctor; others: practitioner).

2.3 Survey

At the beginning of the survey, we gathered sociodemographic characteristics such as gender, age, years of education, highest educational qualification, and whether participants had themselves fled or been displaced from their country of origin. Interpreters had to indicate one of five main work settings: (1) psychotherapy, (2) psychosocial counselling (i.e., drug counselling, family counselling), (3) medical setting (i.e., hospital or doctor's office), (4) authorities (i.e., German Federal Office for Migration and Refugees), court, police, social services, job center, (5) other setting. Subsequently, we asked about details of participants' work as interpreters in their main work setting. To assess the convergent construct validity of the newly developed RoCo, three additional questionnaires were applied: the Brief Symptom Inventory 18 (BSI-18;Derogatis, 2000; Franke et al., 2017), the work-related burnout subscale of the Copenhagen Burnout Questionnaire (CBI; Kristensen et al., 2005), and the Secondary Traumatic Stress subscale of the Professional Quality of Life Scale (ProQOL; Stamm, 2010).

Psychological distress was measured using the BSI-18, which assesses symptoms of depression, anxiety, and somatization with six items each. Items are rated on a 5-point Likert scale ranging from 0 = 'not at all' to 4 = 'extremely'. In the current analysis, we calculated the General Severity Index (GSI) as a global indicator of psychological distress, adding all 18 items together to form a sum score (0–72). Higher scores indicate higher distress. The internal consistency in the current sample was McDonald's ω = .92, Cronbach's α = .91.

Work-related exhaustion was assessed using one of three subscales of the CBI, referred to in the present study as CBI-work-related. The subscale comprises seven items assessing the extent to which respondents associate their work with feelings of exhaustion. The items are rated on a 5-point Likert scale ranging from 1 = 'to a very low degree' or 'never' to 5 = 'to a very high degree' or 'always'. The

Likert scale was converted (1 = 0; 2 = 25; 3 = 50; 4 = 75; 5 =100) and the mean score was calculated as the total score. In the current sample, internal consistency was ω = .89, α = .86.

Lastly, secondary traumatic stress experienced by the participants was assessed using the respective subscale of the ProQOL. The ProQOL-STS consists of ten items that are rated on a 5-point Likert scale ranging from 1 = 'never' to 5 = 'very often'. To improve the fit of the items to the work context of professional interpreters, the word 'help' was replaced with 'interpret for' (as proposed by the manual). For validity testing, the sum score of the raw scores was calculated. The internal consistency in the present sample lay at ω = .84, α = .81.

With the exception of the BSI-18, all questionnaires were not originally published in German. Therefore, we applied the back-translation procedure to ensure the quality of the German translations (Guillemin et al., 1993).

2.4 Missing data and multiple imputation

The final data set of the RoCo (N = 164) revealed a number of missing values on the item level, ranging from 0.6% (items 2, 4, 10, 19, 21, and 25) to 3% (item 14). We analyzed missing data of the RoCo, and missing values were replaced using multiple imputation. First, we tested the underlying missing data mechanism. Little's MCAR test was not significant, X^2 = 531.77, df = 560, p = .79, indicating that data were missing completely at random (Little, 1988). Further, influx and outflux of each item were checked. Both of these indicators are summaries of missing data patterns and showed favorable scores for multiple imputation (Van Buuren, 2018). In line with recent recommendations (Goretzko et al., 2020; McNeish, 2017; Zygmont & Smith, 2014), we applied multiple imputation at the item level using predictive mean matching (PMM). PMM was conducted using the mice package in R (Buuren & Groothuis-Oudshoorn, 2011) to generate 50 imputed data sets. The quality of imputations was examined post hoc using density plots (Enders, 2017). Overall, the imputation algorithms were stable. Finally, for each analysis, the individually estimated parameters were pooled into a single set of results using Rubin's rules (Rubin, 1987).

2.5 Statistical analyses

The current study aimed to provide an exploratory psychometric validation of the newly developed questionnaire on interpreters' role conflicts (RoCo). Descriptive analyses were conducted for all variables of interest. As a first step of psychometric validation, exploratory factor analysis (EFA) was applied to identify a reasonable factor structure of the RoCo. Statistical assumptions for factor analyses were examined (Brown, 2015). Due to the non-normal distribution of the data, a weighted least squares mean and variance adjusted (WLSMV) estimator was used for categorical data (Goretzko et al., 2019; Rosellini & Brown, 2021). Oblique rotation was applied in all EFAs since the latent factors of interpreters' role conflicts were expected to be intercorrelated (Rosellini & Brown, 2021). The following fit indices and cut-off scores were used to assess the model fit of each model (Hu & Bentler, 1999): >.95 for the comparative fit index (CFI) and the Tucker-Lewis index (TLI), <.06 for the root mean square error of approximation (RMSEA), and <.08 for the standardized root mean square residual (SRMR). Further, results of χ^2 tests were considered even though they are based on specific distributional assumptions and sensitive to rejecting the null hypothesis (Rosellini & Brown, 2021). To identify an adequate number of factors, several indicators were considered: the Kaiser-Guttmann criterion (Eigenvalues > 1), parallel analysis, the goodness-of-fit indices, and the interpretability of the factor solution. In the next step, items were selected and eliminated successively. Single items were evaluated based on factor loadings and cross-loadings (Rosellini & Brown, 2021), with items with a loading lower than .3 being excluded. After selecting a model, the reliability and validity of the identified factors were evaluated. For this purpose, we calculated internal consistency for each factor, reporting McDonald's omega as a model-based estimate of reliability (Revelle & Condon, 2019). Additionally, we tested convergent validity using bivariate correlations with psychological distress, work-related exhaustion, and secondary traumatic stress. Therefore, a mean score for each subscale of the RoCo was calculated for validity testing. Statistical analyses were conducted using the software R 4.2.1 (R Core Team, 2021) with the software packages mice (Buuren & Groothuis-Oudshoorn, 2011) and miceadds (Robitzsch & Grund, 2022) as well as the software program Mplus 8.1 (Muthén & Muthén, 2020).

3 Results

3.1 Sample description

The final sample consisted of N = 164 interpreters (n = 115 females, 70.1%). A minority had a university or college degree in interpreting (14.6 %), and on average, they reported having worked as an interpreter for more than five years. Most participants were working as freelancers at the time of the survey (n = 108, 65.9%), and the most frequently reported work setting was 'authorities'. See Table 1 for detailed characteristics of the sample.

Table 1

Sample characteristics

	n	*%*	*M*	*SD*	*Range*
Sociodemographic Variables					
Gender: Female	115	70.1	–	–	
Age, in years	–	–	38.84	12.35	18-71
Years of education	–	–	16.80	3.42	6-26
Ever fled or displaced, yes	45	27.4	–	–	
Degree in interpreting (university or college)	24	14.6	–	–	
Work experience in years[a]	–	–	5.17	5.97	0-30
Employment situation[a]					
Freelancer	108	65.9	–	–	–
Employed	37	22.6	–	–	–
Both	19	11.6	–	–	–
Main work setting					
Psychotherapy	38	23.2	–	–	–
Authorities	59	36.0	–	–	–
Medical	22	13.4	–	–	–
Counselling	39	23.8	–	–	–
Other Setting	6	3.7	–	–	–
Psychological and work-related distress					
Psychological distress (BSI-18 GSI)	–	–	9.02	9.07	0-43
Secondary traumatic stress (ProQOL-STS)	–	–	18.90	5.78	10-37
Work-related exhaustion (CBI - work-related)	–	–	25.78	18.31	0-93

Note. BSI-18 GSI: *Brief Symptom Inventory-18 General Severity Index*; CBI – work-related: *Copenhagen Burnout Questionnaire,* subscale: *work-related*; ProQOL-STS: *Professional Quality of life*, subscale *Secondary traumatic stress* (raw scores). [a] in main work setting

3.2 Exploratory factor analysis

EFA was conducted using a WLSMV estimator with oblique rotation. Factor selection was data-driven. The Kaiser-Meyer-Olkin measure of sampling accuracy indicated an adequate sample size for factor analysis (KMO = 0.81) and Bartlett's test of sphericity was significant (χ^2 (351) = 2168.669; $p <$ .001). The EFA including all 27 items revealed four factors with eigenvalues >1, thus favoring a four-factor solution based on the Kaiser-Guttmann criterion. The scree plot suggested either a two- or a four-factor solution while the parallel test favored a four-factor solution. Considering all applied criteria, a four-factor solution was selected. To improve interpretability, items were removed in a stepwise procedure following the rules outlined by Rosellini and Brown (Rosellini & Brown, 2021). First, EFA was conducted with the full questionnaire (Model 1). In this analysis, item 6 showed low factor loadings in general and similarly high loadings on both F1 and F4 (.36 and .32, respectively) and was therefore removed. EFA was conducted again with 26 items (Model 2). In this analysis, item 16 showed factor loadings ≤.3 for all four factors and was also excluded. Next, item 24 was deleted due to almost similarly high loadings on F3 (.56) and F4 (-.51) (model 4). Lastly, item 23 showed similarly high loadings on F2 (-0.38) and F3 (.47)and was therefore deleted. In the resulting model 5, a simple structure was reached, such that all items had high loadings on one factor and substantially lower loadings on the other factors; we therefore stopped item evaluation and reanalysis at this point. The procedure resulted in five models (table 2): Model 1 (27 items); Model 2 (26 items, item 6 removed), Model 3 (25 items, items 6 and 16), Model 4 (24 items, items 6, 16, and 23 removed) and Model 5 (23 items, items 6,16, 22 and 23 removed). Goodness-of-fit indices for all three models are shown in Table 2. All the indices were close to or above the suggested cut-offs for good model fit. In particular, the SRMR improved slightly from Model 1 to Model 5.

Table 2

Goodness-of-fit indices for Model 1 to Model 5

	WLSMV-χ^2	*df*	CFI	TLI	RMSEA	SRMR
Model 1: original (27 items)	525.097	249	.956	.938	.082	.048
Model 2: 26 items	494.936	227	.957	.939	.085	.046
Model 3: 25 items	483.291	206	.956	.935	.091	.045
Model 4: 24 items	353.060	186	.973	.959	.074	.037
Model 5: 23 items	**313.116**	**167**	**.976**	**.964**	**.073**	**.035**

Note. N = 164. WLSMV: weighted least squares with mean and variance adjustment; CFI: comparative fit index; TLI: Tucker Lewis index; RMSEA: root mean square error of approximation; SRMR: standardized root mean square residual. Model 5 (in bold) was chosen as the final model.

Table 3

Exploratory factor analysis. Factor loadings of Model 5

	Item description	Mean	SD	Factor loadings			
				F1	F2	F3	F4
Factor 1: Lack of emotional boundaries between interpreter and client							
Item 1	I feel the need to calm clients down during the appointment.	3.92	1.79	**.39**	.24	.22	-.00
Item 2	I have to cry during appointments with clients.	1.83	1.27	**.63**	.15	.04	-.02
Item 3	I have to think about the clients for a long time after the appointments.	3.24	1.69	**.85**	.08	.04	-.06
Item 4	I feel emotionally distressed after the appointments.	3.01	1.57	**.83**	.12	.08	-.04
Item 5	It is difficult for me to distance myself mentally from the clients after the appointments.	2.57	1.56	**.98**	.00	-.07	-.09
Item 6	It is difficult for me to set emotional boundaries between myself and the clients during the appointment.	2.46	1.55	**.82**	-.17	-.04	.22
Item 7	It is difficult for me to set emotional boundaries between myself and the clients after the appointment.	2.23	1.40	**.85**	-.07	-.01	.14
Factor 2: Devaluation by practitioners							

