



Social Work and Disasters Systematic Literature Review:

Commissioned by BASW England

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Social Work and Disasters: Systematic Literature Review Project

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Introduction

There is a tremendous wealth of research internationally which has explored the intersection of social work and disaster interventions through the case study of specific disasters including both environmental and (hu)man-made disasters such as, climate change, terror attacks, extreme weather events, health pandemics and poverty. However, until now there has not been a systematic literature review of the resources in this substantive area, including the grey literature used by social work practitioners, that specifically explores social workers' roles undertaken during disasters. Therefore, under the backdrop of the evolving COVID-19 pandemic, the British Association of Social Work (BASW) England commissioned a systematic review of all the relevant literature relating to social work during disasters, mapped against its guidelines designed for social workers providing emergency support and interventions.

This Report starts by outlining the methodological approach used to define the research questions before summarising the systematic method of data collection employed throughout, including a justification of the exclusion and inclusion criteria used for the review. Following this, the findings and conclusions of the relevant resources gathered through the systematic literature search are consolidated under the six key themes identified: disaster mitigation strategies; the roles of social workers in recovery; supporting socially vulnerable groups; community engagement; a social justice, rights-based approach to disaster intervention; and self-care for social workers. A further section of the review collates all lessons learned within the reviewed literature and applies them to UK specific disasters to allow for an examination of existing practice within UK country specific disaster settings. The final section concludes the Report and maps key articles against the *BASW CPD Guidance on Social Work Roles During Disasters*.

Methodology of the Systematic Search

Before detailing the methods used to conduct the systematic search into what research exists on social workers' roles in disaster intervention, is it important to state the coproduced research questions which have driven the scope and parameters of this review. The questions are:

- 1. What are the roles that social workers perform in disaster situations?
- 2. How do social workers perform their roles in disaster situations?
- 3. How can social workers' performances in disaster situations be improved?

A *systematic* literature review is a very specific method of data collection. This is followed to ensure that all sources relevant to the review are captured within the resource sample and that the method of collection can be replicated, if necessary, and to update the review in future with any new emerging literature.

To guarantee the literature included in the review was relevant to the three research questions listed above, search strings¹ were created to reflect the 12 CPD training learning outcomes that BASW England has established as guidance (see BASW 2019) for what the role of social workers are in disaster preparedness, response and recovery. From the 12 learning outcomes 30 search strings were populated to ensure all possible resources relevant to this review were captured. Following this, a further 10 search strings specific to BASW England's focus and remit were added to the final search strategy which allowed resources relating to England-specific disasters to also be gathered within the data collection phase. Additionally, a search string for a specific disaster from the other three nations of the UK² was also included in the systematic search strategy to provide a UK-wide context too³. This led to a total of 43 search strings employed to gather relevant literature (a table of all the search strings can be found in the Systematic Literature Review's Supplementary Resources Documents).

These search strings were then run on four of the most widely used resource databases relevant to the disciplines and objectives of this study: Web of Science (all databases), SOCIndex, Scopus and the Social Care Institute of Excellence (SCIE). From this search a total of **7,146** resources were captured. Following this, the same search strings were run on the top five most widely referenced academic journal databases relevant to this project to ensure no resources were missed from the data collection phase. The five databases selected were: the *British Journal of Social Work*, *Social Work*, *International Social Work*, *Social Services Review* and *Affilia*. For all of these journal specific databases 'all fields' was selected. From this search a further **956** resources were captured, bringing the total to **8,102**.

These resources were then exported to EndNote and both a 'find duplicate' search and a manual check for duplications was carried out. This is vital as both databases are likely to populate some of the same resources since the same search strings were employed on multiple databases. From this a total of **4,745** resources remained. Next, by reading through the titles of each 4,745 resources **4,172** were excluded as these were deemed not to be relevant to the scope and objectives of this review. The irrelevant resources captured by the search strategy included an expansive range of academic resources which discussed the role of social media during disasters as well as social work skills and roles in settings and circumstances other than disaster intervention (including child protection and adoption), which although related, were outside the boundaries of the scope of the review.

This left a total of **573** resources which from their title were deemed could be relevant. Finally, the full abstracts were reviewed rather than just the title and those specifically about social

¹ A search string is the combination of all text, numbers and symbols entered by a user into a search engine to find their desired results. Search strings are used to find files and their content on database information and web pages. The asterisk (*) is a commonly used symbol that broadens a search by finding words that start with the same letters with less words required in the search string. For example: instruct* would allow instruct, instructs, instructor etc to also be searched.

² Lockerbie for Scotland; Aberfan for Wales/Cymru and 'The Troubles' for Northern Ireland

³ A table with the final 43 search strings used within this systematic literature search which were mapped against the 12 CPD learning outcomes.

work interventions in disaster situations or in a social work journal were kept⁴. From this, **344** resources were left which were then all read, analysed and the relevant information synthesised into seven distinct thematic sections below. These 344 resources included 19 books which were used to inform the review, but they were not systematically analysed as the refereed articles were because a number of them lacked a peer review process prior to publication. This resulted in a total of **325** peer-reviewed resources gathered through the systematic method of data collection. Nevertheless, although all 325 resources informed the review not all were directly cited or quoted within the final report. Instead, 138 of the peer reviewed resources were used to shape the structure of the review in a supplementary manner and are not directly cited in the final report, leaving a final **187** articles which are cited in this main report. Those not directly cited were excluded because a wide range of resources spoke to the same issues as others and so the most prolifically cited papers were selected. However, these 138 articles and 19 books are included within the supplementary resource. Thus, the final number resources examined in this systematic review was **187**. **Table 1** below outlines how the search strategy refined the number of resources from **8,102** to the final **187** which made up the bibliography for the review.

Table 1: Quantitative breakdown of the resources at each stage of the systematic search

Stages of the Systematic Data Search	Total Number of Resources
Initial Search	8102
Removing Duplicates	4745
Title Sort	573
Abstract Sort	325
Resources Directly Cited in Review	187

Once the final articles were identified and analysed in accordance with the key themes identified during the systematic review, a comprehensive discussion section was able to be collated. Within each of these seven key themes the BASW (2019) CPD guidance has been referenced. In addition, a table has been provided at the end of this report which explicitly maps this review's findings against the 12 guidelines for the roles of social workers play in all stages of a disaster intervention. Those outcomes relevant to references considered in each section are summarised at the end

⁴ Nevertheless, there was a handful of resources that are an exception to the criteria because they dealt with specific disasters in England that BASW had specifically identified they wanted reviews. Not all of these mentioned social work in the abstract.

