An exploration of burnout and secondary trauma reported by professionals and volunteers working with forced migrants.

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The Impact of Working with Forced Migrants

Thesis Portfolio Abstract

Due to increases in conflict worldwide, the number of forcibly displaced people, commonly termed refugees, has increased substantially. As a result of the potentially traumatic, lengthy and politically strenuous nature of seeking refuge and the atrocities this population may have experienced pre-flight, refugees often report adverse effects on their mental and psychosocial wellbeing. This is evidenced in the prevalence of post-traumatic stress disorder, depression and anxiety disorders reported by refugees, which were found to vary from 3-88%, 5-80% and 1-81% respectively. Evidence suggests that providing support to highly traumatised individuals, such as refugees, can also have psychological effects on workers. This includes reported experiences of compassion fatigue, such as burnout and secondary trauma.

This thesis portfolio explores the psychological impact of working with refugees in a supportive capacity, with a focus on burnout and secondary trauma. A systematic review is presented pooling the prevalence of high burnout (36.5%) and moderate to severe secondary trauma (45.7%) in those working with forcibly displaced people internationally, on a voluntary and professional basis. An empirical paper is presented focusing on the local context of refugee workers within the UK. Levels of burnout (13.7%), secondary trauma (54.3%), clinical anxiety (9.9%) and clinical depression (13.8%) were reported by a national sample of volunteers, volunteers typically being used in the support of refugees in the UK. Increased time spent volunteering was observed to be associated with higher levels of burnout and secondary trauma. Volunteers identifying as refugees were found to have higher levels of depression and secondary trauma than volunteers with no history of seeking refuge. Those with high supervision satisfaction reported significantly less secondary
trauma, whereas no association was found between time spent in supervision and
burnout; and a positive association was found between time spent in supervision and
secondary trauma. These findings are discussed in relation to the current research
literature and potential clinical application.
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Chapter One

Introduction to The Thesis Portfolio: The Refugee Context

Word count: 1310

As of the end of 2018, 70.8 million individuals had been forcibly displaced worldwide as a result of persecution, conflict, violence, or human rights violations (UNHCR, 2019). The term forcibly displaced refers to: “…those who have left their usual place of residence in order to escape from persecution, armed conflict, or human rights violations,” (Crisp, 2010). The descriptor refugee refers to a subsample of forcibly displaced people who have been forced to flee their country of origin, defined as: “…someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion,” (UNHCR, 1967).

The 1948 universal declaration of human rights states that: “Everyone has the right to seek and to enjoy in other countries asylum from persecution,” (UN, 2015). The 1951 Refugee Convention (UNHCR, 1951), currently ratified by 145 state parties, further specifies the parameters of this right. Despite these guidelines, the response of countries towards refugees has been inconsistent, with the wealthiest East Asian Nations, South Korea and Japan accepting only several hundred refugees (Biedermann, 2017). For example, out of the 10,901 applications for asylum made to Japan, only 125 (1.1%) were granted refugee status (Ministry of Justice, 2017). It has been estimated that 1.4 million refugees were in need of resettlement, however, in 2018 only 81,300 places were provided by 29 host countries (UNHCR, 2019).
Despite human rights laws (UN, 2015) and agreements made as part of the 1951 Refugee Convention (UNHCR, 1967), some countries actively seek to prevent refugees from seeking asylum within their borders, for example, by capturing, disabling or disposing of sea vessels suspected of being used for human trafficking (Zieck, 2018). These variable global responses make seeking refuge an increasingly complex, dangerous and difficult undertaking.

The Journey

In addition to the political currents that refugees negotiate, the journeys that they face are often dangerous (Bouhenia et al., 2017; Dolma, Singh, Lohfeld, Orbinski, & Mills, 2006; Farhat et al., 2018; Gerard & Pickering, 2013; Tello, Castellon, Aguilar, & Sawyer, 2017) and can include experiences of torture, bombing of their houses, losing property, being separated from family members and children, being shot at (Farhat et al., 2018), beatings, forced detention (Bouhenia et al., 2017; Farhat et al., 2018; Gerard & Pickering, 2013), exposure to tear gas (Bouhenia et al., 2017) and rape (Gerard & Pickering, 2013). Journey lengths can also vary from 20 days to 741, with access to medical care varying depending on location (Bouhenia et al., 2017), adding additional complications to the dangerous process of seeking refuge.

Once in the country of destination, the process of seeking asylum in host countries can be difficult to access (Bouhenia et al., 2017; Farhat et al., 2018). “By the end of 2018, about 3.5 million people were awaiting a decision on their application for asylum,” (UNHCR, 2019). This wait has been reported to leave refugees feeling uncertain about their futures (Tello et al., 2017), which in turn, has been reported to have adverse effects on refugees’ mental and psychosocial well-
being (Farhat et al., 2018). All of these elements impact on refugees’ wellbeing and subsequent mental state when arriving in host countries.

**The Impact on Those Working with Refugees**

The evidence suggests that people working with refugees in a supportive capacity also experience psychological effects, such as burnout (Chatzea, Sifaki-Pistolla, Vlachaki, Melidoniotis, & Pistolla, 2018; Guhan & Liebling-Kalifani, 2011; Kjellenberg, Nilsson, Daukantaitė, & Cardeña, 2014; Mehus & Becher, 2016; Posselt, Deans, Baker, & Proctor, 2019; Raynor & Hicks, 2018) and secondary trauma (Denkinger et al., 2018; Espinosa, Akinsulure-Smith, & Chu, 2019; Guhan & Liebling-Kalifani, 2011; Kindermann et al., 2017; Kjellenberg et al., 2014; Lusk & Terrazas, 2015; Mehus & Becher, 2016; Posselt et al., 2019; Raynor & Hicks, 2018; Weitkamp, Daniels, & Klasen, 2014; Yeunhee, 2017), due to the potentially difficult nature of working with such a highly traumatised client group. These support roles include offering practical help and support, counselling, guidance, signposting, case management and medical treatment in clinically qualified, non-qualified and voluntary roles, such as: physical health professions; counselling and therapeutic roles; interpretation services; registered migration agents; rescue workers; and social care professions.

Burnout is characterised by feelings such as: exhaustion, frustration, anger and depression, and can be defined as: “…feelings of hopelessness and difficulties in dealing with work or in doing your job effectively,” (Stamm, 2010). Secondary trauma, also referred to as vicarious trauma, describes a worker’s trauma reactions that are “…secondary to their exposure to clients’ traumatic experiences,” (Trippany, Kress, & Wilcoxon, 2011) and can be defined as: “…the natural behaviors and emotions that arise from knowing about a traumatizing event experienced by a
significant other - the stress resulting from helping or wanting to help a traumatized person,” (Figley, 1995). In the present context, secondary trauma refers to trauma symptomatology experienced by those working with refugees as a result of being exposed to the potentially traumatic accounts of this client group. The prevalence of burnout and secondary trauma in those working with refugees in a supportive capacity was evidenced to vary from 9.2% (Mehus & Becher, 2016) to 57.1% (Chatzea et al., 2018) for burnout and 22.9% (Denkinger et al., 2018) to 93.6% (Posselt et al., 2019) for secondary trauma. That those working with refugees appear to also be experiencing adverse reactions warrants further exploration and investigation. At present, there is no known systematic review pooling burnout and secondary trauma prevalence data in those working with refugees. Also, there is only one known study that has investigated the impact of working with refugees in the UK on burnout and secondary trauma prevalence. This study recruited participants from a Midlands-based refugee centre and so it is not known what the impact of working with refugees is in the UK nationally.

The UK Context

In 2018, the UK received 29,334 applications for asylum, with 10,085 (34.4%) being granted leave to remain (Newell, 2019). In the UK, services and organisations providing support to refugees are often staffed by volunteers, due to the cost-effective nature of this staffing method. Whilst this staffing method allows for a greater resource capacity, those working in a voluntary capacity are not formally employed and so are not in receipt of the same rights, support and protections as paid staff. Organisations also have no statutory obligation to offer clinical supervision to volunteers, despite this being a mandatory requirement in other professions working with highly traumatised client groups, such as mental
health professions. It has been suggested that the current provision of supervision for
those working with refugees in the UK is sparse, non-existent or not appropriate
(Guhan & Liebling-Kalifani, 2011; Robinson, 2013). This lack of provision is
potentially problematic, as some evidence suggests that supervision reduces burnout
and secondary trauma in workers (Apostolidou, 2016; Baird & Kracen, 2006;
Robinson, 2013; Thornberry, Roeland, & Mitchell, 2014). This indicates that those
working with refugees in the UK in a voluntary capacity may have higher levels of
burnout and secondary trauma severity due to the lack of supervision provided.

The Thesis Portfolio

This portfolio focuses on those who work with refugees in a supportive
capacity and the impact of working with a population who have experienced such
atrocities as have been outlined above. The next chapter presents a systematic review
investigating the prevalence of burnout and secondary trauma in volunteers and
professionals working globally with people experiencing trauma in the context of
forced migration. Chapter four presents original research findings reported by a
national sample of volunteers working with refugees in the UK, with a focus on:
secondary trauma and burnout severity; how these outcomes impact on general
wellbeing; and the impact of supervision on these outcomes. Additional
methodology and results for chapter four are presented in chapter five. Chapter six
presents a critical evaluation of the thesis as a whole.
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Chapter Two

A Systematic Review Investigating the Prevalence of Burnout and Secondary Trauma in Volunteers and Professionals Working with People Experiencing Trauma in the Context of Forced Migration

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A Systematic Review Investigating the Prevalence of Burnout and Secondary Trauma in Volunteers and Professionals Working with People Experiencing Trauma in the Context of Forced Migration.

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Abstract

**Objective:** Evidence suggests that professionals and volunteers working with forcibly displaced people experience burnout and secondary trauma as a result of working with such a highly traumatised population. The present systematic review and meta-analyses report the pooled prevalence rates of burnout and secondary trauma in people working both professionally and voluntarily with forcibly displaced people. **Methods:** CINAHL Complete, E-Journals, ERIC, MEDLINE Complete, OpenDissertations, PsycARTICLES and PsycINFO were searched historically to September 2019. Studies sampling those working either on a professional or voluntary basis with refugees, asylum seekers, forced migrants or displaced persons and reporting an outcome of secondary trauma and/or burnout, were included. Two meta-analyses were conducted using a random effects model to assess: (a) the prevalence of burnout; and (b) the prevalence of secondary trauma. **Results:** Fifteen studies were included and assessed for quality. The pooled prevalence of high burnout was 36.5% (95% CI 15.9% - 57.2%) with considerable heterogeneity found between studies \([Q(5)=171.25, \ p<.001, I^2=97.1\%]\). The pooled prevalence of moderate, high and severe secondary trauma was 45.7% (95% CI 26.1% - 65.2%) with considerable heterogeneity found between studies \([Q(12)=1079.37, \ p<.001, I^2=98.9\%]\). Significant differences were observed in reported prevalence dependent on measure. **Conclusions:** This review highlights the high prevalence of high burnout and moderate to severe secondary trauma reported by populations working with forcibly displaced people. The results have implications for future research and employment support for those working with forcibly displaced people.
Keywords: refugee, burnout, vicarious trauma, secondary trauma, compassion fatigue, professional
Introduction

It has been reported that 70.8 million people were internally or externally forcibly displaced in 2018 (UNHCR, 2019). The term “displaced people” refers to: “…those who have left their usual place of residence in order to escape from persecution, armed conflict, or human rights violations,” (Crisp, 2010). People who are forced to flee their country of origin and cross an international border are referred to as externally displaced, whilst those who are forced to leave their places of residence, but do not cross an international border, remaining in their country of origin, are referred to as internally displaced (Crisp, 2010). Individuals can also become displaced in the context of natural disasters, such as hurricanes or earthquakes (James, Noel, & Roche Jean Pierre, 2014). The term Forcibly Displaced People (FDP) will be used throughout the current manuscript to refer to asylum seekers, refugees, refused asylum seekers, internally and externally displaced people.

Due to increases in conflict worldwide, the number of FDP has increased substantially, “…from 43.3 million in 2009 to 70.8 million in 2018, reaching a record high,” (UNHCR, 2019). In addition to the political currents that FDP negotiate, the journeys that they face are often dangerous (Bouhenia et al., 2017; Dolma, Singh, Lohfeld, Orbinski, & Mills, 2006; Farhat et al., 2018; Gerard & Pickering, 2013; Tello, Castellon, Aguilar, & Sawyer, 2017) and the processes of seeking asylum in host countries can be difficult to access (Bouhenia et al., 2017; Farhat et al., 2018). In a systematic review of 38 studies pooling data from 39,518 internally and externally displaced adults from 21 countries, prevalence rates for PTSD, depression and anxiety disorders were found to vary from 3-88%, 5-80% and 1-81% respectively (Morina, Akhtar, Barth, & Schnyder, 2018). This evidences the emotional impact of forced migration and the subsequent repercussions on FDPs’
mental health. The observed increase in FDP also creates a global demand for services that are able to offer support for these vulnerable individuals.

Those Working with Forcibly Displaced People

The evidence suggests that, due to being exposed to the trauma narratives reported by FDP, those working with FDP also experience psychological effects, such as burnout, secondary trauma and compassion fatigue (Apostolidou, 2016; Guhan & Liebling-Kalfani, 2011; Jones & Williamson, 2014; Robinson, 2013). Compassion fatigue is characterised by exhaustion, anger and irritability, negative coping behaviours, reduced ability to feel sympathy and empathy, a diminished sense of enjoyment or satisfaction with work, increased absenteeism, and an impaired ability to make decisions and care for patients (LeMaster & Zall, 1983). Burnout is characterised by feelings such as: exhaustion, frustration, anger and depression, and can be defined as: “…feelings of hopelessness and difficulties in dealing with work or in doing your job effectively,” (Stamm, 2010). Secondary trauma, also referred to as vicarious trauma, describes a worker’s trauma reactions that are “…secondary to their exposure to clients’ traumatic experiences,” (Trippany, Kress, & Wilcoxon, 2011) and can be defined as: “…the natural behaviors and emotions that arise from knowing about a traumatizing event experienced by a significant other - the stress resulting from helping or wanting to help a traumatized person,” (Figley, 1995). The terms compassion fatigue, secondary trauma and burnout have been used interchangeably within the literature (Baird & Kracen, 2006), with compassion fatigue previously being categorised as synonymous with secondary trauma (Figley, 1995; Stamm, 2005), or more recently, theorised as a combination of secondary trauma and burnout (Stamm, 2010). The current review will focus on the concepts of secondary trauma and burnout as two separate
experiences, which can be combined to form a measure of compassion fatigue, as theorised by Stamm (2010). Secondary trauma will be used in reference to the trauma symptomology a worker may experience as a result of being exposed to the traumatic accounts of FDP.

**The Current Review**

To date, no review has systematically identified and pooled prevalence data reporting levels of burnout and secondary trauma in those working with FDP. The current systematic review aims to address this knowledge gap. Gaining insight into the prevalence rates of burnout and secondary trauma in volunteers and professionals working with FDP has important implications for professional quality of life, resource allocation and recommendations to address these areas of need.

No current publication exists reporting on the prevalence of secondary trauma and burnout in the general public to use as a comparator. Stamm (2010), however, reports the mean raw scores of a data bank of 1289 cases from multiple studies. Using these mean scores, we can observe that on average, the general population sits within the “average” category for burnout (M=20) and secondary trauma (M=11). By also considering the 75 percentile cut-off used within measures of burnout and secondary trauma to categorise “moderate” and “high” burnout and secondary trauma (Bride, Robinson, Yegidis, & Figley, 2004; Stamm, 2010), we may consider that 25% of the general population on average would meet criteria for “moderate” or “high” burnout and secondary trauma. Using this as a benchmark, if the pooled prevalence of burnout or secondary trauma are observed to be above 25%, we may conclude that this is higher than the prevalence observed in the general population.
Methodology

Eligibility Criteria

Participants. Studies were included that collected data from participant pools defined as professionals and/or volunteers of any age, working with client groups described as experiencing psychological trauma in any degree, description or severity, labelled as: asylum seekers; refugees; internally or externally displaced persons; forced migrants; refused asylum seekers; or refused refugees. Studies were excluded where the participant pool was not working directly with the above defined client group for the majority of their work at the time of assessment.

Outcome data. The review considered studies in which the prevalence of burnout and/or secondary trauma were reported or able to be obtained. Studies reporting data collected from any region using validated measures only were included. Studies reporting data collected using non-validated measures were excluded.

Study designs. The review considered studies using experimental designs only. Studies using non-experimental study designs were excluded, including single case study designs. Studies reporting purely qualitative findings were excluded.

Manuscript. Peer reviewed manuscripts, defined as published in an externally peer reviewed journal, written in the English language were considered. Manuscripts that were not peer reviewed, including grey literature, unpublished theses and dissertations, were excluded. No limitations were placed on the publication date of the manuscript.

Literature Search and Search Strategy

CINAHL Complete, E-Journals, ERIC, MEDLINE Complete, OpenDissertations, PsycARTICLES and PsycINFO were searched historically to
September 2019. The list of search terminologies used can be viewed in Table 1. All search terms from each individual column were combined using the search term “OR”. The combined results of each column were then combined using “AND”. This resulted in all papers containing one or more search terms from each column in any part of the manuscript being identified for inspection. Additional search parameters to: “apply related words”; and “apply equivalent subjects”, were included to increase the inclusivity of the search. The titles and abstracts of the generated papers were assessed independently against the eligibility criteria by two reviewers (edited out for blind review). A flow diagram was used to aid consistent application of the inclusion and exclusion criteria (Appendix B). The concordance rate between the reviewers was 96.68%. The remaining 3.32% of papers (n=9) for which agreement was not met were reviewed by the research team and a final decision was reached. The reference lists of the final pool of included papers were screened by the first reviewer for further relevant papers. All identified papers generated from the reference search that either met, or were close to meeting the inclusion criteria, were sent to the full research team for confirmation. From the references search, a further search term, “torture survivor”, was identified, observed to be used within the research literature in reference to FDP. The original search was re-run to include this additional search term and the resulting new papers were screened by the first reviewer.

**Data Analysis**

Where available, prevalence data were extracted from the identified papers. In instances where prevalence data were collected but not reported, or further clarifications were needed, the author(s) of the paper were contacted. Where a response was not received, up to three reminders were sent at weekly and then
monthly intervals from the original date of contact. Statistical heterogeneity was assessed using I-squared. Two prevalence meta-analyses were conducted using the statistical programme OpenMetaAnalyst (Wallace et al., 2012). The first meta-analysis pooled burnout prevalence data, the second meta-analysis pooled secondary trauma prevalence data. A random effects model was used for both meta-analyses. For each comparison, the pooled prevalence was calculated and presented with 95% confidence intervals. Data were presented through forest plots. A funnel plot was not constructed to assess small sample size publication bias, as no single outcome measure was assessed by 10 studies or more, making such a graph meaningless (Sterne et al., 2011).