Item 8	I am not treated as an equal communication partner by practitioners.	2.19	1.68	.02	**.67**	.06	.10
Item 9	I have the impression that practitioners evaluate my work unfairly.	1.69	1.32	-.03	**.92**	.01	.00
Item 10	I do not feel appreciated by practitioners.	1.71	1.42	-.05	**.95**	.03	-.00
Item 11	I have the impression that practitioners speak to me in a derogatory tone.	1.49	1.04	.03	**.84**	-.11	.11
Item 12	I have the impression that practitioners only see me as a technical tool.	2.01	1.56	.08	**.83**	.02	-.03
Item 13	I have the impression that practitioners attribute misunderstandings to poor interpreting.	1.91	1.48	.11	**.68**	-.22	.04
Factor 3: Perceived formal framework of the interpreter's role							
Item 14	My neutral role as an interpreter is compatible with the client's cultural values.	4.01	2.13	.08	-.11	**.55**	-.06
Item 15	My role as an interpreter is clearly defined by practitioners.	4.9	1.84	-.02	-.00	**.86**	.06
Item 16	My job as an interpreter is clearly defined in advance by practitioners.	4.93	1.72	.01	-.05	**.85**	.09
Item 17	I know what clients expect from me as an interpreter.	5.1	1.67	-.10	.19	**.52**	-.26
Item 18	The rules regarding my job as an interpreter were conveyed to me by practitioners.	4.51	2.07	.12	-.09	**.50**	-.13
Item 19	Clients understand my neutral role.	4.15	1.71	-.08	-.13	**.41**	-.22
Factor 4: Emotional distress due to the role within the triad							
Item 20	I am worried that I disrupt the relationship between clients and practitioners.	2.05	1.35	-.01	.01	-.01	**.96**
Item 21	I am worried that I am an obstacle to the relationship between clients and practitioners.	2.03	1.45	.02	.03	.04	**.89**
Item 22	I am worried that clients have a closer relationship with me than with practitioners.	2.85	1.8	.10	.28	.04	**.54**
Item 23	I feel distressed when clients and practitioners have conflicting needs during the appointments.	3.04	1.84	.28	.18	.03	**.49**
		ω		**.92**	**.93**	**.81**	**.90**
		R^2		**.67**	**.73**	**.47**	**.70**

Note. N = 164. Factors were extracted using a WLSMV estimator with oblique rotation; factor loadings ≥ .30 are printed in bold. Deleted items: former item 6: I am worried that I may encounter clients outside the appointment (Factor 1: Lack of emotional boundaries between interpreter and client); former item 16: As an interpreter, I have limited scope to act (Factor 3: Perceived formal framework of the interpreter's role); former item 20: Practitioners understand my neutral role (Factor 3: Perceived formal framework of the interpreter's role); former item 21: Clients understand that I have to keep a professional distance from them (Factor 3: Perceived formal framework of the interpreter's role).

Model 5 was chosen as the final model. Its four-factor structure corresponds to the four overarching themes introduced in the working definition. Factor loadings of the items are shown in Table 3. The first factor reflects emotional and cognitive difficulties in setting boundaries in the relationship between interpreter and client (e.g., item 5, 'It is difficult for me to distance myself mentally from the clients after the appointments.'). Therefore, the subscale was named 'Lack of emotional boundaries between interpreter and client'. The second factor, 'Devaluation by practitioners', reflects problems that primarily emerge in the relationship between interpreter and practitioner (e.g., item 10, 'I do not feel appreciated by practitioners.'). The third factor, 'Perceived formal framework of the interpreter's role', reflects the perception of the formal framework of the interpreter's role (e.g., item 15 'My role as an interpreter is clearly defined by practitioners.'). The fourth factor, 'Emotional distress due to the role within the triad', reflects dynamic problems that emerge from the triadic relationship between interpreter, practitioner, and client (e.g., item 20, 'I am worried that I disrupt the relationship between clients and practitioners'). All factors showed good to excellent reliability (ω = .81 - ω = .93). Inter-factor correlations are shown in table 4 and indicate that factors are not independent from each other.

Table 4

Inter-factor correlations in Model 5 (23 items)

	F1	F2	F3
F1	-		
F2	.59	-	
F3	-.31	-.44	-
F4	.16	.25	-.12

Note. F1: Lack of emotional boundaries between interpreter and client; F2: Devaluation by practitioners; F3: Perceived formal framework of the interpreter's role; F4: Emotional distress due to the role within the triad.

3.3 Assessment of convergent validity

Convergent validity of the RoCo was calculated by correlating the score on each of the four subscales with psychological distress in general (BSI-GSI), in the workplace (CBI, subscale work-

related exhaustion), and STS (ProQOL). The three factors that measure distress due to role conflicts in the interpreting setting (F1, F2, and F4) showed significant positive correlations with measures of mental distress in general (r = .27 – r = .50) and in the workplace (r = .32 – r = .50), and with STS (r = .34 – r = .44). In contrast, as expected, the factor measuring the perceived formal framework of the interpreter's role (F3) showed significant negative correlations with measures of mental distress in general and in the workplace, and with STS (r = -.11 – r = -.21). See Table 5 for details.

Table 2

Correlations between factors and external variables for Model 5 (23 items)

	F1	F2	F3	F4
Psychological distress (BSI-18 GSI)	.46***	.27***	-.19***	.50***
Secondary traumatic stress (ProQOL-STS)	.44***	.34***	-.21***	.46***
Work-related exhaustion (CBI - work-related)	.50***	.32***	-.11***	.44***

Note. *** p < .001; BSI-18 GSI: *Brief Symptom Inventory-18 General Severity Index*; CBI – work-related: *Copenhagen Burnout Questionnaire,* subscale: *work-related*; ProQOL-STS: *Professional Quality of life*, subscale *Secondary traumatic stress* (raw scores). F1: Lack of emotional boundaries between interpreter and client; F2: Devaluation by practitioners; F3: Perceived formal framework of the interpreter's role; F4: Emotional distress due to the role within the triad.

4 Discussion

The aim of the present study was to develop and evaluate a questionnaire assessing role conflicts and challenging aspects of interpreting for refugee clients. For this purpose, first, items were developed based on a literature search and experts' feedback. Second, the newly developed questionnaire was psychometrically tested, and in a third step, the convergent validity of the subscales of the questionnaire was assessed using questionnaires measuring work-related and non-work-related distress. The results of the EFA revealed a questionnaire with four subscales assessing various challenging role conflicts of interpreters within the triad consisting of practitioner, client, and interpreter. The final RoCo

questionnaire showed excellent psychometric properties and a preliminary assessment of convergent validity revealed promising findings.

4.1 Evaluation of the questionnaire

The questionnaire was developed based on qualitative reports of interpreters working with refugee and migrated clients and a preliminary working definition of the role of interpreters. After deleting four items due to low factor loadings and cross-loadings in the EFA, 23 items across four subscales resulted: 1) lack of emotional boundaries between interpreter and client, 2) devaluation by practitioners, 3) perceived formal framework of the interpreter's role, and 4) emotional distress due to the role within the triad. The first subscale includes items on rumination and distress due to hearing and interpreting the client's stories, which is reflected in interpreters' reported difficulties in handling their own emotions during or after appointments (Doherty et al., 2010; Simms et al., 2021). The second subscale focusses on feeling devalued in the relationship with practitioners, for example due a lack of appreciation of the interpreter's work (Green et al., 2012; Hassan & Blackwood, 2021). Furthermore, this subscale includes the increasingly criticized perception of interpreters as a black box or technical tool (Yick & Daines, 2017) as a possible cause of distress. The third subscale comprises the interpreters' perception regarding the clarification of their role. As such, it reflects the lack of formal standards for the role of interpreters, which can range from mere translation to cultural mediation (Brisset et al., 2013; Sleptsova et al., 2014). The fourth subscale includes the dynamics between all three parties within the triad and addresses, for example, interpreters' concerns about being an obstacle to the relationship between practitioner and client. This subscale therefore corresponds well to the experiences reported in the literature, such as interpreters' feelings of distress when they notice difficult situations in the relationship between client and practitioner (Hassan & Blackwood, 2021; Williams, 2005). In consequence, the four areas described in the working definition and in qualitative studies are in line with the results of the EFA. Overall, the analysis revealed factors that can be clearly distinguished from each other and show high factor loadings of the items on the respective factor. However, the fourth factor

might benefit from revision, for example by adding items pertaining to further difficult dynamics within the triadic relationship.

The convergent construct validation was carried out from an exploratory perspective using questionnaires related to psychological distress and work-related constructs (work-related exhaustion and secondary traumatic stress). As expected, the established measures of psychological and work-related distress showed positive correlations with the first (lack of emotional boundaries between interpreter and client), second (devaluation by practitioners) and fourth subscale (emotional distress due to the role within the triad) of the RoCo and negative correlations with the third subscale (perceived formal framework of the interpreter's role). The RoCo therefore captures an independent construct with facets of psychological and work-related distress. Given that role conflicts at work have been found to be related to depression, future studies should investigate in greater depth precisely which kind of emotional distress is associated with role conflicts (Schmidt et al., 2012; Zheng et al., 2022).

Furthermore, it should be noted that the RoCo was evaluated in the context of working with refugee clients. The first subscale in particular might be especially relevant for working with traumatized (refugee) clients, as it focusses on the emotional distress due to the client's distressing stories. However, the questionnaire may also be applied more generally to interpreters working with culturally and linguistically diverse clients, as studies have highlighted a lack of role clarification, for instance, for interpreting contexts beyond that of refugee clients (Brisset et al., 2013; Sleptsova et al., 2014). Therefore, we suggest applying the questionnaire in various settings and with all types of clients to gain a better understanding of interpreters' challenging work and role conflicts within the triad.

4.2 Strengths and limitations

The RoCo is the first questionnaire to systematically assess role conflicts for interpreters in the triad between interpreter, practitioner, and client. Our analyses revealed excellent psychometric properties and promising results concerning convergent validity. Furthermore, due to the rigorous

development approach based on the literature, the RoCo represents a comprehensive instrument to assess the extent of role conflicts.

When interpreting the results, several limitations must be considered. In the present study, a convenience sample of interpreters was recruited at various locations, and the sample is therefore not representative for interpreters in general. Nevertheless, a reasonably high sample size was achieved for the online survey, and we applied the questionnaire in various work settings. Due to the small sample size per work setting, it was not possible to analyze the questionnaire separately for every work setting. Consequently, the sample of interpreters may have been heterogeneous in terms of the clarification of their role.

4.3 Conclusion and implications

This study took a first step to investigate and quantify role conflicts among interpreters. Overall, the first evaluation showed clearly interpretable subscales with high internal consistencies. Based on the present findings and the research to date, the questionnaire needs to be applied, further improved, and validated in more settings and languages. Furthermore, discriminant construct validation was not addressed in the current study and requires further investigation. Questionnaires addressing the working alliance between practitioner, interpreter, and client may foster the understanding of the triadic relationships and role conflicts, particularly in psychotherapeutic care. By applying the questionnaire, we aim to facilitate a process of open communication between interpreters and practitioners regarding difficult situations and develop a mutual understanding among the three parties. Importantly, the questionnaire may point to two relevant topics in terms of employer support for interpreters: the offer of training, for instance regarding coping strategies, and the need for transparency and clarification of their role. Ideally, therefore, the RoCo will enhance and contribute to a functional work environment for interpreters in refugee care.

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Supplementary materials

The following supplementary materials related to **Study 4** are available in the **Appendix C**:

- Original questionnaire (German version)
- Factor loadings for version with all 27 items
- Inter-item correlations
- Final version (German)

CHAPTER 6

3 Discussion

In this chapter, first the main findings of **studies 1-4** will be summarised (sections 6.1-6.4) as well their limitations (section 6.5). Then, practical implications and future research will be outlined with regard to the findings of the studies in this dissertation (section 6.6).

3.1 Main findings of study 1 - Review of previous research

Research regarding mental health of interpreters showed a wide range of experiences reported by interpreters in several work settings. Due to many individual reports, it is unclear to what extent interpreters show psychological distress or work-related exhaustion, and how specific work-related (e.g. frequency of supervision) or personal (e.g. having a flight experience) factors may be associated with their mental health. The aim of **study 1** was to systematically identify and summarise studies regarding the mental health and work experiences of interpreters in the mental health care of refugees. The systematic review sought to include quantitative and qualitative studies to reach a better understanding of interpreters' mental health and the possible associated risk and protective factors. Therefore, a systematic search was conducted across five databases.

Study 1 demonstrates the imbalance between the number of identified qualitative (k = 19) and quantitative studies (k = 6). All included qualitative studies were conducted outside Germany, and most of the very few quantitative studies were conducted in Germany. Furthermore, the included studies showed heterogeneous recruitment work settings (e.g. hospitals or legal services) and highly varying sample sizes (Range: n = 3-90). The content of the qualitative studies informed three superordinate themes: emotional and behavioural consequences, the work within the triad and the working environment itself. The quantitative studies mostly investigated the mental health of interpreters in terms of work-related distress, such as secondary traumatic stress and associated risk and protective factors.

Psychological distress, anxiety and depressive symptoms were only investigated in one quantitative study and found to be significantly higher (distress and anxiety) and lower or similar (depressive symptoms) among interpreters compared to a representative German sample. PTSD was investigated in two quantitative studies and was found to be higher than in representative German samples.

