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Posttraumatic stress disorder, secondary traumatic stress, and burnout in frontline workers in homelessness services: risk and protective factors

Running title: Work-related distress in homelessness services

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Conflict of interest statement

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Data accessibility statement

The data that support the findings of this study are available via the Center for Open Science page for this project: [anonymised link for peer review](#).

Posttraumatic stress disorder, secondary traumatic stress, and burnout in frontline workers in homelessness services: risk and protective factors

People experiencing homelessness (PEH) frequently have multiple and complex needs that may contribute to interpersonal difficulties that affect their relationships with services. As a result, professionals working in frontline homelessness services are frequently exposed to primary trauma (e.g. workplace aggression, crisis situations) and secondary trauma (e.g. hearing about service users' traumatic experiences). This cross-sectional study explored organisational and individual factors in relation to three related but distinct facets of work-related distress: posttraumatic stress disorder (PTSD), secondary traumatic stress (STS), and burnout. A sample of 139 frontline workers in UK homelessness services completed an inventory of 15 possible distressing workplace experiences and four psychometric questionnaires. Results clearly evidence that frontline workers are exposed to high levels of potentially traumatic incidents at work and that this is associated with significant distress, with 23% of the sample meeting the threshold for PTSD diagnosis. Hierarchical multiple regression analyses identified trauma exposure and the use of 'maladaptive' cognitive coping strategies as strong predictors of PTSD and STS, while organisational culture and compassion satisfaction were protective against burnout. These findings have important service implications, and recommendations are made regarding trauma- and psychologically informed approaches that organisations can implement to effectively support their employees.

Keywords: homelessness, professional quality of life, posttraumatic stress, secondary traumatic stress, burnout

5668 words (including title, abstract, and keywords).

Introduction

Working in homelessness services

Working with people experiencing homelessness (PEH) often entails supporting people with complex trauma histories, who use coping strategies such as substance use or self-harm, who may have a range of psychological difficulties, and who may have had challenging past experiences with services or be seen as ‘difficult to engage’ (Kerman et al., 2019; Liu et al., 2021). Supporting distressed and traumatised people can have negative consequences for the emotional wellbeing of caring professionals, including frontline workers in homelessness services (FWHS; Kerman et al., 2022; Petrovich et al., 2020; Waegemakers Schiff & Lane, 2019). This challenging work draws heavily on workers’ interpersonal and relational skills, and often involves balancing the role of caregiver and gatekeeper, remaining compassionate yet bounded, and being person-centred but recovery-driven (McGrath & Pistrang, 2007; Peters et al., 2022).

Broader systemic and professional issues further compound these challenges. In the United Kingdom, the voluntary sector undertakes a significant proportion of work with PEH, while the siloed nature of statutory housing, social work, and health services can constrain professionals’ ability to work in a holistic, biopsychosocial way (Renedo, 2014). Shifts towards contract-based service provision and an increased focus on ‘hard’ performance indicators may compromise workers’ abilities to practice in a value-congruent way and the resulting ‘moral distress’ may lead to burnout, with consequences for service users, staff, and organisations (Dzeng & Wachter, 2020). Work-related distress and the associated emotional exhaustion, increased apathy, disconnection from service users, and decreased workplace satisfaction may compromise the standards of person-centred care (Forté et al., 2017; Lanctôt & Guay,

2014), whilst increased sick leave and staff turnover both have implications for continuity of care and service delivery.

Work-related distress

Three forms of work-related distress are examined in this study: posttraumatic stress disorder (PTSD), secondary traumatic stress (STS), and burnout. Research highlights high rates of exposure to verbal and physical abuse in homelessness settings (Choi & Choi, 2015; Kerman et al., 2022; Peters et al., 2022), and staff frequently witness or respond to crisis situations. Exposure to traumatic events can precipitate the development of PTSD, characterised by experiencing symptoms of intrusion, avoidance, changes to cognitions and mood, and changes in arousal and reactivity (American Psychiatric Association, 2013).

While PTSD may develop as a consequence of repeated exposure to traumatic situations, FWHS may also develop STS as a result of secondary trauma at work, i.e. the witnessing and desire to alleviate the suffering of a traumatised person's distress (Figley, 1995). The difficulties associated to STS closely mirror symptoms of PTSD, and can include intrusive dreams or memories relating to the client's trauma, avoidance of related triggers, and hypervigilance or difficulties with concentration (Newell & MacNeil, 2010).

Finally, burnout describes the complex combination of experiences that stem from prolonged exposure to professional stressors. Maslach and Jackson (1981) proposed three dimensions of burnout: emotional exhaustion, depersonalisation, and a diminished sense of personal accomplishment. While PTSD, STS, and burnout all involve work-related distress, the latter is less associated to the nature of the work (i.e. working with PEH with complex needs) than to its organisational and systemic stressors (Marshall, 2022; McFadden et al., 2015; O'Connor et al., 2018). A small body of evidence positions burnout and compassion satisfaction, i.e. the sense of fulfilment

experienced by helping professionals who feel effective in their work (Figley, 1995; Newell & MacNeil, 2010), as ‘conceptual opposites’ and notes that compassion satisfaction may be protective against burnout, but insufficient to safeguard against STS (Baugerud et al., 2018; Beebe, 2016; Waegemakers Schiff & Lane, 2019).