Results

Search Strategy Results

In total, 370 papers were identified by the initial search strategy. A total of 15 studies met all inclusion criteria (see Appendix C for the PRISMA flow diagram documenting the selection process). A further 35 papers were identified following inclusion of the search term: “torture”. None of these additional papers met the inclusion criteria.

Characteristics of Included Studies

Data were extracted from included papers by the first reviewer using a data extraction template. A summary of the included studies is presented, including details relating to: whether the study data were used in the burnout meta-analysis only, the secondary trauma meta-analysis only, both meta-analyses or neither meta-analysis due to missing data. The location of the study, participant pool, sample size, age, gender, measure used and prevalence results are also summarised (Appendix D).
Measures

**Within the included papers, the following measures were identified.** Two measures were used to assess secondary trauma only: the German questionnaire for secondary traumatisation (Fragebogen für Sekundäre Traumatisierung, FST; Daniels, 2006; Weitkamp, Daniels, & Klasen, 2014); and the Secondary Traumatic Stress Scale (STSS; Bride et al., 2004). The Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996) was used to assess burnout only. The Professional Quality of Life Scale (ProQOL) versions R-IV (Stamm, 2005) and five (Stamm, 2009; 2010) were used to assess both burnout and secondary trauma.

**FST.** The FST is a standardised 31-item self-report questionnaire scored on a five-point Likert scale (1=never, 5=very often). Participants are instructed to either rate the items based on the last week or on the most distressing week in relation to their work. The FST consists of five subscales: intrusion, avoidance, hyperarousal, parapsychotic sense of threat and PTSD-comorbidities. Of the five studies identified within this review using this measure, one study reported on the reliability (α=0.94; Weitkamp et al., 2014), indicating an excellent internal consistency. A total score of 65-82 is classified as “moderate” secondary trauma, a total score of 83 or greater is classified as “severe” secondary trauma (Weitkamp et al., 2014). The number of participants reporting scores falling within the “moderate” and “severe” cut-offs were combined and used to indicate the presence of secondary trauma for the purpose of meta-analysis.

**STSS.** The STSS is a 17-item self-report questionnaire scored on a five-point Likert scale (1=never, 5=very often). Participants are asked to rate items based on the last week. The STSS consists of three subscales: intrusion, avoidance and arousal. Of the three studies identified within this review using this measure, all
reported on the reliability ($\alpha=0.93$, Espinosa, Akinsulure-Smith, & Chu, 2019; $\alpha=0.95$, Lusk & Terrazas, 2015; $\alpha=0.93$, Yeunhee, 2017), indicating excellent internal consistency. A total score of less than 28 (at or below the 50th percentile) indicates “little or no” secondary trauma, 28-37 (51st to 75th percentile) indicates “mild” secondary trauma, 38-43 (76th to 90th percentile) indicates “moderate” secondary trauma, 44-48 (91st to 95th percentile) indicates “high” secondary trauma and 49 or above (above the 95th percentile) indicates “severe” secondary trauma (Bride, 2007). The number of participants reporting scores falling within the “moderate” to “severe” cut-offs (above the 75th percentile) were combined and used to indicate the presence of secondary trauma for the purpose of meta-analysis.

**MBI.** The MBI is a 22-item questionnaire scored on a 7-point Likert scale (0=never, 6=every day). It consists of three subscales: emotional exhaustion, depersonalisation and personal accomplishment; these are reported individually and cannot be combined. Of the three subscales, emotional exhaustion most closely reflects a measure of experienced work stress (Maslach et al., 1996). Of the two studies identified within this review using this measure, one reported on the reliability (emotional exhaustion $\alpha=.86$, Yeunhee, 2017), indicating a good internal consistency. On the emotional exhaustion scale a score equal to, or less than, 17 indicates “low”-level burnout, a score of 18-29 indicates “moderate” burnout and a score of equal to, or greater than, 30 indicates “high”-level burnout. The number of participants reporting scores falling within the “high”-level cut-off was used to indicate the presence of burnout for the purpose of meta-analysis.

**ProQOL.** The most recent version of the ProQOL, the ProQOL-V, is a standardised 30-item self-report questionnaire scored on a five-point Likert scale (1=never; 5=very often). The previous version of the ProQOL, the ProQOL R-IV
(Stamm, 2005), is vastly similar to the ProQOL-V, but uses slightly different item phrasing and a six-point Likert scale (0=never; 5=very often). The ProQOL consists of three 10-item subscales: compassion satisfaction, burn-out and Secondary Traumatic Stress (STS), referred to as compassion fatigue in the ProQOL-IV. As currently theorised within the most up-to-date ProQOL manual (Stamm, 2010), scores from the burnout and STS subscales can be combined to produce a measure of compassion fatigue, or analysed separately. Using the t-score table reported in the concise ProQOL manual (Stamm 2010), the following scores can be observed at the 25 and 75 percentile cut-offs, cited as the thresholds for the following cut-offs: “low” (0-15), “average” (16-25), “high” burnout (26-50); and “low” (0-7), “average” (8-16), “high” STS (17-50). It should be noted that there is an error within the ProQOL-V (Stamm, 2009; 2010) that incorrectly cites the same cut-offs for the compassion satisfaction, burnout and STS scales. This raises issues when considering the validity of prevalence data reported using the ProQOL-V for the purposes of pooling within a meta-analysis. Of the seven studies identified within this review using this measure, five reported on the reliability (STS α=.70, burnout α=.76, James et al, 2014; compassion fatigue α=.84, STS α=.80, burnout α=.70, Kjellenberg, Nilson, Daukantaite, & Cardena, 2014; α=.81 for the ProQOL as a whole, Lusk & Terrazas, 2015; STS α= .80, burnout =.66, Mehus & Becher, 2016; STS α=.86, burnout α=.84, Raynor & Hicks, 2018), indicating internal consistency ratings ranging from questionable (α=.66, Mehus & Becher, 2016) to good (α=.84, Raynor & Hicks, 2018) for burnout and acceptable (α=.70, James et al, 2014) to good (α=.86, Raynor & Hicks, 2018) for STS. The number of participants reporting scores falling within the high cut-offs were used to indicate the presence of burnout and secondary trauma for the purpose of meta-analysis.
Meta-analyses

Where further clarification or data were needed for the purpose of meta-analysis, the study author(s) were contacted as previously outlined. Using this method, further prevalence data were able to be obtained or clarified for two outcomes of burnout (Kjellenberg et al., 2014; Raynor & Hicks, 2018) and six outcomes of secondary trauma (Espinosa et al., 2019; Kindermann et al., 2017; Kindermann et al. 2019; Kjellenberg et al., 2014; Raynor & Hicks, 2018; Weitkamp et al., 2014), with only two burnout (n=8, James et al., 2014; n=179, Yeunhee, 2017) and one secondary trauma (n=8, James et al., 2014) outcomes outstanding. Although it should also be noted that secondary trauma outcome data were only able to be obtained from a subsample of 165 out of the total 196 participants recruited in Weitkamp et al.’s (2014) study.

Due to the error found within the ProQOL-V manuals (Stamm, 2009; 2010), all ProQOL-V prevalence data were deemed to be potentially invalid until otherwise confirmed. Emails were sent to the authors whose findings were potentially affected to request access to their datasets (Lusk & Terrazas, 2015; Mehus & Becher, 2016; Posselt, Deans, Baker, & Proctor, 2019). All but one (n=31, Lusk & Terrazas, 2015) of the ProQOL-V data sets were able to be confirmed. As such, the ProQOL data for this study have been excluded from analysis. As Lusk & Terrazas (2015) also reported secondary trauma data using the STSS, the STSS outcome data were extracted for the purpose of meta-analysis. This left a total of three outcomes of burnout (n=218) and one outcome of secondary trauma (n=8) outstanding.

Two prevalence meta-analyses were conducted. The first meta-analysis pooled burnout prevalence data collected using the MBI and ProQOL burnout scale.
The second meta-analysis pooled secondary trauma prevalence data collected using the FST, STSS and ProQOL STS scale.

**Burnout.** The meta-analysis combining burnout prevalence data included six studies (Chatzea, Sifaki-Pistolla, Vlachaki, Melidoniotis, & Pistolla, 2018; Guhan & Liebling-Kalifani, 2011; Kjellenberg et al., 2014; Mehus & Becher, 2016; Posselt et al., 2019; Raynor & Hicks, 2018; \(n=645\)). The pooled prevalence of burnout was 36.5% (95% CI 15.9% - 57.2%) with considerable heterogeneity found between studies \([Q(5) = 171.25, p < .001, I^2 = 97.1\%; \text{Figure 1}]\). A sub-analysis was undertaken to assess for differences in measure. The assessment tool used to measure burnout was observed to have an observable effect on prevalence, with the MBI reporting a higher prevalence (57.1%; 95% CI 50.6% - 63.7%) than the pooled prevalence of data reported using the ProQOL (32.1%; 95% CI 10% - 54.3%; Table 2).
Due to heterogeneity between studies, a sensitivity analysis was conducted by removing each study sequentially to identify changes in pooled prevalence. This analysis produced prevalence estimates ranging from 32.1% (95% CI 10% - 54.3%; Chatzea et al., 2018) to 43.5% (95% CI 31.3% - 55.7%; Mehus & Becher, 2016), indicating that some studies had a greater impact on the estimate of pooled prevalence.

**Secondary trauma.** The meta-analysis combining secondary trauma prevalence data included 13 studies (Denkinger et al., 2018; Espinosa et al., 2019; Guhan & Liebling-Kalifani, 2011; Kindermann et al., 2017; Kindermann et al., 2019a; Kindermann et al., 2019b; Kjellenberg et al., 2014; Lusk & Terrazas, 2015; Mehus & Becher, 2016; Posselt et al., 2019; Raynor & Hicks, 2018; Weitkamp et al., 2014; Yeunhee, 2017; n=1233). The pooled prevalence of secondary trauma was 45.7% (95% CI 26.1% - 65.2%) with considerable heterogeneity found between studies \[Q(12) = 1079.37, p < .001, I^2 = 98.9\%; \text{Figure 2}\]. A sub-analysis was undertaken to assess for differences in measure. The assessment tool used to measure secondary trauma was observed to have a significant effect on prevalence, with the ProQOL reporting the highest pooled prevalence (78.5%; 95% CI 68.4% - 88.6%), as compared to the STSS (48.1%; 95% CI 43.3% - 52.9%); and the FST, which reported the lowest pooled prevalence (15.3%; 95% CI 4.7% - 25.9%; Table 3).
Due to heterogeneity between studies, a sensitivity analysis was conducted by removing each study sequentially to identify changes in pooled prevalence. This analysis produced prevalence estimates ranging from 41.6% (95% CI 22.7% - 60.5%; Posselt et al., 2019) to 49.4% (95% CI 29.5% - 69.2%; Kindermann et al., 2019b), indicating that the overall prevalence estimate was not unduly affected by any individual study.

Assessment of Methodological Quality

Papers selected for retrieval were assessed for methodological quality by the first reviewer (edited out for blind review) using items one to five and nine to 11 of the Critical Appraisal Skills Programme (CASP) cohort study tool (CASP, 2018). Further items were not included as they did not apply to the observational design of the studies under appraisal or were qualitative; and so were not able to be rated as ‘yes’, ‘no’ or ‘can’t tell’ for the purposes of reporting and assessing rater reliability. Answers to items rated as ‘yes’ were deemed satisfactory, answers to items rated as ‘no’ or ‘can’t tell’ were deemed unsatisfactory. There was a range of 25-100% (M=71.9%) satisfactory answers to the selected appraisal questions, indicating a
THE IMPACT OF WORKING WITH FORCED MIGRANTS

varying, but on average acceptable, methodological quality within the studies identified. A second reviewer (edited out for blind review) checked a sample of 20% of the final pool of papers \( n=3 \) to assess the reliability of the first reviewers’ ratings of methodological quality. These three papers were identified by the first reviewer for their difficulty in rating. Ratings were observed to be 100% concordant on satisfactory, ‘yes’, versus non-satisfactory, ‘no’ or ‘can’t tell’, answers between the two reviewers. This confirmed the validity of the first reviewer’s assessment of methodological quality. See Appendix E for a table documenting this appraisal process and outcomes for each study.

**Discussion**

The present systematic review and meta-analyses present the pooled prevalence of burnout and secondary trauma in those working professionally and voluntarily with FDP. A total of 15 studies met criteria for the systematic review. Prevalence data were obtained from 14 of these studies, including 13 outcomes for secondary trauma and six outcomes for burnout. The pooled prevalence of burnout was found to be 36.5% (95% CI 15.9% - 57.2%). The pooled prevalence of secondary trauma was found to be 45.7% (95% CI 26.1% - 65.2%). These findings indicate that over a third of the population sampled working with FDP are experiencing high levels of burnout and just under half are experiencing moderate to severe levels of secondary trauma. These findings are supported within the literature, which evidences that those working with FDP experience high levels of burnout, secondary trauma and compassion fatigue (Apostolidou, 2016; Jones & Williamson, 2014; Robinson, 2013). On comparing these results to normative data (Stamm, 2010), the present pooled sample of those working with FDP reported observably
higher burnout (36.5%) and secondary trauma (45.7%) prevalence than the general population (25%), with the pooled prevalence of secondary trauma almost double that observed in the general population. It should be noted though, that Stamm (2010) does not provide a description for the samples from which the normative data were derived and so this normative data may not indeed be representative of the general population.

When comparing the current prevalence figures to that of other helping workforces in highly stressful occupations the following results can be observed. In a meta-analysis combining data collected from 464 nurses working in obstetrics and gynecology using the MBI, the pooled burnout prevalence of high burnout was observed to be lower than the present pooled prevalence (36.5%) at 29%, as measured by the emotional exhaustion scale, the scale most closely related to burnout on the MBI (De la Fuente-Solana et al., 2019). In a further similar meta-analysis pooling a sample of 1600 paediatric nurses, 31% reported high burnout (Pradas-Hernández et al., 2018), also observably lower than the present pooled prevalence (36.5%). In a study assessing secondary trauma in a sample of 128 trauma nurses, 27.3% reported high secondary trauma (Hinderer et al., 2014), lower than the present pooled prevalence (45.7%). In a further study assessing secondary trauma in a sample of 63 UK based police officers, 27% reported secondary trauma within the moderate to severe cut-offs of the STSS (MacEachern, Dennis, Jackson, & Jindal-Snape, 2019), also lower than the present pooled prevalence (45.7%). In a third study assessing secondary trauma in a sample of 118 clinicians based in a hospital treating traumatically injured patients, 19.5% reported secondary trauma within the moderate to severe cut-offs of the STSS (Roden-Foreman et al., 2017), lower than the present pooled prevalence (45.7%). The prevalence of both secondary
trauma and burnout was measured in a sample of 253 therapists working in the UK engaged in trauma work with working-age adults using the ProQOL-V. It was found that 25.8% reported high burnout, lower than the present pooled prevalence; and 70% reported high secondary trauma (Sodeke-Gregson, Holtum, & Billings, 2013), higher than the present pooled prevalence. In combination, this evidence suggests that the present pooled sample of those working globally with FDP experience higher levels of burnout and secondary trauma than the majority of other helping professionals.

**Clinical Relevance and Application**

The results of this review are of clinical importance, as they evidence the high prevalence of burnout and secondary trauma in those working with FDP, also observably higher than the majority of other helping professions studied. As discussed, burnout is characterised by: exhaustion, frustration, anger and depression, “…feelings of hopelessness and difficulties in dealing with work or in doing your job effectively,” (Stamm, 2010). That a third of those working with FDP report experiencing a high frequency of these symptoms indicates that further support is warranted to help meet the needs of and support those working with FDP. This support would hopefully allow the population to continue to provide compassionate, high level service provision, whilst maintaining their own wellbeing and work satisfaction, as well as reducing potential staff turnover. Of even greater concern was that a high frequency of secondary trauma, referring to trauma symptomology experienced by those who work with traumatised populations (Trippany et al., 2011), was reported by just under half those working with FDP in the present sample, almost double that of the general population. Further support should be offered to this population to both prevent and treat these areas of difficulty. As it was observed
that those working with FDP experienced higher levels of burnout and secondary trauma than the majority of other helping professionals, staff wellbeing support interventions from other similar professions could be adapted and implemented with those working with FDP. It may also be beneficial to find ways to monitor levels of burnout and secondary trauma within the workforce.

**Assessing Outcome Measures**

A significant effect of measure was observed for both the burnout and secondary trauma meta-analyses, with observable clustering in the data, as viewed within the forest plots. In the present review, the MBI was found to produce a higher estimate of pooled burnout prevalence than the ProQOL burnout scale, suggesting that the MBI has a lower threshold for classifying high burnout than the ProQOL. The FST was found to produce the lowest estimate of pooled secondary trauma prevalence, whereas the ProQOL STS scale was found to produce the highest, as compared to the other measures of secondary trauma. This suggests that the FST has a higher threshold for classifying the presence of secondary trauma, whereas the ProQOL has a lower threshold.

When considering which measure to use to assess the prevalence of secondary trauma or burnout, it is worth noting the varying degrees of prevalence these measures produced and comparing these with the reliability of the measure and potential complexities of the population of interest. For example, whilst the FST was found to have excellent internal consistency, it currently only appears to be validated in the German language with participants working in Germany. It also appears to have a higher threshold for classifying secondary trauma, meaning that lower prevalence figures are likely to be observed. The STS and burnout scales of the ProQOL could be used, with careful consideration of the cut-offs and an awareness
of how comparable research has applied them. It should be noted though, that the ProQOL had the poorest internal consistency ratings, ranging from questionable to good. The ProQOL has, however, been widely used and is available in numerous languages, making it appealing for more global research. The STSS may be the tool of choice when assessing the prevalence of secondary trauma, as it has numerous, clear and well-defined cut-offs, selected with reference to percentile scores. It was also found to have excellent internal consistency, as measured by three studies within the present review; and very low levels of heterogeneity between studies ($I^2 = 0.7\%$). A further benefit is that the thresholds used to categorise high levels of secondary trauma appear to sit conservatively between the lower ProQOL and higher FST thresholds. The STSS is also briefer than the 31-item FST, at 17-items in total.

Between the MBI and ProQOL burnout sub-scale, no conclusion was able to be drawn as to which measure may be preferable. Whilst a good internal consistency was reported for the MBI within this review, not enough data were able to be pooled to assess heterogeneity. The MBI also uses three scales to measure burnout, which cannot be combined. Whilst the emotional exhaustion scale has been referenced as most closely reflecting a measure of burnout, it was also noted that using only this one sub-scale limits the validity of the assessment tool as a measure of burnout and merely presents a measure of experienced work stress (Maslach et al., 1996). Further research should be conducted to explore the most valid and reliable measure of burnout.