Based on the summary of the reviewed studies, a model of risk and protective factors was presented. This model summarises work-related and individual factors which may be associated with interpreters' psychological distress based on the results of the systematic review. Work-related factors comprised the support system and resources of the employer, e.g. provision of supervision, as a possible protective factor against psychological distress. Individual factors included the personal support system, such as social support from family as well as compassion satisfaction or the individual background, for example a refugee background. Aside from proposing the model of risk and protective factors, **study 1** highlights the need for further quantitative research regarding psychological distress of interpreters in the mental healthcare of refugees to gain a better understanding of the impact of interpreting and associated risk and protective factors. It moreover demonstrates the various potential sources of psychological distress with a focus on individual and work-related factors.

3.2 Main findings of study 2 - Psychological distress and work-related exhaustion among interpreters in refugee care

The results of **study 1** indicate that interpreters' mental health has been frequently investigated in qualitative studies. These studies highlight difficult working situations and a wide range of negative emotions related to interpreting. However, due to the nature of qualitative studies, these experiences may be reported by either a single person or a small group of people in a very specific working situation. Furthermore, there is very little quantitative data on interpreters' general psychological distress and possible work-related correlates.

Therefore, an online survey was conducted, the main participation criterion of which was payment for interpreting spoken languages for refugee clients. The survey originally consisted of two

measurement points with nine months in between. For **study 2**, only cross-sectional data from the first measurement point was analysed. Overall, 164 interpreters took part and answered standardised questionnaires regarding, for example, psychological distress (BSI-18) or work- and client related exhaustion (CBI), facets of job satisfaction (JSS; satisfaction with recognition and payment) and several questions regarding their working conditions.

Study 2 investigated the level of psychological distress and work-related exhaustion among interpreters in refugee care. Additionally, the study aimed to identify work-related correlates of psychological distress and exhaustion in order to reach a better understanding of the relationship between working conditions and psychological distress against the background of the qualitatively reported experiences. Therefore, correlation and regression analyses were carried out to identify significant correlates of psychological distress as well as work and client-related exhaustion.

The results indicated slightly higher levels of psychological distress among interpreters than in a representative German sample, whereas work- and client-related exhaustion were at a similarly high level to other professions in social care and psychiatric contexts. Moreover, in comparison with a representative German sample, a higher prevalence of probable PTSD was indicated in the sample of interpreters. The results highlight the importance of taking the interpreters' wellbeing into account.

The regression analysis for psychological distress furthermore indicated especially younger age and in part lack of supervision as correlates for higher psychological distress. Furthermore, higher amount of interpreted traumatic content and dissatisfaction with payment turned out to be significant correlates for higher work-related exhaustion. Lastly, lower satisfaction with recognition was associated with higher client-related exhaustion.

In sum, for the first time, psychological distress and work-related exhaustion were linked to specific work-related conditions of the interpreters. Consequently, previously qualitatively collected claims for improved organisation of interpreters' employment conditions are now supported by quantitative data.

3.3 Main findings of study 3 - Well-being of interpreters across different work settings

Whereas qualitative studies often focused on interpreters' experiences in the mental health setting, quantitative studies predominantly recruited interpreters from various work settings such as hospitals or legal services. The literature so far indicates specific challenges with regard to the work settings of interpreters. Little is known about whether there are differences regarding the mental health of interpreters depending on the work setting.

Therefore, **study 3** sought to compare four work settings (psychotherapy, counselling, medical setting and authorities) of interpreters regarding specific work characteristics (e.g. frequency of supervision) and interpreter-related characteristics (e.g. having a degree in interpreting) of the first measurement point. Furthermore, wellbeing (psychological distress, work-related exhaustion, compassion satisfaction) was investigated in cross-sectional and longitudinal analyses. Therefore, group comparisons and post-hoc-tests were carried out.

Overall, 158 interpreters were included in the analyses of the cross-sectional data and 63 interpreters in the analyses of the longitudinal design. The analysis of work characteristics between the work settings yielded two main findings. First, significantly more traumatic content was interpreted in the context of counselling and psychotherapy. Second, the proportion of interpreters with an interpreting degree was significantly higher in the authorities setting than in the counselling setting. The results regarding interpreters' wellbeing furthermore showed significant differences in psychological distress and work-related exhaustion between the four main work settings in the cross-sectional data. Interpreters mainly working in the counselling setting indicated the highest levels of psychological distress and work-related exhaustion. No differences were found for compassion satisfaction between the four main work settings. Similar differences were found in in the longitudinal analyses where interpreters in the counselling setting showed the highest level of psychological distress and work-related exhaustion. However, in the longitudinal analyses no significant differences were found in interpreters' wellbeing between the four work settings.

Overall, the results of **study 3** shows differences in the perceived psychological distress and exhaustion between the main work settings and their related working conditions. Interpreters in counselling settings may be at risk of higher levels of distress, as they seem to interpret more traumatic content and are less likely to have a professional degree in interpreting.

3.4 Main findings of study 4 - Development of the Role Conflicts questionnaire

Qualitative research demonstrated the variety in the interpreters' roles in the triad of refugee client, practitioner, and interpreter. Additionally, interpreters highlighted their distress due to the many expectations they are confronted with by practitioners and clients. Therefore, it is important to systematically investigate role conflicts in order to reach a better comprehension of the distress interpreters experience within the triad.

In **study 4** a newly developed questionnaire was evaluated in a German sample of interpreters. The questionnaire was designed based on the literature and indicated four overarching themes related to role conflicts within the triad. These comprised the relationship to the client, feelings of devaluation because of the practitioner, the lack of a formal framework for the interpreters' role and difficult dynamics within the triad. The questionnaire was assessed in a sample of interpreters working in the care of refugees in Germany. To explore the convergent construct validity, questionnaires regarding psychological distress (BSI-18), work-related exhaustion (CBI) and the Professional Quality of Life (ProQOL) were applied.

In total, 164 interpreters who participated at the first measurement point were included in the analyses. Multiple imputation was applied for missing values. An exploratory factor analysis for categorical variables resulted in a questionnaire with 23 items and 4 subscales (lack of emotional detachment from clients, devaluation by practitioners, perceived formal framework of the interpreter's role, emotional distress due to the role within the triad). All subscales showed good or very good reliability, with McDonald's omegas for the subscales ranging from .81 to .93. Subscales related to emotional distress correlated positively with psychological distress and work-related exhaustion, while

a clearly defined formal framework of the interpreter's role was negatively correlated with psychological distress and work-related exhaustion.

Overall, the questionnaire showed good psychometric properties. The four identified subscales reflect the qualitative research on interpreters' role conflicts and may help to identify emotional distress among interpreters due to expectations of refugee clients and practitioners.

3.5 Limitations

While the results contribute to the research of interpreters' mental health, the present dissertation has some limitations which are going to be addressed in the following section. The first part will discuss limitations regarding the systematic review and the second part limitations of the online survey.

3.5.1 Systematic Review

The systematic review identified rather heterogenous studies in terms of recruitment locations, sample size and study outcomes. Therefore, the computation of a meta-analysis was not possible, and the quantitative results refer to single studies and in part single outcomes. In general, only six quantitative studies were identified, and five out of six of these studies were conducted in Germany. Therefore, the interpretation of the quantitative results overall is mostly limited to the German system of refugee support. In addition, sample sizes varied widely, especially in the qualitative studies, and reports from individuals in a sample were often cited. Several of the included studies recruited interpreters at various work settings which not only comprised mental healthcare settings. Due to the varying recruitment locations even within the studies, interpreters may have been exposed to different working conditions and may have reported experiences relating to their very specific working situation, which makes generalisability difficult. Furthermore, all of the included studies were cross-sectional studies and mostly convenience samples. The presented model in consequence only proposes an indication of possible risk and protective factors.

3.5.2 Online-survey

The online survey (**study 2, 3, and 4**) poses several limitations regarding the sample characteristics, the study design and the statistical analyses.

Sample characteristics. First, a convenience sample of interpreters in Germany was recruited and in consequence the sample is not representative of interpreters in Germany. Furthermore, most interpreters work as freelancers. This means that interpreters usually work in various locations and work settings. To approach this complex situation, the idea of a main work setting in terms of the most working hours in comparison to other interpreting work settings was developed. This main work setting was used as an approximation to compare working conditions and measurements of interpreters' wellbeing. However, this poses several methodological limitations. The main work setting served as an approximation for the highest psychological strain as it was believed that higher working hours would go hand in hand with higher psychological strain. However, it was not clear why interpreters worked in their indicated work setting the most and whether or how much they also worked in other work settings. For example, interpreters may have been working in their indicated work setting because they associated less distress with this work setting or were especially experienced in this setting which in turn may have mitigated their distress overall.

Study design. The study was conducted via an online tool. Therefore, interpreters in most cases were not directly contacted and only were recruited through their employing organisations. Therefore, relevant parts of the target population may not have been reached. Due to the design of this online survey, participants answered the questionnaires in an uncontrolled setting. The online survey took around 35-40 minutes, participants may have dropped out due to exhaustion during the first measurement point. The distance between the two measurement points was chosen for exploratory purposes as this was the first study to investigate interpreters in a longitudinal design. Overall, only self-report questionnaires were applied regarding PTSD and psychological strain. Particularly for a clinical diagnosis, this presents a limitation in comparison to interview-based diagnosis. The indication of a probable PTSD presented in this study can therefore only be a hint for a clinical disorder.

Statistical analyses. In general, the examination of work-related correlates posed several limitations. Moreover, most of the work-related correlates (e.g. amount of interpreted traumatic content, frequency of supervision) were only related to the main work setting, which neglects the possible influence of working conditions in other work settings. The results have to be interpreted against the background of primarily analysing cross-sectional data (**study 2,4** and in part **study 3**). The regression analyses (study 2) in sum were conducted with a very exploratory approach due to the lack of quantitative research and theories. The correlates for the regression analyses were selected based on their correlations with the outcomes. The results of **studies 2 and 3** give therefore first indications for possible risk and protective factors, but causal relationships could not be identified. Regarding **study 3**, the longitudinal data only included small sample sizes per group as around a third of the interpreters changed their main work setting at the second measurement. The interpretation of relationship of working conditions with work settings is hence restricted only to comparisons. Furthermore, due to the small sample sizes per work setting, correlates, working conditions as well as the RoCo could not be analysed for every work setting. Conclusions about the relationship of interpreters' wellbeing and work-setting specific circumstances have to be made with caution. Similarly, the possible differences between work settings regarding role conflicts could have confounded the results.

Overall, a highly exploratory approach was applied regarding the analyses of the data. Moreover, all of the analyses were carried out among the same sample of interpreters. The above mentioned limitations therefore have to be taken into account with regard to the future research and implications.

3.6 Implications and future research

The findings of this dissertation contribute to the further development of current practice in interpreters' work with refugee clients and have implications for future research. Overall, the presented results demonstrate the need for more quantitative and generalisable research investigating interpreters' mental health. Moreover, risk and protective factors need to be addressed further, for example regarding external work-related and individual factors.

3.6.1 The research aims of this dissertation: an overview

In chapter 1, the two research aims of this dissertation were outlined. These will be discussed in this section in the presence of the study results.

The first aim of this dissertation was to investigate interpreters' mental health using a quantitative approach. All studies addressed psychological distress and work-related exhaustion among interpreters. **Study 1** showed the wide extent of emotional reactions interpreters reported across several samples. The results of **study 2** furthermore indicated generally heightened levels of psychological distress among interpreters, whereas **study 3** showed that the level of psychological distress and work-related exhaustion varied between work settings. In **study 4**, initial indications were identified associating role conflicts within the triad with psychological distress and work-related exhaustion. The results are in line with the results of previous studies (Kindermann et al., 2017; Teegen & Gönnenwein, 2002; Yick & Daines, 2017) and may indicate that interpreters are an occupational group at increased risk for generally elevated stress. Moreover, in healthcare settings but also asylum hearings, interpreters subjectively take on great responsibility for the outcome (Bergunde & Pöllabauer, 2019) and may be put under considerably more pressure than in other work settings. Emotional reactions such as anxiety or depression, which may impact the interpreters' wellbeing after the sessions and concentration during them, need to be investigated further to ensure adequate outcomes for the clients.