Disaster Mitigation Strategies: Social Workers' Roles Within Mitigation Endeavours

One of the key aspects almost all resources emphasised as being crucial when outlining social work intervention within disasters was the importance of disaster mitigation strategies. Although interrelated, several definitions were provided which distinguished different phases of mitigation approaches, including prevention, adaption and preparation. For instance, the U.S. Federal Emergency Management Agency defined disaster adaption as:

"the effort to reduce loss of life and property [...] which includes existing structures and future construction, in the pre- and post-disaster environments" (FEMA, 2016: 1 cited in Barney, 2019).

Whereas the U.S. Department of Homeland Security (2012:1 cited in Barney, 2019) defined disaster preparedness as "a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response". Most markedly, through a review of the relevant literature it was clear that comprehensive mitigation strategies need to utilise a multi-agency approach to ensure preparation involves a wide range of sectors and institutions within the disaster-prone areas (Desai 2008) both nationally and internationally (Rapeli, 2018). Dominelli (2015) emphasises mitigation as those activities or strategies that aim to reduce the danger that a hazard can cause as well as challenging anti-oppressive practices through the use of social justice activities including environmental justice and human rights, which are the foundations of all social work practice. Moreover, environmental expertise such as geographical knowledge and urban planning is a key priority within disaster mitigation both to prepare the infrastructure to withstand the impact of disasters and involve community stakeholders (Mathbor, 2007), and ensure that industrial developments do not contribute to or exacerbate the effects of disasters (Barney, 2019). Yet, as Zakour (2008) stressed social work expertise is essential throughout all phases of disaster intervention including mitigation.

The psychosocial impact of disasters, both to individuals and whole effected communities, has been found to be longer lasting and often more difficult to mitigate than the physical adaptions required for disaster preparedness. This is where social work intervention can help. Social work expertise includes systematic knowledge of the mental health impacts of acute stress, community coordination strategies, how to assess and treat trauma as well as how to communicate essential information to diverse populations (Mihai, 2017). Although these are all essential services social workers provide once a disaster has stuck, the learning from post-disaster recovery has since informed prevention steps which can be taken in order to comprehensively mitigate the adverse consequences of future events in disaster prone areas. For example, in light of a number of environmental disasters in the Global South in 1996, the National Association of Social Workers (NASW) in the USA established a partnership with the Red Cross to deliver a 'disaster mental health services' training course which all participating NASW members are now required to complete (Allan and Nelson, 2009).

Similarly, Ali and colleagues (2014) provided a more localised example of social work intervention in pre-disaster risk management in Bangladesh following a number of small earthquakes. A reflective analysis of the local responses found that, the Bangladeshi communities were not aware of how best to respond immediately post-disaster. Therefore, social workers were tasked with co-ordinating and disseminating response plans to a wide range of different groups including medical, psychological and legal professional bodies as well as community members, so they all knew what roles and responsibilities they had to play in any future disasters. They informed communities and key social institutions, such as schools and hospitals, on how best to prioritise when making decisions during emergency situations through training sessions, posters, audio-visual resources and newspaper adverts. What underpinned this mitigation strategy was a shift away from simply focusing on disaster preparedness activities to more holistically brokering a multi-agency risk management approach which involved all stakeholders relevant to Bangladesh. This involved preparation activities and adaption planning at the most localised community levels, to forming regional disaster mitigation committees, to more nation-wide initiatives to assess regional vulnerabilities and provide training and resources to manage risks and hazards for future disasters.

In order for multi-stakeholder collaborations within disaster mitigation to run successfully, such as the Bangladesh example discussed above, Rowlands (2013a) emphasises the importance of preparing a methodical case management approach. By planning a case management framework in advance of an emergency situation, support services can deliver a more targeted and deliberate, and by extension a more cost-effective, recovery approach to those impacted by a disaster (Matthieu et al., 2007). Case management is a service delivery framework that all social workers are well trained in and experienced at delivering as it features in a range of social work models, well beyond disaster intervention.

As Hall and colleagues (2002) outline, there are six generally accepted functions to case management. Including firstly, practitioner identification of and outreach to clients. In a disaster scenario, this would be all those effected by the event. Next, a needs assessment is required which a multi-sector range of key disaster organisers would then, and thirdly, begin to plan with the survivors concerning how best to address those needs. Crucial to case management approaches during a disaster scenario is the differentiation of their unmet needs which are disaster-related compared to those which would have existed pre-disaster (Dombo and Ahearn, 2017). These could include ongoing social issues or individual pre-existing medical conditions. Following this, a fourth feature of social work case management is to identify and establish local support networks by linking survivors with services which can help to meet their needs. After initial connections are made, it is expected that the case manager will continually and reiteratively monitor the effectiveness of the interventions that they link clients to and assess whether their needs are actually being met fully (Goelitz and Stewart-Khan, 2013). Where initial links are unsuccessful the final feature of disaster case management would then be to advocate for the unmet needs of survivors at local, national and international levels where necessary. Notably, Hall and colleagues (2002) stress that although these six features are distinct in their activities and prioritisation, it is important to recognise these are not linear or even strictly sequential. What is meant by this, for example, is that although conducting a needs assessment of survivors is listed as 'second assessments', these may need to be redone a number of times during the post-disaster intervention period once initial community links have been established and/or while advocating at both the meso- and macro-levels for the unmet needs of particular individuals and social groups.

Although the learning of how best to develop disaster case management plans has come from post-disaster recovery experiences, a number of resources within this review highlighted that this is an essential feature of the preparation stage. Case management is often a long-term initiative post-disaster, as recovery plans can often last years before all the needs and essential resources that were lost are addressed fully (Findley et al., 2014). For instance, as Bell (2008) claimed following an examination of Hurricane Katrina, social workers and the agencies that supported them provided recovery responses organised around a case management approach for over two years after the disaster in 2005. Other examples from the literature described how the delivery of emergency support changes throughout the response period emphasising the need for a long-term, coordinated, multi-agency response plan to be decided pre-disaster. Moreover, the importance of recognising the different, but equally important, micro-, meso-and macro-levels of collaboration is something which was highlighted as vital to develop an effective case management mitigation strategy. Subsequently, in reviewing this literature mitigation strategies can be categorised into the following BASW (2019) learning outcomes:

- 'Explain the role of the social worker in disaster cycle including preparedness, response and recovery';
- 'Utilise social work skills for psychosocial, practical and emotional support';
- 'Evaluate the impact of disasters on individuals, families, communities, including firms and institutions';
- 'Reflect on the wider contexts. Causes and implications of a disaster in a local, national and international level';
- 'Utilise research-informed practice in disasters and apply relevant evidence';
- 'Engage with multi-professional teams, agencies and/or stakeholders to provide coordinated response'; and
- 'Apply relevant social work theories and models to specific disaster context'.