**Strengths and Limitations**

Due to the observable effect of measure on reported prevalence, the ability to pool different measures within a meta-analysis is debatable, thus bringing the validity of the estimated pooled prevalence of the present review into contention.
This was reflected in the high degree of statistical heterogeneity observed when pooling the measures, as measured by I squared. The differences in measure specific reported prevalence may be due to inconsistency in the cut-offs, validity and/or reliability of the measures used, or the sample from which the data were collected. For example, it should be noted that all five studies using the FST were conducted in Germany, meaning that the data extracted may be less generalisable and comparable to other populations. The scores observed when using the FST may then be viewed as potentially more reflective of the current context of those working with FDP in Germany and overall political stance of acceptance towards refugees in Germany, as the country evidenced to host the largest number of refugees in Europe (UNHCR, 2019). The pooled prevalence of studies using the FST (15.3%) is observably much lower than the pooled prevalence of studies using the ProQOL (78.5%) and STSS (48.1%), suggesting that pooling data derived from the FST with other measures may have negatively skewed the secondary trauma meta-analysis pooled prevalence.

When selecting which cut-offs to pool for the purposes of meta-analysis, as far as was possible the 75-percentile cut-off was used, with an aim to increase the homogeneity of the data. This was achievable with the STSS and ProQOL measures, however, not with the FST or MBI. In order to account for this, sub-analyses of measure were carried out and data reported for each pooled measure. This allows the reader to consider the overall pooled prevalence in the context of how this relates to the measure.

When conducting the sensitivity analyses, it was found that some studies had a greater impact on the estimate of pooled burnout prevalence. This may be in part due to the fewer number of studies able to be pooled within the burnout meta-analysis and high degree of outstanding data, meaning that each study holds a greater
weight in regards to the pooled prevalence estimate. On inspecting the six studies included in the burnout meta-analysis, the quality rating assessed within the present review was found to vary from 25% to 100% satisfactory answers, with a mean of 75%, indicating that there was some variance in the methodological quality of the studies, which may have impacted on reported prevalence. On inspecting the study which had the greatest negative impact on pooled prevalence (Mehus & Becher, 2016), it was found that it had a quality rating of 50% satisfactory answers, which may have impacted on the reported prevalence. On inspecting the study which had the greatest positive impact on pooled prevalence (Chatzea et al., 2018), it was found that this study was of a high quality (100% satisfactory answers). In this study, the participants’ work included duties such as recovering dead bodies of adults and children, the highly traumatising nature of which may have impacted on experienced work stress, as measured by the MBI. The author also noted as a limitation of the study that: “…slight overestimations of the outcomes may have occurred…” (Chatzea, et al., 2018) due to the self-report nature of the assessment tools. This was also the only study that MBI prevalence data were able to be obtained for and so the higher prevalence may be reflective of lower cut-offs, or the psychometrics of the measure.

A significant strength of this review is the systematic and high degree of rigour with which it was conducted. An initial search and abstract screening were conducted independently by two reviewers, with a high level of agreement in screening outcomes (96.68%). Inconsistencies were assessed by the research team. Where the search strategy was found to be limiting, this was updated with additional search terms to improve inclusivity. The methodological quality of the papers was assessed, 20% of which were verified by a second reviewer with 100% concordance.
for satisfactory versus non-satisfactory answers. All but one of the papers identified as collecting prevalence data were able to be included, with only four outcomes outstanding (three burnout and one secondary trauma). All of these elements contributed to the rigorous, systematic and inclusive nature of the search and the validity of the findings.

**Conclusions**

The present systematic review and meta-analyses highlight the high levels of burnout and secondary trauma experienced by those working with FDP, with the prevalence of secondary trauma being notably almost double that observed in the general population. These results suggest that further support should be offered to this workforce population. This support would hopefully allow those working with FDP to provide a compassionate, high level of service provision, whilst maintaining professional wellbeing, work satisfaction and reducing potential staff turnover. Future research could be conducted to explore the types of support that those working with FDP would like and the forms that this support could take. It may also be beneficial to monitor burnout and secondary trauma in those working with FDP, with the STSS suggested as the measure of choice to assess secondary trauma. The development of additional measures to assess burnout may be of benefit.
References


Table 1. Search Terms Used in the Present Systematic Review

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Trauma</th>
<th>FDP</th>
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<tbody>
<tr>
<td>Professional Quality of Life</td>
<td>Trauma*</td>
<td>Migra*</td>
</tr>
<tr>
<td>ProQOL</td>
<td>PTSD</td>
<td>Immigra*</td>
</tr>
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<td>Compassion Fatigue Scale</td>
<td>Posttrauma*</td>
<td>Refugee*</td>
</tr>
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<td>CFS</td>
<td>Post-trauma*</td>
<td>Asylum</td>
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<td>Compassion Satisfaction and Fatigue Test</td>
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<td>Displace*</td>
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<tr>
<td>CSFT</td>
<td></td>
<td>Torture*</td>
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<tr>
<td>Compassion Fatigue*</td>
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<tr>
<td>Burn out</td>
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<tr>
<td>Secondary Trauma*</td>
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<td></td>
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<tr>
<td>Vicarious trauma*</td>
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* Additional search term added after the initial search was completed.
Table 2. Burnout Sub-analysis of Measure

<table>
<thead>
<tr>
<th>Subgroups</th>
<th>Studies</th>
<th>Pooled prevalence (%)</th>
<th>CI lower bound (%)</th>
<th>CI upper bound (%)</th>
<th>Q</th>
<th>Het. value</th>
<th>$I^2$ (%)</th>
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<td>ProQOL</td>
<td>5</td>
<td>32.1</td>
<td>10</td>
<td>54.3</td>
<td>107.32</td>
<td>&lt;.001</td>
<td>96.3</td>
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<td>MBI</td>
<td>1</td>
<td>57.1</td>
<td>50.6</td>
<td>63.7</td>
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<td>N/A</td>
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<tr>
<td>Overall</td>
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<td>36.5</td>
<td>15.9</td>
<td>57.2</td>
<td>171.25</td>
<td>&lt;.001</td>
<td>97.1</td>
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</tbody>
</table>

*CI = Confidence interval; Het. = heterogeneity; ProQOL = Professional Quality of Life Scale; MBI = The Maslach Burnout Inventory; N/A = not applicable
Table 3. Secondary Trauma Sub-analysis of Measure

<table>
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<th>Sub-groups</th>
<th>Studies</th>
<th>Pooled prevalence (%)</th>
<th>CI lower (%)</th>
<th>CI upper (%)</th>
<th>Q</th>
<th>Het. value</th>
<th>I² (%)</th>
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</thead>
<tbody>
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<td>FST</td>
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<td>15.3</td>
<td>4.7</td>
<td>25.9</td>
<td>48.48</td>
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<td>ProQOL</td>
<td>5</td>
<td>78.5</td>
<td>68.4</td>
<td>88.6</td>
<td>26.52</td>
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<td>88.6</td>
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<td>STSS</td>
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<td>48.1</td>
<td>43.3</td>
<td>52.9</td>
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<td>.365</td>
<td>0.7</td>
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<tr>
<td>Overall</td>
<td>13</td>
<td>45.7</td>
<td>26.1</td>
<td>65.2</td>
<td>1079.37</td>
<td>&lt; .001</td>
<td>97.2</td>
</tr>
</tbody>
</table>

*CI = Confidence interval; Het. = heterogeneity; FST = The German questionnaire for secondary traumatisation; ProQOL = Professional Quality of Life Scale; STSS = The Secondary Traumatic Stress Scale
Appendix

Appendix A: Authors guidelines (see attached pdf)

Appendix B: Flow chart for inclusion/exclusion

Appendix C: PRISMA 2009 Flow Diagram

Appendix D: Summary of included studies (see attached word document - landscape)

Appendix E: CASP results table (see attached word document - landscape)
Appendix B: Flow chart for inclusion/exclusion

Is the manuscript written in the English Language or is there an available translated version?  
No = exclusion code A

Did an experiment take place?  
NB - a case study is not an experimental design  
No = exclusion code B

Is the sample pool working directly with refugees, asylum seekers, forced migrants or displaced persons in a professional or voluntary capacity?  
No = exclusion code C

Is the study design mixed-methods or quantitative?  
No = exclusion code D

Is the prevalence of at least one of the below concepts reported or able to be calculated?  
- Vicarious trauma/secondary trauma  
- Burnout  
(if not and all other criteria met, contact author)  
No = exclusion code E

Were the client group of the sample pool described to be experiencing trauma in any description or severity?  
No = exclusion code F

Was/were the measure(s) used above validated?  
No = exclusion code G
Appendix C: PRISMA 2009 Flow Diagram

Records identified through database searching
MEDLINE complete (n=130); PsycINFO (n=77); CINAHL Complete (n=67); PsycARTICLES (n=50); E-Journals (n=38); ERIC (n=4); OpenDissertations (n=4); total (n=370)

Records after duplicates removed (n=294)

Manuscripts not written in English excluded (n=23)

Records screened (n=271)

- Non-experimental designs removed (n=106)
- Those not working directly with FDP removed (n=107)
- Studies reporting only qualitative data removed (n=21)
- Further duplicates removed (n=4)
- Studies not reporting target outcome data removed (n=12)
- Erratum’s removed (n=3)
- Non-peer-reviewed studies removed (n=3)

Full-text articles assessed for eligibility (n=15)

- Participant pool not primarily working with FDP removed (n=1)
- Used the same participant pool as another included study removed (n=1)
- References of all papers inspected for further papers, included (n=2; references also checked).
- Search re-ran to include key term “torture” in reference to the term torture survivor identified through references search. Thirty-five new papers identified. Non-experimental designs removed (n=20). Those not working directly with FDP removed (n=13). Studies reporting only qualitative data removed (n=2). No further papers identified.

Studies reporting burnout measure only: (n=1)
Studies reporting STS measure only: (n=8)
Studies reporting both measures: (n=5)

Studies included in:
1. Burnout prevalence meta-analysis (n=6)
2. STS prevalence meta-analysis (n=13)
Chapter Three

Bridging Chapter

Word count: 793

The previous chapter evidences the high pooled prevalence of “high” burnout (36.5%) and “moderate” to “severe” secondary trauma (45.7%) in those working with Forcibly Displaced People (FDP) internationally, on a voluntary and professional basis. These prevalence figures were obtained by pooling samples of those working with FDP in various capacities, including: clinically qualified professionals, for example doctors (Denkinger et al., 2018) and social workers (Denkinger et al., 2018; Espinosa, Akinsulure-Smith, & Chu, 2019; Yeunhee, 2017); non-qualified paid staff, for example secretaries (Kjellenberg, Nilsson, Daukantaitė, & Cardeña, 2014); and volunteers, for example rescue workers (Chatzea, Sifaki-Pistolla, Vlachaki, Melidoniotis, & Pistolla, 2018). Many of these job roles appear to be paid professions, entitling these workers to certain rights as agreed within their employment contracts. Only one sample was observed to be recruited from the UK: a sample of volunteers recruited at a Midlands-based refugee centre described as “…offering practical help and support,” (Guhan & Liebling-Kalifani, 2011). As this sample was recruited from one base only, it is not known what the impact of working with refugees is in the UK nationally.

In the UK, organisations providing support for refugees and asylum seekers are often staffed by volunteers working in a befriending/and or mentoring capacity. Those working in a voluntary capacity are not formally employed and so are not entitled to the same protections, benefits, status and regulation as paid employees. As
such, volunteers may not receive as much support in their roles, including psychological support, potentially leaving them more vulnerable to psychological consequences when working with highly traumatised clients. Organisations are also not obliged to offer volunteers supervision, despite supervision being a mandatory requirement in other helping professions working with traumatised clients, such as in mental health professions. Where supervision is offered to volunteers at the discretion of organisations, this may not necessarily be regulated, meaning that the frequency, duration, level of qualification held by the supervisor and content of supervision may vary. BPS guidelines for qualified psychologists working with refugees in the UK posit that one of the four key issues when working with this population is the need for supervision, described as a space to share traumatic stories heard from clients and an aid in the prevention of secondary trauma (BPS, 2018). As such, it may be hypothesised that supervision could be an important factor in the prevention of compassion fatigue, the lack of which may leave volunteers at a heightened vulnerability to experiencing high levels of burnout and secondary trauma.

Due to the hypothesised impact of supervision in the prevention of compassion fatigue, such as burnout and secondary trauma, it is important to understand how these factors interact. “Professional quality of life is the quality one feels in relation to their work as a helper,” (Stamm, 2010), referring to feelings of compassion satisfaction and compassion fatigue. Compassion satisfaction is defined as: “…the pleasure you derive from being able to do your work well,” (Stamm 2010), referring to any work activity. Stamm (2010) developed a model to describe professional quality of life, detailing how secondary trauma, burnout, compassion fatigue and compassion satisfaction may interact. This model places compassion
fatigue and compassion satisfaction as opposing concepts and describes how experiences of burnout and secondary trauma combine to form a measure of compassion fatigue (Figure 1). Stamm (2010) also produced a questionnaire assessing Professional Quality of Life (ProQOL; Stamm 2010). The ProQOL consists of three 10-item subscales: compassion satisfaction; burn-out; and secondary traumatic stress, a measure of secondary trauma.

![Figure 1. Professional Quality of Life model](image)

As professional quality of life in volunteers supporting refugees in the UK has so far only been assessed in one Midlands-based refugee centre, it is not known what the impact of working with refugees is in the UK nationally. Due to the hypothesised impact of supervision in the prevention of burnout and secondary trauma, it is also important to assess the provisioning of supervision in volunteers working with refugees in the UK and the impact of supervision on burnout and secondary trauma. The following study assesses the prevalence and severity of burnout and secondary trauma using validated scales in a national sample of befriender and/or mentor volunteers working with asylum seekers, refugees, forced
migrants and displaced persons in the UK. The impact of burnout and secondary trauma severity on general measures of wellbeing is also explored in this population, so as to assess whether professional quality of life impacts on personal wellbeing. The provision of supervision across the sample was inspected and the impact of supervision on burnout and secondary trauma severity was assessed. As it was anticipated that some of the sample would also personally identify as refugees, asylum seekers, refused asylum seekers or forced migrants, the effect of refugee status on the outcome measures was also assessed.
References


Chapter Four

The Impact of Voluntary Work Within Befriending and/or Mentoring Roles
Supporting Refugees, Asylum Seekers and Forced Migrants in the UK: Data from an Online Survey.

Prepared for submission to the Journal of Refugee Studies¹

Word count: 7972/8000 (excluding title, authorship, abstract, keywords and acknowledgements)

¹ https://academic.oup.com/jrs/pages/General_Instructions
The Impact of Voluntary Work Within Befriending and/or Mentoring Roles
Supporting Refugees, Asylum Seekers and Forced Migrants in the UK: Data from an Online Survey.

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Those working with refugees, asylum seekers and forced migrants have been found to experience increased burnout and secondary trauma as a result of supporting this often-traumatised population. This study reports on the prevalence of burnout (13.7\%), secondary trauma (54.3\%), clinical anxiety (9.9\%) and clinical depression (13.8\%) in a national sample of 131 volunteer befrienders and/or mentors working in the UK. The effects of hours spent volunteering, refugee status, supervision provision and supervision satisfaction were analysed. Increased time spent volunteering was observed to be associated with higher levels of burnout and secondary trauma. Volunteers identifying as refugees were found to have higher levels of depression and secondary trauma. Those with high supervision satisfaction reported significantly less secondary trauma, whereas no association was
found between time spent in supervision and burnout; and a positive association was found between time spent in supervision and secondary trauma. These findings highlight the importance of providing high quality supervision to this workforce.

**Keywords:** refugee, asylum seeker, burn-out, vicarious trauma, secondary trauma, supervision.

**Introduction**

Asylum seekers can be defined as: “…people who have moved across international borders to seek protection. In the UK, an asylum seeker is someone who has applied for protection under international law…” (The British Psychological Society; BPS 2018) and is awaiting a decision on whether they will be granted refugee status. Under the United Nations Convention on the Status of Refugees (1951) a refugee can be defined as: “…someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion,” (UNHCR 1951). The term refugee will be used throughout the present manuscript in reference to refugees, asylum seekers and those otherwise forced to flee their countries of origin due to war, conflict or fear of persecution.

Due to increases in conflict worldwide, the number of refugees has increased exponentially, resulting in a refugee crisis in 2015 (UNHCR 2016). In 2018, the UK received 29,334 applications for asylum, with 10,085 (34.4%) being granted leave to remain (Newell 2019). “Between 2014 and 2018, 19,881 people were resettled to the UK, mainly from Syria and the surrounding region,” (Sturge 2019). It has been
reported that refugees find adapting to British culture and the stigma of transitioning from being a citizen in their countries of origin to a foreigner in the UK, stressful and depressing (Papadopoulos et al. 2004). In a systematic review including data from 6,743 adult refugees re-settled across seven western countries, including the UK, it was found that nine percent of refugees were diagnosed with Post-Traumatic Stress Disorder (PTSD; Fazel et al. 2005). This suggests that refugees could be approximately ten times more likely to have PTSD than age and geographically matched general population counterparts (Fazel et al. 2005). Further studies assessing the prevalence of PTSD have found higher, more variable rates. For example, it was found that out of a sample of 450 Syrian refugees living in Lebanon, 61.56% met criteria for full PTSD (Kreidie et al. 2016). The presence of this vulnerable population within the UK, as well as the complexities of the emotional impact of fleeing and seeking refuge, creates a demand for services to support these individuals and their specific needs. As such, it is of a high priority that the UK be able to provide adequate services for refugees and maintain a healthy work-force within these services.

The experience of helpers working with refugees

The evidence suggests that, in addition to the primary trauma that refugees can experience, people working with this population also experience psychological effects, such as burnout (Kjellenberg et al. 2014; Mehus and Becher 2016; Chatzea et al. 2018; Posselt et al. 2019) and Secondary Trauma (ST; Kjellenberg et al. 2014; Weitkamp et al. 2014; Lusk and Terrazas 2015; Mehus and Becher 2016; Kinderman et al. 2017; Yeunhee 2017; Denkinger et al. 2018; Espinosa et al. 2019; Posselt et al. 2019). The prevalence of burnout and ST in this population was evidenced to vary
from 9.2% (Mehus and Becher 2016) to 57.1% (Chatzea et al. 2018) for burnout and 22.9% (Denkinger et al. 2018) to 93.6% (Posselt et al. 2019) for ST. Four studies specifically explored the experiences of UK staff working with refugees. These studies evidence experiences of burnout, ST and compassion fatigue (Guhan and Liebling-Kalfani 2011; Robinson 2013; Jones and Williamson 2014; Apostolidou 2016) and reported prevalence figures of 33.3% for burnout and 41.7% for ST within a volunteer sample working with refugees in one base (Guhan and Liebling-Kalfani 2011). Compassion fatigue is characterised by: exhaustion, anger and irritability, negative coping behaviours, reduced ability to feel sympathy and empathy, a diminished sense of enjoyment or satisfaction with work, increased absenteeism, and an impaired ability to make decisions and care for patients (LeMaster and Zall 1983). Burnout is characterised by feelings such as: exhaustion, frustration, anger and depression, and can be defined as: “…feelings of hopelessness and difficulties in dealing with work or in doing your job effectively,” (Stamm 2010). ST describes a worker’s trauma reactions that are “…secondary to their exposure to clients’ traumatic experiences,” (Trippany et al. 2011) and can be defined as: “…the natural behaviors and emotions that arise from knowing about a traumatizing event experienced by a significant other; the stress resulting from helping or wanting to help a traumatized person,” (Figley 1995). Vicarious traumatisation refers to “…harmful changes that occur in professionals’ views of themselves, others, and the world as a result of exposure to graphic and/or traumatic material.” which can result in decreased motivation, efficacy and empathy (Baird and Kracen 2006). As such, vicarious trauma is a broader term, encompassing experiences of burnout and compassion fatigue, whereas ST refers more specifically to trauma symptomology experienced by a helper following exposure to a client’s traumatic experiences. The
terms vicarious trauma and ST, whilst referring to different phenomenon, are often used interchangeable within research literature (Baird and Kracen 2006). The term ST will be used in the present study so as to remain distinct from burnout.