Research has found elevated levels of PTSD, STS, and burnout in samples of FWHS, with associated consequences for wellbeing (Kerman et al., 2022; Petrovich et al., 2020; Schneider et al., 2021; Waegemakers Schiff & Lane, 2019).

Risk and protective factors

Several demographic variables have been examined as potential protective factors against PTSD, STS and burnout, including age, professional experience, training and qualifications, and gender, with mixed conclusions (Baugerud et al., 2018; Baum, 2016; Kulkarni et al., 2013; Sutton et al., 2022). In this study, cognitive emotion regulation and coping skills are examined as potential predictors of work-related distress due to evidence suggesting that negative appraisals, emotion suppression, and rumination are all maintaining factors for post-traumatic stress responses (Lazarus & Folkman, 1984; Levy-Gigi et al., 2016), as well as studies reporting significant relationships between coping style, burnout, and STS (Smith, 2019; Wagaman et al., 2015).

In addition to individual-level factors, several environmental factors have also been studied in relation to PTSD, STS, and burnout. There is mixed evidence regarding a “dose effect” of trauma exposure for the development of work-related distress. While some research suggests a positive correlation between cumulative trauma exposure and distress (Ben-Porat et al., 2020; Petrovich et al., 2020), other researchers have found no relationship between number of traumatic experiences and PTSD or STS symptoms (Ivicic & Motta, 2017). Despite persuasive evidence that FWHS are likely to be exposed both to primary and secondary trauma at work, very little research has

estimated the prevalence or degree of this exposure (see Kerman et al., 2022, for a notable exception). Work environment is also hypothesised to influence the development of work-related distress, as professionals who report a more positive organisational culture also report lower STS and burnout (Cao et al., 2016; Kulkarni et al., 2013) (Kulkarni et al., 2013) and greater compassion satisfaction (Kulkarni et al., 2013; Lenzi et al., 2021; Peters et al., 2022).

The present study

Our first aim was to investigate and quantify the degree to which FWHS are exposed to potentially traumatic events in the workplace. While many of these experiences might also be present in other fields (e.g. substance use or mental health services), our focus was on experiences reported by FWHS in other studies and in personal communication with the researchers. Our second aim was to investigate four possible factors influencing the development of work-related distress: the degree of trauma exposure (the “dose effect”), the organisational environment in which traumatic events occur, the individual’s cognitive coping strategies, and the presence of compassion satisfaction. A cross-sectional online survey with FWHS collected demographic data and prevalence data on workplace trauma exposure; several psychometric questionnaires also measured organisational culture, PTSD, STS, burnout, and compassion satisfaction in this population. We used correlational analyses and hierarchical multiple regressions to test our hypotheses that organisational culture and compassion satisfaction would make a greater contribution to the variance in burnout than cognitive coping style, while cognitive coping style would explain more of the variance in PTSD and STS. Conditional process analysis was then used to investigate if compassion satisfaction mediates the relationship between trauma exposure and work-related distress, and whether organisational culture and individual cognitive coping style moderates the hypothesised mediated relationship.

Method

Participants

Participants were FWHS over the age of 18 who were working or volunteering in a UK-based service that primarily supports PEH for at least six months. Participants had to be working in a client-facing role for at least 15 hours a week. A combination of convenience and snowball sampling techniques were used.

Power calculations using Soper's (2019) *a priori* sample size calculator for multiple regression indicated a desired sample size of 127 for a medium effect size of $f^2 = 0.15$ at a desired power level of 0.8 (Cohen, 1988), with a significance level of 0.01 and five predictor variables (trauma exposure, organisational culture, positive coping strategies, negative coping strategies, and compassion satisfaction).

Procedure

The survey was hosted on Qualtrics and open to responses from March 1st to July 31st 2021. Recruitment took place through a variety of avenues to attempt to reduce selection bias. A tweet containing a graphic and a direct link to the survey were tweeted by the lead researcher and retweeted by other Twitter users. The lead researcher also made direct contact with practitioner psychologists working within statutory and third sector homelessness services and other clinicians in the #HomelessPsychology Twitter network to seek their support in disseminating the study details to their respective services via email. Finally, the survey link was also circulated in a call for participants made in several electronic newsletters for professional networks related to homeless and inclusion health.

The survey was developed by the lead researcher and piloted by two practitioner psychologists and one support worker working in the field of homelessness, who confirmed a completion time of approximately 15 minutes. All questions were mandatory, and a debrief page was available at the end of the survey or if participants

chose to discontinue at any point. The study received approval from Research Ethics Committee of The University of Edinburgh's School of Health in Social Science.

