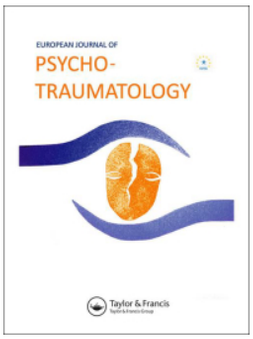

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BASIC RESEARCH ARTICLE

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'I've got no PPE to protect my mind': understanding the needs and experiences of first responders exposed to trauma in the workplace

Nicola Cogan [a], Ashleigh Craig[a], Lucy Milligan[a], Robyn McCluskey[a], Tara Burns[a], Wiktoria Ptak[a], Alison Kirk [a], Christoph Graf[a], Jolie Goodman[a] and Johannes De Kock [b]

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ABSTRACT

Background: First responders (FRs) are at high risk of being exposed to traumatic events in their occupational roles. Responding to critical incidents often involves exposure to life-threatening circumstances, dealing with fatalities and encountering highly stressful situations that may trigger traumatic responses. These experiences can lead to poor physical and mental health (MH) outcomes including post-traumatic stress disorder, co-morbid conditions such as depression, anxiety, substance abuse, insomnia, and suicidality. Little research has explored the perspectives and experiences of FRs in dealing with occupational trauma(s) and how best to meet their health needs.

Objective: This study aimed to explore FRs' experiences of exposure to occupational trauma and its impact on their mental wellbeing. The wider objective was to investigate how FRs can be supported to access appropriate and relevant help, addressing barriers like stigma.

Method: A qualitative research design using in-depth semi-structured interviews with FRs (n = 54) was adopted. Interviews were audio-recorded, transcribed and analysed using an inductive thematic approach.

Results: Themes developed were: (1) the pervasive, cumulative and salient impact of occupational trauma on MH (micro-traumas, nightmares, flashbacks and reliving experiences); (2) the demands of the job exacerbating the adverse effects of trauma (self and others); (3) insufficient support and unhelpful ways of coping following exposure to trauma (lack of psychological safety); (4) stigma and fear of judgement as barriers to MH help-seeking; and (5) need for specific, accessible and credible trauma-focused interventions and workplace support.

Conclusions: The implications of these findings are discussed at the individual, service provider and organisational level, emphasising the importance of implementing a strengths-based, non-pathologising and de-stigmatising approach to trauma in the workplace as experienced by FRs. Emphasis is placed on the importance of overcoming barriers to accessing MH support and improving access to evidence-based, trauma-focused psychological interventions and workplace support.

'No tengo EPP para proteger mi mente': comprender las necesidades y experiencias de los equipos de primera intervención expuestos a traumas en el lugar de trabajo

Antecedentes: Los equipos de primera intervención (EPI) corren un alto riesgo de estar expuestos a eventos traumáticos en sus roles ocupacionales. Responder a incidentes críticos a menudo implica la exposición a circunstancias que amenazan la vida, lidiando con muertes y encontrándose con situaciones altamente estresantes que pueden desencadenar respuestas traumáticas. Estas experiencias pueden conducir a resultados deficientes de salud física y mental (SM), incluido el trastorno de estrés postraumático, afecciones comórbidas como depresión, ansiedad, abuso de sustancias, insomnio y suicidalidad. Pocas investigaciones han explorado las perspectivas y experiencias de los EPI en el manejo de traumas ocupacionales y la mejor manera de satisfacer sus necesidades de salud.

Objetivo: Este estudio tuvo como objetivo explorar las experiencias de los EPI en relación con la exposición a traumas ocupacionales y su impacto en su bienestar mental. El objetivo más amplio fue investigar cómo se puede ayudar a los EPI a acceder a ayuda apropiada y relevante, abordando barreras como el estigma.

Método: Se adoptó un diseño de investigación cualitativo utilizando entrevistas semiestructuradas en profundidad con EPI (n = 54). Las entrevistas fueron grabadas en audio, transcritas y analizadas utilizando un enfoque temático inductivo.

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KEYWORDS

First responder; occupational trauma; stigma of MH help-seeking; qualitative; mental health

PALABRAS CLAVE

Equipo de primera intervención; trabajador sanitario; trauma ocupacional; cualitativo; estrés agudo; bienestar en el lugar de trabajo

HIGHLIGHTS

- First responders regularly experience traumatic events in their workplace which can bring about traumatic stress, which is further exacerbated by the demands and pressures of their jobs.
- First responders' coping needs are not being met to a sufficient extent, especially in terms of psychological/MH input.
- There is need for evidenced-based, easily accessible, occupation-specific trauma-focused interventions to support first responders with their MH needs from occupational trauma-related stressors.

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Resultados: Los temas desarrollados fueron: (1) el impacto penetrante, acumulativo y destacado del trauma ocupacional en SM (microtraumas, pesadillas, flashbacks y experiencias revividas); (2) las demandas del trabajo que exacerban los efectos adversos del trauma (propio y de otros); (3) apoyo insuficiente y formas inútiles de afrontar la situación después de la exposición al trauma (falta de seguridad psicológica); (4) el estigma y el miedo al juicio como barreras para la búsqueda de ayuda de SM; y (5) necesidad de intervenciones específicas, accesibles y creíbles centradas en el trauma y apoyo en el lugar de trabajo.
Conclusiones: Se discuten las implicancias de estos hallazgos a nivel individual, de proveedor de servicios y organizacional, enfatizando la importancia de implementar un enfoque basado en fortalezas, no patologizante y desestigmatizador del trauma en el lugar de trabajo tal como lo experimentan los EPI. Se hace enfasis en la importancia de superar las barreras para acceder al apoyo de SM y mejorar el acceso a intervenciones psicológicas centradas en el trauma y apoyo en el lugar de trabajo. basadas en evidencia.

1. Introduction

First responders (FRs) such as police officers, firefighters, ambulance workers, and emergency medical workers face a high risk of exposure to traumatic events in their jobs (Brais et al., 2023; Bryant, 2022; Jones, 2017; Jones et al., 2018; Regehr et al., 2002). Each occupational group fulfils different roles when responding to critical incidents (Davidson et al., 2023). Emergency medical and paramedic teams attend to the casualties' physical and medical needs (Eaton et al., 2021). In contrast, police and firefighters are generally responsible for safety issues, incident resolution, and managing bystanders at the scene of an emergency (Nunavath et al., 2016). Nonetheless, all FRs are often the first to be present at a critical incident. They attend to victims, casualties, and fatalities (Kleim & Westphal, 2011). FRs are routinely exposed to emotionally challenging, unpredictable, and potentially traumatic situations (Greinacher et al., 2019). FRs encounter situations such as going into burning buildings, confront armed and violent individuals, extracting victims from vehicle crashes, and witness severe injuries and deaths (Alzahrani, 2022). They can be subjected to violence and abuse from individuals in crisis and encounter highly stressful environments that increase psychological distress (Pietrzak et al., 2014) and may trigger traumatic responses (Petrie et al., 2018).