The benefits of supervision

Clinical supervision can be defined as: “The formal provision by senior/qualified health practitioners of an intensive relationship-based education and training that is case-focused and which supports, directs and guides the work of colleagues (supervisees)...” (Milne 2007). The primary functions of clinical supervision are: “...quality control, maintaining and facilitating the supervisees’ competence and capability; and helping supervisees to work effectively...” (Milne 2007). In a systematic review of studies measuring the effectiveness of clinical supervision in those providing psychotherapy to clients it was found that supervision was reported as highly acceptable, satisfactory and helpful by supervisees; and that supervision improved the therapeutic relationship and therapeutic competence when assessing client-focused benefits (Kühne et al. 2019). In a further systematic review synthesising 20 reviews assessing supervision from the last 25 years, it was found that supervision was: positively associated with job satisfaction, job retention and ability to manage workload; seen as helpful by supervisees; and potentially benefits therapeutic competence (Watkins 2019).

Staff working with refugees have reported that they feel supervision could be beneficial as a means to reduce burnout (Guhan and Liebling-Kalifani 2011) and provide containment when working with refugees (Century et al. 2007). In a sample of 84 professionals working with refugees, including social workers, psychotherapists, doctors and interpreters, “…71.6% of the participating caregivers
rated their need for supervision as “rather high” to “very high” (M=5.04, SD=1.68) on a scale ranging from one (“very low”) to seven (“very high”)…” (Denkinger et al. 2018). This evidences the need for supervision in those working with refugees. Further studies have also emphasised the importance of supervision in reducing compassion fatigue, burnout and ST in health workers, social workers (Robinson 2013) and therapists (Apostolidou 2016) working with refugees. Furthermore, in a research synthesis, “some” evidence was identified suggesting that supervision may act as a protective factor against vicarious trauma (Baird and Kracen 2006). It has been suggested that the current provision of supervision for those working with refugees in the UK is sparse, non-existent or not appropriate (Guhan and Liebling-Kalifani 2011; Robinson 2013). This evidence highlights the clinical importance of providing supervision to those working with refugees and the need to increase provision of supervision in the UK with an aim to improving professional wellbeing.

Clinical supervision has been evidenced to provide a space in which staff can explore and reflect on their personal reactions towards the refugees they are supporting (Apostolidou and Schweitzer 2017). For example, Apostolidou and Schweitzer (2017) interviewed nine participants working with refugees who identified the importance of supervision as a source of personal and professional empowerment, promoting self-care and protecting practitioners from burnout. In a quantitative study, Thornberry et al. (2014) report on the implementation of a supervision model within a palliative care team, which resulted in increased self-awareness, job satisfaction, improvements in team dynamics and retention and decreased compassion fatigue. Whilst Thornberry et al. (2014) reports conclusions drawn from outside of the field of refugee work, these are significant when applied to the current context to illustrate the importance of supervision as an intervention to
alleviate compassion fatigue in professionals. In combination, the evidence provided by Apostolidou and Schweitzer (2017) and Thornberry et al. (2014) highlights the importance of supervision as a means to offset compassion fatigue and improve staff experience and retention. In further support of this finding, BPS guidelines for psychologists working with refugees in the UK posit that one of the four key issues when working with this population is the need for supervision, described as a space to share traumatic stories heard from clients and an aid in the prevention of ST (BPS 2018).

_Befriending/mentoring in the UK_

Dedicated services and organisations providing support for refugees and asylum seekers across the UK are often staffed by volunteers working in befriending and/or mentoring roles. Befriending can be defined as: “...having the objective of building a trusting relationship over time with the aim of combating isolation,” (Philip and Spratt 2007). Where mentoring is included in the befriending relationship, this includes the addition of “…low key objectives which may be identified over weeks or months and reviewed over time,” (Philip and Spratt 2007). Stand-alone mentoring differs from befriending, as the focus is on “…meeting agreed objectives set at the outset…”, rather than building a relationship (Philip and Spratt 2007). Whilst relying on volunteers is a more cost-effective means of supporting refugees, allowing a greater proportion of this population to be supported across the UK where funding may not be available for paid professionals, there are some drawbacks associated with this method of staffing. For example, as volunteers are not employed by the organisation and so are not in receipt of a contract entitling them to certain rights, there is no statutory obligation for organisations to offer them
supervision (Gov.uk 2019; Gray 2019; National Council for Voluntary Organisations 2019). Despite this, organisations may choose to offer volunteers supervision, however, due to the lack of legal status and protections afforded to volunteers, this activity may not be regulated, meaning that the frequency, duration, level of qualification held by the supervisor and content of supervision can vary. This creates a disparity, as other professions exposed to similar levels of client distress, such as mental health professions, have statutory rights to receive supervision, whereas volunteers are not entitled to this means of support. Given that the evidence suggests supervision may reduce burnout and ST, it may be hypothesised that those not receiving supervision may have higher levels of these outcomes, which may then impact on their wellbeing, ability to work and to offer a high-quality service to refugees.

*The current study*

The current study aimed to identify the prevalence of depression, anxiety, burnout, and ST in a large sample of befrienders and/or mentors working with refugees across the UK. As evidence suggests that supervision can decrease burnout and ST, the current study will also investigate current provision of supervision, time spent in supervision and reported satisfaction with supervision. Collecting data on supervision will allow the researchers to inform on the predicted need for supervision within this population. Demographic information will be collected to characterise the study population. The relationships between the variables will be explored. As it is anticipated that some befrienders/mentors will also identify as refugees, which has been found to be associated with higher levels of PTSD symptomology and other mental health difficulties, the presence of this population
within the sample will be measured. The outcome variables of those identifying currently or historically as refugees will be compared to those identifying as having no experience of forced migration. It is anticipated that those identifying as refugees will report higher levels of the outcome variables due to the personal trauma this population may have experienced.

**Research questions**

1. Is time spent directly working with refugees on an average week associated with (a) the severity of burnout and (b) the severity of ST?

2. Is the severity of ST associated with (a) the severity of depression and (b) the severity of anxiety; and is the severity of burnout associated with (c) the severity of depression and (d) the severity of anxiety?

3. Is time spent in formal clinical supervision over an average month associated with (a) the severity of burnout and (b) the severity of ST?

4. Do participants with high supervision satisfaction have significantly different reported (a) burnout and (b) ST than participants with low supervision satisfaction?

5. Do participants identifying as refugees, asylum seekers, refused asylum seekers or forced migrants have significantly different reported depression, anxiety, burnout and ST severity than those identifying as none of the above?

**Methods**

**Recruitment strategy**

Participants were recruited nationally across the UK from 28-Jan-2019 to 03-Oct-2019. Internet searches were used to identify potential organisations supporting
refugees with a befriender and/or mentors’ scheme. These organisations were sent a
standardised introductory email with a copy of the study participant information
sheet (Appendix A), study poster (Appendix B) and lay summary (Appendix C)
attached. The email content included introductory information regarding the study,
study inclusion criteria, a link to the on-line survey and a request for the reader to
disseminate the study information within their organisation (Appendix D). Where
organisations did not respond to the introductory email, a reminder email was sent
four-weeks later. The introductory email was sent to a total of 292 active email
accounts during recruitment. A database of the contacted email addresses was
maintained. Monthly mailshots were sent to these email addresses during recruitment
from March 2019. These mailshots included updates on recruitment and an appeal to
continue to disseminate study information (Appendix E).

Participants
The inclusion criteria were individuals identifying themselves as: (a) befrienders
and/or mentors working in a voluntary capacity for charities and organisations based
in the UK primarily supporting refugees; (b) having worked within this role for a
minimum of six months; (c) having spent time working with refugees in the last
month; (d) aged 18 or over. Those who had been working within their roles for less
than six months were not included, as it was deemed that they would not have
accrued enough working hours, experienced a high degree of exposure to traumatic
experiences or had the opportunity to receive ongoing supervision.

Measures
Cross-sectional self-report data were collected using an on-line survey, JISC (2019; Appendix F). Standardised measures used included: The Professional Quality of Life questionnaire (ProQOL-V; Stamm 2010); the Supervision Satisfaction Questionnaire (SSQ; Ladany et al. 1996); the Patient Health Questionnaire-Nine (PHQ-9; Kroenke and Spitzer 2002); and the Generalised Anxiety Disorder Assessment-Seven (GAD-7; Spitzer et al. 2006). Demographic data were collected detailing age, gender and ethnicity. The amount of time participants spent directly working with refugees on an average week was assessed. Participants receiving supervision were asked to report the amount of time spent in supervision on an average month. Data regarding whether participants identified as refugees were collected to explore potential confounding effects, for example, due to the personal trauma this population may have encountered. The on-line survey used was assessed for its usability by a regional coordinator within a major refugee support organisation in the UK, improving its functionality.

The ProQOL-V\textsuperscript{2} is a standardised 30-item self-report questionnaire scored on a five-point Likert scale (1=never; 5=very often). It consists of three 10-item subscales: compassion satisfaction; burn-out; and Secondary Traumatic Stress (STS), a measure of ST. For the purposes of the current study only the burnout and STS subscales were used, as data regarding compassion satisfaction were not needed to answer the research questions. These subscales were analysed separately. The ProQOL was created for use by employees working within roles which provide support and/or assistance to other people. Results from previous studies using the ProQOL-V with those working with refugees have found variable reliability ratings ranging from questionable (α=0.66; Mehus and Becher 2016) to good (α=0.84; \footnote{Credit to The Center for Victims of Torture: www.ProQOL.org}}
Raynor and Hicks 2018) for burnout and acceptable (α=0.70; James et al. 2014) to good (α=0.86; Raynor and Hicks 2018) for STS. To overcome known issues with the ProQOL-V cut-offs, t-score table raw scores observed at the 25 and 75 percentiles (Stamm 2010), cited as the thresholds for the following cut-offs, were used to categorise burnout and ST as follows: “low” (0-15), “average” (16-25), “high” burnout (26-50); and “low” (0-7), “average” (8-16), “high” ST (17-50).

The SSQ, a modification of the Client Satisfaction Questionnaire (CSQ; Larsen et al. 1979), is an 8-item self-report questionnaire used to measure staff satisfaction with supervision. It is scored on a four-point Likert scale ranging from one to four, with higher scores denoting greater satisfaction with supervision. The SSQ has been found to have excellent internal consistency (α=0.94) in a sample of mental health trainees (Schweitzer and Witham 2017).

The PHQ-9 is a standardised 9-item self-report questionnaire used to measure the frequency of depressive symptomology in both clinical and non-clinical populations. It is scored on a 4-point Likert scale (0=not at all; 3=nearly every day). The sum of the scores indicated on the PHQ-9 can be used to categorise depression severity: “minimal” (score of 0-4); “mild” (5-9); “moderate” (10-14); “moderately severe” (15-19); and “severe” depression (20-27; Kroenke and Spitzer 2002). The PHQ-9 was found to be a valid tool to screen for major depression and subthreshold depressive disorder within a general population sample (Martin et al. 2006).

The GAD-7 is a standardised 7-item self-report questionnaire used to measure the frequency of anxiety symptomology in both clinical and non-clinical populations. It is scored on a four-point Likert scale (0=not at all; 3=nearly every day). The sum of the scores indicated on the GAD-7 can be used to categorise anxiety severity: “minimal” (score of 0-4); “mild” (5-9); “moderate” (10-14); and
“severe” anxiety (15-21; Spitzer et al. 2006). The GAD-7 was found to be a valid and efficient tool for screening and assessing for the severity of general anxiety disorder in primary care settings (Spitzer et al. 2006).

**Ethical Considerations**

This study was approved by the UEA Faculty of Medicine and Health Sciences Research Ethics Committee (Appendix G; H). The BPS guidelines for research conduct were adhered to throughout the research process (BPS 2014). The study adhered fully to the General Data Protection Regulations (GDPR 2018).

**Results**

*Sample characteristics*

A total of 133 participants were recruited. Two participants consented but did not answer the pre-defined minimum of 50% of the questions. These participants were removed from the final dataset, making a final total of 131 participants included in the analysis (Table 1). Power calculations were carried out a priori using a conservative small effect size due to the lack of previous research in the area. The sample analysed (n=131) surpassed the minimum number of participants needed for the purposes of analysis (n=126; MANOVA), indicating that the analyses were sufficiently powered where the full sample of participants was able to used.

**Table 1**

<table>
<thead>
<tr>
<th>Sample Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
</tr>
<tr>
<td>Gender</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Category</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>97 (74)</td>
</tr>
<tr>
<td>Male</td>
<td>33 (25.2)</td>
</tr>
<tr>
<td>Non-binary/queer</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>Age</td>
<td>49.61 (17.28; 19-84)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>White British</td>
<td>69 (54.3)</td>
</tr>
<tr>
<td>White, Caucasian, White</td>
<td>31 (24.4)</td>
</tr>
<tr>
<td>European or White other</td>
<td></td>
</tr>
<tr>
<td>British</td>
<td>8 (6.3)</td>
</tr>
<tr>
<td>Mixed</td>
<td>4 (3.1)</td>
</tr>
<tr>
<td>Asian</td>
<td>2 (1.6)</td>
</tr>
<tr>
<td>Black African</td>
<td>2 (1.6)</td>
</tr>
<tr>
<td>British Asian</td>
<td>2 (1.6)</td>
</tr>
<tr>
<td>British Pakistani</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>Bangladeshi Asian</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>German</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>Irish</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>Latino</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>Mediterranean</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>Turkish</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>White American</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>White Australian</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>Refugee status</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>17 (13.1)</td>
</tr>
<tr>
<td>No</td>
<td>113 (87)</td>
</tr>
</tbody>
</table>
Descriptive statistics and internal consistency

The software package IBM® SPSS® Statistics Version 25 was used for statistical analysis. The distributions of the variables were inspected. A Shapiro-Wilk test of normality identified that burnout was normally distributed ($p=0.081$). Following transforming the outcome variable STS by Log10, a Shapiro-Wilk test of normality identified that STS was satisfactorily normally distributed in the context of the sample size obtained ($p=0.046$). Further Shapiro-Wilk’s tests of normality identified that depression ($p<0.001$), anxiety ($p<0.001$), supervision satisfaction ($p<0.001$), time spent volunteering ($p<0.001$) and time spent in supervision ($p<0.001$) were non-normally distributed. Where the data were normally distributed, means and standard deviations were generated (Table 2). Where the data were non-normally distributed, medians and interquartile ranges were generated (Table 3). The internal consistency of all measures was inspected. It was found that the internal consistency of the burnout ($\alpha=0.69$) scale was questionable, the STS ($\alpha=0.81$) and PHQ9 ($\alpha=0.87$) scales had good levels of internal consistency and the GAD7 ($\alpha=0.90$) and supervision satisfaction ($\alpha=0.92$) scales had excellent levels of internal consistency (Table 4).

Table 2

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean raw score (standard deviation; n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STS Log10</td>
<td>1.25 (0.13; 127)</td>
</tr>
<tr>
<td>STS</td>
<td>18.5 (5.58; 127) “high” STS</td>
</tr>
<tr>
<td>Burnout</td>
<td>19.81 (4.97; 124) “average” burnout</td>
</tr>
</tbody>
</table>
The prevalence of depression, anxiety, burnout and ST were inspected \((n=131)\). The prevalence of depression was: 72.3% “minimal” \((n=94)\); 13.8% “mild” \((n=18)\); 10.8% “moderate” \((n=14)\); and 3.1% “moderately severe” depression \((n=4)\). The prevalence of anxiety was: 66.4% “minimal” \((n=87)\); 23.7% “mild” \((n=31)\); 8.4% “moderate” \((n=11)\); and 1.5% “severe” anxiety \((n=2)\). The prevalence of burnout was: 24.2% “low” \((n=30)\); 62.1% “average” \((n=77)\); and 13.7% “high” \((n=17)\).
prevalence of ST was: 0% “low” \((n=0)\); 45.7% “average” \((n=58)\); and 54.3% “high” \((n=69)\). These results highlight the high prevalence of “minimal” depression, “minimal” anxiety, “average” burnout and “high” ST in volunteers working with refugees in the UK.

*Research question one:* Is time spent directly working with refugees associated with (a) the severity of burnout and (b) the severity of secondary trauma?

As the assumption of normality was not met for the variable time spent directly working with refugees, Spearman’s rank correlation coefficient tests were used. A positive association was found between hours/week volunteering and burnout severity \((r=0.23, p=0.009, n=124)\). A positive association was found between hours/week volunteering and ST severity \((r=0.36, p<0.001, n=126)\). These findings suggest that those who spend more time volunteering also have higher levels of burnout and ST severity.

*Research question two:* Is the severity of secondary trauma associated with (a) the severity of depression and (b) the severity of anxiety, and is the severity of burnout associated with (c) the severity of depression and (d) the severity of anxiety?

As the assumption of normality was not met for the variable’s depression and anxiety, Spearman’s rank correlation coefficient tests were used. Positive associations were found between: ST severity and depression severity \((r=0.61, p<0.001, n=125)\); ST severity and anxiety severity \((r=0.55, p<0.001, n=127)\); burnout severity and depression severity \((r=0.46, p<0.001, n=123)\); and burnout severity and anxiety severity \((r=0.41, p<0.001, n=124)\). These findings confirm the relationship between increased ST and burnout severity and increased depression and
anxiety severity, suggesting at a relationship between compassion fatigue and mental health difficulties.

Research question three: Is time spent in formal clinical supervision associated with (a) the severity of burnout and (b) the severity of secondary trauma?

Fifty (38.5%) participants reported receiving supervision. As the assumption of normality was not met for the variable time spent in formal supervision, Spearman’s rank correlation coefficient tests were used for the subsample of those reporting receiving supervision. No association was found between minutes/month in supervision and burnout \((r=0.17, p=0.248, n=48)\), suggesting that increasing the duration of supervision does not impact on burnout severity. Contrary to what may be hypothesised based on the current research literature, a positive association was found between minutes/month in supervision and ST \((r=0.33, p=0.018, n=50)\), suggesting that those who spend more time in supervision also have higher levels of ST severity.