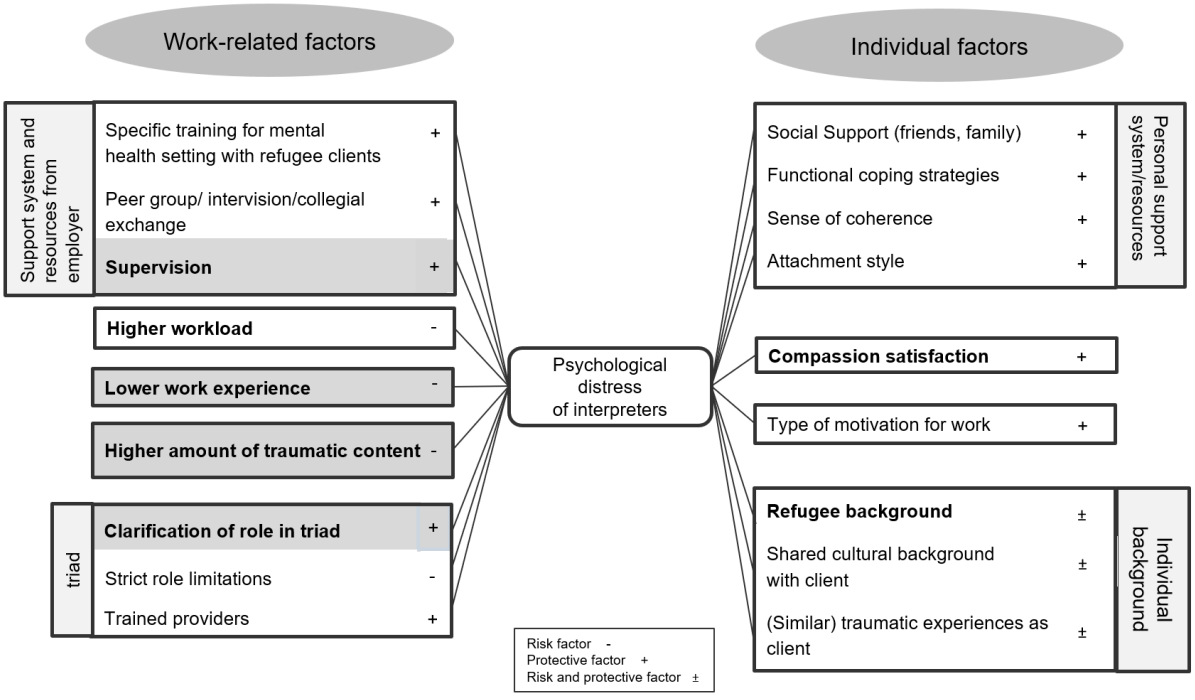
The second aim of this dissertation was to explore possible risk and protective factors of interpreters' psychological distress. In **study 1**, a model of potential risk and protective factors for interpreters' distress was displayed with a specific focus on the mental health setting. Thereby, work-

related, and individual factors were illustrated. Similar results were shown in a review with a broader perspective on interpreters in health care (Yick & Daines, 2017) This indicates that the risk and protective factors presented in **study 1** may be relevant for further work settings than the mental health setting. However, there is still a lack of research regarding interpreters' distress and associated correlates in administrative and legal work settings. Therefore, investigating demands and needs of interpreters in these settings would need further research.

Studies 2, 3 and 4 indicated possible further risk and protective factors across several work settings. To distinguish between the risk and protective factors proposed in **study 1**, and the constructs for interpreters' distress examined in the online survey, figure 6.1 presents the model from study 1 in a slightly modified form. The factors which were investigated in **studies 2, 3, and 4** are printed in bold. Significant correlates (in the regression or correlation analyses) for psychological distress or work-related exhaustion regarding one of the displayed factors are highlighted in grey. Overall, figure 6.1 shows that the online survey mainly investigated and identified work-related correlates of interpreters'

Figure 3.1

Identified, investigated, and significant factors for psychological distress and work-related exhaustion of interpreters (based on studies 2, 3 and 4).



Note. Compassion Satisfaction was not included in regression or correlational analyses.

distress. With regard to the prevention of interpreters' distress, more research on individual factors such as motivational aspects or similar experiences as clients is necessary to identify risk and protective factors of interpreters' mental health. In sum, interpreters currently provide the crucial link for a mutual understanding between practitioners and refugee clients as there is still a lack of multilingual professionals and staff (Rolland et al., 2020; Schouler-Ocak, 2020). Furthermore, due to the increasing numbers of refugees and the global dynamic migration flow, interpreters will most likely remain an essential part of healthcare and administrative systems regarding the communication between local practitioners and migrated people. Further research on the mental health of interpreters is therefore urgently necessary. This would further promote the recognition of interpreters as an important professional group when working with refugee clients.

3.6.2 Working conditions: Importance of recognition, support and prevention

A main focus of this dissertation was the exploration and investigation of working conditions which interpreters have to face. Though this was addressed in all four studies, **study 2** especially contributed to a better understanding of possible work-related risk and protective factors of interpreters' psychological distress and work-related exhaustion. Therefore, dissatisfaction with recognition and lack of supervision will be addressed in the next paragraphs as well as implications for future studies.

Adequate pay. The results of **study 2** suggest that lack of recognition, in the sense of dissatisfaction with pay, is a potential risk factor for interpreters' work-related exhaustion. This is in line with a recent systematic review showing effort-reward imbalance as a work-related risk factor for stress-related mental disorders (van der Molen et al., 2020). Regarding interpreters, the lack of adequate pay may be associated with several specifics of employment circumstances which have not been examined in the present online survey and will be outlined in the next paragraph.

Recognition in terms of monetary aspects includes, for example, a sufficient and appropriate salary, the possibility of raises of payment or employment which would in consequence mean a steady income and paid time leave. However, one of the main problems concerns the lack of employment opportunities for interpreters, and, as a consequence, the aforementioned benefits of being safely

employed. One reason for this is, for example, the unforeseeable migration movement practitioners have to deal with (Dubus & LeBoeuf, 2019). Therefore, the need for interpreters varies especially when interpreters occasionally are needed for rare languages (Bergunde & Pöllabauer, 2019). Importantly, the lack of employment even seemed to affect the quality of interpreting. A recent study showed differences in in-house and contracted interpreters in following the code of conduct of interpreters, indicating that non-in-house agency interpreters seemed to ignore elements of the code of conduct (Crezee et al., 2020).

Furthermore, interpreters who are not specially trained for this profession may not intend to work on a long-term basis in this job due to the low income and uncertain career perspectives. The question of a qualification-related salary here goes hand in hand with the lack of standardised qualifications. If there is no acknowledged standardisation of qualification (e.g. by the government or hospitals) and interpreting is not covered by insurance, then the responsibility for payment lies with the employing organisations (MacFarlane et al., 2020) - which are often in need of funding themselves and/or are dependent from the funding of authorities (Jaeger et al., 2019; Kiselev et al., 2020; Simms et al., 2021). This may have the effect of keeping interpreters' remuneration low and only attract lay or even ad-hoc interpreters who in turn may experience higher levels of work-related exhaustion due to the lack of training and preparation.

Moreover, in a German sample, almost half of the interpreters indicated to interpret part-time (Wichmann et al., 2018). Therefore, some interpreters may work spontaneously and only if needed, whereas others consider this job to be their main income. In sum, depending on the relevance of the income from interpreting, a lower salary and the lack of career perspectives may contribute to higher work-related exhaustion and therefore to inadequate interpreting behaviour such as disregard of the code of conduct.

Overall, interpreters face difficult employment circumstances and inadequate pay for several primarily systemic reasons. Options to act on this currently seem to be limited and are under researched. Due to how diverse interpreters are as a group, there is improved comprehension regarding monetary wishes and motives of interpreters for interpreting needed. Significantly, for the first time the online

survey indicated that it is necessary to stress the need for fair pay for interpreters in order to prevent work-related exhaustion. This furthermore should not depend on the amount of regular interpreting or employment status.

Inclusion. A second finding of **study 2** was the significant association between dissatisfaction with recognition and client-related exhaustion. Therefore, a relevant factor of recognition may include the wish for inclusion in the team and acknowledgement of interpreters as equal team members.

Several studies emphasised that interpreters are often still seen as a necessary but at best invisible profession (Brisset et al., 2013; Dubus, 2016; Lai & Costello, 2021; Yick & Daines, 2017). Particularly in the social or psychotherapeutic treatment of refugee clients, many professions work together (e.g. a social worker, psychotherapist, doctor) to guarantee the best treatment by working multidisciplinary. However, interpreters are often neglected regarding their integration into this team (Leanza et al., 2021) although their work during sessions is heavily appreciated (Gryesten et al., 2021; Miller et al., 2005). This again concerns contracted interpreters above all, who usually are called in for in-house sessions but seldomly have the opportunity for briefings, debriefings or team meetings. This experience of interpreters illustrates the feeling of holding a lower position with a less important voice within a team (Gryesten et al., 2021). Therefore, stronger integration into teams may be implemented by including interpreters in team meetings or case reviews. Interpreters would be informed about the clients and as well as about organisational and staff-related processes and changes. Moreover, the possibility to attend team meetings and to raise their voice when it comes to interpreter-related problematic situations with specific clients may also help the case of the clients. Altogether, increasingly integrating interpreters is likely to enhance the feeling of being recognised and may even prevent work-related exhaustion.

Supervision. In comparison with other professionals working with refugee clients, interpreters are often overlooked regarding the need for supervision (Lai & Costello, 2021). Moreover, facilitating and enabling supervision as an employer also demonstrates the recognition of the wellbeing of this professional group. In the present study, lack of supervision emerged as a possible correlate for higher

psychological distress in **study 2** (up to the point where job satisfaction was entered into the model). Supervision may offer a way of coping with psychological distress caused by the work and may help to buffer distress caused by interpreted traumatic content (**study 2**) or by difficult role dynamics (**study 4**). Importantly, due to the lack of training, supervision furthermore may represent one way to mitigate psychological distress in case no or little training was possible. Additionally, due to the constant power imbalance contracted interpreters in particular experience within teams (Gallagher et al., 2017; Leanza et al., 2021), independent supervision may moreover create a safe space and aid the clarification of legal boundaries, empowering interpreters to carry out their work. This is especially important as the principle of confidentiality was sometimes misunderstood by interpreters so that interpreters thought that information is not allowed to be shared in the context of seeking guidance or counselling (Darroch & Dempsey, 2016; Lai & Costello, 2021). In the context of trauma-informed interpreting, interpreters are encouraged to think of their own past difficult experiences in order to reflect on their work as an interpreter in trauma-focused contexts, or reconsider taking specific assignments (Bancroft et al., 2016). Berthold and Fischman (2014) moreover proposed peer-to-peer groups in which interpreters are invited to discuss self-care regarding their own traumatic experiences, and a potentially self-disclosure with colleagues. This may be also addressed in supervision groups, or if available a staff contact person for interpreters. However, the benefit of supervision for interpreters has not yet been investigated thoroughly. For instance, it is unclear under which circumstances interpreters prefer to have supervision, how often interpreters would need supervision, and in which work settings it should be implemented as a binding offer by employers.

Conclusion and future research. In sum, working conditions, specifically pay, recognition and supervision affect the mental health and stress levels of interpreters. All three areas need significant improvement as this dissertation and other research has shown. However, the proposed changes and recommendations regarding the working environment are currently difficult to implement. Overall, an important first step would therefore be to integrate spoken language interpreters in the insurance system in the same way as interpreters for deaf patients. In Germany, this is planned in the coalition agreement of the current government (Bundesverband der Dolmetscher und Übersetzer, 2021). The integration of

interpreters into the healthcare system would normalise the work of interpreters for practitioners as well as highlight their central and equally important role in the work with migrated clients (Fennig & Denov, 2021).

Models regarding the integration and collaboration between interpreters and practitioners need to be developed and investigated to better understand the many possibilities for recognition and support in terms of salary, safe employment opportunities, appreciation by the team, or supervision. Furthermore, understanding their relationship to work-related and psychological stresses of interpreters in terms of their integration into the team could contribute to building an inclusive and appreciative work environment.

Finally, in various studies interpreters reported that they wanted to quit the job due to the complex and exhausting work (Crezee et al., 2013; d'Ardenne et al., 2007; Doherty et al., 2010). Therefore, strategies to prevent turnover intentions are needed. In terms of research and practical implications, two approaches are outlined in the next paragraphs of this section.