These experiences can lead to poor mental health (MH) outcomes, including high levels of burnout (Benincasa et al., 2022), anger problems (Hinton et al., 2022), substance misuse (Bonumwezi et al., 2022), depression (Whitworth et al., 2023), anxiety (Baker et al., 2023), somatic difficulties (Prioux et al., 2023), sleep problems (Reffi et al., 2023), pain (Hourani et al., 2020), post-traumatic stress disorder (Surgenor et al., 2020), and suicidality (Bond & Anestis, 2023). Evidence indicates that the adversities associated with exposure to occupational trauma have broader impacts on FRs' social and romantic relationships (Bryant, 2022; Rennebohm et al., 2023) and family dynamics (Casas & Benuto, 2022).

There is increasing evidence that FRs have distinct MH presentations and support needs (Arjmand et al., 2024; Feldman et al., 2021; Gilmartin, 2002; Lanza et al., 2018). However, they often struggle to seek or access help (Haugen et al., 2017; Smith et al., 2021; Tamrakar et al., 2020). Growing recognition exists that further research is needed to explore FRs' first-hand perspectives and personal experiences regarding the impact of occupational trauma on their MH and well-being (Smith et al., 2021). Additionally, there is a need to better understand their help-seeking behaviour and MH support needs (Jones et al., 2020).

1.1. The current study

The primary aim of this study was to explore FRs' experiences of exposure to occupational trauma. A secondary aim was to understand the impact this had on their MH and wellbeing as well as their help-seeking behaviours and support needs. To achieve these aims, we conducted an in-depth qualitative study to investigate the experience of FRs within the UK context. The research questions explored were as follows:

(1) What are FR' experiences of exposure to occupational trauma in their service settings?
(2) What is the impact of exposure to occupational trauma on their MH and wellbeing?
(3) How do FRs cope with the impact of trauma exposure in their working roles?
(4) How best can their MH support needs be met?

2. Method

A qualitative research design using in-depth semi-structured interviews with FRs ($n = 54$) was adopted. The research team comprised of academic researchers from health promotion, social work, psychology and physical activity for health, MH practitioners and a researcher and advocacy worker for a national MH

charity engaged with trauma informed practice. The research team worked in partnership with FR organisations from the onset of the research through to its design, recruitment of FRs, data collection and analysis and dissemination of preliminary findings. This multi-disciplinary and collaborative approach helped to promote accessibility by grounding data collection in the experiences of those being researched (MacIntyre et al., 2019) and to help the study produce more relevant, useful and practice-oriented knowledge for FRs (Vaughn & Jacquez, 2020). This democratisation of the research process required the research team to have clear structures to support team members with different kinds and levels of expertise and knowledge (Hafford-Letchfield et al., 2022). This included providing formal training to the research team, facilitated by the lead researcher, on qualitative interviewing techniques and data analysis and opportunities for both verbal and written structured dialogue to facilitate mutual and reciprocal learning and understandings of the research process (Onwuegbuzie & Byers, 2014).

2.1. Reflexivity

Before interviewing commenced, researchers intentionally reflected on how their subjective beliefs and experiences could affect the research at all stages. This involved: reflecting on what the research topic meant to them and how their personal histories influenced their interest in the topic, what preconceived expectations they had regarding results and how these expectations may influence their interpretation of the research findings (Ash & Clayton, 2009; Ivey, 2023). Before the research team began formal analysis, each interviewer documented their reflections in their reflective journals on each interview experience and its affective impact on them (Finlay, 2012). This entailed interviewers' recording thoughts and observations following completion of each interview, and to notice any feelings that were elicited in them at particular points in the interview process (Froggett & Hollway, 2010). Regular reflexive team meetings were held amongst the team as a basis for establishing and maintaining safe and supportive working practices.

2.2. Participants

FRs were invited to take part if they were living in the UK, aged 17 years or older, were employed in FR occupations (for at least 6 months) and self-identified as having been 'exposed to trauma in the workplace' at the time of the study. A matrix sample of FRs ($n = 54$) was used to ensure key demographic characteristics such as age, gender and occupation were reflected in the sample (see Table 1). Fifty four participants ($n = 54$) took part in this study. As is recommended for interview research that has an ideographic aim (Malterud et al., 2016), this sample size was sufficient to capture the voices of the diverse FR occupational groups yet allowed individual participants to have a locatable voice within the reporting of the findings. The participants' ages varied between 22 and 64 years ($M = 40.84$, SD = 11.78). Thirty three of the participants identified as male, 20 as female and 1 as non-binary. The majority of participants (81.48%) identified as being of white, British ethnic origin with the remaining participants identifying as being from ethnic minorities. In terms of occupational groups, 21 were paramedics, 15 were firefighters, 12 were emergency healthcare workers and 6 were police (see Table 1). Participants' number of years working in their occupational roles varied from 1 to 43 years ($M = 20.98$, SD = 12.34). The majority of participants were located in England (64.81%) followed by Scotland. All of the participants self-identified as having been exposed to occupational trauma and that this had adversely impacted on their MH and wellbeing.

Table 1. Participants characteristics.

Total sample = 54	Range	Frequency (N) or Mean (M)	SD or %
Gender			
Male		$N = 33$	61.11%
Female		$N = 20$	37.03%
Non-binary		$N = 1$	1.85%
Age	22–64	$M = 40.84$	SD = 11.78
Ethnicity			
White		$M = 44$	81.48%
Asian		$M = 5$	9.26%
Black		$M = 3$	5.55%
Ethnic (other minority)		$M = 2$	3.70%
Occupation			
Paramedic		$N = 21$	38.89%
Firefighter		$N = 15$	27.78%
Emergency healthcare		$N = 12$	22.22%
Police		$N = 6$	11.11%
Years of working experience	1–43	$M = 20.98$	SD = 12.34

2.3. Interviews

A semi-structured interview schedule was developed for the purposes of this project and informed by earlier research (e.g. Cogan et al., 2022; Greinacher et al., 2019). While the schedule had a strong focus on support and help-seeking in the aftermath of exposure to work-related trauma, it sought to gain broader insights into FRs' lived experiences of dealing with trauma. The aim of the schedule was to gain an understanding of FRs' experiences of exposure to trauma in the workplace and its impact on: (1) MH and wellbeing, (2) feelings of safety, (3) help-seeking and supports, and (4) interventions. Questions were developed and informed by guidelines for ensuring the safety and promotion of resilience of research participants (Alessi & Kahn, 2023; Isobel, 2021; Wild, El-Salahi, et al., 2020) and were developed in collaboration with FR organisations

during the period of project inception. Questions were worded in a broad, open-ended and non-judgemental way to allow FR to respond in their own terms (DeJonckheere & Vaughn, 2019).