Social Workers' Role in Recovery

Within the literature which focuses specifically on how best to respond following a disaster event, it is evident that the roles and responsibilities of the social work profession are relatively misunderstood or overlooked. As Dominelli (2011) emphasised despite their relative invisibility, social workers have long held multiple crucial roles within disaster response plans including psychosocial first aid, crisis management and longer-term community rebuilding. As the American National Association of Social Workers stated (2003: 83 cited in Huimin et al., 2009):

"social workers are uniquely suited to interpret the disaster context, to advocate for effective services, and to provide leadership in essential collaborations among institutions and organisations".

Yet, notwithstanding official discourse and crisis management plans recognising social workers as essential disaster recovery key workers, the role social work plays in recovery efforts receives very little recognition both within and beyond the sector (Dominelli, 2011; Adams and Tyson, 2020). In terms of supporting survivors, Alipour and colleagues (2014) found this lack of awareness creates challenging barriers for social workers within relief efforts as effected communities can be sceptical of the support offered. For instance, within a case study of social work intervention in China following the 2008 Wenchuan earthquake, Huimin and colleagues (2009) noted that the lack of familiarity of what social workers' role is following a disaster resulted in professionals struggling to obtain access and the trust of victims, which significantly hindered recovery efforts. Therefore, a noteworthy amount of the literature reviewed focused on the different response phases of social worker support in disaster situations. However, Vickers and Dominelli (2015) stated that if social workers explicitly explain their role and purpose within disaster intervention, survivors become more informed of the services they provide and have a clearer understanding of the benefits of social work support, compared to other professionals within the same geographical area. As Barney (2019) outlined, the social work profession predominantly intervenes in two distinct ways. Firstly, in micro-level practices which directly aid an individual survivor's psychosocial well-being. And secondly, they help return affected communities back to their pre-disaster conditions through supporting unmet needs such as temporary housing and access to relief services as well as macro-level organisation and governance of longer-term community-based recovery programmes.

This section has highlighted literature relevant to the social workers' roles in the 'disaster cycle including response and recovery' identified in the BASW (2019) learning outcomes.

Micro-Level Recovery Strategies

Emergency situations which directly threaten human life and property, such as earthquakes, terrorist attacks, flooding or war, drastically impact disaster survivors' coping mechanisms to process the trauma, losses, and changes they face. Loss, Alston and colleagues (2018) stressed, within a disaster event is greater than just the material loss, which is often prioritised within recovery strategies, but in fact includes the loss of survivor's livelihoods, cultural identity, a sense of belonging and a community's sense of cohesion. As a result, a number of the resources have highlighted how vital trained professionals are immediately post-disaster to help survivors process their loss and trauma (Boehm, 2010). For instance, within their study of exploring the impact of a chemical leak on the local community in South Mississippi, Rehner and colleagues (2000) noted the valuable role social workers played in providing immediate mental health assessments and one-off counselling sessions as well as developing longer term support groups for those suffering with more chronic psychosocial conditions. Indeed, research into the most

enduring psychosocial conditions such as post-traumatic stress disorders (PTSD), depression and behavioural disorders such as alcoholism, have evidenced how the immediacy of counselling and other trauma-informed services post-disaster can, in some cases, significantly influence the severity of mental health problems survivors face long-term (Warsini et al., 2014; Ramesh et al., 2018). However, Sim and Dominelli (2017) highlighted how in the Wenchuan Earthquake, survivors in Yingxiu did not want psychosocial services in the first instance, but community development. Nonetheless, a wealth of literature in this area emphasised the need for swift crisis intervention which responds to specific disaster related needs informed by the strategic focus on strength based intervention strategies to counteract the profound emotional impact of disempowerment that emergency situations have on individuals and families (Yang et al., 2020).

However, due to the severity of some survivors' trauma, Abbas and Sulman (2016) noted that mental health professions are often also required during disaster recovery plans to provide medical first aid and psychosocial medication and treatments. Yet, for the majority of survivors who either don't require clinical forms of mental health support or, more commonly, those whose needs aren't fully meet by overstretched health care services, social workers provide the majority of psychosocial support offered post-disaster. In practical terms, Bemak and Chung (2011) highlighted a number of ways in which mental health support following a disaster should differ from the traditional psychosocial interventions offered in other settings. Firstly, they noted that many victims of a disaster do not seek out mental health support and so consequently, micro-level recovery efforts require practitioners to continually prioritise outreach work in the affected communities. Likewise, due to the social stigma attached to seeking support for mental health problems in many cultures, Harms and colleagues (2020) consider the advantages of avoiding the use of labels such as 'counselling', 'mental health' and 'psychosocial' services when offering help in the community. Other resources further discussed how group interventions are often more beneficial than individualised counselling approaches post-disaster, as the shared group setting provides a safe space for survivors to share their trauma with others who could relate, validate and normalise their experiences (Huang and Wong, 2013). Disasters have been found to impact individuals' informal support networks and sense of security within their communities. Thus, the priority for psychosocial interventions post-disaster is to help communities begin to come to terms with their new realities by slowly accepting their losses and coping with the continual change and upheaval common in the immediate recovery period (Philips, 2009). This is a task that social work, as a profession, is well trained and equipped to support.

In light of these micro-level recovery strategies explored, this section reflects two key CPD guidelines. These are:

- 'Utilising social work skills for psychosocial, practical and emotional support'
- 'Prioritising the perspectives of victim-survivors who have been impacted by a disaster'.

Macro-Level, Long-Term Community Recovery

The second way in which social workers support affected communities following a disaster is at the macro-level of community redevelopment, empowerment and transformation. Long-term recovery of a disaster-stricken community can take a decade, or longer, to fully return to how it was pre-disaster. A concept is captured in the term 'building back better' which has its critiques, but normally ignored by funders and/or governments who often dictate the terms of humanitarian aid delivery (Dominelli, 2012). Therefore, in the longer-term recovery efforts requires a holistic community development plan to address environmental protection, local infrastructures, the loss of livelihoods and community restoration which requires effective organisation and governance. As Wu and colleagues (2019) have commented, the biggest challenge to the macro-levels of disaster recovery is that the organisational aspects are very complex and nuanced and often difficult to balance evenly. With numerous, and often competing, priorities demanding practitioners' attention simultaneously. For example, macrodisaster management often includes the need for recovery management to prioritise a community's economic, physical, cultural, political, psychosocial and technological recovery all at the same time when coordinating state responses (Amir Zal, 2019). Consequently, a crucial aspect of social workers' role post-disaster is to embed the development and coordination of a reconstruction plan in the first six months following a disaster event. The affected community, with the help of local volunteers and non-governmental organisations, can continue with this once the majority of the state-appointed support leaves the area (Dominelli, 2018). The governance of macro-level relief efforts is typically coordinated topdown, which Davis and Alexander (2015) highlighted requires multi-agency cooperation and effective communication to ensure all assisting professionals at more regional and local levels don't duplicate the actions done elsewhere – especially those that disaster survivors could do themselves.