Measures

Demographic questions included information about gender, ethnicity, lived experience of homelessness, and qualifications; participants were also asked about length of time working with PEH and in their current service, their job title, and the type of service they worked in (e.g. statutory/third sector, faith-based/secular). The count of trauma exposure developed for this study and the four standardised measures used are described below.

Trauma exposure count

This study aimed to better understand the extent to which FWHS are exposed to distressing events at work. An initial list of 12 possible distressing workplace events was compiled based on the limited evidence base on workplace hazard exposure before being reviewed by three professionals working in this setting. Three more events and an 'other' response option were added following discussion with these professionals. Possible events included "I responded to an overdose (e.g. administered Naloxone)", "I received verbal abuse from a service user", and "I received threats to my life or to the life of people close to me" (see full list in *Table 2*). Participants were given one point if they had experienced these workplace events at any point, with two points added if this experience was in the last six months. Scores were summed to create a behavioural count of workplace trauma exposure.

Culture of Care Barometer (CoCB)

The CoCB is a 30-item questionnaire designed to assess healthcare workers' perception of organisational culture and identify areas of strengths and growth within a healthcare setting (Rafferty et al., 2017). It measures four factors, organisational values

and culture (11 items; $\alpha=.93$), team-level management and support (10 items; $\alpha=.93$), relationships with colleagues (4 items; $\alpha=.84$), and job constraints (3 items; $\alpha=.70$; a higher score in this factor indicates fewer job constraints) using a five-point Likert scale (1=Strongly disagree, 5=Strongly agree). While the CoCB has not yet been validated in a social care population, development involved employees at all levels of the National Health Service (NHS) and suggested adequate content validity (Rafferty et al., 2017). Internal consistency for each of the four factors was similar to the initial development study, $\alpha=.69-.90$. The composite score for the CoCB score (COCB_Sum) used as a predictor variable in this study also demonstrated good internal consistency, Cronbach's $\alpha = .80$.

Cognitive Emotion Regulation Questionnaire (CERQ)

The CERQ is a 36-item scale that measures nine distinct adaptive or maladaptive strategies used for coping with distressing incidents using four items per strategy (Garnefski et al., 2002). The five adaptive strategies are: *acceptance*; *positive refocusing*; *refocus on planning*; *positive reappraisal*; and *putting into perspective*. The four maladaptive strategies are: *self-blame*; *ruminating*; *catastrophising*; and *other-blame*. Participants endorse their use of each specific strategy using a 5-point Likert scale. Subscale scores range from 4 to 20.

The CERQ has been found to have acceptable construct and criterion validity in several samples, including two general adult population samples (Garnefski & Kraaij, 2007; Ireland et al., 2017) and a sample of people seeking treatment for PTSD (Lee et al., 2020). All the CERQ subscales were deemed to have acceptable internal consistency in this study (Cronbach's α range from .67-.83). The summed scores for maladaptive coping strategies (CERQ_M, $\alpha = .73$) and adaptive coping strategies (CERQ_A, $\alpha = .78$) were used as predictor variables.

Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5)

The PCL-5 is a 20-item scale designed to measure the presence and severity of PTSD symptoms, as defined by the DSM-5 criteria for diagnosis (Weathers et al., 2013). It assesses symptoms over the past month using a 5-point Likert scale. The summed severity score ranges from 0-80 and was examined as a dependent variable in this study. While the PCL-5 is not a full diagnostic tool, there is evidence that a score of 31-33 can be an effective screening point for provisional diagnosis of PTSD (Bovin et al., 2016); 31 was used as the cut-off in this study. The PCL-5 has previously been used in research with staff in psychiatric services (Hilton et al., 2020) and FWHS (Kerman et al., 2021). It has been found to have strong convergent and discriminant validity and high internal consistency ($\alpha = .94$; Blevins et al., 2015). Internal consistency in this study was also high, with Cronbach's $\alpha = .97$.

Professional Quality of Life Scale (ProQOL-5)

We used the ProQOL (Stamm, 2010) to measure the positive and negative effects of working with PEH, based on its previous use in several studies with FWHS (Kerman et al., 2021; Lemieux-Cumberlege & Taylor, 2019; Smith, 2019; Waegemakers Schiff & Lane, 2019). A 30-item scale with a 5-point Likert scale covers three subscales: compassion satisfaction, burnout, and STS. In this study, the compassion satisfaction subscale was used as a predictor variable, and the burnout and STS subscales were outcome variables. The internal consistency of the ProQOL for the compassion satisfaction ($\alpha = .88$), burnout ($\alpha = .75$), and STS ($\alpha = .81$) subscales are all listed in the scoring manual, which also provides information for reverse scoring and standardising results (Stamm, 2010); cut-off scores for low/high levels of each of the three ProQOL subscales were calculated as the 25th and 75th percentile t-scores as per author recommendation. Internal consistency in this study was also high, with Cronbach's α ranging from .81 to .93.