Compassion satisfaction and motivation. A possible protective factor displayed in the model of **study 1** was compassion satisfaction. This is usually seen as a positive effect of helping professions in contrast to compassion fatigue which represents the negative consequences of helping, such as exhaustion or secondary traumatic stress (Stamm, 2010). **Study 3** showed that compassion satisfaction was present at almost the same levels in every work setting, while the levels of work-related exhaustion and psychological distress varied. This was shown in the cross-sectional and longitudinal analyses. Interestingly, Stamm (2010) hypothesised that the relationship between compassion satisfaction and compassion fatigue can appear in different ways, for example experiencing similarly high levels of compassion fatigue and compassion satisfaction simultaneously. Most studies reported on the outcomes of compassion satisfaction and compassion fatigue when applying the ProQOL (Birck, 2001; Mehus & Becher, 2016) and described negative correlations between compassion satisfaction and compassion fatigue. However, it is not clear whether and under which circumstances compassion satisfaction mitigates psychological distress. For instance, motivational aspects of the work of an interpreter may

play a crucial role when investigating the association between compassion satisfaction and psychological distress. **Study 1** showed various motivations of interpreters derived from qualitative studies, including financial reasons, solidarity with the own community or overcoming frustration due to being a migrated and discriminated against person. Compassion satisfaction specifically relates to the satisfaction derived from the helping job and may therefore be related with one of the motivations interpreters have for helping clients through interpreting. Moreover, the motivation to help and the gratification from this work may contribute to continuing this work as well as buffering distress. The interpreters' gratification from seeing the process of recovery (Doherty et al., 2010; Splevins et al., 2010) may therefore point to compassion satisfaction as a protective factor especially in mental health settings. However, these associations warrant further investigation as they may help to better understand interpreter distress over time and could help in the prevention of work-related distress.

Coping strategies and prevention of distress. In **study 1 and 2**, heightened levels of psychological distress were reported. Against the background of the complex work situation, further research is urgently necessary regarding coping strategies and prevention measures for distress of interpreters. The results of **studies 2 and 4** furthermore suggest that coping strategies related to dealing with the traumatic content could be of significance. In interpreter training, trauma-informed interpreting has previously been neglected but is now increasingly gaining attention (Bancroft et al., 2016; Tipton & Furmanek, 2016). Therefore, aspects of trauma-informed interpreting such as self-care or using specific interpreting techniques (e.g. third-person interpreting) may help to support interpreters beforehand (Bancroft et al., 2016; Crezee, 2015). This may be especially important for work settings in which mainly emotionally charged content is interpreted.

It is furthermore important to take the specific situation of interpreters into account. For instance, work stress among sign interpreters was linked to the demand-control theory (Dean & Pollard, 2001). This theory refers to the balance of job demands and simultaneously existing possibilities to control aspects of the job (Kain & Jex, 2010; Karasek, 1979). Due to principles such as impartiality or transparency, sign and spoken language interpreters find themselves in situations in which they are

exposed to high demands or stressful situations but are not allowed to intervene. This is in line with previous studies reporting that interpreters felt restricted within their role (Green et al., 2012; Myler, 2017). Therefore, two aspects could be important in dealing with minimal control in this situation. Firstly, it may be helpful to emphasise the linguistic aspects of interpreting in the education and training of interpreters in order to focus on the process of interpretation during assignments and increase the acceptance of one's own limits (González Campanella, 2022). Previous research secondly indicated that social support may be a possible protective factor for interpreters' distress (Kindermann et al., 2017). Work-related support structures as peer-to-peer support were preliminarily investigated for sign language interpreters in mental health settings (Anderson, 2011). The results of this study indicated that the participation at a peer support group was associated with a decrease in interpreters' distress and, additionally, an increase in the perception of being part of a supportive professional network. Therefore, enforcing social support structures may help interpreters to exchange personal difficulties regarding their restricted role within the triad and lessen feelings of isolation within a hierarchical system. However, future research is needed to investigate the efficiency and acceptance of peer-to-peer support among interpreters for spoken languages and specifically in the work with refugee clients.

3.6.3 Working within a triad: The need for standards and enhanced collaboration

The results of **study 1 and 4** pointed to the complex role dynamics within the triad. Thereby, four sources of possible distress were identified in the literature and reflected in a newly developed questionnaire in **study 4**. The relationship between psychological distress, work-related exhaustion, STS and role conflicts was furthermore identified and hence highlights the importance of future research on the interpreters' roles for a healthy work environment.

Need for standards. Overall, **studies 1 and 4** which address role conflicts and the complex dynamics within the triad point to the need to establish some kind of officially agreed definition of the minimum standards and requirements for interpreters' work in order to avoid distress and exhaustion. This is in line with earlier research (Brisset et al., 2013; Simms et al., 2021). Moreover, several recommendations in terms of guidelines have been published by numerous organisations and researchers

(e.g., Bundesweite Arbeitsgemeinschaft der psychosozialen Zentren für Flüchtlinge und Folteropfer, 2022; Geiling et al., 2022a; Kluge, 2020; Leanza et al., 2014; O'Hara & Akinsulure-Smith, 2011). Still, lots of guidelines represent a rather broad framework of rules often developed by clinical practitioners. The effective dissemination and application of guidelines has not been sufficiently investigated. Furthermore, interpreters need to be included in the development to equally consider, for example, the linguistic demands of their job. In Germany, a first step towards more detailed standards with the cooperation of interpreters was taken by developing and publishing minimum quality standards and minimum requirements for the qualification of interpreters in social work (Breitsprecher et al., 2020).

Additionally, it seems that there are many terms for the role of interpreter across countries, for example ‘interpreter’ but also ‘language mediator’, ‘language broker’ (Breitsprecher et al., 2020; Fennig & Denov, 2021; Mirza et al., 2017; Tipton & Furmanek, 2016), and in Germany, for example, ‘Dolmetscher*in’ (English: interpreter) or ‘Sprach- und Kulturmittler*in’ (English: language and cultural mediator). In terms of the interpreter’s role, some designations for interpreters take the concept of culture into account besides interpreting words in the triad. For instance, misunderstandings can arise in many discrepancies between the dominant local language and the preferred language of the client, e.g. misunderstandings regarding the mental healthcare system or interventions, or one party not understanding that some words or terms do not translate perfectly into the other language (Simms et al., 2021). The question arises about what can be expected from interpreters in terms of cultural and language interpretation, e.g. explaining different meanings of a word to the practitioner (Chang et al., 2021). In doing so, it is important to be aware of the danger of an overly emphasis on cultural over historical, social or economic aspects in order to avoid stigmatisation (Kluge & Kassim, 2006). Moreover, cultural mediation, in the sense of expanding an interpreter's range of tasks beyond translation, is critically discussed in translation studies today (Bahadır, 2020). When culture is perceived as something that can be explained by interpreters to practitioners, they thereby take over a kind of problem solving for practitioners (Felberg & Skaaden, 2012). This gains even more importance when interpreters share cultural commonalities with the client and even identify with the clients and their emotions (d'Ardenne et al., 2007; Lipton et al., 2002; Splevins et al., 2010). This may increase the risk

of overstepping professional boundaries and cause psychological distress related to role conflicts. In sum, a clarification of tasks concerning the concept of cultural mediating may help interpreters to find their role in the complex situation between two parties, and at the same time would emphasise the practitioners' responsibility.

Lastly, with regard to the results of **study 3**, it is important to consider the many work settings of interpreters and their specific requirements and tasks as defining interpreters' tasks may come with variations between work settings. For instance, studies in mental health settings often highlighted cultural competency or knowledge regarding the community of clients (e.g., Chang et al., 2021; Gartley & Due, 2017; Leanza et al., 2021). Interventions in these settings are additionally almost only based on language (Morina et al., 2010). Metaphors and culturally specific norms and values and how they are translated into language may therefore be specifically relevant for this context. In addition, background information about the community can be helpful for practitioners to understand the client's current living circumstances. This may be less important when interpreting in the context of administrative and legal work settings. In a curriculum for interpreting in asylum hearings moreover, knowledge of the legal framework within they interpret and coping strategies for ethical dilemmas were emphasised (Bergunde & Pöllabauer, 2019). Therefore, definitions may be refined with regard to the work setting and need to be further evaluated in research and practice. This could help to confirm and strengthen their necessity. As interpreters in the mental health and medical settings indicated fewer interpreting degrees (**study 3**), it may be especially important to create a formal framework regarding the interpreters' role in these work settings.

Enhanced collaboration between practitioners and interpreters. In **study 4**, three subscales (lack of devaluation by practitioner, perceived formal framework and emotional distress due to the role within the triad) were presented in the developed questionnaire which may contribute to emotional distress when there is a lack of transparency in the common work of practitioners and interpreters. For instance, practitioners did not seem to trust the interpreter's interpretation (Crezee et al., 2013; Doherty et al., 2010). Moreover, lack of transparency can happen when side conversations are not translated and

one person is accidentally left out (Bergunde & Pöllabauer, 2019). These dynamics may furthermore impact the level of trust, especially between practitioner and interpreter. The importance of building up trust within the triad has, however, been highlighted in **study 1** as well as further studies especially in the mental health setting (e.g., Simms et al., 2021; Tribe & Keefe, 2009). Though this often concerns the relationship of practitioners or interpreters with the clients, trust and transparency also are relevant for the relationship between practitioners and interpreters (Costa, 2016). For instance, misunderstandings due to dynamics within the triad can impact trust when dynamics shift in a counterproductive way, for example if the interpreter perceives the client is speaking directly to them and initiates a side conversation with the client. This dynamic is reflected in practitioners frequently reporting difficulties trusting the interpreters' translation and concerns around losing control of the session (e.g., Mirza et al., 2020; Tutani et al., 2018).

These dynamics need to be addressed in a mindful way by practitioners as control of the conversation lies in the responsibility of practitioners. Importantly, they must therefore actively and regularly engage in processes of clarification with interpreters as soon as they notice misunderstandings (Gryesten et al., 2021). This would make a problematic dynamic transparent and thus continuously inspire mutual trust in the respective responsibility of the interpreter and the practitioner.

Conclusion and future research. The current lack of standards in the preparation and collaborative work between practitioners and interpreters is reflected in the results of this dissertation. Previous recommendations may not be sufficient. Therefore, officially agreed standards on interpreting in healthcare and administrative settings are needed. The triadic work poses several dynamics which may cause distress among interpreters. In sum, there is a need for constant collaboration between practitioners and interpreters regarding the language-related processes in the triad.

Triangular approach. This dissertation focused on the perspective of interpreters. However, similar to previous qualitative studies (Dubus & LeBoeuf, 2019; Miller et al., 2005; Mirdal et al., 2012) a triangular research approach may be helpful for quantitative studies in order to include every perspective within a triad. With regard to the findings of **study 4**, this may be especially relevant when

conducting research on role conflicts in mental health settings. Investigating common factors such as the degree of trust or the perception of transparency between all parties within the triad in further studies may in particular enhance the comprehension of difficult dynamics within the triad. Moreover, a triangular approach may furthermore help to identify discrepancies and overlaps regarding the needs of all three parties. Thereby, the commonalities between client and interpreter (see section 6.6.4) would be considered and could be investigated in terms of risk and protective factors. Thus, it would empower clients and interpreters equally.

3.6.4 Traumatic experiences: The relevance for interpreting

The importance of interpreted traumatic content for interpreters working with refugees was highlighted by several findings in the present dissertation. First, the model of **study 1** indicated the need for a specific training in the mental health care setting due to the stressful content with which interpreters are confronted. This result is secondly complemented by **study 3** showing the highest amount of traumatic content interpreted in counselling and psychotherapy. Most significantly, **study 2** indicated traumatic content as a possible correlate for higher work-related exhaustion across the whole sample. Therefore, the results demonstrate the need for practical implications regarding coping with traumatic experiences of clients.

Handling interpretation of traumatic content. The relationship between traumatic experiences of clients and the wellbeing of professionals in contact with the traumatic experiences of their clients (such as psychotherapists, nurses or social workers) have often been investigated (Hensel et al., 2015; Roberts et al., 2021). These studies predominantly focused on secondary traumatic stress as an outcome and attempted to link various trauma content-related factors to secondary traumatic stress (e.g. the number of traumatised clients, caseload ratio). In the present online survey, the variable traumatic content only concentrated on the amount of interpreted traumatic content by measuring the average proportion of interpreted traumatic content and the results (**study 2**) therefore indicated that the quantity of traumatic content may be a risk factor for work-related exhaustion. In comparison, previous studies showed that specific traumatic events such as sexual abuse, torture and child suffering were

experienced as especially stressful to interpret (Rondon-Pari, 2022; Teegen & Gönnenwein, 2002). The measure of a trauma-related factor therefore represents various possibilities. It remains unclear for traumatic content whether quality (e.g. type of traumatic event), quantity (e.g. caseload of traumatised clients, volume of traumatic content) or a combination of both, has a long-term negative effect on the interpreter's general or work-related wellbeing.