A post-hoc Spearman’s rank correlation coefficient was conducted to further assess the relationship between time spent in supervision and supervision satisfaction. No significant association was found in the present sample \((r=-0.264, p=0.064, n=50)\), suggesting that increasing the duration of supervision does not impact on satisfaction with supervision. Using the Holm’s method of correcting for multiple comparisons (Wright 1992), an adjustment was made to account for the nine correlational tests used during analysis. All tests remained significant following these corrections. As five of the correlation \(p\) values were unable to be differentiated, the lowest critical value was used for all of these tests (Table 5).

Table 5
### Critical Values Used as Suggested by Holm’s Method of Correcting for Multiple Comparisons

<table>
<thead>
<tr>
<th>Variables analysed</th>
<th>P value</th>
<th>Holm’s critical value</th>
<th>Bonferroni critical value</th>
<th>Remains significant?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time spent volunteering and secondary trauma</td>
<td>$p&lt;0.001$</td>
<td>0.013</td>
<td>0.006</td>
<td>Both</td>
</tr>
<tr>
<td>Secondary trauma and depression</td>
<td>$p&lt;0.001$</td>
<td>0.013</td>
<td>0.006</td>
<td>Both</td>
</tr>
<tr>
<td>Secondary trauma and anxiety</td>
<td>$p&lt;0.001$</td>
<td>0.013</td>
<td>0.006</td>
<td>Both</td>
</tr>
<tr>
<td>Burnout and depression</td>
<td>$p&lt;0.001$</td>
<td>0.013</td>
<td>0.006</td>
<td>Both</td>
</tr>
<tr>
<td>Burnout and anxiety</td>
<td>$p&lt;0.001$</td>
<td>0.013</td>
<td>0.006</td>
<td>Both</td>
</tr>
<tr>
<td>Time spent volunteering and burnout</td>
<td>$p=0.009$</td>
<td>0.033</td>
<td>0.006</td>
<td>Holm’s only</td>
</tr>
<tr>
<td>Time spent in supervision and secondary trauma</td>
<td>$p=0.018$</td>
<td>0.039</td>
<td>0.006</td>
<td>Holm’s only</td>
</tr>
<tr>
<td>Time spent in supervision and supervision satisfaction</td>
<td>$p=0.064$</td>
<td>0.044</td>
<td>0.006</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Research question four: Do participants with high supervision satisfaction have significantly different reported (a) burnout and (b) secondary trauma than participants with low supervision satisfaction?

A median split was applied to the supervision satisfaction data, creating two independent groups from the subsample of those receiving supervision: high and low supervision satisfaction. A MANOVA was used with burnout and ST as the Dependent Variables (DVs) and supervision satisfaction as the Independent Variable (IV; see Appendix I for assumption testing). The IV had two levels: high supervision satisfaction and low supervision satisfaction (Table 6).

Table 6

<table>
<thead>
<tr>
<th>Measure</th>
<th>Supervision satisfaction; mean raw score (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Burnout</td>
<td>20.88 (25)</td>
</tr>
<tr>
<td>STS Log10</td>
<td>1.29 (25)</td>
</tr>
</tbody>
</table>

The main effect of supervision satisfaction was found to be non-significant [F(2,45)=2.71, p=0.077; Pillai’s Trace=0.11, partial $\eta^2=0.11$] with a medium effect size. The effect of supervision satisfaction on burnout was found to be non-significant [F(1,46)=3.53, p=0.067; partial $\eta^2=0.071$] with a medium effect size, demonstrating that there was no significant effect of supervision satisfaction on
burnout severity. The effect of supervision satisfaction on ST was found to be significant \([F(1,46)=4.80, p=0.034; \text{partial } \eta^2=0.094]\) with a medium effect size, demonstrating that those with high supervision satisfaction had significantly lower levels of ST severity.

Research question five: Do participants identifying as refugees have significantly different reported depression, anxiety, burnout and secondary trauma severity than those identifying as none of the above?

The prevalence of depression, anxiety, burnout and ST were inspected separately for the subsamples of those identifying as refugees \((n=17)\) and those identifying as having no experience of forced migration \((n=113; \text{Tables 7-10})\).

Table 7

<table>
<thead>
<tr>
<th>Measure</th>
<th>Total sample</th>
<th>Non-refugee</th>
<th>Refugee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>((n=130))</td>
<td>((n=112))</td>
<td>((n=17))</td>
</tr>
<tr>
<td>“Minimal” (0-4)</td>
<td>72.3 ((n=94))</td>
<td>75.9 ((n=85))</td>
<td>47.1 ((n=8))</td>
</tr>
<tr>
<td>“Mild” (5-9)</td>
<td>13.8 ((n=18))</td>
<td>12.5 ((n=14))</td>
<td>23.5 ((n=4))</td>
</tr>
<tr>
<td>“Moderate” (10-14)</td>
<td>10.8 ((n=14))</td>
<td>9.8 ((n=11))</td>
<td>17.6 ((n=3))</td>
</tr>
<tr>
<td>“Moderately severe” (15-19)</td>
<td>3.1 ((n=4))</td>
<td>1.8 ((n=2))</td>
<td>11.8 ((n=2))</td>
</tr>
<tr>
<td>“Severe” (20-27)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Clinical depression (10+)</td>
<td>13.8 ((n=18))</td>
<td>11.6 ((n=13))</td>
<td>29.4 ((n=5))</td>
</tr>
</tbody>
</table>

Table 8

<table>
<thead>
<tr>
<th>Measure</th>
<th>Total sample</th>
<th>Non-refugee</th>
<th>Refugee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>((n=130))</td>
<td>((n=112))</td>
<td>((n=17))</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prevalence (%) of Anxiety as Measured and Categorised by the GAD-7
<table>
<thead>
<tr>
<th>Measure</th>
<th>Total sample</th>
<th>Non-refugee</th>
<th>Refugee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=131)</td>
<td>(n=113)</td>
<td>(n=17)</td>
</tr>
<tr>
<td>“Minimal” (0-4)</td>
<td>66.4 (n=87)</td>
<td>68.1 (n=77)</td>
<td>52.9 (n=9)</td>
</tr>
<tr>
<td>“Mild” (5-9)</td>
<td>23.7 (n=31)</td>
<td>24.8 (n=28)</td>
<td>17.6 (n=3)</td>
</tr>
<tr>
<td>“Moderate” (10-14)</td>
<td>8.4 (n=11)</td>
<td>6.2 (n=7)</td>
<td>23.5 (n=4)</td>
</tr>
<tr>
<td>“Severe” (15-21)</td>
<td>1.5 (n=2)</td>
<td>0.9 (n=1)</td>
<td>5.9 (n=1)</td>
</tr>
<tr>
<td>Clinical anxiety (10+)</td>
<td>9.9 (n=13)</td>
<td>7.1 (n=8)</td>
<td>29.4 (n=5)</td>
</tr>
</tbody>
</table>

Table 9

<table>
<thead>
<tr>
<th>Measure</th>
<th>Total sample</th>
<th>Non-refugee</th>
<th>Refugee (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=124)</td>
<td>(n=107)</td>
<td></td>
</tr>
<tr>
<td>“Low” (0-15)</td>
<td>24.2 (n=30)</td>
<td>25.2 (n=27)</td>
<td>18.8 (n=3)</td>
</tr>
<tr>
<td>“Average” (16-25)</td>
<td>62.1 (n=77)</td>
<td>61.7 (n=66)</td>
<td>62.5 (n=10)</td>
</tr>
<tr>
<td>“High” (26-50)</td>
<td>13.7 (n=17)</td>
<td>13.1 (n=14)</td>
<td>18.8 (n=3)</td>
</tr>
</tbody>
</table>

Table 10

<table>
<thead>
<tr>
<th>Measure</th>
<th>Total sample</th>
<th>Non-refugee</th>
<th>Refugee (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=127)</td>
<td>(n=109)</td>
<td></td>
</tr>
<tr>
<td>“Low” (0-7)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>“Average” (8-16)</td>
<td>45.7 (n=58)</td>
<td>48.6 (n=53)</td>
<td>29.4 (n=5)</td>
</tr>
<tr>
<td>“High” (17-50)</td>
<td>54.3 (n=69)</td>
<td>51.4 (n=56)</td>
<td>70.6 (n=12)</td>
</tr>
</tbody>
</table>
The effect of refugee status on depression, anxiety, burnout and ST was assessed. Where the DVs were observed to be normally distributed, a MANOVA was used (see Appendix J for assumption testing). Burnout and ST were the DVs and refugee status was the IV. The IV had two levels: participants identifying as refugees, asylum seekers, refused asylum seekers or forced migrants, coded as yes and participants identifying as none of the above, coded as no (Table 11).

**Table 11**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Refugee status; mean raw score (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Burnout</td>
<td>20.69 (16)</td>
</tr>
<tr>
<td>STS Log10</td>
<td>1.32 (16)</td>
</tr>
</tbody>
</table>

There was a statistically significant main effect of refugee status \(F(2,116)=3.33, p=0.039; \text{Pillai's Trace}=0.054, \text{partial } \eta^2=0.054\) with a small effect size, demonstrating that those identifying as refugees experienced higher levels of burnout and ST than those identifying as none of the above when these variables were combined. The effect of refugee status on burnout severity was found to be non-significant \(F(1,117)=0.45, p=0.50; \text{partial } \eta^2=0.004\). The effect of refugee status on ST severity was found to be significant \(F(1,117)=5.63, p=0.019; \text{partial } \eta^2=0.046\) with a small effect size, demonstrating that those historically or currently identifying as refugees experienced higher levels of ST than those identifying as none of the above. An adjustment was made to account for the two MANOVA tests used during analysis. The effect of refugee status on ST remained significant.
following both the Holm’s and Bonferroni methods of correcting for multiple comparisons.

Where the DVs were observed to be non-normally distributed, Mann-Whitney U tests were used. Depression severity and anxiety severity were the DVs. Refugee status was the IV with two levels as previously defined (Table 12).

Table 12

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean rank by refugee status (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>PHQ9</td>
<td>86.76 (17)</td>
</tr>
<tr>
<td>GAD7</td>
<td>75.53 (17)</td>
</tr>
</tbody>
</table>

The effect of refugee status on depression severity was found to be significant, demonstrating that participants historically or currently identifying as refugees reported higher depression severity (mean rank=86.76) than those identifying as none of the above (mean rank=61.09; U=565, $p=0.007$; partial $\eta^2=0.06$) with a medium effect size. The effect of refugee status on anxiety severity was found to be non-significant, demonstrating that there was no effect of refugee status on anxiety severity (U=790, $p=0.23$; partial $\eta^2=0.01$). An adjustment was made to account for the two Mann-Whitney U tests used during analysis. It should be noted, however, that a further eight Mann-Whitney U tests were conducted post-hoc, as reported in chapter five. With the further addition of these tests, the effect of refugee status on depression severity only remains significant when using the Holm’s method of correcting for multiple comparisons.
Discussion

The prevalence and severity of depression, anxiety, burnout, and ST was measured in a sample of volunteer befrienders and/or mentors working with refugees in the UK. The relationships between these outcomes was assessed. The impact of time spent volunteering, refugee status and supervision were inspected.

Depression

Eighteen participants (13.8%) scored 10 or more on the PHQ-9, indicating clinical levels of depression. In comparison to a sample of 580 primary care patients, 17.8% of which reported PHQ-9 scores of 10 or more (Kroenke et al. 2001), the prevalence of the present sample is slightly lower. That the present sample appear to be experiencing reduced depression in comparison to the general population may be explained by the current research literature, which suggests that there is a relationship between volunteering and reduced depression. For example, Jenkinson et al. (2013) conducted a systematic review exploring the benefits of volunteering and found evidence suggesting that volunteering was associated with reduced levels of depression.

Anxiety

Thirteen participants (9.9%) scored 10 or more on the GAD-7, indicating clinical levels of anxiety. In comparison to general population data provided by Löwe et al. (2008) generated from 5036 participants, the median GAD-7 score of the present study (median=3.00) is observed to be in line with the mean observed in the general population (M=2.95). Löwe et al. (2008) reported that “approximately 5%” of participants reported GAD-7 scores of 10 or more, about half that observed in the
present sample (9.9%). This disparity between comparing measures of central
tendency and prevalence could suggest that the prevalence reported within the
present study has been affected by outliers. However, it feels understandable that
those working with refugees may be experiencing heightened levels of anxiety due to
the potentially anxiety-provoking nature of this role.

**Burnout and secondary trauma**

Seventeen participants (13.7%) reported “high” burnout and 69 participants (54.3%)
reported “high” ST as categorised by the ProQOL-V, in which participants can be
categorised as “low”, “average” or “high”. The mean raw scores of the present
sample were compared to those reported by Stamm (2010) based on a data bank of
1289 cases from multiple studies. Using this normative data, the severity of reported
burnout from the present study (M=19.81) is observed to be in line with the general
population (M=20), whilst the severity of reported ST (M=18.5) is observed to be
substantially higher than that of the general population (M=11). The prevalence of
“high” burnout within the present sample (13.7%) is observed to be lower than the
majority of other refugee studies, which report prevalence figures ranging from 9.2%
(Mehus and Becher 2016) to 57.1% (Chatzea et al. 2018) and lower than what we
may expect to observe in the general population (25%; Stamm 2010). The present
prevalence of burnout is also observed to be lower than other UK volunteers working
with refugees in a single base (33.3%; Guhan and Liebling-Kalfani 2011). The
prevalence of “high” ST within the present sample (54.3%) sits in the middle of
those reported by other refugee studies, which range from 22.9% (Denkinger et al.
2018) to 93.6% (Posselt et al. 2019) and is observably over double what we may
expect to see in the general population (25%; Stamm 2010). The present prevalence
of ST is also observably higher than that reported by other UK volunteers working with refugees in a single base (41.7%; Guhan and Liebling-Kalfani 2011).

In summary, both the mean ST severity (M=18.5) and prevalence of “high” ST (54.3%) within the present sample are observed to be substantially higher than that of the general population (M=11, 25%; Stamm 2010), with the prevalence of “high” ST more than double that of the general population. This prevalence appears to be in line with those reported by other helpers working with refugees. The mean burnout severity of the present sample (M=19.81) is observed to be comparable to that of the general public (M=20, Stamm 2010); however, when comparing prevalence, the prevalence of “high” burnout within the present sample (13.7%) is observed to be lower than that of the general public (25%, Stamm 2010) and other helpers working with refugees. The observed low burnout in this population could be as a result of the impact of volunteering, which has been found to be associated with improved quality of life in two cohort studies where volunteers felt their actions were appreciated (Jenkinson et al. 2013). The low burnout prevalence may also be reflective of potential sampling bias, as it may be anticipated that volunteers experiencing higher levels of burnout may be less likely to commit further time towards completing a work-related survey. Further research should be conducted to assess the replicability of the present burnout prevalence.

Time spent volunteering

The relationships between the outcomes were assessed. Increased time spent volunteering was found to be associated with higher levels of burnout and ST severity. Higher levels of burnout and ST severity were also found to be associated with higher levels of depression and anxiety severity. That it appears that more time
spent volunteering is associated with experiences of compassion fatigue, namely burnout and ST, may be due to increased exposure to highly traumatised clients, which has been linked with compassion fatigue (Guhan and Liebling-Kalfani 2011; Robinson 2013; Jones and Williamson 2014; Kjellenberg et al. 2014; Weitkamp et al. 2014; Lusk and Terrazas 2015; Apostolidou 2016; Mehus and Becher 2016; Kinderman et al. 2017; Yeunhee 2017; Chatzea et al. 2018; Denkinger et al. 2018; Espinosa et al. 2019; Posselt et al. 2019). These findings also highlight the clinical relevance of “high” ST and burnout as having an impact on volunteers more general wellbeing. It may be beneficial for befriending/mentoring organisations to maintain an awareness of the amount of time befrienders and/or mentors volunteer; and to offer further support to those who volunteer larger quantities of their time.

**Refugee status**

Comparisons were made between those identifying as refugees and those with no experience of forced migration. No effects of refugee status were observed for outcomes of burnout and anxiety severity. Those identifying as refugees were observed to report higher levels of ST severity with a small effect size and depression severity with a medium effect size. That refugees are reporting higher levels of depression may be explained by the current research literature, which evidences the trauma and stress associated with the experience of forced migration, the journeys of which can be dangerous (Dolma et al. 2006; Gerard and Pickering 2013; Bouhenia et al. 2017; Tello et al. 2017; Farhat et al. 2018) and subsequent process of seeking asylum difficult to access (Bouhenia et al. 2017; Farhat et al. 2018). This may leave volunteers with a history of seeking refuge at a higher vulnerability to being retraumatised or triggered when working with refugees with
similar experiences. This finding may also be reflective of the reported stressful and depressing nature of adapting to British culture experienced by refugees (Papadopoulos et al. 2004). The prevalence of clinical depression (29.4%) and clinical anxiety (29.4%) within the present sub-sample of volunteers identifying as refugees were also observed to be higher than a sample of 200 Syrian refugees residing in Germany (clinical depression=14.5%, clinical anxiety=13.5%, Georgiadou et al. 2018). This further suggests that volunteers identifying as refugees should be offered additional support as they may be experiencing higher levels of depression and anxiety than the people they are supporting.

That those identifying as refugees appear to be experiencing higher levels of ST may be explained by the amount of time they spend volunteering (median of seven hours/week), which was observed to be higher than that of volunteers without a history of seeking refuge (median of three hours/week). As increased time spent volunteering was found to be associated with increased ST severity, this may explain some of the variance. It is also probable that those volunteers identifying as refugees have their own personal experiences of trauma, which debatably may or may not have an impact on the development of STS (Baird and Kracen 2006); may increase vulnerability to being retraumatised or triggered when hearing distressing narratives; and may confound results reported using the ProQOL STS scale due to the potential cross-over between ST and personal trauma symptomology. As the present study did not assess for primary trauma and so could not control for its potentially confounding effects, further research should be conducted to assess whether this has an impact on ST experienced by volunteers identifying as refugees. Future research could also explore why refugees may be experiencing higher levels of ST.
Supervision

The current provision and effects of supervision on burnout and ST severity were explored. Fifty (38.5%) participants reported receiving supervision. Contrary to what may be expected, no relationship was found between time spent in supervision and burnout severity though a positive association was found between time spent in supervision and ST severity. As the levels of burnout in the present sample were lower than expected, this may have limited the ability to detect factors relating to reduced burnout. That time spent in supervision was found to be positively associated with ST severity may be indicative of the correlational method of analysis used, reflecting that those who experience higher levels of ST severity may more readily seek additional time in supervision. To further explore the impact of time spent in supervision as a potential measure of supervision quality, a post-hoc test was conducted exploring the relationship between time spent in supervision and supervision satisfaction. No relationship was found, indicating that supervision satisfaction is not significantly impacted by the amount of time spent in supervision. This finding suggests that offering additional supervision does not reduce burnout or ST severity and does not improve perceived satisfaction with supervision. As such, time spent in supervision should not be viewed as a measure of the quality of supervision within the present sample.