Data analysis

All data were entered and analysed using the Statistical Package for the Social Sciences (SPSS), version 25 (IBM Corp., 2017). Statistical significance was set at $p < .01$ for all analyses to account for a potential increase in Type I error due to the number of tests run (Jafari & Ansari-Pour, 2019). Preliminary analyses were conducted to identify any missing data and outliers and confirm that relevant assumptions were met. In total, 139 participants completed the full set of questionnaires; to preserve power, participants were excluded in a listwise manner if they had not completed one of the questionnaires pertaining to specific analyses. There were no missing values in any of the questionnaires due to the force response set-up.

Each subscale was examined for outliers, defined as values that were 1.5 times the interquartile range above or below Tukey's Hinges (Hoaglin et al., 1986). Outliers were winsorised using the $k+1$ rule, where k is the closest non-outlier value (Tukey, 1977). Composite scores of winsorised subscales were not winsorised further to avoid excessive transformation of the data. Inspection of histograms and the Shapiro-Wilk test for normality (Shapiro & Wilk, 1965) revealed that all data was moderately non-normally distributed; given the sample size of $n = 139$, statistical tests considered robust to violations of normality at higher sample sizes were used. There were no violations of assumptions of linearity or homoscedasticity, and no correlations between variables exceeded the cut-off of $r = 0.9$ that may suggest multicollinearity (Field, 2018).

Descriptive statistics, Kruskal-Wallis H-tests, Independent t-tests, and Spearman's Rho correlations were used to explore the relationships between variables. The mean for each standardised measure was compared to literature values drawn from studies with similar populations, where available. Forced entry hierarchical multiple regressions were used to examine whether trauma exposure, organisational culture, coping strategies, and compassion satisfaction predicted each of the three dependent

variables using standardised coefficients (β). Examination of standardised residuals plots confirmed linearity and homoscedasticity, while Cook's distance and leverage value confirmed that none of the outliers identified were high leverage or influential points. Tolerance scores and variance inflation factors confirmed the absence of collinearity. Independence of errors was confirmed using Durbin-Watson statistics (Field, 2018).

Conditional process analysis using Hayes' (2017) PROCESS Macro Version 3.0 for SPSS version 25 was used to further investigate the relationships found in the regression analyses. Effects were considered significant at $p < .01$ if zero was not included within the 95% bootstrapped confidence intervals (5000 bootstrap samples). First, simple mediation models (Hayes' Model 4) were used to assess whether the relationships between trauma exposure and PTSD, STS, and burnout were mediated by compassion satisfaction. Next, three moderated mediation analyses (Hayes' Model 59) were run for each dependent variable to test whether the proposed mediation was moderated by organisational culture, adaptive coping, and maladaptive coping. In these analyses, 5000 bootstrap samples were used. Effects were considered significant at $p < .01$ if zero was not included within the 95% bootstrapped confidence intervals.

Results

Of the 201 participants proceeded past the study's consent form and eligibility page, 139 participants completed all measures used in the analyses (see Figure 1 – participant flow diagram). 68% ($n = 137$) of the sample identified as female, 91.5% ($n = 184$) identified as White, and 76% ($n = 152$) worked in the third sector. Overall, sample characteristics were largely consistent with those found in other studies with FWHS (Lemieux-Cumberlege & Taylor, 2019; Schneider et al., 2021; Waegemakers Schiff & Lane, 2019). A wide range of job roles was represented and 28% ($n = 57$) of the sample

disclosed having lived experience of homelessness. There was considerable variation in years of experience both in the field and in the current service; a Chi-square test of independence identified a moderately strong statistically significant association between service type and time working in service, $\chi^2(8) = 40.41, p < .0005$, Cramer's $V = .317$. Overall, 41% of participants working in statutory services had been working in their current service for more than 10 years, while three quarters of third sector workers had been in their current service for under 5 years. Demographic information and sample characteristics are further summarised in Table 1.

[Insert Table 1 about here]

Preliminary analyses

Descriptive statistics, Kruskal-Wallis H-tests, Independent t-tests, and Spearman's Rho correlations were used to compare sample means to literature values, explore the relationships between variables, and identify potential covariates.

Kruskal Wallis H-tests identified no statistically significant differences in scores on the COCB, CERQ, PCL-5, and ProQOL based on gender, ethnicity, lived experience of homelessness, time working in the field or in the current service, and whether participants worked in a statutory or third sector service.

A total "trauma score" was calculated for each participant; participants were asked to indicate whether they had experienced each of the potentially distressing events listed at any point in their career (1 point given), at no point (0 points), and in the last 6 months (2-point supplement). Overall, the sample reported high levels of trauma exposure, with 33% ($n=56$) having experienced at least three of the events listed in the last 6 months. A detailed breakdown can be found in Table 2.

[Insert Table 2 about here]

Participants were asked to select an “index event” that had caused significant distress over the last 6 months as the reference event for their responses to the PCL-5. Of the participants who proceeded to the PCL-5, 31% identified verbal abuse as an index trauma, 17% selected “providing immediate support following a service user self-harming or attempting suicide”, and 14% selected “responding to an overdose”.