What makes these macro-level relief efforts even more complex, according to Rowlands (2013b), is that different stakeholders often hold conflicting objectives for disaster recovery. For instance, the need to boost local economies and offset labour shortages with the investment in new businesses could hinder social work efforts to build relationships and empower locals to set up non-profit community-led organisations to support marginalised survivors (Wu et al., 2019). Yet, as Hayward and Joseph (2018) advocated, if co-produced with the local community, recovery efforts can support multiple objectives. As Drolet and colleagues (2018) commented, if recovery efforts which address sustainable development involved the creation of jobs which directly tackled environmental issues, this would provide job opportunities to those who lost their livelihoods to a disaster whilst also repairing the damaged environments and facilitating longer term mitigation to future climate-related disasters (Dominelli, 2013b). However, central to relief efforts which empower communities, the literature stressed the importance of adequate financial support to enable local residents to support their own recovery beyond the provisions that meet immediate emergency needs (Pyles, 2007; Rowlands, 2004). This is an area Bliss and Meehan (2008) argued can be significantly supported by social work involvement, as social work professionals can advocate on the behalf of a local community at disaster management meetings and forums at meso- and macro-levels, including the financial strain disaster incidents put on survivors. Consequently, as Galamos (2005) summarised, social workers can support a community's longer-term recovery in four main ways: understanding best practice from disaster relief efforts elsewhere; supporting the administration of recovery efforts; enhancing community organisation and empowerment initiatives; and advocating for macro-relief support beyond clinical interventions.

Thus, the macro-level recovery approaches discussed above can be characterised as relevant to five of the BASW learning outcomes. These are:

- 'Explain the role of the social worker in disaster cycle including preparedness, response and recovery';
- 'Evaluate the impact of disasters on individuals, families, communities including firms and institutions';
- 'Promote the importance of the social work role in and advocate for the highest quality social work services for people before, during and after a disaster';
- 'Explain legislation, policy, procedures and guidance that are relevant in specific disaster contexts';
- 'Develop creative and ethical responses to the unique/unpredictable challenges of a disaster'.

Community Engagement

It is argued, in the literature reviewed that only through effective community engagement can state intervention ensure all survivors are fully supported within disaster responses long-term. To do so, a number of researchers stressed the importance of empowering local organisations, communities and individuals to support themselves during the recovery phases (Araki, 2013). Shifting from simply surviving post-disaster to collectively rebuilding the community, social workers can best support the development of physical infrastructures and reconstruction of informal and formal support networks. As the green social work model outlines⁵, social work practice is at its best when supporting survivors to self-determine so as not to create long-term dependency on external actors (Dominelli, 2013a). In practical terms, Davis and Alexander (2015) evidenced how social workers can do this by organising and coordinating disaster interventions which works with the effected community to determine their own recovery responses, rather than providing all the support themselves. Building local capacity is crucial for long-term recovery as it helps empower vulnerable populations not only to cope with the adverse impact of an emergency situation but also to adapt and organise. Empowering survivors to support themselves enables them to problem solve in a culturally informed manner, shape their local institutions and contribute to policy and advocate for their unmet needs at macro-levels of governance (Green, 2000; Lee and Hsu, 2018). Moreover, Dominelli (2018) emphasised that the level of disaster survivors' involvement in organisational planning and response actions directly influences how quickly the community is able to recover. Therefore, one of the most vital responsibilities of social workers during disaster intervention is to

⁵ See the 'Social Justice Rights-Based Approach to Disaster Intervention' section of this review for a more indepth discussion of Green Social Work

proactively enhance social inclusion. In other words, to repair and develop local individuals', groups' and communities' capacity to support themselves. Yet, UN agencies have acknowledged this is often absent from disaster responses (Busaspathumrong, 2013). In order to promote effectively survivors' self-determination, this review identified two key BASW (2019) CPD) priorities that social workers need to focus on. These are:

- 'Establishing and enhancing means of communication';
- 'Adapting their intervention strategies to respond to the specific culture of the affected community'.

These two priorities are well-known to social workers following the principles of anti-oppressive practice (Dominelli, 2002) in the profession generally, and are relevant to all social worker involvement in disasters. Anti-oppressive principles underpin all of BASW's learning outcomes as well.

Communication

Perhaps the most overarching theme which emerged throughout the analysis of the resources for this systematic review was the need for multiagency cooperation. So much so that the importance of engaging with all relevant stakeholders impacted by and/or able to respond to a particular disaster is also discussed within the mitigation strategies and recovery sections of this paper. Although closely connected, identifying and improving reliable communication is a distinct theme within the disaster intervention literature. It is only through reliable communication networks that cooperation can be established and be truly effective (Galambos, 2005). Communication technologies are often damaged by disasters, which means that fixing telecommunication structures during immediate post-disaster responses is arguably as important as rebuilding shelter infrastructures. However, beyond the physical rebuilding and repairing of telecommunication services, the need to review and improve pre-existing communication strategies has been discussed in number of the resources reviewed. For instance, Bryant and colleagues (2018) examined an Australian rural community's access to specialised mental health provisions in light of a traumatic event and found they were frequently forgotten within state intervention strategies due to their technological inaccessibility and geographical distance from where service provisions were available. They argued that proactively improving the communication networks for these hidden and often under-served populations would ensure that the complex needs of even the most rural communities could be supported virtually by specialist practitioners, services and organisations, regardless of location. Moreover, this study went on to highlight that rather than being simply 'better than nothing', the service delivery design of virtual support services was found to be preferred by many service users (Bryant et al., 2018). Studies of survivors who have used virtual services found counselling interventions via videoconferencing platforms were less intimidating and allowed the service user more control of the sessions. Virtual recovery services were also found to enable a higher level of confidentiality between the service user and the wider community as survivors were able to opt into mental health support from the privacy of their own house. This meant that they did not need to attend physically to

receive a particular service or have face-to-face contact with a practitioner (Ku and Ma, 2015), a development that was welcomed within very small communities where, culturally, mental health intervention is not commonplace, and being labelled 'mentally ill' is often stigmatised.