The effects of high versus low supervision satisfaction were explored. No significant difference was found when comparing the burnout severity scores of those with high versus low supervision satisfaction; however, a medium effect size was found, indicating that this null finding may be due to a lack of power when analysing the smaller subsample of those receiving supervision. Those with high supervision satisfaction were found to have significantly lower levels of ST severity.
with a medium effect size. Whilst the authors of the SSQ and CSQ do not offer a
description or definition of what is meant by high supervision satisfaction, the items
of the SSQ can be observed to measure: supervision quality, amount, satisfaction;
whether the supervisee receives the “…kind of supervision…” they wanted, would
recommend supervision to a colleague, would “…come back…” to supervision if
they sought help again; and whether supervision met their needs and helped them to
“…deal more effectively…” with their problems (Ladany et al. 1996). In
combination, these supervision findings suggest that increasing time spent in
supervision is not helpful when attempting to reduce ST and burnout severity in the
workforce. Instead, items relating to supervision satisfaction, as outlined above,
should be inspected, as those with high supervision satisfaction had significantly
lower levels of ST severity with a medium effect size. Further research should be
conducted with a larger sample of those receiving supervision to further explore the
effects of high supervision satisfaction on burnout severity and factors associated
with high supervision satisfaction.

Limitations

As the sample were self-selected it cannot be verified that the participants recruited
met the inclusion criteria. However, the inclusion criteria were included in every
communication made to organisations via email, hopefully mitigating this.
Participants also reported their age, demonstrating that this inclusion criteria was
met.

In order to reduce time spent completing the survey and increase completion
rates and thus available data, the survey was kept as brief as possible. Because of
this, further data which may have had a confounding effect on the results, such as
personal experience of trauma or duration of service, were not collected and thus could not be controlled for. In defence of this, Kindermann et al. (2017) found no significant relationship between duration of work experience and STS in a sample of 64 interpreters working with refugees. In a research synthesis it was also identified that there was the same amount of evidence suggesting that personal experiences of trauma factors into the development of STS as there was suggesting there was no link between these two variables (Baird and Kracen 2006). These studies evidence that personal experiences of trauma and duration of service, although not measured, may not have had a confounding effect on the data.

Despite assessing for refugee status as a potential confounding factor, this variable was unable to be controlled for due to its non-normal distribution, preventing it from being used as a covariate. As those identifying as refugees also reported significantly higher depression and ST severity, the inability to control for this variable may have had an effect on the results.

When analysing supervision satisfaction data, a median split was used to dichotomise participants into two groups: high and low supervision satisfaction. As this method was used, additional variance of the supervision satisfaction data was not included. In defence of this decision, by using a MANOVA rather than a multiple regression, which would have taken into account all the variance of the data, the results are able to be more easily interpreted and digested.

That lower levels of burnout were reported by the present sample may be as a result of the poor psychometric properties of the ProQOL-V burnout scale, the internal consistency of which has been found to range from questionable (α=0.66; Mehus and Becher 2016) to good (α=0.84; Raynor and Hicks 2018) in other refugee studies and was rated questionable in the present study (α=0.69). As a result, burnout
may not have been accurately measured, affecting the study’s ability to draw conclusions regarding this outcome. Future research could use the Maslach Burnout Inventory (MBI; Maslach et al. 1996) instead of the ProQOL-V to further explore burnout. 

Due to the novel nature of the present research, the Holm’s method (Wright 1992), a more conservative method of comparing for multiple comparisons, was used in favour of the harsher Bonferroni method in an effort to avoid type two errors. If the Bonferroni method had been used as the primary method of comparing for multiple comparisons, the following results would no longer be significant: time spent volunteering was found to be positively associated with burnout severity; time spent in supervision was found to be positively associated with ST severity; those identifying as refugees reported significantly higher levels of depression severity as compared to those with no history of forced migration. Therefore, these findings should be interpreted with additional caution.

**Clinical implications**

The results of the present study, evidencing: the high prevalence of ST within this workforce; the implications this has for their general wellbeing; and that highly satisfactory supervision is associated with significantly lower levels of ST severity, evidences the need for supervision in this population. These findings could be used by refugee charities and organisations to apply for funding for supervision. It should be noted that increased time spent in supervision does not reduce ST and burnout severity. As such, where individuals need additional support, the focus should be on improving the quality of supervision, rather than increasing time spent in supervision. This may be achieved by monitoring supervision satisfaction and by
exploring the factors related to high supervision satisfaction. It may also be appropriate to consider the training and qualifications held by the supervisor and their ability to provide high quality supervision. As those identifying as refugees were found to have significantly higher levels of depression and ST severity, it may be appropriate to offer these individuals further support within these areas when volunteering. Further research should be conducted to identify how these individuals can be best supported in their roles. See Appendix K for a summary of the results for dissemination to participants.

Conclusions

To the researchers’ knowledge, this is the first national study reporting the prevalence of depression, anxiety, burnout, and ST in volunteers working with refugees across the UK. It was found that over half of the sample were experiencing “high” ST. Increased time spent volunteering was observed to be associated with higher levels of ST and burnout severity. Volunteers identifying as refugees were found to have higher levels of depression and ST severity as compared to volunteers with no history of forced migration. Of note was that those with high supervision satisfaction had significantly lower levels of ST as compared to those with low supervision satisfaction. This highlights the importance of providing high quality supervision to this workforce. This may also have implications for the roles of appropriately qualified professionals, including clinical psychologists, in providing supervision to volunteer befrienders and/or mentors supporting refugees, as well as the development of supervision guidelines for this professional group. Further research could explore factors contributing to the perception of highly satisfactory supervision. The results of this research could then support the development of a
supervision model targeted at reducing ST in those working with highly traumatised populations. The results of this research could also inform the creation of guidelines regarding volunteering to support refugees.

Acknowledgments

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Appendix

Appendix A: Participant information sheet

Appendix B: Study poster

Appendix C: Lay summary

Appendix D: Introductory recruitment email

Appendix E: Example monthly mailshot

Appendix F: On-line survey (see pdf)

Appendix G: Ethical approval documentation (see pdf)

Appendix H: Ethical approval for an amendment to the study (see pdf)

Appendix I: Assumption testing for research question four

Appendix J: Assumption testing for research question five

Appendix K: Summary of results for dissemination to participants (see pdf)
Appendix A: Participant information sheet

Participant information sheet

07-Jan-2019 (version 2)

The impact of voluntary work within befriending and/or mentoring roles supporting refugees, asylum seekers and forced migrants in the UK: Data from an online survey

My name is Fritha Roberts and I am training to be a Clinical Psychologist at the University of East Anglia. As part of my training I am doing a research project looking at how working with refugees, asylum seekers, refused asylum seekers and forced migrants may impact volunteers in the UK.

Brief Summary

Increases in war and conflict have meant that more people across the world are fleeing their homes out of fear for what could happen to them otherwise. These people have often experienced traumatic events and may need support when arriving in other countries.

Working with people who have experienced traumatic events can sometimes be difficult, as hearing about these events can be upsetting. This can lead workers to
feel depressed, or to experience trauma themselves. These feelings can result in emotional and physical exhaustion, called burnout.

This study aims to ask people working within a befriending and/or mentoring capacity about the difficulties which may happen when working with refugees. To do this we will be using an online questionnaire. By gathering this information, we are hoping to look at whether people experience difficulties, what these difficulties are, and how they can be addressed, so that those working with refugees can be supported in their roles.

Work-based supervision is a formal work-based activity in which a more senior member of staff provides education and training as part of a scheduled meeting to help direct, support and guide other members of staff in their work with clients. This study is looking at the protective nature of supervision to protect against the development of feelings of low mood or distress. To do this, this study will gather information about the provision of work-based supervision across the UK for befrienders and mentors. The possible ability of supervision to reduce the difficult feelings which may happen when working with people who have experienced trauma will be explored.

What would taking part involve?

Participation will involve completing an online survey which will ask you about your experience at work. You can access this online survey through your computer or through another device with access to the internet, such as a smart phone or tablet.
The survey will include questions about possible feelings of burnout, worry or sadness which people may feel as part of working with individuals who have been through traumatic events. There will also be questions about your own wellbeing focusing on experiences of low mood and anxiety.

As part of the survey we will ask you a little bit about yourself, such as your age, gender and ethnicity. We will not ask you to give your name or contact details. This means that you will remain anonymous unless you choose to contact us. The survey also includes questions about work-based supervision, if this is something you receive within your role. In total, the survey should take about 15 minutes to complete.

If you choose to participate in this research project, we will ask you to complete a consent form, to confirm that you understand what is involved in participating and are happy to proceed.

What are the possible benefits of taking part?

Whilst there may not be any direct benefits in taking part, by knowing more about this area we are hoping to be able to make suggestions about ways that people within your role can be best supported. By contributing through completing this survey, you would be helping us to make suggestions that are more representative of a larger group of mentors and befrienders. This would make our suggestions more helpful to you and others like you.
What are the possible disadvantages and risks to taking part?

As part of the survey we will be asking you about your mood over the last week, including a question about whether you have had any thoughts about taking your own life. We will also be asking about distressing experiences you may have had which resulted from hearing very upsetting stories from the people you work with. Reading and answering these types of questions may cause you to feel upset or distressed when completing the survey. If you do feel upset during or after filling out the survey, we have provided some contact details and suggestions for you below for extra support. If you would like help with your mental health, we would recommend you speak to your GP, who will be able to give you further support. You can also make a self-referral to your local Wellbeing service, who also provide support for mental health, by googling: “Wellbeing Improving Access to Psychological Therapy (IAPT)”. If you are in crisis, or need immediate help, please call your local emergency service on 999.

Samaritans (24-hour service)

Contact number: 116 123 (UK) Email: jo@samaritans.org (UK)

Contact number: 116 123 (ROI) Email: jo@samaritans.ie (ROI)

Website: https://www.samaritans.org/how-we-can-help-you/contact-us

Mind (9AM – 6PM, Mon-Fri, except bank holidays)

Contact number: 0300 123 3393 Email: info@mind.org.uk

Text: 86463

Website: https://www.mind.org.uk/
Right to Withdraw

You have the right to withdraw at any point during the research process. You can do this by exiting the screen by clicking the top right “x” button. If you choose to exit the survey midway through, your previous answers will have already been submitted and will not be able to be withdrawn. This is because we are not asking you for any personal details, such as your name or contact information. Because of this, we will not be able to withdraw your data, as we will have no way of finding out which answers were yours. If you chose to complete the survey and submit your answers, we will not be able to withdraw the answers you gave from our research data for the same reason.

Confidentiality

As we are not taking any of your personal details, your answers will remain anonymous. While we are working on the study, your anonymous research data will be kept securely on an encrypted memory stick. When the study is complete, your research data will be transferred to the University of East Anglia network drive for archiving, where it will be stored securely. This data will be kept for ten years, after which it will be destroyed. This study adheres fully to the General Data Protection Regulation (GDPR; 2018).

The Results

When the research process is finished, we will send our findings back to you via the same method you found out about the research study. This may be through your
organisation, as part of a mailing list, or through membership of a larger group, such as City of Sanctuary.

**Who is organising and funding the study?**

This study is funded by the University of East Anglia (UEA) in Norwich, England. It has received full ethical approval by the UEA Faculty of Medicine and Health Sciences Research Ethics Committee. This study is being completed as a part of a doctoral qualification in Clinical Psychological.

**Further information and contact details**

If you would like further information about the research project, or if you have any questions, please don’t hesitate to contact me, Fritha Roberts, on:

Email: f.roberts@uea.ac.uk

Phone: 01603 591258

Address: Department of Clinical Psychology, Norwich Medical School, Norwich Research Park, University of East Anglia, Norwich, Norfolk, NR4 7TJ.

Please note, that these are professional contact details, and so responses may take up to week or more. As such, these contact details should not be used for seeking additional help for mental health difficulties, or for distress arising as part of the research process. If you need further support, please use the details provided above.

**Concerns and complaints**
If you are unhappy with any part of your research participation, or would like to make a complaint, please contact the Head of the Department, Professor Niall Broomfield, on:

Email: n.broomfield@uea.ac.uk
Phone: 01603 593544
Address: Norwich Medical School, Norwich Research Park, University of East Anglia, Norwich, Norfolk, NR4 7TJ.

Thank you for reading this information sheet!
Appendix B: Study poster

The impact of voluntary work within befriending and/or mentoring roles supporting refugees, asylum seekers and forced migrants in the UK: Data from an online survey

Do you want to be involved in a research project?
Do you have fifteen minutes to spare and access to the internet?

If you are:

a. Volunteering in a befriending or mentoring capacity or role.
b. Volunteering for a UK based organisation or charity that mostly works with refugees, asylum seekers or forced migrants.
c. Have been volunteering for a minimum of six months.
d. Have worked with refugees, asylum seekers or forced migrants in the last month.
e. Aged 18 or over.

We want to hear from you!

For more information or to take part follow this link: https://uea.onlinesurveys.ac.uk/the-impact-of-voluntary-work
Appendix C: Lay summary

**Lay Summary**

My name is Fritha Roberts and I am training to be a Clinical Psychologist at the University of East Anglia. As part of my training I am doing a research project looking at how working with refugees, asylum seekers, refused asylum seekers and forced migrants may impact volunteers in the UK.

**What is this study about?**

Increases in war and conflict have meant that more people across the world are fleeing their homes out of fear for what could happen to them. For example, since 2011 more than 5.6 million people have fled the war in Syria to seek refuge in other countries. These people have often been through difficult events and are in need of support. Services have been set up to provide support for refugees and asylum seekers in the UK. These services are often staffed by volunteers.

Working with people who have been through difficult events can sometimes be hard, as hearing about these events can be upsetting. This can lead workers to feel depressed or worried. These feelings can result in burnout. Supervision is a work-based task in which members of staff meet to discuss their work and receive feedback and advice. This study is aiming to look at whether supervision is offered to volunteers working with refugees and asylum seekers. This study will also look at whether supervision can reduce the difficult feelings which may happen when working with people who have been through difficult events.
What does taking part involve?

I am hoping to collect data from a large number of volunteers. I have made an online survey to collect this data. This survey includes questions on feelings of low mood, anxiety, work place well-being and supervision. This survey should take about fifteen minutes to fill out.

Why is this study important?

By doing this study, we are hoping to look at whether workers have these difficult feelings, what these are, and how they can be improved. We are doing this so that people working with refugees can be helped in their roles. If, as other studies have shown, supervision improves workplace well-being, the results of this study will show the importance of supervision for those who work with refugees.

How can I get involved?

The people who can be take part in this study are volunteers who regularly work with refugees and asylum seekers through organisations in the UK.

If you would like to take part or find out more about the study, please follow this link:

https://uea.onlinesurveys.ac.uk/the-impact-of-voluntary-work

If you have any questions about the study, please contact me on:

f.roberts@uea.ac.uk
Kind regards,

Fritha Roberts

Trainee Clinical Psychologist

University of East Anglia
Appendix D: Introductory recruitment email

Subject: Research opportunity for volunteer befrienders and/or mentors working with refugees in the UK

Dear Sir or Madam,

My name is Fritha Roberts and I am a Trainee Clinical Psychologist at the University of East Anglia. As part of my training I am conducting a research project investigating the experiences of people working voluntarily as befrienders and/or mentors, or similar roles, with refugees, asylum seekers, refused asylum seekers and forced migrants across the UK.

Why am I emailing you?
I am hoping to collect data from a large number of volunteers working with refugees. I am approaching organisations which have contact with volunteer befrienders/mentors who may be eligible and interested in participating, to enquire as to whether you would be happy to share the details of my research project with potential participants.

What is the study about?
In order to collect this data, I have developed an online survey. This survey includes questions on experiences of low mood, anxiety, work place wellbeing and supervision. This survey should take approximately fifteen minutes to complete.

By gathering this information, we are hoping to look at whether people experience difficulties, what these difficulties are, and how they can be addressed, so that those working with refugees can be supported in their roles. If, as previous research has shown, supervision supports workplace and general wellbeing, the results of this project will demonstrate the value of supervision to those who work with refugees.

The eligibility criteria for my study are as follows:
1. Individuals volunteering in a befriending or mentoring capacity or role.
2. Individuals volunteering for a UK based organisation or charity that mostly works with refugees, asylum seekers or forced migrants.
3. Individuals who have volunteered within this role for a minimum of six months.
4. Individuals who have spent time volunteering with refugees, asylum seekers or forced migrants in the last month.
5. Individuals who are aged 18 or over.

For further information or to fill out the survey please follow this link: https://uea.onlinesurveys.ac.uk/the-impact-of-voluntary-work
I have attached the study participant information sheet, lay summary and poster documents to this email. If you would like further information about the project, or a laminated version of the study poster sent to you, please don’t hesitate to ask.

Kind regards,

Fritha Roberts
Trainee Clinical Psychologist
University of East Anglia
Appendix E: Example monthly mailshot

Subject: Research opportunity for volunteer befrienders and/or mentors working with refugees in the UK: Only eleven more participants needed!

Good afternoon everybody,

We are now preparing for the close of recruitment and have begun to conduct preliminary analyses on the data. The quality of the data is looking very good, which is excellent news. I want to send a big thank you to all of the participants who completed the survey so carefully and thoroughly. Recruitment will remain open until then end of September, after which it will be closing on October 1st, ready to start the final data analysis process.

We are still looking for a further 11 volunteers to complete the survey. If anyone is able to support us by giving one last push on sharing the survey information with potential participants that would be incredibly helpful. It would be really amazing to meet our recruitment target of 126, as we are now so close with 115 participants having completed the survey so far.

The eligibility criteria for my study are as follows:

6. Individuals volunteering in a befriending or mentoring capacity or role.
7. Individuals volunteering for a UK based organisation or charity that mostly works with refugees, asylum seekers or forced migrants.
8. Individuals who have volunteered within this role for a minimum of six months.
9. Individuals who have spent time volunteering with refugees, asylum seekers or forced migrants in the last month.
10. Individuals who are aged 18 or over.

For further information or to fill out the survey please follow this link: https://uea.onlinesurveys.ac.uk/the-impact-of-voluntary-work

If you would like to opt-out of receiving any further emails regarding recruitment please let me know.