In the initial phase of setting up the research team, time was exerted into establishing a safe base and in developing trusted relationships among research team members (Batlle & Carr, 2021), preparing the interviewers for dealing with difficult and/or distressing content shared in interviews (Dempsey et al., 2016) as well as the potential impacts of secondary trauma in the interview process (Dickson-Swift et al., 2007). Role plays, scripted case studies and training in conducting sensitive interviews (Shea & Barney, 2015) was provided by the lead researcher who is an academic and registered MH practitioner (Cogan et al., 2022). An infrastructure of support to interviewers was provided through interviewer check-in meetings, debrief sessions and research supervision. Training and ongoing support and supervision in strategies in self-care, self-reflection and critical incident reporting was also provided to interviewers.

2.4. Procedure

Recruitment was conducted between January 2023 and June 2023. The study was advertised through FR organisations who were consulted prior to the conduct of the study. The aims of the study and the methods employed were discussed with senior leadership across FR organisations who were given an opportunity to ask questions prior to recruitment commencing. The study was then advertised within organisational intranet servers along with an electronic participant information sheet (PIS). Individuals who were interested in taking part that had read the PIS were provided with the lead researchers' contact details along with the opportunity to ask any questions they had about the study.

Potential participants were then invited to complete an electronic 'expression of interest' survey, where they provided demographic details and expressed their consent to participate by signing an electronic consent form via the Qualtrics platform. Participants were also asked if they had been exposed to trauma in their workplace and whether this had had an adverse impact on their mental wellbeing. Participants were informed that they would receive an online Gift Voucher of £20 for their participation. This served as both an incentive and a thank you for participants voluntarily taking part in the study.

Once an expression of interest was received by the research team, the potential participant was contacted by the lead researcher to arrange a convenient time for the interview to take place. All interviews were conducted online using MS Teams platform. Following completion of the interview, each FR was contacted via email by the lead researcher, who shared a Debrief Form and sent the online Gift Voucher of £20 for their participation. Interviews were transcribed in full verbatim and all identifying information was removed from the transcripts prior to analysis.

2.5. Analysis

The transcribed data was initially analysed using a reflexive thematic approach (Braun & Clarke, 2021) which is an accessible and theoretically flexible interpretative approach to qualitative analysis (Campbell et al., 2021). It facilitates the identification, analysis and reporting of qualitative data to derive meaning and create themes (Braun & Clarke, 2006; 2023). Given that thematic analysis is a flexible qualitative method, an inductive, critical realist approach was adopted, since this was in keeping with a data-driven, pragmatic analysis.

In addition, the research team drew upon interpretative phenomenological analysis (IPA) as both methods of analysis are underpinned by similar epistemologies, since IPA also takes a critical realist stance (Smith et al., 2021). IPA has a conception of the research participant as inherently self-reflective who, when faced with difficulties or challenging events, quite naturally attempts to make sense of their experience (Giorgi, 2011). It synthesises ideas from phenomenology and hermeneutics resulting in a method which is descriptive and interpretative (Pietkiewicz & Smith, 2014). The breadth and depth of experience discussed by FRs and elicited by the interview schedule meant that the data were suitable for both methods (Alase, 2017). Consequently, both pragmatic and phenomenological aspects of the FRs' perspectives could be explored, that is, the experience of living, working, and managing occupational trauma. This form of analytic pluralism has been used in earlier work to advance psychological knowledge by demonstrating findings which arise in the comparison between findings from the two analyses (Barker & Pistrang, 2021; Clarke et al., 2015; Spiers & Riley, 2019).

While it was a challenge to get the balance in the detailed, ideographic nature of IPA with the demands of analysing a large and diverse dataset, we sought to identify common themes across different sub-groups of FRs according to their occupational roles and to highlight shared experiences and issues, acknowledging the diversity within the sample while providing a cohesive analysis. Further, the research team employed several strategies to maintain both depth and breadth in the analysis. The analysis was iterative, with researchers going back and forth between the data and developing themes to refine and deepen understanding. Transcripts were analysed one by one using the data management programme NVivo

– Version 13 (Lumvero, 2020). In the transcripts, the research team looked for complex ideas, particularly trauma-related issues, metaphors and critical moments (Eatough & Smith, 2017).

The team engaged in a critical reflection of how the qualitative data was interpreted to capture any biases and misperceptions during the analytical process (Morse, 2015). Each of the research team members continued to retain their reflective journals throughout the research process to help capture any biases, paradoxes and/or inconsistencies (Castleberry & Nolen, 2018). Analyses focused on understanding the breadth and depth of FRs' experiences and building a picture of the impact of trauma exposure on their MH and wellbeing, and what this meant in terms of understanding their MH needs and supports as grounded in their own narratives.

First, transcribed data was read and re-read actively to allow immersion in the data and initial ideas were noted using memos (Maher et al., 2018). Next, data was organised at a granular level by labelling data extracts with relevant codes. An inductive, 'data-driven' approach was adopted to code data, as the research team were not interested in trying to fit the coding process into a pre-existing coding frame or specific analytic preconceptions (Clarke & Braun, 2017). As analysis progressed, a table of codes was developed. Each new transcript led to codes being expanded or adjusted. Once all transcripts were analysed, the lead researcher refined the codes, looking for duplicate codes or patterns (Roberts et al., 2019). Previously generated codes were examined and compared. Codes that were similar or overlapped were collated together and initial themes were constructed. Themes were reviewed, modified and developed to ensure that they were coherent and distinct from each other. This process was guided by critical reflective questions about the themes' meanings and boundaries. and the amount of data to support them (Ivey, 2023). Themes were reviewed in relation to the entire data set to ensure that they captured the essence and tone of the data. A definition and narrative description of each theme was produced, and a thematic map was created to organise themes, sub-themes and representative extracts from the transcribed data. Finally, a report was produced to present detailed and thick descriptions of participants' experiences, using rich quotes and examples from the data, illustrating the themes and demonstrating the depth of analysis, providing a clear, nuanced understanding of the findings (Clarke & Braun, 2017; Kiger & Varpio, 2020).

Rigour, transparency, and quality of reporting were followed using Qualitative Checklist Criteria, COREQ (COnsolidated criteria for REporting Qualitative research) guidelines (Tong et al., 2007) and APA Style JARS-Qual (Journal Article Reporting Standards) guidelines (Levitt et al., 2018). Some of the strategies used to ensure quality included maintaining an audit trail of the stages of the research process, including data collection, analysis, and decision-making (Nowell et al., 2017). This transparency allowed for the study to be reviewed and assessed for methodological rigour and consistency (Carcary, 2020). The researchers also engaged in peer debriefing, where they discussed the study's process and findings with colleagues who were not directly involved in the research. This external feedback provided new insights, challenged assumptions, and enhanced the credibility of the findings (Tomaszewski et al., 2020).

2.6. Ethics

Ethical approval was sought and provided by the University Ethics Committee (UEC22/92). The participation of FRs was voluntary and followed both verbal and written electronic consent via Qualtrics.