The literature on communications also emphasised that repairing and developing telecommunication services, although essential for connectedness, was not enough on its own. The availability of communication services did not overshadow the need for their application to be integrated proactively into disaster recovery plans. For this, Henley and colleagues (2011) argued that social workers and local communities should jointly collaborate with IT professionals to ensure that the technologies developed to support survivors were practicebased, user-focused and underpinned by 'best practice' approaches. Furthermore, it has been stressed that all communication strategies should be underpinned by the social work value of ensuring marginalised and vulnerable communities are advocated for and included within all service delivery plans (Bryant et al., 2018). This is where supporting communication beyond the physical infrastructure and provision of services is equally important post-disaster. As Brigg and Roark (2013) suggested, multi-stakeholder cooperation is often a very challenging process to establish and maintain in the chaotic periods following a disaster. To ensure local agencies, communities and individuals feel equipped, empowered and able to begin to support their own recovery needs, continuous dialogue, advocacy and learning between professionals and the effected communities is essential. For social workers, networking and enhancing social capital is a feature of much routine practice (Dominelli, 2013a), although it is often a role which is undervalued. In light of this, a number of resources discussed how the person-centred aspects of social work intervention positioned social workers as a key component when establishing connections between different groups and organisations. For example, knowing locals on a personal, first name basis really strengthened collaborative efforts (Yagi, 2016). Notably, utilising these networking skills and formally embedding them into disaster management plans was found to be especially useful while the recovery of damaged telecommunication platforms was still underway as it meant community engagement could begin to be established and developed immediately. Indeed, what a noteworthy number of resources emphasised (including Fahrudin, 2012; Hall, 2016) was, that to ensure disaster survivors were closely involved in the recovery processes, proactive communication strategies and relationship building efforts between response agencies and the local communities should be formally prioritised and included in early post-disaster recovery plans. Communication theories and skills are essential elements covered in generic social work training, and social workers can apply them effectively in disaster settings.

Culturally Responsive Interventions

In addition to establishing and developing the relationships required for effective two-way communication between professional recovery agencies and local communities, empowering disaster survivors to support their own needs long-term requires locality specific and culturally appropriate social work practices (Dominelli, 2012, 2015, 2018a). The effects of globalisation and the increasing risk that global warming is placing on particular populations has increased

international support post-disasters (Bragin et al., 2016). Which, as Dominelli (2010) highlighted, has resulted in Euro-American social work practices frequently being imposed to meet the needs of survivors from the Global South. Within the resources reviewed, a number of examples evidenced the delivery of standardised western interventions within international responses to disasters are often ineffective and at worst damaging. For instance, Bemak and Chung (2011) studied traditional psychological intervention strategies, based on Western psychological principles, within post-disaster settings and found the exclusive focus on individualised counselling techniques failed to address the trauma that whole communities had collectively experienced. As a result of this, local survivors were found by Dominelli (2015) to miss out on crucial recovery services, often opting for their own rituals over external support offered (Dominelli, 2015). This study emphasised that Euro-American approaches to psychological recovery failed to acknowledge and work through the structural social injustice issues which effect vulnerable populations most markedly following a disaster event. Likewise, Bell (2008) found the survivors of Hurricane Katrina in the city of New Orleans did not respond well to the support provided by professionals brought in from Austin due to cultural differences between the local community and providers from another state. The support workers prioritised individual's housing and health needs whereas survivors wanted the recovery of their community spaces and development of local networks for support to be the first priority. The New Orleans case also exemplified that in addition to incorporating responses to specific race, ethnicity or religion, disaster intervention plans need to understand the value place and space holds in shaping the cultural norms and values of a particular community (Bell, 2008). If external agencies do not understand and develop a culturally relevant response specific to the effected place within the disaster case management model, the local traditions and social systems that are in place to protect the wellbeing of children and families could be ignored and/or undermined (Drolet et al., 2018).

Moreover, the literature reviewed stressed the adverse impact of international post-disaster responses when not delivered in culturally responsive ways has been most acutely felt in countries with no pre-existing social work sector. In a number of developing countries institutionally recognised social work is not formally provided by national and/or regional governments and therefore, following a disaster, international organisations bring in experienced agencies and individuals to fulfil the roles and responsibilities of local practitioners including social workers (Pyles, 2017; 2015). Research into these external recovery responses has highlighted that although not intentional, they have slowed down the rebuilding and development of a sustainable, transparent, locally managed system of care and community disaster recovery. For example, a study of the social work responses to the 2008 Wenchuan earthquake found that practitioners felt ill-equipped to support the relief efforts of affected Tibetan and Qiang communities as they had no local knowledge of these ethic groups' indigenous traditions and belief systems which they needed to embed within their psychosocial recovery plans (Huimin et al., 2009). Similarly, Wu and colleagues (2019) surveyed social workers following the 2014 earthquake in Ludian, China, and found over one-third of the respondents said they were not prepared or trained sufficiently to deliver appropriate and effective cross-cultural support to survivors.

In response to the issue of culturally insensitive social work models, Bragin and colleagues (2016) outlined how international social workers could overcome this potential challenge when required to support disaster recovery in another country. Through the case study of developing a culturally relevant risk management programme with the Afghan government, they advocated international interventions need to promote group recovery through a range of multi-level, needs-based practices that take time to learn and embed local culture, skills and norms through coproducing the intervention strategies with the affected communities. For instance, culturally responsive disaster management within Islamic countries emphasises the need for knowledge of Islam to frame social work intervention to ensure that support workers differentiate accepted religious practices from violations of human rights. Therefore, central to the community engagement literature reviewed is the need for social workers to work with the affected communities to support their own recovery through culturally relevant practices which are informed and developed in partnership with survivors (Dominelli, 2014b). Only through culturally sensitive responses can the immediate, and often outsourced, social work practices be relevant but also effective long-term. This occurs because the community will be able to own and maintain the secondary recovery interventions self-sufficiently when the international response agencies leave the affected area once the most urgent crisis-related needs are met.

Therefore, the literature explored in both these sub-sections regarding community engagement during a disaster reflects a number of the BASW (2019) CPD guidelines. Most markedly these are:

- 'Apply relevant social work theories and models to a specific disaster context';
- 'Develop creative and ethical responses to the unique/unpredictable challenges of a disaster';
- 'Prioritise the perspectives of victim-survivors who have been impacted by a disaster';
- 'Reflect on the wider contexts, causes and implications of a disaster including at local, national and international levels';
- 'Explain the role of the social worker in disaster cycle including preparedness, response and recovery'.