Kind regards,

Fritha Roberts
Trainee Clinical Psychologist
University of East Anglia
Appendix I: Assumption testing for research question four

The assumptions of a MANOVA were assessed as follows. The number of cases per group was greater than the number of levels of IV multiplied by the number of DVs being assessed (Grande, 2015). The Maximum Mahalanobis Distance (7.65) was found to be smaller than the critical value (14.22; Penny, 1996) when analysing two predictor variables with a sample size of over 100. The data were inspected for the presence of a linear relationship using a matrix scatter plot. A linear relationship was observed by the presence of an elliptical pattern moving from the bottom left to top right corners (Figure 1; Grande, 2015). The multivariate normality for each of the DVs was assessed. A Shapiro-Wilk test of normality identified that scores on the burnout scale remained normally distributed following excluding cases where there were missing data ($p=.11$). STS Log10 scores were found to be approaching a normal distribution ($p=.03$). The histogram and kurtosis of STS Log10 was further inspected for normality (Figure 2). The product of multiplying the kurtosis standard error by two was found to be greater than the kurtosis statistic ($0.438 \times 2 = 0.88 > 0.59$), indicating that the data were normally distributed (Grande, 2015). An inspection of the histogram plot of STS Log10 scores also indicated that the data were normally distributed. It was accepted that STS Log10 was adequately normally distributed for this sample size. Multicollinearity between the DVs was assessed. A positive association was found between STS and burnout ($r=0.623, p<0.001, n=120$). This fell within the cut-off of being greater than .2 and below .7 (Grande, 2015). Box’s test of equality of covariance matrices ($p=.49$; Grande, 2015) and Levene’s test of equality of error variances (trimmed mean statistic: burnout, $p=.96$; STS Log10, $p=.97$; Grande, 2015) were found to be non-
significant. All assumptions of the MANOVA were considered to be satisfied. As there was some debate regarding the distribution of STS Log10, Pillai’s Trace was used to report the test statistic within the empirical paper.

![Dependent Variable Matrix Scatter Plot](image1.png)

**Fig. 1.** Dependent Variable Matrix Scatter Plot

![Histogram of Secondary Traumatic Stress Log10 Data](image2.png)

**Fig. 2.** Histogram of Secondary Traumatic Stress Log10 Data
Appendix J: Assumption testing for research question five

The assumptions of a MANOVA were assessed. The number of cases per group was greater than the number of levels of IV multiplied by the number of DVs being assessed (Grande, 2015). The Maximum Mahalanobis Distance (6.99) was found to be smaller than the critical value (14.22; Penny, 1996) when analysing two predictor variables with a sample size of over 100. The data were inspected for the presence of a linear relationship using a matrix scatter plot. A linear relationship was observed by the presence of an elliptical pattern moving from the bottom left to top right corners (Figure 1; Grande, 2015). The multivariate normality and multicollinearity of the DVs was assessed as detailed above. Box’s test of equality of covariance matrices was found to be non-significant ($p=.11$; Grande, 2015). Levene’s test of equality of error variances was found to be non-significant for burnout ($p=.85$) but significant for STS Log10 ($p=.03$; Grande, 2015) on inspection of the trimmed mean statistic. Not all of the assumptions of the MANOVA were considered to be satisfied, as such, Pillai’s Trace was used to report the test statistic.

**Fig. 1** Dependent Variable Matrix Scatter Plot
Chapter Five

Additional Results and Methodology for the Empirical Paper

Word Count: 1074

Methodology

Following receiving ethical approval for an amendment to the study, the use of social media, namely Facebook and Twitter, was also employed to increase recruitment rates. To facilitate this, research accounts were created on Facebook and Twitter. The researcher’s profile page presented the researcher as recruiting for a current research project, all study inclusion criteria were made salient through their presentation in the researcher’s covering picture and a link to the participant information sheet and subsequent on-line survey was pinned to the top of the researcher’s page. Internet searches were used to identify potential organisations supporting refugees with a befriender and/or mentors’ scheme and those with Twitter accounts were followed. These organisations were asked to re-tweet study information on their pages (Appendix A). The followers of organisations known to have refugee befriending and/or mentoring schemes were also followed as a means to direct these potential stakeholders to the researcher’s profile. This produced a total of 1,723 Twitter accounts being followed by the researchers account. Twitter was also used to tweet recruitment updates. The following hashtags were used to increase the distribution of all Twitter posts: #asylumseekers, #refugeeswelscome, #WithRefugees, #OpenBorders, #UNHCR, #refugees, #migrants, #NationalVolunteersWeek2019, #NationalVolunteerWeek. It did not prove possible to use Facebook however, as the researcher’s accounts were de-activated by
Facebook due to concerns that they were using someone else’s identity. Communications with Facebook to rectify this situation were not responded to. On reflection, it was observed that recruiting through the use of social media did not increase the online-survey response rate. Conversely, where more time was allocated to recruiting via social media in lieu of recruiting via direct email, a decline in response rate was observed. As such, recruiting via social media was deemed to be on the whole unsuccessful in the current context.

**Results**

The following results are presented within this additional results chapter due to the word count limitation of chapter four, in which the results of the empirical paper are reported and discussed. An additional research question: “does amount of time spent in formal clinical supervision moderate the relationship between time spent directly working with refugees and (a) the severity of STS; and (b) the severity of burnout?”, is presented. A rationale is provided to justify why this planned research question was not assessed and so was not presented within the empirical paper. The chapter concludes with a further post-hoc exploration of the impact of scoring 10 or more on the GAD-7 or PHQ-9, indicating clinical levels of anxiety or depression, on all outcome measures.

**Research question six: Does amount of time spent in formal clinical supervision moderate the relationship between time spent directly working with refugees and (a) the severity of STS; and (b) the severity of burnout?** As the hypothesised negative associations between minutes/month in supervision and (a) the severity of secondary trauma ($r=.31$, $p=.030$, $n=50$); and (b) the severity of burnout ($r=.14$, $p=.358$, $n=48$), were not observed, as reported in chapter four, the moderating effects of time spent in supervision was not explored, as the initial
research question was no longer deemed to be valid. As such, this question was not reported in the final empirical paper for the purposes of increasing ease of understanding and coherence when submitting for publication.

**The impact of clinical depression and clinical anxiety.** The impact of scoring 10 or more on the GAD-7, indicating clinical levels of anxiety, or on the PHQ-9, indicating clinical levels of depression, was assessed post hoc. T-tests showed that scoring 10 or more on the PHQ-9 had a significant effect on burnout severity with a medium effect size \([t(121) = -4.25, p<.001; d=.77]\) and secondary trauma severity with a large effect size \([t(124) = -5.78, p<.001; d=1.04]\). Scoring 10 or more on the GAD-7 had a significant effect on burnout severity with a medium effect size \([t(122) = -3.31, p = .001; d=.60]\) and secondary trauma severity with a medium effect size \([t(125) = -3.27, p = .001; d=.58]\). Mann-Whitney U tests showed that scoring 10 or more on the PHQ-9 had a significant effect on anxiety severity with a large effect size \((U=150.5, p<.001; \text{partial } \eta^2 = .27)\); and scoring 10 or more on the GAD-7 had a significant effect on depression anxiety with a large effect size \((U=138.5, p<.001; \text{partial } \eta^2 = 0.19)\). These findings indicate that those scoring 10 or more on the PHQ-9 also have significantly higher levels of anxiety, burnout and secondary trauma severity as compared to those scoring below 10 on the PHQ-9; and those scoring 10 or more on the GAD-7 also have significantly higher levels of depression, burnout and secondary trauma severity as compared to those scoring below 10 on the GAD7. No relationship was found between clinical depression and: time spent volunteering \((U=815.5, p=.208)\); time spent in supervision \((U=167, p=.653)\); and supervision satisfaction \((U=159, p=.476)\). No relationship was found between clinical anxiety and: time spent volunteering \((U=592.5, p=.188)\); time spent in supervision \((U=92, p=.499)\); and supervision satisfaction \((U=94.5, p=.519)\). An
adjustment was made to account for the four T-tests used during the analysis. The relationships between clinical depression and (a) burnout; and (b) secondary trauma; and clinical anxiety; and (c) burnout; and (d) secondary trauma, remained significant following both the Holm’s and Bonferroni methods of correcting for multiple comparisons. An adjustment using the Holm’s method of correcting for multiple comparisons (Wright, 1992) was made to account for the 10 Mann-Whitney U tests used during the analysis. As two of the correlation p values were unable to be differentiated, the lowest critical value was used for both these tests. The relationships between (a) clinical depression and anxiety severity; and (b) clinical anxiety and depression severity, remained significant following both the Holm’s and Bonferroni methods of correcting for multiple comparisons. It should be noted, however, that conducting eight further Mann-Whitney U tests post-hoc means that the relationship between refugee status and depression, previously reported in chapter four, is now only significant when correcting for multiple comparisons using the more conservative Holm’s method (Wright, 1992). See Table 1 for a list of the Holm’s critical values used and a comparison with the Bonferroni method of correcting for multiple comparisons.

Table 1

| Critical Values Used as Suggested by Holm’s Method of Correcting for Multiple Comparisons |
|---|---|---|---|---|
| Variables analysed | P value | Holm’s critical value | Bonferroni critical value | Remains significant? |


<table>
<thead>
<tr>
<th>Condition</th>
<th>p-value</th>
<th>Significance</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical depression and anxiety</td>
<td>p &lt; .001</td>
<td>.01</td>
<td>.005</td>
</tr>
<tr>
<td>Clinical anxiety and depression</td>
<td>p &lt; .001</td>
<td>.01</td>
<td>.005</td>
</tr>
<tr>
<td>Refugee status and depression</td>
<td>p = .007</td>
<td>.015</td>
<td>.005</td>
</tr>
</tbody>
</table>
References

Appendix

Appendix A: Ethically approved social media post: Twitter

Research opportunity for volunteer befrienders and/or mentors working with refugees and asylum seekers in the UK

To find out more and to complete the online survey follow:
https://uea.onlinesurveys.ac.uk/the-impact-of-voluntary-work

I’d be very grateful if you could retweet this please, thank you!
Chapter Six

Critical Evaluation

Word count: 4781/5000

Due to increases in conflict worldwide, the number of Forcibly Displaced People (FDP) has increased substantially, “…from 43.3 million in 2009 to 70.8 million in 2018, reaching a record high,” (UNHCR, 2019). The term forcibly displaced refers to: “…those who have left their usual place of residence in order to escape from persecution, armed conflict, or human rights violations,” (Crisp, 2010). The descriptor refugee refers to a subsample of FDP who have been forced to flee their country of origin, defined as: “…someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion,” (UNHCR, 1967). In addition to the dangers instigating the need to flee, the process of seeking refuge and associated journeys can also be dangerous (Bouhenia et al., 2017; Dolma, Singh, Lohfeld, Orbinski, & Mills, 2006; Farhat et al., 2018; Gerard & Pickering, 2013; Tello, Castellon, Aguilar, & Sawyer, 2017) and the process of seeking asylum in host countries difficult to access (Bouhenia et al., 2017; Farhat et al., 2018). The psychological impact of these experiences is reflected in the high prevalence rates of Post-traumatic Stress Disorder (PTSD), depression and anxiety disorders reported by displaced adults, which were found to vary from 3-88%, 5-80% and 1-81% respectively (Morina, Akhtar, Barth, & Schnyder, 2018). Whilst a substantial amount of work has been conducted exploring the experiences and impact of forced migration, significantly less research has been conducted...
investigating the impact of working with FDP in a supportive capacity on professionals and volunteers.

**Those Working with Forcibly Displaced People**

The evidence suggests that people working with FDP in a supportive capacity also experience psychological effects, such as burnout (Chatzea, Sifaki-Pistolla, Vlachaki, Melidoniotis, & Pistolla, 2018; Guhan & Liebling-Kalifani, 2011; Kjellenberg, Nilsson, Daukantaité, & Cardeña, 2014; Mehus & Becher, 2016; Posselt, Deans, Baker, & Proctor, 2019; Raynor & Hicks, 2018) and Secondary Trauma (ST; Denkinger et al., 2018; Espinosa, Akinsulure-Smith, & Chu, 2019; Guhan & Liebling-Kalifani, 2011; Kindermann et al., 2017; Kjellenberg et al., 2014; Lusk & Terrazas, 2015; Mehus & Becher, 2016; Posselt et al., 2019; Raynor & Hicks, 2018; Weitkamp, Daniels, & Klasen, 2014; Yeunhee, 2017), due to the potentially difficult nature of working with such a highly traumatised client group. Burnout is characterised by feelings such as: exhaustion, frustration, anger and depression, and can be defined as: “…feelings of hopelessness and difficulties in dealing with work or in doing your job effectively,” (Stamm, 2010). ST, also referred to as vicarious trauma, describes a worker’s trauma reactions that are “…secondary to their exposure to clients’ traumatic experiences,” (Trippany, Kress, & Wilcoxon, 2011) and can be defined as: “…the natural behaviors and emotions that arise from knowing about a traumatizing event experienced by a significant other - the stress resulting from helping or wanting to help a traumatized person,” (Figley, 1995). In the present context, ST refers to trauma symptomology experienced by those working with FDP as a result of being exposed to the potentially traumatic accounts of this client group. That those working with FDP appear to also be experiencing adverse reactions warrants further exploration and
investigation. The present thesis portfolio addresses this knowledge gap through the use of a systematic review pooling burnout and ST prevalence data reported by those working with FDP internationally. These results are placed into context through a comparison with other helping workforces in highly stressful occupations, such as nurses, trauma therapists, police officers and hospital clinicians, who reported burnout prevalence figures ranging from 25.8% (Sodeke-Gregson, Holttum, & Billings, 2013) to 31% (Pradas-Hernández et al., 2018) and ST prevalence figures ranging from 19.5% (Roden-Foreman et al., 2017) to 70% (Sodeke-Gregson, et al., 2013).

**The benefits of supervision.** Clinical supervision can be defined as: “The formal provision by senior/qualified health practitioners of an intensive relationship-based education and training that is case-focused and which supports, directs and guides the work of colleagues (supervisees)…” (Milne, 2007). The current research literature emphasises the importance of supervision in reducing compassion fatigue, burnout and ST in health workers, social workers (Robinson, 2013) and therapists (Apostolidou, 2016) working with refugees. Furthermore, in a research synthesis, “some” evidence was identified suggesting that supervision may act as a protective factor against vicarious trauma (Baird & Kracen, 2006). This evidence highlights the clinical importance of providing supervision to those working with FDP.

**The UK context.** Dedicated services and organisations providing support for refugees and asylum seekers across the UK are often staffed by volunteers working in befriending and/or mentoring roles. This staffing method, whilst cost-effective, also includes associated drawbacks, as volunteers are not formally employed and so are not entitled to the same rights as formal employees. In line with this, organisations are not obliged to offer volunteers supervision. As such, it has been
suggested that the current provision of supervision for those working with refugees in the UK is sparse, non-existent or not appropriate (Guhan & Liebling-Kalifani, 2011; Robinson, 2013). The present thesis portfolio assesses the validity of this statement by measuring the provisioning and impact of supervision within a national sample of UK-based volunteer befriender/mentors. Currently, the prevalence of burnout and ST in those supporting refugees in the UK has only been assessed in one Midlands-based refugee centre (Guhan & Liebling-Kalifani, 2011). The present thesis portfolio builds on this knowledge by providing a national view of the impact of working with refugees in a voluntary capacity on burnout and ST. The present thesis portfolio also further builds on the current research base by assessing the impact of supporting refugees on more general wellbeing, with a focus on depression and anxiety. The relationships between the outcome variables is explored. Due to the described potential impact of seeking refuge on refugees’ mental health, the outcome variables of volunteers identifying currently or historically as refugees were also compared to those identifying as having no experience of forced migration.

**Summary of Main Findings**

The systematic review confirmed the high prevalence of “high” burnout (36.5%), as categorised by the Professional Quality of Life Scale (ProQOL) versions R-IV (Stamm, 2005) and five (Stamm, 2009; Stamm, 2010) and the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996); and “moderate” to “severe” ST (45.7%), as categorised by the German questionnaire for secondary traumatisation (Fragenbogen für Sekundäre Traumatisierung, FST; Daniels, 2006; Weitkamp, et al., 2014), ProQOL versions R-IV (Stamm, 2005) and five (Stamm, 2009; 2010) and the Secondary Traumatic Stress Scale (STSS; Bride, Robinson, Yegidis, & Figley, 2004), reported by those working to support FDP in varied roles
internationally. When compared to what may be expected in the general population, using the 75 percentile cut-off cited within the STSS and ProQOL measures for “moderate” and “high” ST (Bride et al., 2004; Stamm, 2010) and “high” burnout (Stamm, 2010), the pooled prevalence of “high” burnout (36.5%) and “moderate” to “severe” ST (45.7%) are both observed to be higher than the general population (25%), with the pooled prevalence of ST almost double that of the general population. In line with the current research, these observably high levels of burnout and ST may be as a result of the impact of working with such a highly traumatised population, evidenced by the varying, yet high prevalence of PTSD reported by displaced adults (1-81%; Morina, et al., 2018).

“High” burnout and ST were reported by 13.7% and 54.3% of the befrienders and/or mentors recruited for the purposes of the empirical paper. When comparing the results of the empirical paper to the pooled prevalence estimates generated by the meta-analyses, the prevalence of ST (54.3%) within the sample of UK based volunteers is observed to be slightly higher than the pooled prevalence estimate generated by the ST meta-analysis (45.7%) and also higher than what may be expected within the general population (25%). This discrepancy may be reflective of the sparser provisioning of support strategies offered to volunteers in general, including supervision, which has been cited as an aid in the prevention of ST (BPS, 2018), the lack of which may have potentially contributed to the higher reported ST within the UK based volunteers.

The prevalence of burnout (13.7%) within the sample of UK based volunteers is observably much lower than the pooled prevalence estimate generated by the burnout meta-analysis (36.5%) and also lower than what may be expected within the general population (25%). This creates a query as to why the volunteers sampled
within the empirical paper appear to be experiencing such observably lower levels of burnout as compared to other workers supporting FDP internationally and the general population. One hypothesis is that the observed low burnout in this population could be as a result of the beneficial impacts of volunteering, which has been found to be associated with improved quality of life in two cohort studies where volunteers felt their actions were appreciated (Jenkinson et al., 2013). The low burnout prevalence may also be reflective of potential sampling bias, as it may be anticipated that volunteers experiencing higher levels of burnout may be less likely to commit further time towards completing a work-related survey. Further research should be conducted to assess the replicability of the empirical paper burnout prevalence data.

**Assessing outcome measures.** Sub-analyses were undertaken to assess for differences in pooled prevalence produced by different measures assessing burnout and ST prevalence within the systematic review. The type of assessment tool used had an observable effect on reported prevalence, with the FST observed to have the highest cut-off threshold for “moderate” ST and the ProQOL Secondary Traumatic Stress (STS) scale observed to have the lowest threshold for “high” ST when comparing the FST, ProQOL and STSS measures in this respect. This finding suggests the STSS may provide a potential “middle ground” between the higher FST and lower ProQOL STS cut-offs, potentially identifying the STSS as the measure of choice when assessing ST. The MBI was also observed to have a lower threshold for “high” burnout as compared to the ProQOL burnout scale, suggesting that higher prevalence figures will be observed when using the MBI. Given the disparity between the measures, further research should be conducted to explore the most
valid and reliable measure of burnout, or potentially to develop a new assessment tool for burnout.