A key ethical consideration was the impact on researchers and participants from talking about trauma experiences (Legerski & Bunnell, 2010). The protocol drew on established guidance for working with people who have experienced trauma (Goelitz, 2020). FRs were provided with a debrief and signposted towards support services if needed as well as the opportunity to discuss any concerns or issues with the lead researcher. The team adopted guidelines on working with vicarious trauma (Caringi & Pearlman, 2009) and had regular debriefings and access to a registered consultant clinical psychologist with expertise in psychotraumatology for signposting and self-care advice when working with trauma (Cohen & Collens, 2013). In terms of the reporting of the research findings, the team recognised that some readers may find the content distressing. Following reflexive discussions within the team and with FR organisations involved in recruitment for the study, it was agreed that it was important to retain the magnitude and salience of the data reporting on FRs' experiences of occupational trauma while being mindful of the potential impact of sharing such experiences on the reader. Pseudonyms have been used throughout to protect participants' anonymity.

While the research team adhere with the use of a clinical definition of trauma in accordance with diagnostic criteria (Hyland et al., 2021), a more participant-driven understanding of trauma is presented in the research findings to align closely with FRs' understandings and lived experiences. This approach ensures transparency and helps in accurately interpreting the findings and their implications.

3. Results

The themes and associated sub-themes developed were: (1) the pervasive, cumulative and salient impact

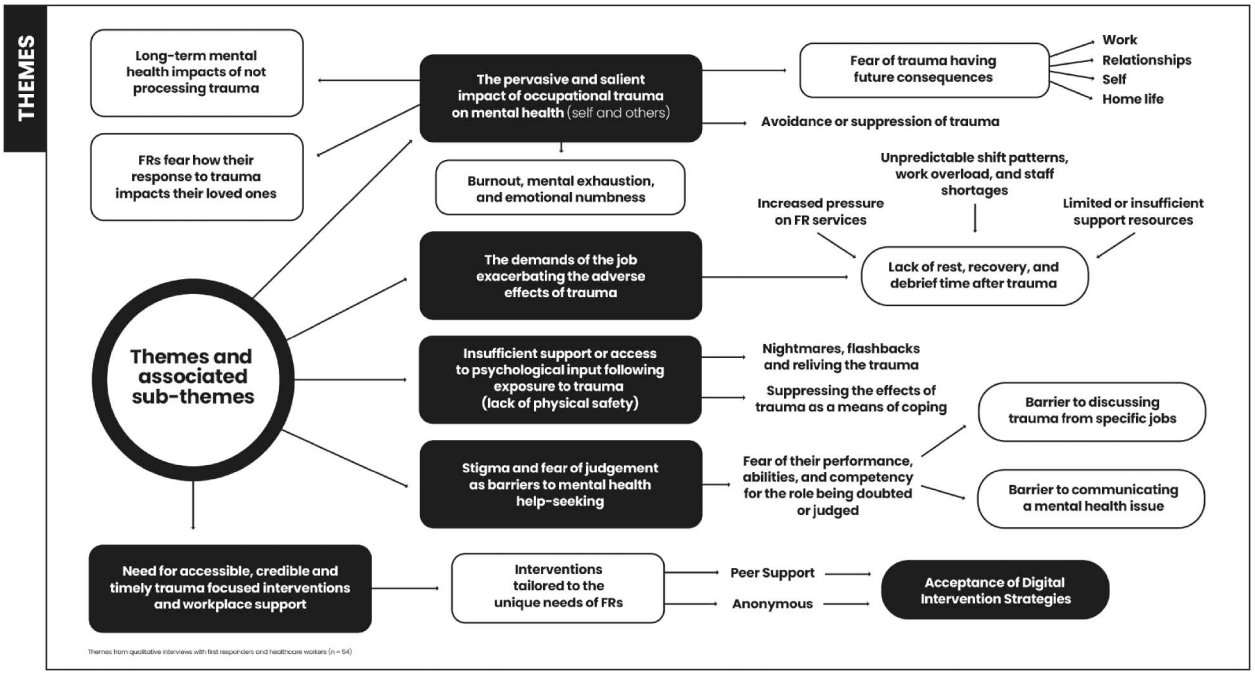

Figure 1.

of occupational trauma on MH (micro-traumas, nightmares, flashbacks & reliving experiences); (2) the demands of the job exacerbating the adverse effects of trauma (self and others); (3) insufficient support or access to psychological input following exposure to trauma (lack of psychological safety); (4) stigma and fear of judgement as barriers to MH help-seeking. and (5) need for specific, accessible and credible trauma-focused interventions and workplace support. See Figure 1.

3.1. Theme (1) The pervasive, cumulative and salient impact of occupational trauma exposure on MH (micro-traumas, nightmares, flashbacks & reliving experiences)

Evident among all FRs' accounts was reference to the pervasive and salient impact of exposure to traumatic events in their day-to-day working roles and routine duties. It was not only major critical incidents and/or disasters that were found to adversely impact on their MH and wellbeing, but also the cumulative impact of exposure to traumatic stressors on a routine basis. Traumatic stressors that FRs referred to included witnessing the traumatic responses of others (fear, anxiety, shock) and/or grief of loved ones/bystanders of causalities and/or fatalities, responding to MH crises (e.g. self-harm, overdoses, completed or attempted suicides), dealing with potential life-threatening situations and dangerous environments (e.g. road traffic accidents, burning buildings) and risk of personal assault and/or abuse while on duty (e.g. verbal or physical abuse; damage to equipment). The physical and/or mental 'threatening and traumatic' (Paula, healthcare worker) work-based situations that FRs encountered were evident across all accounts. Sarah described the trauma she experienced in relation to not being able to relieve a patient's pain:

> It was like trauma, bad jobs. It was just the horrible jobs. You know where you couldn't get pain relief in a person because their veins were collapsed and you were watching a patient in pain. And it was things like that. And I had quite a run of these and I got really run down. (Sarah, paramedic)

The aftermath of dealing with traumatic events at work, including exposure to causalities and/or fatalities was a common stressor, as Michael remarked:

> Seeing a burned body, feeling the burned body for the first time … that could be you traumatised (pauses) that could be you awake in the middle of the night dreaming about burned bodies. (Michael, firefighter)

The impact of sharing 'bad news' (Laura, healthcare worker) relating to highly emotive and distressing experiences that impacted on wider family and/or social networks of causalities and fatalities was another major stressor. For example, William recounted the distress he experienced in relation to informing a parent that her son had committed suicide:

> It's like the screams of telling a mum that that their son (has) completed suicide. You know, these things will always be there. You know, you'll never not hear them again (pauses) It stays with you, like a loop in your mind. (William, police)

FRs emphasised how 'bad jobs' (Sam, paramedic), 'traumatic incidents' (Pauline, police), 'dealing with death' (Jennifer, healthcare worker), 'life and death

decisions' (Barry, medical doctor), 'moral dilemmas' (Robert, doctor), 'responding to hangings' (Clarrisa, paramedic), 'assaults on the job' (Tom, healthcare worker) were significant stressors that had affected them and had a detrimental impact on their MH and wellbeing. In describing these cumulative traumatic events, Callum referred to them as being 'micro-traumas that just build up over time' (Callum, healthcare worker). Apparent throughout FRs' accounts was a sense that the accumulative impact of trauma incidents was a significant stressor; as captured by Walter:

> I think it is when you're going to a stabbing and then another stabbing and another cardiac arrest or another assault or another, whatever … that's when you just can't take it any longer. (Walter, paramedic)

FRs described how frequent exposure to 'back-to-back trauma' (Nathan, paramedic) and/or traumatic incidents lead to 'burnout' (Mary, police), 'major anxiety' (Susan, paramedic), 'mental exhaustion' (Tom, firefighter), 'numbness' (Robert, paramedic), 'disconnect' (Bill, firefighter), and being 'demoralised' (Sarah, healthcare worker). They referred to having experienced 'flashbacks' (Jill, healthcare worker), 're-living it' (Billy, healthcare worker), 'nightmares' (Robert, paramedic) and 'horrible daydreams' (Karen, paramedic) associated with such incidences and 'like it's (traumatic event) all happening again' (Rubin, police).