In total, 23% ($n = 35$) of participants met the diagnostic threshold for PTSD. One-sample t-tests comparing mean scores on the PCL-5 to those of a sample of 761 psychiatric staff (Hilton et al., 2020) found no statistically significant difference between these scores. A Chi-Square test of independence highlighted a moderately strong statistically significant association between length of time working in the field of homelessness and whether someone met the criteria for PTSD diagnosis, $\chi^2(4) = 10.34$, $p = .035$, Cramer's $V = .262$, with participants who had been working in the field for under 12 months most likely to meet the cut-off score of 31, though this may be influenced by the significant increase in workplace pressures due to the COVID-19 pandemic (Kerman et al., 2021; Parkes et al., 2021). Due to the group differences identified, time working in the field of homelessness was initially retained as a covariate.

With regards to the CoCB, scores for the measure were statistically significantly elevated compared to those of the initial development and validation sample ($n=1698$; Rafferty et al., 2015), $p < .001$. Descriptive statistics for the ProQOL found that 29% ($n = 40$) of participants reported low levels of CS, with similar proportions of participants reporting high levels of burnout (30%, $n = 41$) and STS (27%, $n = 37$). When compared to normative benchmark data based on 30 studies ($n = 5612$) conducted with professional caregivers (De La Rosa et al., 2018), only the sample mean for STS was statistically significantly higher than the literature value, Cohen's $d = .58$, a medium effect size.

Correlation analyses

Descriptive statistics and the results of the correlation analyses can be found in Table 3. The hypothesised associations were found, with moderate to strong positive correlations found between the use of maladaptive coping strategies and PTSD ($r_s = .50$), STS ($r_s = .46$), and burnout ($r_s = .34$). Statistically significant relationships between organisational culture and the dependent variables were also confirmed, with a strong positive association between organisational culture and compassion satisfaction ($r_s = .57$), and moderate to strong negative associations between organisational culture and PTSD ($r_s = -.30$), STS ($r_s = -.34$), and burnout ($r_s = -.62$).

[Insert Table 3 about here]

Regression analyses

Hierarchical multiple regression analyses (see table 4) were used to explore whether trauma exposure, organisational culture, individual coping, and compassion satisfaction were predictive of PTSD, STS, and burnout in FWHS.

[Insert Table 4 about here]

The five-variable hierarchical multiple regression models were significant for all three indicators of work-related distress: PTSD, STS, and burnout. A single covariate, time working in the field of homelessness (entered using dummy variables) was initially included in the model predicting PTSD. However, the resulting model explained less of the variance than the model without covariates, so this was excluded. The PTSD model accounted for 38% of the variance in PTSD, $\text{Adj. } R^2 = .384$, $F(5, 133) = 18.18$, $p < .0005$, while the final model for STS accounted for 42% of the variance, $\text{Adj. } R^2 = .418$, $F(5, 133) = 20.81$, $p < .0005$. For both PTSD and STS, the only significant predictors in the final model were trauma exposure and use of maladaptive coping strategies. The same five-variable model accounted for 56% of the variance in burnout ($\text{Adj. } R^2 = .567$) and was highly significant, $F(5, 133) = 37.203$, $p < .0005$. In contrast to the models for

PTSD and STS, organisational culture and compassion satisfaction were the two remaining significant predictors in the final model predicting burnout.

Conditional process analysis

Following the hierarchical multiple regressions described above, mediation and moderated mediation analyses were conducted using the SPSS PROCESS macro 4.0 (Hayes, 2017). Effects were considered significant at $p < .01$ if zero was not included within the 95% bootstrapped confidence intervals. The results indicated that the relationship between trauma exposure and PTSD was not mediated by compassion satisfaction. Whilst indirect effects of trauma exposure through compassion satisfaction were found for both STS and burnout, these were so negligible that they preclude any conclusions being drawn. None of the moderated mediations were significant, regardless of moderator.

Discussion

To the authors' knowledge, this is only the second study to a) collect data on the prevalence of specific distressing workplace experiences in homelessness services (see also Kerman et al., 2022) and b) link these experiences to levels of PTSD, STS, and burnout. The results clearly evidence that these experiences are effectively an occupational hazard that carry both physical (e.g. in the instance of a physical assault or feeling that one's life is at risk) and emotional (e.g. following the death of a service user) risks. Our results also indicate a moderate "dose effect" of trauma exposure, with greater trauma exposure associated to higher levels of distress and particularly predictive of PTSD symptomatology and STS. These results add to a growing evidence base that a small yet significant proportion of FWHS experience considerable work-related distress, with 23% of the sample presenting with clinical levels of PTSD symptoms, 27% with high levels of STS, and 30% with high levels of burnout.