Supporting Socially Vulnerable Groups

In relation to engaging the local community in the recovery strategies, an overwhelming amount of the literature reviewed and discussed the need for disaster interventions to be targeted and responsive to social vulnerabilities. Although a whole community can be affected by a disaster event, years of research has exemplified that the impact of that disaster is not experienced equally by its residents. As Dominelli and Ioakimidis (2014) discussed, the levels of vulnerability and risk in dealing with the most devastating consequences of a disaster is disproportionately distributed amongst marginalised populations. That is, vulnerability is not homogenous. The capacity to recover from the impact of an emergency situation is influenced by structural privileges and inequalities prevalent long before the disaster hit (Alexander, 2018). This is a reality that the literature stresses social workers must understand and respond to when supporting disaster recovery efforts. They can do this by targeting their support of

socially vulnerable groups of survivors in considered ways informed by the structural oppressions specific to that community.

To do so, Akerkar and Devavaram (2015) highlighted the need to move beyond mitigation and recovery plans underpinned by the natural hazard paradigm to a disaster management strategy informed by the social vulnerability model. The natural hazard paradigm emphasises the importance of focusing on physical vulnerabilities through emergency responses to infrastructure damage, such as flood control management and designing buildings to withstand seismic activity for example. Which although still very important during mitigation and risk reduction strategies, O'Keefe and colleagues (1976) argued that the natural hazard paradigm fails to account for and support the variations in people's coping capacities and social vulnerabilities to the devastating physical and social impacts of disasters. In comparison, the social vulnerability framework acknowledges this imbalance within an affected community by considering how risk is shaped by social, economic and political processes of marginalisation and utilises this knowledge when planning intervention programmes and plans (Hewitt, 1983). From this paradigm, the stark variances within socially differentiated categories including class, race, gender, age, caste, ethnicity, disability and citizenship are recognised (Wisner et al., 2004). Highlighting the endemic social, cultural and economic inequalities within a population reveals the impact of a particular individual's abilities to access resources for recovery. In response to this paradigm advocating targeted action post-disaster, a noteworthy number of resources focused on how disaster interventions could support a specific socially vulnerable group. Thus, this section now focuses on three social groups that were covered in detail in a significant proportion of the literature: namely, older populations, minority ethnic groups and women.

Older Populations

Firstly, a wide range of resources focused on the disproportionate impact disasters have on older people. Due to the likelihood of pre-existing chronic health conditions, physical limitations and heightened dependency on others, older populations were considered to be amongst those least able to recover well from the impact of a disaster (Ngo, 2001). Quantitative research shows that natural disasters claim the lives of frail older population more than any other socially vulnerable group (Allen and Nelson, 2009). In their empirical study of the recovery processes of survivors following the 2015 Nepal earthquake, Adhikari and colleagues (2018) found that older populations responded differently to the devastating impact of the disaster than others in a number of ways. Most notably, more than any other social group, older survivors reported feelings of insecurity and fear of another earthquake. These feelings of apprehension were found to be so overwhelming participants noted their inability to sleep and sustain daily routines, including maintaining their personal hygiene and remembering their medication which had further knock-on effects on their physical health. Literature from other global disasters also noted that older survivors were at the highest risk of psychological morbidity – a psychiatric disorder involving anxiety and depression which aggravates physical conditions (Barusch, 2011). This was due to their weaker physical function and psychosocial cognition than younger survivors (Adhikari et al., 2018). However, a number of resources

including Fernandez and colleagues (2002) stressed that age alone did not determine older people's ability to cope post-disaster but rather, when coupled with additional adversities such as, poverty, little social support, injury, loss of a loved one and/or material loss of their property and belongings, the effects of a disasters acutely impacted older survivors.

Another distinguishable age-related difference Adhikari and colleagues (2018) identified in survivors of the 2015 Nepal earthquake was older people tended not to get as involved in the community post-disaster as they had done before. Indeed, a number of resources noted that older populations are more likely to be socially isolated and therefore, less likely to ask for help or attend community meetings and other recovery initiatives than younger age groups following a disaster situation (Allen and Nelson, 2009). As Barusch (2011) discussed this was most acutely the case with psychosocial support. They found that older survivors still welcomed professional assistance with physical injuries and material loss during global disasters. However, they were more sceptical and unwilling to engage in psychological interventions. Moreover, a notable proportion of the empirical case studies of disasters in the Global South highlighted that older people, and their families, frequently sought out traditional healers and the use of indigenous methods for treating mental health problems over the support offered by social workers and other related health practitioners (Ngo, 2001). A preference most often linked to both the cultural stigma associated with counselling in certain communities as well as the perceived loss of independence by accepting state-provided help holds for older generations (Huerta and Horton, 1978). As a result, supporting this socially vulnerable group has disproportionately been found to be left to family members and other informal caregivers in post-disaster scenarios. Reliable social and emotional support provided by family members has been found to significantly limit the development of PTSD in older people (Rivera et al., 2015) and as such, informal care following a disaster is acknowledged as a key factor in mitigating the vulnerability of and risks faced by older populations within disaster recovery plans. Nevertheless, the literature also stressed that informal support from family members cannot be relied upon to replace professional interventions when loss of life and family displacements are significantly high within disaster situations (Fernandez et al., 2002). Similarly, not all older survivors will have supportive relatives close-by. Thus, the need for more formal responses are required which the literature advocates should proactively account for and respond to the disproportionate impact disasters have on older members of a disaster affected community.

To do this, a small number of the resources specifically explored the impact that disasters have on older survivors and outlined ways in which social work interventions could be targeted to best support this population. Barusch (2011) argued that since older people are less likely to attend community events such as disaster management meetings, social workers must ensure that they represent the needs and interests of this population within debates and the ongoing development of recovery plans. Additionally, they must maintain a communication feedback loop with these individuals to keep them informed of all decisions and progress being made. Likewise, since research with this social group has continually highlighted that older people are less likely to accept help due to concerns about losing their autonomy or being seen as dependent and in need of psychosocial support, the literature stresses that these concerns should

be considered within disaster responses (Huerta and Horton, 1978). For instance, tailor-made community-based programs which support the mental health needs of older people by helping to build up their self-worth was identified by Matsuoka (2015) as important in empowering older people to prioritise and support their own mental wellbeing. Recovery initiatives which provided targeted support for this socially vulnerable group while recognising the independence and resilience of older generations were found to be the most well received. As Yang and colleagues (2020:12) stated in their study following the 2015 explosion disaster in Tianjin, China:

"although the explosions had affected their lives, as 'the generation that has endured the most' [older survivors] said they wished the resistance and responsibility already in their blood could be seen and appreciated."