**Depression and anxiety prevalence.** The findings from the empirical study revealed that out of 131 participants analysed, 13.8% scored 10 or more on the PHQ-9 and 9.9% scored 10 or more on the GAD-7, indicating clinical levels of depression and anxiety. These figures were compared to that of the general population, evidencing that the volunteers sampled within the empirical study reported lower levels of depression and higher levels of anxiety (depression 17.8%, Kroenke, Spitzer, & Williams, 2001; anxiety 5%, Löwe et al., 2008). Volunteering has been associated with reduced levels of depression (Jenkinson et al., 2013), potentially explaining why the volunteers sampled reported lower levels of depression than the general population. Volunteers may also be experiencing heightened levels of anxiety due to the potentially anxiety-provoking nature of listening to traumatic narratives (Apostolidou, 2016; Guhan & Liebling- Kalfani, 2011; Jones & Williamson, 2014; Robinson, 2013). This anxiety finding may also be reflective of the disparity in the levels of safeguards, support strategies and protections provided to volunteers in comparison to formal employees.

**Relationships between variables.** Time spent volunteering on an average week was found to be associated with burnout and ST severity; and burnout and ST severity were found to be associated with depression and anxiety severity. These relationships highlight the importance of targeting burnout and ST when developing and implementing interventions to improve workplace wellbeing. They also emphasise the potential importance of monitoring time spent volunteering on an average week and offering further support to those who volunteer larger quantities of time.
Refugee status. Those identifying as refugees were observed to report higher levels of ST severity with a small effect size and depression severity with a medium effect size. That refugees are reporting higher levels of ST may be explained by the current research literature, which evidences the potential trauma and stress associated with experiences of forced migration, the journeys of which can be dangerous (Dolma, et al., 2006; Gerard & Pickering, 2013; Bouhenia et al., 2017; Tello, et al., 2017; Farhat et al., 2018) and subsequent process of seeking asylum difficult to access (Bouhenia et al., 2017; Farhat et al., 2018). This may leave volunteers with a history of seeking refuge at a higher vulnerability to being retraumatised or triggered when working with refugees with similar experiences. These findings may also be reflective of the reported stressful and depressing nature of adapting to British culture experienced by refugees (Papadopoulos, Lees, Lay, & Gebrehiwot, 2004). These findings suggest that it may be beneficial to offer volunteers identifying as refugees additional support. Further research should be conducted to identify how these individuals can be best supported in their roles.

Supervision. No relationship was found between time spent in supervision and (a) burnout severity; and (b) supervision satisfaction; and a positive association was found between time spent in supervision and ST severity. These findings suggest that offering additional supervision does not reduce burnout or ST severity and does not improve perceived satisfaction with supervision. No significant difference was found when comparing the burnout severity scores of those with high supervision satisfaction to those with low supervision satisfaction; however, a medium effect size was found, indicating that this null finding may be due to a lack of power when analysing the smaller subsample of those receiving supervision. Those with high supervision satisfaction were found to have significantly lower
levels of ST severity with a medium effect size. These findings suggest that high supervision satisfaction may be a factor in the reduction of ST. Further research should be conducted on a larger sample of those working with highly traumatised clients to investigate the potential impact of supervision on burnout.

**Comparisons with Other Helping Professions**

A comparison of the pooled prevalence of burnout and ST generated by the systematic review and meta-analyses with other helping workforces in highly stressful occupations is presented in chapter two. When also comparing these findings with that of the empirical paper, the following observations can be made. In a meta-analysis combining data collected from 464 nurses working in obstetrics and gynecology using the MBI, the pooled burnout prevalence of “high” burnout (29%; De la Fuente-Solana et al., 2019) was observed to be higher than the prevalence of burnout reported by the volunteers sampled within the empirical paper (13.7%) and lower than the pooled prevalence generated by the systematic review (36.5%). In a further similar meta-analysis pooling a sample of 1600 paediatric nurses, 31% reported “high” burnout (Pradas-Hernández et al., 2018), observably higher than the volunteers sampled within the empirical paper (13.7%) and lower than the pooled prevalence generated by the systematic review (36.5%). In a study assessing ST in a sample of 128 trauma nurses, 27.3% reported “high” ST (Hinderer et al., 2014), lower than both the pooled prevalence generated by the systematic review (45.7%) and volunteers sampled within the empirical paper (54.3%). In a further study assessing ST in a sample of 63 UK based police officers, 27% reported ST within the “moderate” to “severe” cut-offs of the STSS (MacEachern, Dennis, Jackson, & Jindal-Snape, 2019), also lower than both the pooled prevalence generated by the systematic review (45.7%) and the volunteers sampled within the empirical paper
In a third study assessing ST in a sample of 118 clinicians based in a hospital treating traumatically injured patients, 19.5% reported ST within the “moderate” to “severe” cut-offs of the STSS (Roden-Foreman et al., 2017), lower than both the pooled prevalence generated by the systematic review (45.7%) and the volunteers sampled within the empirical paper (54.3%). The prevalence of both ST and burnout was measured in a sample of 253 therapists working in the UK engaged in trauma work with working-age adults using the ProQOL-V. It was found that 25.8% reported “high” burnout, lower than the pooled prevalence generated by the systematic review and higher than the volunteers sampled within the empirical paper and 70% reported “high” ST (Sodeke-Gregson, et al., 2013), higher than both the pooled prevalence generated by the systematic review and the volunteers sampled within the empirical paper (Table 1). In combination, this evidence suggests that the pooled sample of those working globally with FDP identified through the use of a systematic review reported higher levels of burnout and ST than the majority of other helping professions. This evidence also suggests that the volunteers working with refugees nationally in the UK recruited for the purposes of the empirical paper reported lower levels of burnout and higher levels of ST in comparison to the majority of other helping professions. Differences in reported prevalence may be reflective of differing degrees of exposure to trauma narratives across workforces, for example, this may explain the high prevalence of ST reported by trauma therapists (Sodeke-Gregson, et al., 2013). These comparisons should, however, be viewed in the context of the assessment tool used, which produce observably different prevalence results as reported within the systematic review. As such, additional caution should be exercised when comparing prevalence figures across different measures.
**Table 1. Comparisons with Other Helping Professions**

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
<th>Outcome</th>
<th>Prev. (%)</th>
<th>SR (%)</th>
<th>EP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>De la Fuente-Solana et al., (2019)</td>
<td>Obstetrics and gynecology nurses</td>
<td>Burnout; MBI</td>
<td>29</td>
<td>36.5</td>
<td>13.7</td>
</tr>
<tr>
<td>Pradas-Hernández et al., (2018)</td>
<td>Paediatric nurses</td>
<td>Burnout; MBI</td>
<td>31</td>
<td>36.5</td>
<td>13.7</td>
</tr>
<tr>
<td>Sodeke-Gregson, et al., (2013)</td>
<td>Trauma therapists</td>
<td>Burnout; ProQOL-V</td>
<td>25.8</td>
<td>36.5</td>
<td>13.7</td>
</tr>
<tr>
<td>Hinderer et al., (2014)</td>
<td>Trauma nurses</td>
<td>ST; ProQOL-R-IV</td>
<td>27.3</td>
<td>45.7</td>
<td>54.3</td>
</tr>
<tr>
<td>MacEachern et al., (2019)</td>
<td>Police officers</td>
<td>ST; STSS</td>
<td>27</td>
<td>45.7</td>
<td>54.3</td>
</tr>
<tr>
<td>Roden-Foreman et al., (2017)</td>
<td>Hospital clinicians</td>
<td>ST; STSS</td>
<td>19.5</td>
<td>45.7</td>
<td>54.3</td>
</tr>
<tr>
<td>Sodeke-Gregson, et al., (2013)</td>
<td>Trauma therapists</td>
<td>ST; ProQOL-V</td>
<td>70</td>
<td>45.7</td>
<td>54.3</td>
</tr>
</tbody>
</table>

* EP = Empirical Paper; MBI = The Maslach Burnout Inventory; Prev. = Prevalence; ProQOL = The Professional Quality of Life Scale; SR = Systematic Review; ST = Secondary Trauma; STSS = Secondary Traumatic Stress Scale

**Key Strengths of the Thesis**
A significant strength of the thesis portfolio is the systematic and high degree of rigour with which the systematic review and meta-analyses were conducted, as described in the systematic review “strengths and limitations”, chapter two. To the researchers’ knowledge, the thesis portfolio also presents the first national study reporting the prevalence of depression, anxiety, burnout, and ST in volunteers working with refugees in the UK. All efforts were made to include as a wide a scope of refugee support organisations within the UK as possible, including amending the study to include the use of social media to increase the spread of the on-line survey. The methodological rigour of the empirical paper was of a high quality, as described in “methods”, chapter four. All of these factors improved the validity and reliability of the research findings, allowing recommendations to be made as to their clinical application.

**Key Limitations of the Thesis**

**Systematic review.** Due to the observable effect of measure on reported prevalence, the ability to pool different measures within a meta-analysis is debatable, thus bringing the validity of the meta-analyses pooled prevalence estimates into contention. The differences in measure specific reported prevalence may be due to inconsistency in the cut-offs, validity and/or reliability of the measures used, or the sample from which the data was collected. For example, it should be noted that the FST was only used with German participants, meaning that the data extracted from the five studies using the FST may be less generalisable and comparable to populations outside of Germany. Results reported by the FST may perhaps be more reflective of the current context of those working with refugees in Germany and overall political stance of acceptance towards refugees in Germany, as the country evidenced to host the largest number of refugees in Europe (UNHCR, 2019).
A further criticism of the measures used relates to the ProQOL. Through speaking to other researchers who have published within the refugee research field and gaining familiarity with the ProQOL measure, it became evident that there is an error in the 2009 and 2010 concise ProQOL manuals for the fifth version of the ProQOL (Stamm, 2009; 2010), in which the cut-offs have been reported inaccurately. In these manuals it states that the sum of the raw scores have the cut offs of 22 or less for a “low” score, 23-41 for an “average” score and 42 or more for a “high” score for all scales. By looking at the t-score table in the 2010 concise manual (Stamm, 2010) and cross-referencing this with the previous version of the ProQOL, the ProQOL R-IV, these figures are found to be inaccurate. For example, when looking at the t-score table (Stamm, 2010), the STS scale is observed to have much lower scores in general, meaning that lower cut-offs should be observed. Also, only minor adjustments were made between the R-IV and fifth versions of the ProQOL, yet the cut-offs reported between these versions are vastly different, with different cut-offs reported for each of the scales within the ProQOL R-IV, as may be expected. From emailing other researchers who have used the ProQOL-V, some have noticed this error and either reverted back to the ProQOL R-IV cut-offs (Espinosa, et al., 2019; Appendix A) or used the 2010 concise manual t-score table (Mehus & Becher, 2016) to identify the 25 and 75 percentile cut-offs, labelled as the designated cut-offs for the “low” (less than 25%); “average” (25-75 percentile) and “high” (more than 75%) categories of burnout and ST (Stamm, 2010). As the t-score table appears to be the most up-to-date method of categorising burnout and ST, these cut-offs were used within the present thesis, however, this does add further complication when comparing the present research findings to the current and future research literature where a confirmation of the cut-offs used is not reported.
Communications to the ProQOL team to inform them of this error have been made by the first author and other research teams, but these enquiries have unfortunately not been pursued.

When conducting the sensitivity analyses, it was found that some studies had a greater impact on the estimate of pooled burnout prevalence. This may be in part due to the fewer number of studies (n=6) able to be pooled within the burnout meta-analysis, meaning that each study holds a greater weight in regards to the pooled prevalence estimate.

**Empirical paper.** The key limitations of the empirical paper are discussed in “limitations”, chapter four.

When analysing supervision satisfaction data, a median split was used to dichotomise participants into two groups: high and low supervision satisfaction. As this method was used, additional variance of the supervision satisfaction data was not included. In order to include this variance, future research could use an alternative analysis plan, for example, a multiple regression test. It may also be beneficial for future researchers to use a longitudinal study design to further assess the impact of supervision on burnout and ST severity. This could be conducted with either those starting work with refugees who will be receiving supervision, or where supervision is being implemented for the first time. This design would allow for pre-post-tests to be conducted, offering more definitive data from which casual conclusions could be drawn, rather than the correlational data presented within the present thesis portfolio. From these data, firmer conclusions could then be drawn as to the relationship between supervision and (a) burnout severity; and (b) ST severity.

That lower levels of burnout were reported by the present sample may be as a result of the poor psychometric properties of the ProQOL-V burnout scale, the
internal consistency of which has been found to range from questionable ($\alpha=.66$; Mehus & Becher, 2016) to good ($\alpha=.84$; Raynor & Hicks, 2018) in other refugee studies and was rated as questionable within the empirical paper ($\alpha=.69$). As a result, burnout may not have been accurately measured, affecting the study’s ability to draw conclusions as to the relationship of this outcome with other variables. Future research could use the MBI instead of the ProQOL-V to further explore burnout. This would also have the further benefit of avoiding potential confusion and/or error when applying the ProQOL-V cut-offs. Future research may also consider using the STSS rather than the ProQOL STS scale to measure ST, as the STSS appears to be of a higher psychometric quality and a potential middle ground between the higher FST and lower ProQOL STS cut-offs.

Clinical Implications

The results of the systematic review and meta-analyses are of clinical importance, as they evidence the high prevalence of burnout and ST in those working with FDP in both a voluntary and paid capacity, suggesting that further support should be offered to this workforce to both prevent and treat these areas of difficulty. The pooled prevalence of the ST meta-analysis (45.7%), almost double the prevalence observed in the general population (25%), is further supported by the high prevalence of ST reported by the volunteers sampled within the empirical paper (54.3%), over double the prevalence observed in the general population (25%). These results indicate that further support is warranted to help meet the needs of and support those working with FDP. This support would hopefully allow this workforce to continue to provide compassionate, high level service provision, whilst maintaining their own wellbeing and work satisfaction, as well as reducing potential staff turnover.
As it was also observed that those pooled within the meta-analyses reported higher levels of burnout and ST than the majority of other helping professionals; and those sampled within the empirical paper reported higher levels of ST; staff wellbeing support interventions from these other professions could be adapted and implemented with those working with FDP. It may also be beneficial to find ways to monitor levels of burnout and ST within this workforce.

The results of the empirical paper evidenced: the high prevalence of ST within this workforce; the implications this has for general wellbeing; and that supervision reported as highly satisfactory may reduce ST severity, highlighting the need for high quality supervision in this population. These findings could be used by refugee charities and organisations to apply for funding for supervision. However, it should be noted that no relationship was found between time spent in supervision and burnout; and a positive relationship was found between time spent in supervision and ST. As such, where individuals need additional support, the focus should be on improving the quality of supervision, rather than increasing time spent in supervision. This may be achieved by monitoring supervision satisfaction. It may also be appropriate to consider the training and qualifications held by the supervisor and their ability to provide effective supervision. As those identifying as refugees were found to have significantly higher levels of depression and ST severity, it may also be appropriate to offer these individuals further support within these areas when volunteering. Further research should be conducted to identify how these individuals can be best supported in their roles.

**Conclusion**

In conclusion, the present thesis portfolio presents an exploration of the impact of working with FDP in a supportive capacity. Original research is presented
highlighting the high prevalence of burnout and ST experienced by this workforce, as compared to other helping professions and the general population, although it should be noted that the UK based volunteers sampled within the empirical paper reported an observably lower prevalence of burnout as compared to other helping professions and the general population. Nevertheless, the current findings suggest that those working with refugees should be offered further support within their roles. Future research could explore the types of support that those working with refugees would like and the forms that this support could take. As it was found that providing highly satisfactory supervision was linked to reduced levels of ST severity, implementing supervision where it is not currently available, as well as monitoring and maintaining the quality of supervision in general, may be of benefit to those working with refugees. Further research could explore factors contributing to the perception of highly satisfactory supervision and the mechanisms by which supervision may reduce ST. The results of this research could then support the development of a supervision model targeted at reducing ST in those working with highly traumatised populations.

It may also be beneficial to monitor burnout severity, ST severity and hours spent volunteering to support refugees on an average week in those working with refugees, due to the relationships between these variables and depression and anxiety severity. As volunteers identifying as refugees were found to have higher levels of depression and ST severity, as compared to volunteers with no history of forced migration, it may also be beneficial to offer this subgroup of volunteers further support.
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#fullreport


Appendix A: Email detailing discussion regarding error in ProQOL-V

Frida Nilsson <fridaknilsson@yahoo.com>
Mon 02/12/2019 13:34

• Fritha Roberts (MED - Postgraduate Researcher)

Dear Fritha

I am so Happy you also noticed this and contacted them. It is really troubeling that they dont correct the scales as They are being used in so many countries. And the misstake can lead to people not getting the help They need.

I wish you all the best in your work forward and your contact with the team.

Best,
Frida

Skickat från min iPhone

2 dec. 2019 kl. 12:20 skrev Fritha Roberts (MED - Postgraduate Researcher) <F.Roberts@uea.ac.uk>:

Dear Frida,

Thank you so much for your data and manuals. I agree with and had also noticed the discrepancy with the cutoffs. Thank you so much for highlighting this for me, as I wasn't sure whether it was just me using the t-score table incorrectly. It’s reassuring to know that you noticed the same error. I have sent an email to the ProQOL team, without any reply so far, but will also flag this issue up with them.

As you suggest, I’ll use the ProQOL version IV cutoffs. Thank you for your help. I am planning to run the prevalence meta-analysis today and will add your data in.

Kind regards,

Fritha
Hi there,

Etzel asked me to answer you. I am Frida Nilsson now of the main authors of the article. Interesting that you ask about the scale ProQOL. We found a fault in the scale cutoff in the scales for public use compared to the raw data that the researchers also provided. The Finish scale has the right scores from the raw data since it is the version four and not five. [https://proqol.org/uploads/ProQOL_vIV_Finnish_1viivoilla.pdf](https://proqol.org/uploads/ProQOL_vIV_Finnish_1viivoilla.pdf) In the scale five all low and high have been set the same for BurnOut and SecondaryStress even though that it not correct according to the raw data. Since this scale is widely used we found this to be a serious fault so Etzel contacted the researcher responsible so they could correct the scales. But the answer we got was that she was too busy to look into it. But please check this for yourself comparing the t-score i the raw data with the cut offs they have chosen. The cut-offs should be different as in the IV version but they are the same in the 5 version.

My colleague is looking into finding our raw data.

Best,
Frida

Your email:

Dear Professor Cardeña,

I’m currently preparing data for a systematic review/meta-analysis looking at the prevalence of burnout and secondary trauma in samples of helpers working directly with forcibly displaced migrants as the majority of their workload. Your paper: “transformative narratives: The impact of working with war and torture survivors”, has been identified for inclusion within the systematic review. I had a query regarding your data to aid inputting into both meta-analyses I am planning to run. In your paper you report mean levels of burnout and secondary trauma. I was wondering if you could provide me with a further breakdown of the individual scores to facilitate inputting into the meta-analyses? Specially, the number of participants from your sample that fell into the low (22 or less sum scores), average (23-41 sum scores) and high (42 or more sum scores) cut-offs on the burnout and secondary traumatic stress scales of the ProQOL. It would be very helpful if you could clarify these points and then I will be able to add the data into the final meta-analyses. Thank you so much for your time reading this email.

Kind regards,

Fritha Roberts
Trainee Clinical Psychologist
University of East Anglia, UK