Overall, due to the many traumatic experiences which refugees report, it is important to consider the variety of these factors regarding traumatic experiences of clients. As part of better support for interpreters, they should not only learn concrete coping strategies for acute situations, but also regularly reflect on their current case load (Crezee, 2015) and take this into account before taking on new assignments. In practice, however, this can only be an option for interpreters who are not financially dependent on interpreting or who have the possibility to choose their assignments themselves. Moreover, in light of the association between interpreted traumatic content and work-related exhaustion, trauma-informed interpreting gains even more importance and should be taken into account for future trainings.

Conclusion and future research. The online survey showed first indications that the amount of interpreted traumatic content may be a risk factor for higher levels of exhaustion. However, it is yet to be investigated in which way exactly the client's experiences can be associated with higher distress among interpreters. Importantly, regarding preparatory training, coping with highly emotional content needs further attention. Trauma-informed interpreting therefore plays a crucial role in the work with refugee clients and should be considered regarding training, especially with regard to the mental health setting (see **study 3**). Additionally, some interpreters themselves experienced potentially traumatic events, therefore this needs to be addressed in future studies and will be outlined in the next two sections.

Flight, traumatic experiences and PTSD among interpreters. The potentially traumatic experiences of interpreters working with refugees and their relationship to distress have been addressed in several qualitative and quantitative studies (e.g., Jeffery & Salt, 2022; Johnson et al., 2009; Teegen & Gönnenwein, 2002). In **study 2** as well as further studies (Kindermann et al., 2017; Teegen &

Gönnenwein, 2002), PTSD among interpreters has been investigated and the results in all three studies indicated a higher proportion of PTSD than a representative sample.

However, less attention has been paid to the relationship between potentially traumatic events interpreters have experienced and interpreters' general and work-related distress though this may be especially relevant in the context of working with refugee clients. In terms of a risk factor for interpreters' mental health, interpreters were asked about past refugee experiences in order to investigate an association with increased distress in **study 2**. However, previous studies (Kindermann et al., 2017; Mehus & Becher, 2016) as well as the present online survey did not indicate significant correlations between flight experiences or having experienced a traumatic event and psychological or work-related distress. A reason here might be the method of investigation of flight experiences in the present online survey. Participants in the online survey as well as in previous studies were asked whether someone fled or was forcibly displaced. However, it was unclear when the flight happened, whether someone experienced trauma before, while or after fleeing, and whether the trauma was processed or still contributed to current distress.

Furthermore, primarily qualitative studies, the impact of interpreted traumatic content on interpreters' wellbeing was described. For instance, the distress due the overlap of traumatic content and self-experienced trauma was often highlighted (Green et al., 2012; Simms et al., 2021; Splevins et al., 2010). However, in qualitative studies too, experiencing post-traumatic growth was described as a helpful experience in the work with refugee clients (Johnson et al., 2009; Splevins et al., 2010). Therefore, the relationship between work-related distress of interpreters and having fled, trauma-related disorders or post-traumatic growth is still unclear and needs to be investigated in future studies as this group of interpreters may represent a specifically vulnerable subgroup of interpreters. Moreover, unprocessed history of trauma may lead to mistakes while interpreting and cause further distress (Kletečka-Pulker et al., 2019).

Commonalities with clients. The relevance of flight and traumatic experiences of interpreters within their work with refugee clients can even be seen in a broader context. **Study 1** summarises among

other things that interpreters often find commonalities with the clients stressful and helpful at the same time, e.g. having the same cultural background or being part of the same community (Celik & Cheesman, 2018; Green et al., 2012; Williams, 2004; Williams, 2005). The studies indicated that it is difficult for interpreters to distance themselves emotionally in these situations (e.g., Crezee et al., 2013; Doherty et al., 2010; Jeffery & Salt, 2022). For instance, interpreters with a migration background seemed to understand the needs of refugee clients faster due their own experiences (Butler, 2008; Robertson, 2014). Similarly, they may experience the needs of refugee clients as more urgent and pressing because they can relate to the situation in general. In consequence, lack of emotional boundaries between interpreter and client as it was presented in **study 4** may be higher among interpreters in presence of commonalities with the clients.

So far, qualitative studies applied different approaches when investigating interpreters with shared cultural background or migration experiences to the client. Previous studies investigated either an ethnic group of interpreters (e.g., Kurdish interpreters) or focused on interpreters who have been refugees themselves and have experienced potentially traumatic events (Green et al., 2012; Jeffery & Salt, 2022; Johnson et al., 2009). A more recent study showed first indications that immigrant interpreters (not born in the country of the study) have a significant higher risk for compassion fatigue than non-immigrant interpreters (Rondon-Pari, 2022).

Overall, commonalities with refugee clients may include more facets than interpreters sharing similar traumatic experiences as refugee clients. Whether having a migration background, sharing the same language, history or culture or living in the same community as the client represents a protective or risk factor remains to be investigated. Moreover, these variables should be considered regarding the relationship with psychological distress among interpreters. The risk of overstepping one's boundaries would then possibly be greater, which means that support structures such as learning coping strategies or collegial exchange are urgently needed – especially for interpreters sharing commonalities with clients.

3.6.5 Necessity of training and opportunities through joint training

The previous sections have highlighted relevant factors of working conditions, work within the triad and the specifics of working with traumatised refugees that are related to psychological stress and work-related exhaustion. Some results of this dissertation here point to the need to improve collaboration between interpreters and practitioners. First, lack of recognition was associated with higher client-related exhaustion (**study 2**). Second, the results of **study 1 and 4** furthermore indicated higher distress when there are difficult dynamics within the triad, for example feeling of being degraded by the practitioner or a lack of a formal framework. Overall, the online survey showed that most interpreters had participated in training for the work with refugees and only small proportion of interpreters indicated having a degree in interpreting (**study 2**). However, the effects of the work-related circumstances may be prevented or buffered through preparatory or regular training such as learning trauma-informed interpreting. In light of the study results, training comprising both parties – practitioners and interpreters – could mitigate difficulties (e.g. clarification of roles) and enhance collaboration.

Advantages of joint training. Training for practitioners regarding the work with interpreters has been recommended in numerous studies (Chang et al., 2021; Crezee et al., 2020; Fennig & Denov, 2021), as many studies indicated misunderstandings on behalf of practitioners regarding the interpreter's role (Crezee et al., 2013; Holmgren et al., 2003; Lai & Costello, 2021). Furthermore, the importance of working together as a team was highlighted in section *6.6.2*.

One approach for enhancing the collaboration between both professions may be joint training. The advantages of joint training have been highlighted in previous literature and include considering another's perspective, clarifying roles and responsibilities, or discussing difficult situations (Crezee et al., 2020; Leanza et al., 2021). For instance, joint training was conducted in a study with both professions within the triad (Krystallidou et al., 2018), in this case - medical and translation students - and showed promising results regarding, for example, the clarification of the interpreter's role and staying within the boundaries of this role. A more recent training was carried out with newly acquired interpreters and clinical practitioners in Canada. Results showed that discussions including both parties were appreciated

by practitioners as they gained insight into interpreters' opinions. Additionally, over the course of the joint training interpreters increasingly participated in discussions with practitioners which may have reflected a stronger integration into the team (Leanza et al., 2021). Therefore, with regard to the results in the present dissertation, in the next paragraphs possible parts of joint training with practitioners and interpreters are described.

Dealing with emotionally burdening content. Studies 1, 2 and 3 pointed to heightened levels of distress among interpreters, **studies 2 and 3** furthermore highlighted the relevance of the traumatic content during assignments, specifically in mental health settings. Consequently, joint training could focus on conveying the concept of mental hygiene and discussing adaptive coping strategies in general, as already suggested for training exclusively with interpreters (Berthold & Fischman, 2014; Crezee, 2015; González Campanella, 2022). Coping strategies may include learning to recognize personal signs of distress, or practicing concepts of mindfulness such as breathing techniques (Crezee, 2015; González Campanella, 2022). Some professions such as psychotherapists may be more familiar with personal coping strategies and self-reflection. However, joint training may give the opportunities to allow the two parties to exchange their personal strategies with regard to individual and common coping strategies in stressful triadic situations and may furthermore broaden the view of both perspectives (table 6.1).

Table 3.1

Overview of possible exercises and learning goals in joint training

	Interpreters	Practitioners	Aims
1) Dealing with emotionally burdening content	- Developing, training and discussion of coping strategies for interpreting highly emotional content, e.g. practicing mindfulness, self-reflection - Train briefings and debriefings of interpreters with regard to emotional and traumatic content, e.g. preparing an interpreter for a specific case, a trauma-focused session, debrief a very distressed interpreter who related to the client because of similar stories		- Buffer and prevent acute and long-term distress in the daily work - Raise awareness of interpreters' working situation and necessary work processes

2)	Reflection of role conflicts	-	Exchange between interpreters regarding one's own and given boundaries	-	Role play with taking over the interpreters' role	- Raise awareness of interplay between translation processes and role conflicts
3)	Training collaboration within the triad	Role plays: - interpreter specific situations, e.g. sensitive topics, difficulties regarding the verbatim translation - practitioner specific situations, e.g. feeling left out in not translated side conversations, clarifying language related misunderstandings				- Enhance processes of transparency - Enhance feeling of equality between both professions

In addition, the importance of briefings and debriefings in general (González Campanella, 2022; Lai & Costello, 2021) but also in certain working environments, such as trauma-focused psychotherapy (d'Ardenne et al., 2007) or asylum hearings (Bergunde & Pöllabauer, 2019), is repeatedly emphasised by researchers. Therefore, practitioners and interpreters may train together on how to conduct these with special regard to emotionally distressing situations during appointments. Through joint training, practitioners may therefore be encouraged to integrate these processes into their daily work with interpreters.

Reflection of role conflicts. Study 4 showed the various sources of role conflicts and challenges within the triad such as misunderstandings between interpreters and practitioners. Discussing methods of maintaining one's own and the given boundaries is furthermore an important issue that was found in **study 1**. Different situations became clear, e.g. with regard to the interpreters' intention to actively support the clients emotionally in the face of high psychological stress (e.g. through physical comforting) (Green et al., 2012; Resera et al., 2015). Therefore, practitioners and interpreters may discuss the clarification of roles and responsibilities in separate groups as it is proposed in a previous training (Leanza et al., 2021). To further enhance the comprehension of the interpreter's role, practitioners may incorporate the role of an interpreter themselves to experience the situation. This may help and enhance the awareness of the many tasks which interpreters have to perform: listening, analysing the message, converting the message, delivering the message (Bancroft et al., 2016).

Training collaboration within the triad. Lastly, **study 2** demonstrated the association between exhaustion and a lack of recognition. Furthermore, difficult dynamics within the triad were linked to psychological distress among interpreters (**study 4**). Therefore, practitioners and interpreters may practice various situations together using role plays. This may ideally enhance mutual recognition and appreciation and improve the handling of misunderstandings and role conflicts. For instance, difficult situations may be trained such as speaking about suicidality and coping with language-related misunderstandings or highly emotional situations with clients. Overall, this part should reinforce the joint work and exchange between the two parties. Ideally, interpreters and practitioners would work on how to keep a regular flow of transparent exchange between each other.