> You get flashbacks (…) if that's what you call them. Your memory automatically goes to these places where you've maybe been to an incident where a certain bit, you know, somebody's they lost their life at that particular bit of the road or in that house or whatever it may be. And so there is, you know, automatic memory joggers that when you're going about your daily life. So that is, I suppose that's always in the background. As I say, I feel as if I'm quite mentally strong. Even if you are mentally strong you can still be affected by it. (Martin, firefighter)

Many of the FRs also raised concerns about the future impact that frequent trauma exposure had in various aspects of their lives, such as 'work, home life and relationships' (Billy, paramedic). They feared 'trauma resurfacing' (Phillip, healthcare worker) and it having a detrimental effect on their ability to function.

> I've had some MH challenges myself. I would never ever change it cause I think what I do in my job, what I get out of it personally, you know positives (pauses), but you get bad jobs and I think that when you come into the job that's gonna happen because you're invited into everybody's lives at the most traumatic times. You know you can't come out that untouched. I've seen trauma. I've seen stuff, you know … And, you have to be strong at the time, obviously. But it would be afterwards you would take some of these jobs home with you. It does have an impact mentally and how you function. (Sarah, paramedic)

3.2. Theme (2) The demands of the job exacerbate the impacts of trauma (self and others)

FRs discussed the multiple demand of their working roles and pressures which they were routinely faced with. Unpredictable and 'changing shift patterns' (Donald, paramedic) and 'difficult working environments' (Terry, firefighter), 'heavy workloads' (Fiona, healthcare worker), 'staffing shortages' (Darren, police), limited and sometimes insufficient resources resulted in 'little down time' (Stewart, paramedic) to discuss the impact of traumatic events that occurred at their places of work. The limited opportunity to process the impact of trauma due to the demands of their working roles was an issue raised by John:

> It's that dealing with everybody else's trauma all day. When you're trying to process your own stuff. I suddenly found I can't deal with work and that it's like having that emotional trauma professionally and then personally it just becomes overwhelming. I struggle to sleep, even after a long shift (pauses). I'm tired but my mind wont rest. (John, paramedic)

A reoccurring issue reported by FRs pertained to their perception that they were experiencing 'more calls, less resources' (Emilia, paramedic) and this further exacerbated the negative impact on their own MH and wellbeing. Despite, many of the FRs emphasising that they found their working roles provided 'meaning and purpose' (Aiden, firefighter), 'pride' (Helen, HCWs), 'standing in the community' (Pauline, Police), 'status' (Vincent, healthcare worker) and 'camaraderie' (Bob, firefighter) that helped them in dealing with the more difficult aspects of being a FR, they pointed to how the demands often outweighed the rewards:

> The job is very rewarding and also very demanding (pauses). Certain things, and it's been recent, I've had to start asking for help because of some of the jobs. Unfortunately, it's been quite a lot. Recently, where we've had a lot of really bad jobs – it's been at least one fatality a month. So that's been the same way now for the past five or six months. So it's been emotionally demanding. Everything still has been awesome, so it has, these are all the bad things, but I've had really good jobs like I've saved children before, but it's the really bad ones that I'm struggling to get rid of. (Larry, firefighter)

Fears about the impact of exposure to work-related traumatic stressors on their peers and fellow work colleagues was a common concern. While many of the FRs highlighted how they sought to 'support each other' (Scott, paramedic), 'trust' (Jim, firefighter), 'understand what we do' (Simon, paramedic) and

that there was a sense of 'we get each other and what we do' (Henry, firefighter) that helped them deal with traumatic stressors, they recognised that such stressors were often overwhelming among their peers. For example, Darren pointed to how he had observed the negative impact of trauma on his colleagues over time:

> It's a slow drip effect and over years and years you can see it … within a few years you can see them (colleagues) and they're completely destroyed. (Darren, police)

For others, it was the concern of how it adversely impacted on family and/or loved ones; as Liam stated, 'how do you not bring that home with you?' (Liam, firefighter). The 'rippling effect' (Fiona, healthcare worker) of trauma was the sense that it also had consequences for family and life outside of their work. While some FRs described how they sought to try and 'protect them (family) from it' (Danny, firefighter) by not discussing or going into any of the details of what they had experienced at work, they recognised that this still caused worry for their loved ones.

> It's like the incidents themselves have caused me to feel low or, you know, question things or feel a bit traumatised by it. But when we've been struggling at home and my wife, not feeling so great or I'm under a lot of pressure, I start feeling a bit overwhelmed and then some of these negative thoughts came in … I worry how that affects my family. (Sam, police)

3.3. Theme (3) Insufficient support and unhelpful ways of coping following exposure to trauma (lack of psychological safety)

Evident among all the FRs' accounts was a sense that there was insufficient support and/or recognition of the negative impact of trauma exposure in their working roles. While there was reference to attempts within their respective occupations to address wellbeing and improve MH, there was very little reference to support specific to dealing with workplace trauma.

> The support bit, it's just not there, I mean we pay lip service to it but really when it comes down to it, we really don't talk about the things we see on a shift or how it affects us. (Jane, healthcare worker)

The majority of FRs reported that there was little support in place to protect their mental wellbeing and shared their frustrations with the 'system and management' (Simon, paramedic) in discussing the perceived lack of support available to them in the aftermath of dealing with traumatic work-related stressors. For example, Tony shared:

> It's just sit and have a cup of tea, take an hour off and then, bang you're away. Sometimes it works, sometimes it doesn't. (Tony, paramedic)

The majority of FRs referred to how they sought to try and avoid thinking about the traumatic experiences they encountered and how they often managed the impacts of trauma exposure by 'putting it to the back of my mind' (Evan, healthcare worker), 'push(ing) them (trauma memories) down' (Nathan, paramedic), 'just getting on with it' (Gillian, paramedic), 'suppressing it' (Kevin, healthcare worker), 'avoiding it' (Joe, Police), 'trying to move on' (Robert, firefighter) and/or trying to 'forget about what's happened' (Joseph, paramedic). Despite such efforts to cope, it was apparent that they were concerned about the wider impact on themselves; as detailed by Sally:

> It's a worry that when I'm out in the road I'm going to get a job that's going to change me forever (pauses). How do I deal with that? I just don't know where to turn with getting the help for that. (Sally, paramedic)

In trying to explain how they sought to deal with traumatic incidents that they had been exposed to in their working roles, they used metaphors to help describe how they coped. For example, Nathan referred to the 'locker' in his mind:

> You need to push them (trauma memories) down and try to get them away … they're only put in the locker in your mind. You know, they've never really gone away (pauses). And you're worried in case there is so much in the locker that someday the locker will burst and what would I do then? (pauses) We need more help from counsellors or psychologists that know how to help us with it. (Nathan, paramedic)

Similarly, Gary talked about the 'black box' in his mind where he tried to store traumatic memories as he felt that was the only way he could deal with it given that there can be lengthy waiting times to see a MH professional:

> I have dealt with a number of traumatic experiences, significant incidences and then probably some. Yeah, aye ((laughing)). There's quite a few to be fair, but I've kind of, a lot of us speak about a wee black box that we've got in our heads and we'll deal with it. We'll file it away. But yeah, there's quite a number of incidents I could, I could probably bring back to the forefront of my memory if I wanted to (pauses) but I wouldn't know how to deal with it or how to get help for it. That's for the (MH) professionals but you just can't get an appointment to see them … it takes forever with waiting times. (Gary, firefighter)

The strategies that many of the FRs adopted to try and support themselves and each other were not considered to be sufficient in the long term as often they expressed their concerns about the future impact of trauma exposure and the lack of support they perceived there to be in dealing with it:

> I can vividly recall what I've seen and what I went to with some jobs. I worry that that's going to come back. I worry that there'll be some days, that you know, things I've been able to shut off from will

> open the floodgates, and I'll not be able to stop it. I won't be able to do what I do. That's a worry for me, I just don't think there's enough support for that. (Mark, firefighter)

While many of the FRs described how they drew upon informal support from family, friends and their peers in dealing with day-to-day stressors, they rarely sought help from them in coping with traumatic stressors. It was evident that they recognised that there was a need for more specialist and/or psychological support to address the impact of trauma exposure on their MH and wellbeing.

> I've got no PPE to protect my mind and that's what leaves you in a bit of a vulnerable position … I don't feel safe in a psychological sense. I need more help with that (pauses), you know, with someone that really understands it and how to deal with it. (John, paramedic)

A perceived lack of MH support and the need for more psychological input was apparent among the majority of FRs accounts, with FRs detailing that there had been 'increasing organisational pressures' (Nicola, healthcare worker) and 'strains on the NHS and emergency services' (Emilia, paramedic) which meant that there was less resources yet more demands in their working roles. Consequently, the majority of FRs recounted that they felt there was 'little time to debrief' (Robin, firefighter) or 'take recovery time' (Rhys, paramedic) after traumatic incidents in the current organisational climate. Some of the FRs made comparisons with resources or working conditions in earlier years, in their occupational roles, that they had found helpful in letting them de-stress; as William recounted:

> Back in the day you could get back to a messroom (staff room) and you got lunch breaks and dinner breaks and whatever, you don't get them anymore, or they're far and few between … We used to call it mess-room therapy, whereby you were going to a mess-room and you would chat to your colleagues. That helped but it wasn't really enough. (William, firefighter)

3.4. Theme (4) Stigma and fear of judgement as barriers to MH help-seeking (negative consequences of not dealing with trauma)

Stigmatisation and fear of judgement served as a major theme across FRs' accounts whereby they detailed their experiences of stigma to both expressing the negative impacts of work-related traumatic stressors and communicating with colleagues and/or management regarding MH issues. Many of the FRs spoke of the internalisation of stigma within their occupations as a barrier to voicing their concerns and how this inhibited MH help-seeking. A sense of being 'unheard' (Gerry, paramedic), 'outed if you say anything' (David, firefighter) and questioning 'who cares anyway?' (Rubin, police) was apparent across FRs' accounts.

When asked about how their wider organisational environments dealt with matters concerning staff MH and wellbeing, it was evident that there was a perception that stigma surrounding MH acted as a barrier to disclosure. The stigma surrounding MH was perceived as being a 'cultural taboo' (Alison, paramedic) across FR organisations; this was captured by Darren:

> It was (is) certainly a stiff upper lip culture, you know you just get on with it. (Darren, police)

Many of the FRs described how disclosing difficulties associated with MH and trauma was often perceived as a sign of 'weakness' (John, firefighter) or that 'If you can't hack the job, you just shouldn't do it (pauses). That's why we don't discuss it' (James, paramedic). Many of the FRs made reference to the 'macho' (Darren, police) working culture that served as a reason for FRs not speaking up about MH concerns. A fear of 'what others will think' (Helen, paramedic) and concern for how they would appear to others and/or be treated by others was emphasised; as Garry remarked:

> (There are) people with the attitude that if you suffer from MH problems, then this is obviously not a job for you … you're clearly not, not cut out for it. It has been said that folk like me, who have PTSD shouldn't have any job, that we're clearly not fit to be in any job. (Garry, police)

A fear of judgement in how others would view their performance and 'questioning your abilities to do the job' (Fiona, healthcare worker) was a strong barrier in voicing MH concerns. Instead, the majority of the FRs felt that there was a need to 'put your game face on' (Karen, paramedic) as opposed to discussing MH concerns. In addition, a fear of the consequences of 'speak (ing) up' (Zoe, healthcare worker) was also voiced. Concerns about how disclosing MH concerns may raise questions in relation to fitness to practice with their respective regulatory bodies was an issue.

> There's a fear. There's a big fear … About the [professional regulatory body]. Your registration because you've got a MH condition … because if you speak, you're fired. (Gerry, paramedic)

As a result of the internalisation of stigma and fear of judgement within their respective organisations, FRs voiced that although they 'can't speak about it' (Emilia, healthcare worker), they were aware of how 'not dealing' (William) with work-related traumatic stressors had the potential to adversely impact on their long term MH and their ability to do their jobs effectively; this concern was voiced by Steven:

> If we don't talk about it, if we don't try and deal with things and learn, our service won't get any better. People will keep being impacted and it'll keep having a negative effect on our ability to do our jobs well. (Steven, paramedic)

The importance of overcoming stigma and fear of judgement through open discussion and acknowledgement of trauma in the workplace was viewed as being fundamental to organisational change.

3.5. Theme (5) Need for specific, accessible and credible trauma-focused interventions and workplace support

A reoccurring theme throughout FRs' accounts was the importance of specific, credible and accessible work-based supports to help them in dealing with traumatic work-related stressors. When discussing what they would find helpful, FRs emphasised that support in dealing with traumatic stressors needed to be 'specific to first responders' (Terry, firefighter). The 'unique (MH) needs' (Evan, healthcare worker) of FRs was emphasised and it was often reported that others 'just don't get it' (Sally, paramedic). A sense that FRs are 'different from others' (Rubin, police) and 'other members of society don't understand us' (Darren, police) was evident across FRs' reflections on their working roles and the traumatic stressors they faced.