However, the high levels of compassion satisfaction found both in our sample and in other research also highlight that despite the challenges involved in this work, FWHS continue to derive significant satisfaction and fulfilment from their work. Furthermore, the finding that organisational culture and compassion satisfaction were protective against burnout further supports previous research regarding the benefits of a positive organisational culture, strong values, and finding meaning in work (Ferris et al., 2016; Kulkarni et al., 2013; Lenzi et al., 2021).

Clinical and practical implications

These findings have important implications for how organisations can support frontline workers' mental health and wellbeing. The relative contributions of trauma exposure and individual coping strategies to PTSD symptomatology and STS indicate the importance of supporting staff to develop and use a range of adaptive coping strategies, whilst the protective effect of compassion satisfaction and organisational culture against burnout highlights the importance of developing a supportive, nurturing organisational culture, particularly for organisations with strong markers of burnout (e.g. repeated sickness/absence, high turnover, etc.). The association found between type of service and tenure in that specific service also raises questions relating to retention and turnover across statutory and third sector services, such as potential systemic issues leading to higher turnover in the third sector due to lower pay with few opportunities for pay increases and employment precarity tied to commissioning and funding structures.

Interventions to address work-related distress have often focussed on individual-level efforts, including supporting professionals to increase their use of the self-care strategies such as exercise, mindfulness, spiritual habits, and maintaining a good work-life balance (Ashley-Binge & Cousins, 2020; Kulkarni et al., 2013; Sutton et al., 2022). However, while there is clearly merit in supporting professionals' natural coping,

individual-focussed interventions run the risk of placing the onus for managing distress solely upon individual professionals, without recognising how organisations can precipitate and perpetuate distress. Indeed, preventing and responding to work-related distress must be seen as an organisational responsibility, rather than just an individual duty. Furthermore, research has highlighted how institutional responses to critical incidents (e.g. incident reports, critical event reviews, inquiries, etc.) and approaches to risk management may align with a “blame culture” and reinforce an individual’s sense of responsibility, guilt, or shame following an incident (Peters et al., 2021; Ravalier, 2019; Ting et al., 2011). “Trauma-informed” services must therefore carefully consider how post-incident responses may reinforce feelings of powerlessness and guilt and develop policies that promote both individual and service-level post-traumatic growth.

In homelessness services, a push towards psychologically informed environments (PIEs) offers a multi-faceted strategy for improving service user and staff wellbeing (Keats et al., 2012). Receiving support from a PIE service has numerous tangible benefits for service users, including greater engagement with physical and mental health services, and reduced levels of distress and criminal justice involvement (Cockersell, 2016; Williamson & Taylor, 2015). PIE services have also reported reduced rates of critical incidents requiring police or ambulance callouts, suggesting a potential reduction in staff and service user involvement in distressing incidents (Cockersell, 2016). Central to the PIE approach is a commitment to staff training and support, which frequently involves the provision of clinical supervision and reflective practice groups (RPGs; Keats et al., 2012).

In contrast to individual-focussed interventions, effective, non-judgemental, and trauma-informed clinical supervision and RPGs allow organisations to reflect on their own processes while also supporting FWHS’ natural coping. While supervision has been found to buffer against both STS and burnout (Ben-Porat et al., 2020; Kerman et

al., 2022), FWHS report mixed experiences of supervision due to concerns over confidentiality, having their difficulties dismissed, or feeling scrutinised rather than supported (Choy-Brown et al., 2016; Lenzi et al., 2021). Making supervision a reflective and supportive space that actively considers parallel processes and STS should therefore be a priority for services aiming to work in a trauma-informed way. In combination with supervision, RPGs offer a valuable space to process the emotions associated with responding to difficult incidents, which allows workers to shift from rumination and self-blame to instead considering how service users' past experiences may contribute to these interactions (Peters et al., 2021; Phipps et al., 2017). It is important to note that rather than being offered solely in response to incidents or periods of high pressure, the PIE framework positions supervision and reflective practice as standard practices that services should use to proactively support their employees.

Strengths, limitations, and recommendations for future research

Several strengths and limitations of this study should be considered. Firstly, the cross-sectional online survey methodology used limits any causal inferences regarding relationships between variables and contextualises the results within a specific time period, i.e. the second wave of the Covid-19 pandemic in the UK, when homelessness services were facing exceptionally high pressures in addition to pre-existing stressors (Carver et al., 2022; Marshall, 2022; Parkes et al., 2021). FWHS currently struggling with their wellbeing might intentionally opt out of participating, or conversely choose to respond due to their experience, potentially skewing the results. Additionally, the relatively small and homogenous sample makes it impossible to take an intersectional lens that considers how marginalisation due to ethnicity, gender, ability, etc. may influence people's experiences at work. A larger sample might also have allowed us to further examine whether lived experience affects FWHS' experiences of work-related distress, either as an added strain or protection.