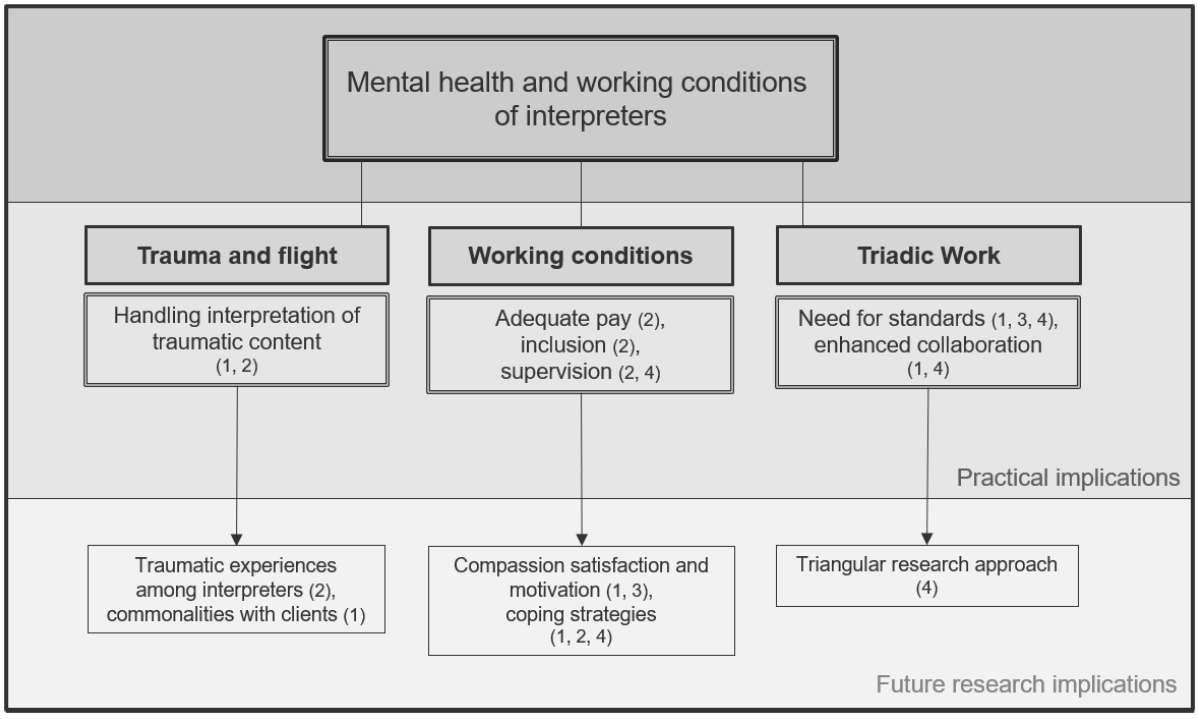
In sum, joint training presents an opportunity to enhance and normalise the work between practitioners and interpreters. Consequently, it may help to prepare lay interpreters for the work. In general, training may be especially important for interpreters who do not have a professional degree and who are deployed at shorter notice. Furthermore, mental health settings may put interpreters specifically at risk of developing symptoms of distress and exhaustion due to the sensitive and emotionally intense nature of topics handled. Therefore, training should be developed and evaluated with special attention to the mental health settings in order to establish a basic foundation. Overall, training for interpreters (and practitioners) requires evaluation in order to prove their quality regarding the general and work-related wellbeing and satisfaction of interpreters (and practitioners), daily work processes, and regarding the effectiveness of treatments.

3.6.6 Conclusion

Interpreters represent an essential professional group in the work with refugee clients that has received little attention so far. The results of the present work therefore contribute to a better understanding of the complex situation of interpreters within the health and administrative system. The presented online survey furthermore may help to raise awareness of interpreters' wellbeing, and therefore highlight the need for more support structures (e.g. independent paid supervision) among interpreters. The findings of this dissertation resulted in three main areas of practical implications and future research (figure 6.2).

Figure 3.2

Implications for research and practice regarding the mental health of interpreters



Note. Arabic numerals refer to the study on whose results the implication is based.

First, the significance of various work-related factors for the mental health of interpreters were demonstrated. The findings suggest that there is an urgent need for a more binding support structure on the part of employers. Financial arrangements need to be developed to cover spoken language interpreting, at least in the health sector. In addition, regular supervision services, employer peer-to-peer

support groups and opportunities for regular workshops would need to be created. Future research is needed to prevent turnover intentions. Therefore, especially research on motivational aspects and coping strategies could help to further develop prevention strategies.

Second, a commonly agreed definition for interpreters, which must also achieve the status of a general standard is urgently necessary. Additionally, collaboration between practitioners and interpreters needs to be strengthened. In general, interpreters who are independently contracted, may in particular benefit from stronger collaborations, as they usually make up the majority of the interpreter pool and often have little contact with other professions in a team. As the dynamics within triadic work are associated with different difficulties and complex situations, a triangular research approach can help to shed light on all three perspectives in order to achieve a better understanding of the specific demands and triadic relationship problems.

Lastly, the work of interpreters with refugees often takes place in the context of highly stressful trauma and flight experiences. The trauma-related content which is interpreted may be a relevant risk factor for interpreters' mental health. Therefore, support of interpreters for handling the work with traumatised refugees is necessary and may be enhanced by teaching trauma-informed interpreting. Additionally, the possible multi-faceted commonalities some interpreters share with the clients and how they are associated with interpreters' distress need to be researched in future studies in order to support this subgroup of interpreters.

Overall, literature indicates that interpreters working with refugees may be a very heterogeneous group of people in terms of financial dependency on interpreting, their commitment, training and personal background. A better understanding of interpreters and their needs could help create a better picture of lay interpreters as a professional group, identify possible links with stress and job satisfaction, and ideally develop prevention strategies. Joint training with practitioners and interpreters here may pose one opportunity to emphasise the collaboration between both parties within the triad. In addition, it may help to empower specifically lay interpreters in relation to their own professional boundaries and

when working with already established professions. In sum, the quality of the services and support provided for refugee clients depends heavily on interpreters and their work. The needs of this professional group must therefore be taken into account to ensure a healthy environment and effective treatment of refugee clients. This would also prevent errors in the health system and thus save costs and unnecessary treatment.

CHAPTER 7

7.1 References for Chapter 1-6

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7.2 Appendix

The following materials supplement the doctoral thesis:

Chapter 2 – Appendix A

Questionnaires applied in quantitative studies

Chapter 3 – Appendix B

Countries of origin (n = 164)
Frequencies of experienced, witnessed and trauma heard of according to the Harvard Trauma Questionnaire (n = 83)

Chapter 5 – Appendix C

Original questionnaire (German version)
Factor loadings for version with all 27 items
Inter-item correlations
Final version (German)

Appendix A

Questionnaires applied in quantitative studies

Reference	questionnaire	authors (year)	construct
Birck (2001)	Traumatic Stress Institute Belief Scale	Pearlman (2000)	Disruptions in the areas of safety, trust, esteem, intimacy and control
	Compassion Satisfaction/Fatigue Self Test	Stamm (2000)	Compassion fatigue and satisfaction, burnout
Denkinger et al. (2018)	Questionnaire for Secondary Traumatization (FST)	Daniels (2006)	Secondary traumatic stress
	Relationship Questionnaire	O'Connor, Elklit (2008)	Adult attachment styles
	distressing factors and resources	developed for reported study	Distressing factors: e.g., Reports on beneficiaries' traumatic experiences, Witnessing the suffering of beneficiaries Resources: e.g., Appreciation from beneficiaries, Supervision
Kindermann et al. (2017)	Essen Trauma Inventory	Tagay, Stoelk, Möllering, Erim, Senf (2004)	Trauma exposure and PTSD symptoms and diagnosis
	Questionnaire for Secondary Traumatization (FST)	Daniels (2006)	Secondary traumatic stress
	depression module of the Patient Health Questionnaire (PHQ): (PHQ-9)	Löwe, Spitzer, Zipfel, Herzog (2002)	Severity of depressive symptoms
	Anxiety module of the PHQ: (GAD-7)	Löwe, Decker, Müller, Brähler, Schellberg, Herzog, Herzberg (2008)	Symptoms of generalised anxiety
	Perceived Stress Scale (PSS-10)	Cohen, Kamarck, Mermelstein (1983)	Perceived stress level
	Sense of Coherence Scale (SOC-29)	Abel, Kohlmann, Noack, Noack (1995)	Sense of coherence
	Social Support Questionnaire (F-SozU K-14)	Fydrich, Sommer, Brähler (2007)	Perceived and anticipated support from one's environment

	Relationship Questionnaire (RQ)	Asendorpf, Banse, Wilpers, Neyer (1997)	Attachment style
Shlesinger (2005)	Professional Quality of Life CSF-R-III	Stamm (2003)	Compassion fatigue and satisfaction
	Trauma and Attachment Belief Scale (TABS)	Pearlman (2003)	Disrupted cognitive schemas
Teegen & Gönnenwein (2002)	TLEQ	Zumbeck, Teegen (1997)	Trauma exposure
	PCL-C	Teegen (1997)	PTSD symptoms and diagnosis
	Stress because of interpreter-related job strain	developed for reported study	e.g., Interpreting for emotionally stressed refugees, not being allowed to intervene in the process of therapy or hearing
	Interpreter-related trauma exposure	developed for reported study	e.g., Reports about war-related trauma, rape, torture
	ADS-K	Hautzinger, Bailer (1992)	Depressive symptoms
	FAPK-3	Koch, 1996	Scale: emotional communication ability
	Coping strategies for specific endangered occupational groups	Teegen u. a., (1997, 2000)	e.g., Social support, sport, hobbies
Wichmann et al. (2018)	Questionnaire for Secondary Traumatization (FST)	Daniels (2006)	Secondary traumatic stress

Appendix B

Countries of origin (n = 164)

Country	**n**
Germany	34
Iran	18
Syria	15
Russia	9
Turkey	9
Albania	7
Afghanistan	6
Egypt	5
France	5
Iraq	5
Vietnam	5
Kazakhstan	4

Bosnia-Herzegovina	3
Kosovo	3
Portugal	3
Ukraine	3
Other countries	31

Note. If $n < 3$, country was classified in other countries; other countries: with $n = 2$: Eritrea, Pakistan, Sri Lanka; with $n = 1$: Argentina, Azerbaijan, Benin, Cameroon, China, Colombia, Croatia, Ethiopia, Georgia, Israel, Jordan, Kyrgyzstan, Lebanon, Libya, Lithuania, Morocco, Rumania, Serbia, South Korea, Togo, Tunisia, Turkmenistan, Uzbekistan, UK

Frequencies of experienced, witnessed and trauma heard of according to the Harvard Trauma Questionnaire (n = 83)

Event	Experienced n (%)	Witnessed n (%)	Heard of n (%)
Lack of food	19 (23%)	13 (16%	39 (47%)
Health	10 (12%)	21 (25%)	39 (47%)
Lack of shelter	7 (8%)	25 (30%)	34 (41%)
Imprisonment	10 (12%)	15 (18%)	46 (55%)
Injury	18 (22%)	24 (29%)	37 (45%)
Combat	20 (24%)	20 (24%)	43 (52%)
Brainwash	11 (13%)	13 (16%)	26 (31%)
Rape	21 (25%)	12 (14%)	50 (60%)
Forced Isolation	8 (10%)	9 (11%)	31 (37%)
Being close to death	22 (27%)	16 (19%)	32 (39%)
Forced separation	26 (31%)	15 (19%)	36 (43%)
Murder	18 (22%)	6 (7%)	34 (41%)
Unnatural death	25 (30%)	11 (13%)	32 (39%)
Murder of other person	8 (10%)	9 (11%)	49 (59%)
Abduction	8 (10%)	7 (8%)	40 (48%)
Torture	9 (11%)	9 (11%)	48 (58%)

Appendix C

German Role Conflict questionnaire (original version)

Item 1	Ich habe das Bedürfnis, Klient*innen während des Termins zu beruhigen.
Item 2	Ich muss während der Termine mit Klient*innen weinen.

Item 3	Ich muss nach den Terminen lange an die Klient*innen denken.
Item 4	Ich fühle mich nach den Terminen emotional belastet.
Item 5	Mir fällt es schwer, nach den Terminen von den Klient*innen gedanklich Abstand zu nehmen.
Item 6	Ich mache mir Sorgen, dass ich Klient*innen außerhalb des Termins treffen könnte.
Item 7	Es fällt mir schwer, mich während des Termins emotional von Klient*innen abzugrenzen.
Item 8	Es fällt mir schwer, mich nach dem Termin emotional von Klient*innen abzugrenzen.
Item 9	Ich werde nicht als gleichwertige*r Kommunikationspartner*in von Auftraggebenden behandelt.
Item 10	Ich habe den Eindruck, dass Auftraggebende meine Arbeit unfair bewerten.
Item 11	Ich fühle mich von Auftraggebenden nicht wertgeschätzt.
Item 12	Ich habe den Eindruck, Auftraggebende sprechen in einem herabwürdigenden Ton mit mir.
Item 13	Ich habe den Eindruck, Auftraggebende sehen mich nur als technisches Werkzeug.
Item 14	Ich habe den Eindruck, Auftraggebende führen Missverständnisse auf schlechtes Dolmetschen zurück.
Item 15	Meine neutrale Rolle als Dolmetschende*r ist mit den kulturellen Werten der Klient*innen vereinbar.
Item 16	Ich habe begrenzte Handlungsmöglichkeiten als Dolmetschende*r.
Item 17	Meine Rolle als Dolmetschende*r ist klar durch Auftraggebende definiert.
Item 18	Meine Aufgaben als Dolmetschende*r sind klar von Auftraggebenden vorgegeben.
Item 19	Ich weiß, was Klient*innen von mir als Dolmetschende*r erwarten.
Item 20	Die Regeln zu meiner Dolmetschendentätigkeit sind mir von Auftraggebenden vermittelt worden.
Item 21	Klient*innen verstehen meine neutrale Rolle.
Item 22	Auftraggebende verstehen meine neutrale Rolle.
Item 23	Klient*innen verstehen, dass ich eine professionelle Distanz zu ihnen einhalten muss.
Item 24	Ich habe Sorge, die Beziehung zwischen Klient*innen und Auftraggebenden zu stören.
Item 25	Ich habe Sorge, ein Hindernis für die Beziehung zwischen Klient*innen und Auftraggebenden zu sein.
Item 26	Ich habe Sorge, dass Klient*innen eine engere Beziehung zu mir haben als zu Auftraggebenden.
Item 27	Ich bin belastet, wenn es widersprüchliche Bedürfnisse von Klient*innen und Auftraggebenden während der Termine gibt.