In considering what would be important to FRs in terms of the kinds of support that they would view as 'credible' (Harry, firefighter), FRs pointed to the importance of there being a strong knowledge and, preferably, experience of life as a FR, which can be evidenced by Gillian and Michael:

> We often say that people that aren't in the emergency services, the fire or police, or search and rescue or that (other FRs) will never understand. Anyone trying to provide help needs to know about what we do. (Gillian, paramedic)

> We can't have that chat without someone, you know, really getting it. (Michael, firefighter)

FRs viewed themselves as different to other occupations given the nature of their working roles and the traumatic stressors they are exposed to. The sense that FRs require an intervention 'that's tailored' (William, police) to meet their MH needs was evident across FRs' accounts. All FRs stated that they would be more likely to share and seek help for MH concerns if they could speak to someone with 'an understanding of what we do' (Sally, paramedic). Additionally, FRs suggested they were more likely to access help if it could be 'completely anonymous' (Gerry, paramedic) and 'confidential' (Vincent, healthcare worker) given the perceived stigma surrounding MH that was prevalent within and across FR occupational groups:

> It should be completely anonymous. So they don't know who they're talking to because they won't be embarrassed that way … they won't get made to feel like they're unfit for the job. (Emilia, paramedic)

Of the few FRs that shared experiences of having sought help in dealing with work-related traumatic stressors, it was apparent that lack of accessible interventions and/or support was a problematic issue. Experiences such as 'long waiting times' (Aileen, paramedic) to see a MH professional along with what was perceived to be insufficient support such as 'you only get up to six counselling sessions at work then you're out' (Ian, healthcare worker) meant that FRs often reported that there was limited access to support for their MH. While 'peer support' (Tyler, firefighter) was viewed as being the most accessible source of support available among FRs, it was often not deemed sufficient in itself in coping with traumatic stressors. The need for 'timely' (Elizabeth, healthcare worker) help and support was viewed as essential in order to help prevent FRs from experiencing occupational burn-out:

> There are some really good and talented (FRs) out there that need help to stop them from burning out and not managing to do this incredibly unique and challenging job. (Nelson, paramedic)

FRs considered a range of different ways in which MH supports and interventions for dealing with work-related traumatic stressors could be offered to them including 'face-to-face help' (Zoe, healthcare worker), 'in-house' (Owen, firefighter), 'online chatroom' (Fiona, healthcare worker), 'website for us only' (Mohammed, paramedic), 'self-help advice' (Kerry, paramedic) and 'like a digital app on my phone' (Peter, firefighter). They also emphasised that in order for such supports to be accessible, they would need to be available 'out of (working) hours' (Darren, police), and to be 'around changing working shifts' (Liam, paramedic). Interestingly, the majority of FRs thought that a digital intervention would be acceptable, albeit it would need to be 'private' (Yvonne, paramedic) and a 'safe space' (Darren, healthcare worker) to get help.

> Having an app available on our work phones would be beneficial because everybody would have it, it would need to be confidential. (Garry, police)

> So if you have nobody to debrief with (pauses) if we had something that could replace that, that's digital technology that might be really good. (Sally, paramedic)

Nonetheless, it was evident that there was a need for a range of different supports and interventions to be made available to meet the diverse MH needs of FRs exposed to work-related traumatic stressors. Essentially, the need to have time and space to process traumatic experiences and to 'find a balance' (Jennifer, healthcare worker) was evident across FRs' accounts. The importance of there being interventions and/or work-based supports that were trauma-focused and able to meet the MH needs of FRs was emphasised by Simon:

> We need to try and get a balance, you know, body getting exercise, activity, connectedness, and most importantly, enjoyment and mastery and pleasure in things. And I think there is definitely a balance that's to be had with that, that doesn't always exist. We need more support at work with this too. It just seems you work only then to go home and sleep to get back up and do the same thing again, and sometimes very, very extensive hours in that. So there's no time to decompress. There's no time to process some of what were quite traumatic experiences (pauses) instead you ruminate on them. Not being able to find particular closure and only then to not sleep properly to waken up and replay the same scenario again. We need help to get that balance and that space to process what we've been through with someone that understands it. (Simon, paramedic)

4. Discussion

In this study, we aimed to explore the lived experiences and perspectives of FRs in the UK, specifically concerning their unique MH needs in dealing with occupational trauma and to understand how they cope with the impact of trauma. This study found that while FRs were proud of their occupation, they also reported the potential negative impacts of their roles, and unmet support needs that must be addressed. Across all FR groups there is a cumulative impact of exposure to significant traumatic stress. These traumas build up over time and lead to substantial MH issues including burnout, anxiety and exhaustion. As found in earlier research (Afshari et al., 2021; Betts et al., 2024; Billings & Focht, 2016; Kirby et al., 2016; Marvin et al., 2023), the work environment exacerbates this with unpredictable shift patterns, poor sleep, heavy workloads, staff shortages and lack of resources. Little time is given to allow processing and support of traumatic events. Some FRs seek support from colleagues, but more often they push these traumatic experiences to the back of their minds, raising concerns about the future impact. Resources to support staff are limited and stigmatisation and fear of judgement are significant barriers to seeking support both within and out with working hours and environments (Billings et al., 2021). The situation is, arguably, getting worse as workloads increase further and staff breaks are compromised, giving little time to talk and reflect (Cogan et al., 2022). There is therefore a critical need for further work to explore how to effectively support FR groups with trauma management.

FRs also emphasised the impact of occupational trauma on their wider social networks, including family and friends. As concluded in previous studies within the field (Casas & Benuto, 2022; Rennebohm et al., 2023), this study found that the trauma exposure within FR occupations leads to poor support-seeking behaviours in personal relationships and an overspill effect of trauma on wider social networks (Casas & Benuto, 2022).

In addition to major traumatic events such as dealing with death and dying, FRs described 'micro-traumatic events' as traumatic stressors that cumulatively impacted their day-to-day functioning. This finding is aligned with earlier psychoanalytical understandings of the small, cumulative psychic injuries associated with micro-trauma that can build up and adversely impact on a person's sense of self-worth (Crastnopol, 2015). Further, the inclusion of repeated exposure to trauma is in the definitions of Type II PTSD and Complex PTSD, and it is formally recognised in the DSM-5, underscoring the importance of acknowledging the cumulative and enduring nature of trauma experienced by FRs in such high-stress roles. This framework helps in understanding the depth of psychological impact faced by individuals who encounter repeated traumatic events as part of their professional duties.