Certain limitations also exist in terms of instrumentation. The COCB is a relatively new measure that has not yet been validated in a social care setting and solely measures the more positive elements of organisational culture; inclusion of an occupational stressors measure may have provided further nuance on organisational factors. As this study used composite scales for maladaptive and adaptive coping mechanisms, rather than subscales for each coping strategy, further research examining the potential differential impact of specific coping strategies (e.g. rumination, self-blame) might highlight ways in which organisations can support individual resilience and coping. The PCL-5 does not feature an “anchor point” to a specific trauma, which was remedied in part by asking participants to identify an index trauma prior to completing the questionnaire. As participants were asked to select an event taking place in the last six months, participants responding in relation to a more recent event might understandably report higher levels of distress whilst those responding regarding a more distant event may have had more opportunity to process the situation and draw on their natural recovery skills. Participants were also not asked to report on the frequency or intensity of the distressing workplace events that they had experienced. Lastly, the ProQOL has faced criticism based on discrepancies in scoring and the use of z-scores, suggesting that benchmarks must carefully be considered when scoring this measure (De La Rosa et al., 2018). Future studies examining the subject may benefit from using different or multiple measures of burnout and STS, though due consideration should be given not to excessively increase respondent burden.

Given the role that organisations have to play in supporting employees after distressing incidents, it would have been useful to capture what support, if any, was offered following an index event. This might further be explored using a qualitative component to the study, which would also have facilitated a more in-depth

understanding of how FWHS conceptualise work-related distress and what factors they consider most important to their wellbeing.

Conclusion

Working in the field of homelessness carries inherent risk and rewards. Supporting trauma survivors and people in distress involves the risk of experiencing both first-hand trauma, either as the victim of a direct threat or as the witness to a distressing event, as well as secondary traumatisation through witnessing survivors' stories and the consequences of their traumatic experiences. Our results suggest that exposure to difficult workplace events is effectively an occupational hazard for FWHS, and that exposure to such events is predictive of both PTSD and STS. The study reflects previously reported findings of high levels of compassion satisfaction, which served as a particularly effective buffer against burnout. However, neither organisational culture nor compassion satisfaction were sufficient to mitigate the effects of trauma exposure on PTSD and STS. Ultimately, organisations should strive to develop holistic, trauma-informed practices that promote post-traumatic growth for individuals and organisations alike so that this important group of professionals can continue to effectively support their service users.

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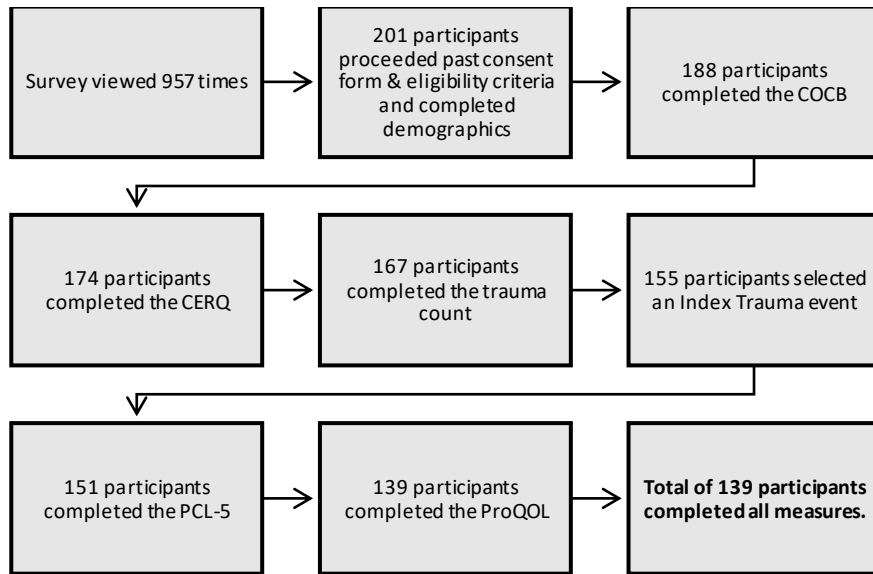
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Figures

Figure 1: Participant flow through study



Tables

Table 1: Sample characteristics

Variable	Group	<i>n</i>
Gender^a	Female	137 (68%)
	Male	58 (29%)
	Binary non-conforming	6 (3%)
Ethnicity^a	White	184 (92%)
	Caribbean or Black	5 (3%)
	Asian, Asian Scottish or Asian British	5 (3%)
	Mixed or Multiple ethnic groups	4 (2%)
	African	3 (2%)
Lived experience of homelessness	No	135 (67%)
	Yes	57 (28%)
	Prefer not to say	9 (5%)
Educational/training background	Vocational only	91 (45%)
	Academic only	44 (22%)
	Both vocational & academic	62 (31%)
	No relevant formal education	4 (2%)
Time in the field	6-12 months	19 (10%)
	1-3 years	40 (20%)
	3-5 years	31 (15%)
	5-10 years	46 (23%)
	10+ years	65 (32%)
Time in current service	6-12 months	35 (17%)
	1-3 years	63 (31%)
	3-5 years	38 (19%)