Exploratory factor analysis for the original version of the questionnaire (27 items)

	Item description	Mean	SD	Factor loadings			
				F1	F2	F3	F4
Factor 1: Lack of emotional boundaries between interpreter and client							
Item 1	I feel the need to calm clients down during the appointment.	3.92	1.79	**.37**	.24	.20	.03
Item 2	I have to cry during appointments with clients.	1.83	1.27	**.64**	.14	.05	-.04
Item 3	I have to think about the clients for a long time after the appointments.	3.24	1.69	**.83**	.07	-.01	-.02
Item 4	I feel emotionally distressed after the appointments.	3.01	1.57	**.82**	.13	.07	-.03
Item 5	It is difficult for me to distance myself mentally from the clients after the appointments.	2.57	1.56	**.97**	.00	-.08	-.09
Item 6	I am worried that I may encounter clients outside the appointment.	2.15	1.64	**.36**	.12	.10	**.31**
Item 7	It is difficult for me to set emotional boundaries between myself and the clients during the appointment.	2.46	1.55	**.84**	-.14	-.02	.19
Item 8	It is difficult for me to set emotional boundaries between myself and the clients after the appointment.	2.23	1.40	**.86**	-.04	-.01	.13
Factor 2: Devaluation by practitioners							
Item 9	I am not treated as an equal communication partner by practitioners.	2.19	1.68	.02	**.68**	.07	.10
Item 10	I have the impression that practitioners evaluate my work unfairly.	1.69	1.32	-.04	**.92**	.01	.00
Item 11	I do not feel appreciated by practitioners.	1.71	1.42	-.05	**.96**	.05	-.02
Item 12	I have the impression that practitioners speak to me in a derogatory tone.	1.49	1.04	.06	**.85**	-.09	.06
Item 13	I have the impression that practitioners only see me as a technical tool.	2.01	1.56	.06	**.84**	.03	-.04
Item 14	I have the impression that practitioners attribute misunderstandings to poor interpreting.	1.91	1.48	.13	**.69**	-.19	.00
Factor 3: Perceived formal framework of the interpreter's role							
Item 15	My neutral role as an interpreter is compatible with the client's cultural values.	4.01	2.13	.12	-.05	**.60**	-.12
Item 16	As an interpreter, I have limited scope to act.	4.24	2.02	.16	.21	**.30**	-.10
Item 17	My role as an interpreter is clearly defined by practitioners.	4.9	1.84	-.09	.03	**.83**	.17
Item 18	My job as an interpreter is clearly defined in advance by practitioners.	4.93	1.72	-.09	-.04	**.82**	.26

Item 19	I know what clients expect from me as an interpreter.	5.1	1.67	-.15	.21	**.49**	-.22
Item 20	The rules regarding my job as an interpreter were conveyed to me by practitioners.	4.51	2.07	.09	-.11	**.49**	-.05
Item 21	Clients understand my neutral role.	4.15	1.71	.05	-.08	**.60**	**-.46**
Item 22	Practitioners understand my neutral role.	5.46	1.58	.06	**-.37**	**.46**	-.12
Item 23	Clients understand that I have to keep a professional distance from them.	4.15	1.75	.10	-.12	**.56**	**-.50**
Factor 4: Emotional distress due to the role within the triad							
Item 24	I am worried that I disrupt the relationship between clients and practitioners.	2.05	1.35	.10	.03	.05	**.89**
Item 25	I am worried that I am an obstacle to the relationship between clients and practitioners.	2.03	1.45	.11	.03	.09	**.86**
Item 26	I am worried that clients have a closer relationship with me than with practitioners.	2.85	1.8	.17	**.30**	.07	**.50**
Item 27	I feel distressed when clients and practitioners have conflicting needs during the appointments.	3.04	1.84	**.32**	.20	.02	**.46**

Note. N = 164. Factors were extracted using a WLSMV estimator with oblique rotation; factor loadings ≥ .30 are printed in bold.

Bivariate correlations between all items of the final version of the RoCo

Item No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
Factor 1																						
Item 1	-																					
Item 2	.47	-																				
Item 3	.49	.55	-																			
Item 4	.40	.61	.73	-																		
Item 5	.38	.66	.83	.81	-																	
Item 6	.38	.56	.64	.67	.76	-																
Item 7	.30	.55	.71	.74	.80	.85	-															
Factor 2																						
Item 8	.26	.29	.29	.30	.25	.25	.29	-														
Item 9	.35	.26	.23	.38	.22	.17	.30	.69	-													
Item 10	.33	.31	.26	.33	.22	.14	.28	.64	.86	-												
Item 11	.29	.39	.31	.39	.35	.25	.30	.64	.80	.84	-											
Item 12	.27	.40	.34	.34	.30	.26	.32	.58	.77	.77	.78	-										
Item 13	.27	.28	.36	.33	.34	.25	.32	.50	.65	.68	.76	.67	-									
Factor 3																						
Item 14	.13	.03	-.06	.02	-.05	.04	-.01	-.14	-.11	-.15	-.14	-.17	-.29	-								
Item 15	.13	-.05	-.03	.05	-.07	-.02	.01	.04	-.09	-.09	-.18	-.03	-.28	.48	-							
Item 16	.20	-.01	.09	.04	-.10	-.04	-.03	-.02	-.14	-.12	-.22	-.05	-.24	.39	.75	-						
Item 17	.03	-.12	-.12	-.13	-.22	-.20	-.11	.02	.01	.03	-.14	.04	-.14	.31	.41	.42	-					
Item 18	.04	.00	.06	.09	-.01	-.06	.00	-.12	-.18	-.09	-.13	-.13	-.23	.23	.36	.49	.23	-				
Item 19	-.15	-.14	-.25	-.20	-.21	-.22	-.25	-.22	-.28	-.21	-.28	-.28	-.28	.48	.29	.15	.32	.36	-			
Factor 4																						
Item 20	.24	.33	.37	.36	.39	.44	.44	.38	.31	.33	.43	.27	.29	-.10	-.04	.01	-.23	-.08	-.28	-		
Item 21	.32	.44	.34	.36	.38	.46	.41	.30	.32	.32	.45	.33	.29	.01	.04	.08	-.27	-.11	-.25	.89	-	
Item 22	.21	.28	.39	.40	.36	.42	.38	.42	.43	.47	.47	.40	.42	-.06	.01	.02	-.14	-.11	-.22	.61	.55	-
Item 23	.27	.29	.47	.52	.48	.57	.56	.32	.38	.35	.44	.38	.47	.00	.02	-.02	-.13	-.10	-.27	.60	.55	.69

Fragebogen zu Rollenkonflikten

Nachfolgend finden Sie Einstellungen und Überzeugungen, die manche Dolmetschende im Rahmen der Tätigkeit haben. Bitte lesen Sie jede Aussage und schätzen Sie ein, wie stark dies auf Ihre Arbeit (z.B. im Bereich Psychotherapie) zutrifft. Hierbei gibt es keine richtigen oder falschen Antworten, allein Ihre Wahrnehmung ist wichtig.

*Das Wort „Auftraggebende" kann durch einen Platzhalter ersetzt werden, wenn der Fragebogen für ein bestimmtes Arbeitssetting ausgefüllt wird (z.B. im Arbeitssetting Psychotherapie „Psychotherapeut*innen" statt „Auftraggebende").*

1 Trifft gar nicht zu	2	3	4 Trifft teilweise zu	5	6	7 Trifft vollkommen zu

(Mangelnde) emotionale Abgrenzung							
1. Ich habe das Bedürfnis, Klient*innen während des Termins zu beruhigen.	1	2	3	4	5	6	7
2. Ich muss während der Termine mit Klient*innen weinen.							
3. Ich muss nach den Terminen lange an die Klient*innen denken.							
4. Ich fühle mich nach den Terminen emotional belastet.							
5. Mir fällt es schwer, nach den Terminen von den Klient*innen gedanklich Abstand zu nehmen.							
6. Es fällt mir schwer, mich während des Termins emotional von Klient*innen abzugrenzen.							
7. Es fällt mir schwer, mich nach dem Termin emotional von Klient*innen abzugrenzen.							
Abwertung durch Auftraggebende							
8. Ich werde nicht als gleichwertige*r Kommunikationspartner*in von Auftraggebenden behandelt.							

9. Ich habe den Eindruck, dass Auftraggebende meine Arbeit unfair bewerten.							
10. Ich fühle mich von Auftraggebenden nicht wertgeschätzt.							
11. Ich habe den Eindruck, Auftraggebende sprechen in einem herabwürdigenden Ton mit mir.							
12. Ich habe den Eindruck, Auftraggebende sehen mich nur als technisches Werkzeug.							
13. Ich habe den Eindruck, Auftraggebende führen Missverständnisse auf schlechtes Dolmetschen zurück.							
Wahrgenommener formaler Rahmen der Dolmetschendenrolle							
14. Meine neutrale Rolle als Dolmetschende*r ist mit den kulturellen Werten der Klient*innen vereinbar.							
15. Meine Rolle als Dolmetschende*r ist klar durch Auftraggebende definiert.							
16. Meine Aufgaben als Dolmetschende*r sind klar von Auftraggebenden vorgegeben.							
17. Ich weiß, was Klient*innen von mir als Dolmetschende*r erwarten.							
18. Die Regeln zu meiner Dolmetschendentätigkeit sind mir von Auftraggebenden vermittelt worden.							
19. Klient*innen verstehen meine neutrale Rolle.							
Emotionale Belastung durch die Rolle innerhalb der Triade							
20. Ich habe Sorge, die Beziehung zwischen Klient*innen und Auftraggebenden zu stören.							
21. Ich habe Sorge, ein Hindernis für die Beziehung zwischen Klient*innen und Auftraggebenden zu sein.							
22. Ich habe Sorge, dass Klient*innen eine engere Beziehung zu mir haben als zu Auftraggebenden.							
23. Ich bin belastet, wenn es widersprüchliche Bedürfnisse von Klient*innen und Auftraggebenden während der Termine gibt.							

7.3 List of publications

Geiling, A., Nohr, L., Meyer, C., Böttche, M., Knaevelsrud, C., & Stammel, N. (submitted). Development and validation of a questionnaire to assess role conflicts among interpreters working with refugee clients: The Role Conflicts Questionnaire (RoCo). *International Journal of Public Health*.

Häring, S., Schulze, L., **Geiling, A.**, Meyer, C., Klusmann, H., Schumacher, S., Knaevelsrud, C., & Engel, S. (under review). Higher risk – less data: Challenges to sex and gender considerations in trauma research. *Clinical Psychology Review*.

Geiling, A., Meyer, C., Böttche, M., Knaevelsrud, C., & Stammel, N. (in press). Unterstützungsangebote für Dolmetschende in der Arbeit mit Geflüchteten: Status quo und Bedarf. *Verhaltenstherapie & psychosoziale Praxis*.

Liedl, A., **Geiling, A.**, Dumser, B., Waiblinger, T., Böttche, M., Nesterko, Y., Koch, T.*, & Stammel, N.* (in press). Aufnahmeprozesse und Klient*innen der beiden größten Behandlungszentren für Geflüchtete in Deutschland - Refugio München und Zentrum ÜBERLEBEN Berlin. *Verhaltenstherapie & psychosoziale Praxis*.

*shared last authorship

Geiling, A., Böttche, M., Knaevelsrud, C. & Stammel, N. (2022). A comparison of interpreters' wellbeing and work-related characteristics in the care of refugees across different work settings. *BMC Public Health, 22*(1), 1635. https://doi.org/10.1186/s12889-022-14034-7

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7.4 Eigenständigkeitserklärung

Hiermit versichere ich, dass ich die vorgelegte Arbeit selbstständig verfasst und keine anderen als die angegebenen Hilfsmittel verwendet habe. Die Arbeit ist in keinem früheren Promotionsverfahren angenommen oder abgelehnt worden.

Berlin, Februar, 2023

Angelika Geiling