The recommendation not to construct all older people as overly vulnerable when designing recovery strategies was further echoed in HelpAge International's Guidelines for best practice which were informed by older adults' experiences of disasters around the world. What their Guidelines emphasised was to shape all disaster mitigation plans to include and respond to the specific needs and vulnerabilities of older survivors (HelpAge International 2011 cited in Barusch, 2011). By doing so, social work interventions would be inclusive and not further stigmatise a population who often felt disempowered by state intervention methods. An example of this was discussed by Adhikari and colleagues (2018) in relation to supporting connectedness and community self-actualisation through the financial and administrative support to create age-related social activities and community groups. As previously reviewed in this paper, supporting and developing community engagement is a central role for social work disaster interventions. Thus, by supporting older survivors to design and organise initiatives to support their specific recovery needs within the wider community engagement strategies, disaster management responses can integrate targeted support into their main response plans. Rather than adding age-related support on as an afterthought for the affected communities. Additionally, a number of resources (including Yang et al., 2020; Dominelli and Ioakimidis, 2014) highlighted that social workers supporting older populations post-disaster must always remember regardless of their age, that all survivors are first and foremost members of particular communities with specific cultural norms and values and therefore, tailor-made interventions should always be culturally responsive and locality specific (Dominelli, 2013b). Working with diverse groups experiences of disasters differentially in anti-oppressive ways that uphold social justice and human rights is a cornerstone of social work interventions in catastrophic situations that is echoed throughout the literature. It also builds on generic social work skills that practitioners are very familiar with as they practise these in the daily routines of practice, and consistent with the injunctions upheld by BASW's Code of Ethics.

Minority Ethnic Populations

A second socially vulnerable group discussed in the reviewed resources was that of minority ethnic survivors. In particular, the literature that stressed the need for culturally appropriate social work practices, emphasised how acutely important it is to tailor intervention strategies

for minority communities within broader response plans. Just as international practitioners have been found to impose unhelpful and potentially damaging Euro-American practices postdisaster; so too have standardised practices been noted as harmful when employed by national social workers specifically supporting survivors from other ethnicities and racially discriminated groups (Airriess et al., 2008). This issue has been extensively examined by literature focusing on the aftermath of Hurricane Katrina. Studies of the recovery following this category 5 Hurricane Disaster found that minority ethnic groups from the poorest areas received the least amount of support from social services and disaster-specific interventions (Benmark and Chung, 2011). Zakour and Harrell (2004) argued that the disproportionate levels of pre- and post-disaster support 'people of colour' received reflects the sociohistorical racism, inequality and structural discrimination that these communities continue to face in society more broadly. One key reason for these disproportionate levels of disaster vulnerability, as Morrow (1999) evidenced, is because minority ethnic groups are more likely to live in the most economically deprived and environmentally degraded communities (Dominelli, 2012). For instance, the infrastructure within poorer neighbourhoods is physically more likely to be damaged in an emergency situation due to a lack of maintenance and inadequate disaster mitigation attention. Likewise, quantitative analysis of disaster survivors' responses shows communities which face socio-political discrimination are at a significantly greater risk of suffering from the most severe psychosocial problems that arise in emergency situations including PTSD and chronic depression (Smith et al., 1988 in Zakour and Harrell, 2004). This has been linked to the multiple levels of trauma and social exclusion that these populations have to cope with in addition to the effects of a disaster alongside dealing with inadequately resourced support services in their communities.

Amongst minority ethnic social groups, a noteworthy handful of the resources stressed that refugees and migrants are most acutely at risk within disaster situations. In a number of the case studies discussed in the literature it was found that state support is often exclusively limited to citizens of the affected country post-disaster. For example, Akerkar (2007) examined recovery amongst migrant and stateless communities in Thailand following the 2004 Indian Ocean Earthquake and Tsunami. It found non-Thai citizens such as Burmese migrants and the stateless Moken gypsy community were not offered any relief or rehabilitative support during the country's recovery period. Other resources which examined the support, or rather, the lack of support for non-nationals discussed how often the marginalisation of these populations postdisaster was structurally enforced through the need for survivors to provide national identity cards to access health care and social support services (Allan, 2015). Furthermore Dako-Gyeke and Adu (2017) stressed one of the most significant challenges refugees face following a disaster is the disruption of informal social networks which they rely on almost exclusively for essential provisions and emotional support. More than any other minority ethnic group, refugees are repeatedly found to have the highest rates of unemployment and homelessness (Marlowe, 2015). Thus, the impact of disasters on stateless populations has been evidenced to exacerbate their social vulnerabilities and levels of deprivation, which are often even further aggravated by a lack of targeted interventions and inclusive support services. This constitutes an important gap in provisions that deserves further attention in policy, practice and research.

This deficiency has also been evidenced in the grey literature regarding Covid-19, the global pandemic traversing the globe at the time of writing.

In light of the disproportionate risks of the effects of disasters on these socially vulnerable populations, the literature has discussed a number of ways social workers can provide more ethnically targeted and culturally responsive interventions. The most frequently explored method that was discussed was the recognition and inclusion of spirituality and religiosity within recovery processes. Aten and colleagues (2019) evidenced the crucial role that faith and religious communities played in the recovery processes for African Americans, especially older survivors, as they are more likely to seek support for psychological trauma from trusted religious figures than secular support services. Beyond the research on disaster interventions a wealth of research has been examined which recognises the role spiritual-based activities have on mitigating the impact of endemic racial discrimination and health disparities found within minority ethnic populations (Adams and Tyson, 2020). Faith has been found to serve as a meaningful way to fulfil psychosocial needs in a lot of trauma survivors. However, empirical research in this area continually identifies faith as more important for black minority ethnic communities in such scenarios. This is thought to be because indigenous treatments and cultural traditions are legitimatised and incorporated in religious and spiritual initiatives and so are more relevant and culturally sensitive than a lot of westernised social work practices (Benson et al., 2016). Moreover, as Richardson (2002, cited in Alawiyah et al. 2011) discussed, religious, faith-based practices often provide the motivation and strength required to remain resilient in times of adversity.