	5-10 years	36 (18%)
	10+ years	29 (14%)
Statutory vs. third sector service	Statutory service	44 (22%)
	Third sector service	152 (76%)
	Other type	5 (3%)
Faith-based vs. secular service	Faith-based service	19 (10%)
	Secular service	182 (91%)
Job title^b	Support worker, recovery worker, practitioner	102 (51%)
	Team leader, accommodation/service manager	50 (25%)
	Healthcare professional (e.g. nurse, General Practitioner, Psychologist)	11 (6%)
	Housing officer	25 (12%)
	Other (e.g. counsellor, social worker)	13 (7%)

$N = 201$

^aNew categories were created to group participants where <3 participants endorsed a demographic category: a third gender identity category called "binary non-conforming" and ethnicity categories grouped under broader categories as per the Office of National Statistics.

^bParticipants could only endorse one category, so this data may not accurately capture possible overlap in job titles.

Table 2: Prevalence of workplace trauma exposure

Event	Never experienced this <i>N</i> (%)	Experienced at any point <i>N</i> (%)	Experienced in the last six months <i>N</i> (%)
I responded to an overdose (e.g. administered Naloxone)	65 (39%)	102 (61%)	59 (35%)
I witnessed the death of a service user	112 (67%)	55 (33%)	43 (26%)
I found a service user who had died	121 (73%)	46 (28%)	37 (22%)
A service user I worked closely with completed suicide	81 (49%)	86 (52%)	62 (37%)
I provided immediate support after a service user self-harmed or attempted suicide (e.g. provided first aid, phoned an ambulance...)	28 (17%)	139 (83%)	86 (52%)
I experienced physical violence from a service user that was severe enough to require medical attention	141 (84%)	26 (16%)	18 (11%)
I experienced physical violence from a service user that was <u>not</u> severe enough to require medical attention	100 (60%)	67 (40%)	50 (30%)
I received verbal abuse from a service user	6 (4%)	161 (96%)	74 (44%)

I was sexually harassed or assaulted by a service user	134 (80%)	33 (20%)	24 (14%)
I received threats to my life or to the life of people close to me	90 (54%)	77 (46%)	60 (36%)
I was in a situation where I genuinely believed my life as at risk	110 (66%)	57 (34%)	45 (27%)
I had a needlestick injury	156 (93%)	11 (7%)	9 (5%)
I experienced a significant breakdown in my relationship with a service user I had been supporting	84 (50%)	83 (50%)	58 (35%)
I experienced a significant breakdown in my relationship with a colleague or manager	108 (65%)	59 (35%)	45 (27%)
Other	138 (83%)	29 (17%)	21 (13%)

N = 167. “Other” events described by participants included experiencing significant bullying at work, testifying in court against a service user, being spat at, witnessing a violent assault, and providing first aid following significant injury (e.g. after a seizure).

Table 3: Descriptive statistics and results of correlational analyses

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. CoCB^a - Organisational culture	3.90	0.8	1							
2. CERQ^b - Adaptive coping	58.09	12.53	.20*	1						
3. CERQ^b - Maladaptive coping	31.40	8.44	-.15	.32*	1					
4. Trauma exposure	N/A	N/A	-.25*	.08	.14	1				
5. PCL-5^c – PTSD	17.39	17.24	-.30*	.26*	.50*	.38*	1			
6. ProQOL^d - Compassion satisfaction	38.80	7.17	.57*	.37*	-.19	-.18	-.19	1		
7. ProQOL^d - Burnout	23.56	6.56	-.62*	-.14	.34*	.31*	.53*	-.65*	1	
8. ProQOL^d - Secondary traumatic stress	20.86	7.16	-.34*	.13	.46*	.35*	.79*	-.26*	.63*	1

^aCulture of Care Barometer; ^bCognitive Emotion Regular Questionnaire; ^cPTSD Checklist for DSM-V; ^dProfessional Quality of Life Scale
* $p < .05$

Table 4: Results of regression analyses

Predictor	Posttraumatic stress				Secondary Traumatic Stress				Burnout			
	β	β (st.)	<i>SE</i>	<i>p</i>	β	β (st.)	<i>SE</i>	<i>p</i>	β	β (st.)	<i>SE</i>	<i>p</i>
Trauma exposure	0.75	0.32	0.17	< .001**	0.28	0.27	0.07	< .001**	0.10	0.10	0.06	.098
Organisational culture	-0.08	-0.10	0.07	.234	-0.04	-0.12	0.03	.146	0.10	-0.31	0.02	< .001**
Adaptive coping	0.51	0.08	0.52	.326	0.04	0.06	0.04	.426	0.04	0.08	0.04	.263
Maladaptive coping	3.03	0.39	0.60	< .001**	0.36	0.42	0.06	< .001**	0.11	0.15	0.05	.024
Compassion satisfaction	-0.12	-0.05	0.21	.578	-0.10	-0.10	0.09	.247	-0.42	-0.46	0.07	< .001**

$N = 139$; ** $p < .001$