In line with earlier work detailing the risk of trauma exposure within these roles (Bryant, 2022), FRs pointed to how the demands of their working roles exacerbated the adverse effects of trauma in the workplace. FRs discussed the lack of downtime between traumatic jobs and opportunity to debrief or seek managerial support as a contributor to the negative impact of trauma exposure. This finding is supported by previous research which concluded that within the occupation, there was a perceived lack of management support (Tjin et al., 2022). While many of the FRs in the current study acknowledged the informal support they gained from colleagues in dealing with the aftermath of traumatic events, they emphasised that this was insufficient in meeting their MH needs. The uniqueness of these occupations in terms of the salience of and frequency to trauma exposure, uncontrolled work environments and work overload demonstrates the timely need for specific support (Wild et al., 2020). The need for access to psychological input following exposure to trauma was viewed as a priority for those who needed it. Reviews on early intervention for FRs have addressed the importance not only of timely access, but to have support delivered according to FRs culture, with the importance of peer support at the root (Cnapich et al., 2022; Richins et al., 2020). The absence of such timely support was viewed as adversely impacting on FRs' sense of psychological safety in the workplace.

As reported in earlier work (Rodrigues et al., 2023), a particularly demanding aspect of their working role concerned dealing with morally challenging decision-making. Exposure to potentially morally injurious events were found to have had a negative impact on FRs feelings towards leadership and the wider healthcare system and public sector organisations they worked for. Lack of psychological safety within the

workplace has also been an area of growing concern among FR organisations and health and social care workers (Hoegh et al., 2024), and there is a need for further research to measure its impact at both an individual and team-based level (Morton et al., 2022).

FRs also described how stigma and fear of judgement within FR organisations, as well as externally, acted as a barrier to MH help-seeking. This finding is in support of the growing body of research which has discussed the 'stiff upper lip' culture in FRs organisations, hypothesising that FRs are less likely to seek support for their mental well-being due to the fear of judgement and being viewed as having a lack of ability to do their job (Auth et al., 2022). FRs demonstrated a fear that their colleagues, managers, and regulatory bodies would raise concern for a lack of confidence in their abilities and deem them unable to perform to the acceptable standards within their job if they voiced MH concerns (Bolzon & Nalmasy, 2021). The findings of this study are in line with previous research which suggested that the view that colleagues and management had on FRs and their ability to do the job served as a main contributor to FRs role-identity in that they internalised the stigma that MH conditions were associated with a lack of ability (Mausz et al., 2022).

Finding ways to overcome stigma and reduce barriers to MH help-seeking is essential to meeting the MH needs of FRs (Cogan et al., 2024). Recent work has highlighted how FRs experience challenges in accessing and engaging in traditional, face-to-face MH interventions (Johnson et al., 2020) as well as FRs' anticipating adverse outcomes from treatment, stigma, and how organisational barriers may inhibit treatment engagement (Zolnikov & Furio, 2020). The research team are currently engaged in further research to explore ways to better meet the needs of FRs, informed by the current study. This includes the development of a co-created digital intervention, Sentinel (Cogan et al., 2024). Digital interventions have become increasingly popular in overcoming barriers related to the stigma of MH help-seeking (Borghouts et al., 2021) and challenges in accessibility reported in traditional face-to-face MH support (Griffith et al., 2023); with artificial intelligence power solutions increasingly being developed (Cogan, 2024). Adopting a strengths-based, proactive approach to help prevent the onset of trauma symptoms and/or the development of PTSD is a key aspect of our ongoing research with FRs in co-creating a digital solution for trauma management and prevention (Cogan et al., 2024). Focusing on supporting maintained engagement, building resilience and improving wellbeing is also a key focus within the development of this digital solution. The authors acknowledge that a digital solution does not replace team-based and organisational support and resources to systemically improve workplace MH practices and develop trauma informed systems of care within and across FR organisations (Kim et al., 2021).

4.1. Strengths and limitations

This study has several strengths. We recruited a broad sample of FRs which gave us the opportunity to explore different perspectives among FR occupational groups. Our research team was diverse, consisting of scientists from different backgrounds and clinical experience, and including different genders, cultural groups, and career stages. This enabled us to consider our findings from multiple perspectives and build a rich and in-depth analysis.

This study also has some limitations. First, whilst we sought to gather a variety of FRs' views, we were only able to learn from the experiences of six police officers. It would be important to hear from other police officers in addition to other FR professions such as community FRs to expand our understanding. Our sample was also limited by a small number of FRs from ethnic minority backgrounds. FRs from minority groups may have had other views and experiences to add to this study. It would also be beneficial to consider the views of FRs' family and friends given that FRs in our current study expressed their concerns relating to the impact of trauma on their loved ones. Further research paying attention to these groups will help more FR voices be heard and provide important information to tailor support and interventions. Second, participants were not screened for PTSD symptoms, using a psychometrically valid measure, prior to their participation. Participants with PTSD may respond differently to questions about workplace trauma compared to those without PTSD. Their experiences and perceptions could be more intense or skewed, potentially affecting the overall findings. Nonetheless, allowing participants to self-identify can empower them to define their experiences on their own terms, potentially leading to richer, more nuanced data that closely mirrors real-world settings where PTSD status is not always known or disclosed. Self-identification aligns with the qualitative research approach adopted that prioritised participants' lived experiences and subjective realities over clinical categorisations (O'Connor et al., 2022). Notwithstanding, future research may consider using screening to allow for comparative analysis and further illuminate the extent to which the presence of PTSD impacts on how workplace trauma is experienced and reported. Given the challenges we faced in capturing a balance between a detailed, ideographic IPA analysis in conjunction with a breadth of the thematic analysis of a large and diverse dataset, we are currently conducting a separate analysis for different sub-groups within the sample to account for variations in

experiences across different types of FRs. This approach will help to maintain the depth of analysis within each sub-group while still contributing to the current broader understandings of shared experiences presented in the current study.

5. Conclusions

In this study, we aimed to explore the experiences, views, and needs of FRs concerning management of occupational trauma. FRs put their lives at risk to help those within communities during their most vulnerable moments, leaving resounding effects on FRs in the aftermath. Supporting the MH and wellbeing of FRs is essential not only for their own wellbeing, but also to support the work that FRs do and the sustainability of the health and social services they provide. There is, therefore, an urgent need for support mechanisms for trauma management in FR including interventions to be developed which are accessible, credible and timely. Interventions need to be specifically developed for FR groups to effectively address their unique MH needs. Further support mechanisms are also needed to reduce stigma and improve work-life balance, allowing time and space for reflection and discussion.

The implications of our findings have been considered at the individual, service provider and organisational level, emphasising the importance of implementing a strengths-based, non-pathologising and de-stigmatising approach to trauma in the workplace as experienced by FRs. Emphasis is placed on the importance of overcoming barriers to accessing MH support and improving access to evidence-based, trauma-focused psychological interventions and workplace supports that help prevent the worsening of MH challenges, reduce trauma symptoms and help build resilience. The findings will inform the development of interventions which aim to provide an accessible and credible solution to the prevention and management of traumatic stress for FRs.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

Data availability statement

Due to the highly sensitive and personal nature of the qualitative data collected in the conduct of the study the dataset supporting the results is not publically available. However, the lead author retains the anonymised data on a secure University data and can share by request for research purposes.

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