Therefore, a number of the resources advocated that in order to embed ethnically relevant disaster support into disaster management plans, social workers require training to be able to offer spiritually sensitive initiatives within their recovery strategies. This could include consulting peer-reviewed meta-analyses of empirical research on spiritual interventions models such as Benson and colleagues (2016) review of 'spiritually sensitive social work with victims of natural disasters and terrorism'. Or similarly, it could include conducting a self-assessment to identify and recognise personal values and spiritual orientation (or lack of one) as Furness and Gilligan (2010) recommend. Then in terms of practice in post-disaster circumstances, Alawiyah and colleagues (2011) emphasised the most community empowerment methods that social workers could employ was to identify and develop a working relationship with faithbased services within their case management plans, so that they are able to refer religious survivors on to locally run programmes when necessary. This kind of secular and spiritual collaboration within post-disaster support is something that the literature highlighted as disappointingly uncommon (Joshi, 2020), and even opposed by many secular practitioners. For instance, in their guidelines for providing spiritual care in times of disasters, the National Voluntary Organizations Active in Disaster Agency acknowledged that the underlying suspicions that both spiritual care providers and secular support services had of each other's roles. This was found to significantly interfere with the delivery of timely and effective interventions among highly vulnerable populations (Massay, 2006). Overall, the literature on supporting minority ethnic populations stressed the need for social workers to recognise and tailor their support services in line with the cultural values, and norms of specific communities (Marlowe, 2015) rather than simply imposing standardised practices which have worked elsewhere. Given the extensive history of anti-racist and black perspectives theorising and challenging racism in the profession, particularly in the West, beginning with Dominelli's (1988) book, *Anti-Racist Social Work*, this was a disappointing finding. This situation has become more poignant given the messages coming out of the Black Lives Matter movement which made headlines in the summer of 2020.

Women

Lastly, among the literature reviewed that explored the disproportionate impact faced by socially vulnerable groups in a disaster situation, a substantial amount of empirical research examined the gendered experiences of disasters. Within all the case studies which explored the intersection of gender and recovery processes it was evidenced that women were at a greater risk to the most adverse impacts of an emergency situation and found to take longer to recover than men (Alston, 2013). Although, interestingly this trend is not found in the grey literature relating to Covid-19 which affects men disproportionately, especially among the casualties in some countries, including China and the UK (Dominelli, 2020). Within the Global South this longer recovery period was found to be associated with cultural norms and practices which hindered women's ability to access support services and relief efforts. For example, Akerkar (2007) discussed the adverse impact the Sri Lankan mourning traditions had on widowed women survivors' ability to recover following the 2004 Tsunami. Within orthodox Muslim communities in Sri Lanka, widows are expected to mourn the loss of their husband in seclusion for 130 days after his death. Within the post-tsunami context however, Akerkar (2007) illustrated that this meant women widowed by the disaster were not allowed to access any social, health or psychosocial support services, as well as being unable to be with their family and wider community for over four months after the disaster occurred. Similarly, in India and Somalia the literature highlighted that during the reconstruction of survivor's homes the management of the recovery efforts was underpinned by the assumption that only men owned property, so the reconstructed houses were all put exclusively in a man's name even when a member of a shared household rather than offering the option for joint ownership between men and women (Allison, 2013). This was found to be acutely problematic for women-headed households who struggled to access state-provided entitlement packages following the Tsunami (Zakour and Harrell, 2004) as the processes for retrieving these relief efforts were set up to only accept the requests of men-headed households. Another challenge faced only by women post-disaster was highlighted by Alipour and colleagues (2014) who noted that womenspecific health needs are often seen as a taboo subject in many cultures and so are left to individuals to manage without official support within recovery efforts. For instance, following the 1998 floods in Bangladesh, sanitary products were not included in the relief provisions given to affected communities, and that during the infrastructure recovery phase no private spaces with clean water were provided for women to wash themselves or their underwear. This resulted in women survivors contracting a number of different skin diseases due to the use of contaminated wet cloths and supplies when menstruating.

The resources focusing on the gendered experiences of disasters noted that emergency situations not only created new challenges for women but also exacerbated social, economic and political adversities already structurally present before the disaster. Most notably, the literature examined how disaster situations only intensify the disproportionate caring responsibilities that women are burdened with. For instance, Enarson and Dhar Chakrabarti (2009) discussed the challenges that child-care places on women following a disaster as they are not only responsible for their own recovery and well-being but also need to recognise and respond to the needs of their children which are often highly specific and require specialist ageappropriate interventions. Similarly, Dominelli (2013b) found women provided the majority of the informal, unpaid care services within both their own households as well as their local community when formal disaster recovery support is under-resourced and oversubscribed. The burden of care responsibilities has been closely linked to why women take longer to recover from the impact of disasters around the world because women are socially expected to fulfil and support the unmet needs of others. This delays their ability and capacity to seek out support for their own material loss and psychosocial well-being (Alston, 2013). Additionally, as Wannamakok and colleagues (2020) stressed, disaster situations can often disrupt and even impede policy and practice initiatives which have begun to tackle societal gender inequalities such as the division of public and private labour. Within recovery responses, national and local budgets are often reallocated to the services deemed to support the most pressing disaster related needs, which can result in gender-responsive programmes aimed to empower women and challenge gender inequality being classed as unessential and, consequently, unfunded.

In terms of supporting socially vulnerable groups, research has also stressed women that are overwhelmingly more at risk to violence and victimisation following a disaster than any other population group. A number of resources have quantitatively evidenced that the prevalence and severity of domestic violence against women increases post-disaster (First et al., 2017; Enarson et al., 2007). For example, Enarson (1999) surveyed 77 domestic violence support centres in Canada and the US and found in the year following an emergency situation, centres in the affected areas consistently reported an increase in the number of service users. Other comparable research has also evidenced that the number of police reports of intimate partner violence consistently rise, regardless of place, following an environmental disaster or a terrorist attack (Parkinson and Zara, 2013; Fothergill, 1999; Schumacher et al., 2010). Moreover, in addition to the increased risk of domestic violence, the literature in this area also highlighted that the safety of women refugees is placed at further risk when living in relief camps. Indeed, Akerkar (2007) stressed that women noted how common stories of rape, assault and other forms gender-based violence were within the camps. Many disasters displace survivors due to material loss and property damage, resulting in temporary housing shelters and refugee camps being created during the initial recovery periods. However, a lack of secure privacy and inadequate lighting arrangements within these camps have been found to increase vulnerability and risk of victimisation. In their reflections on the responses to the Indian Ocean Tsunami, Pittaway and colleagues (2007) discussed how many families chose to send young women relatives with extended, unaffected families to avoid the risk of sexual abuse and other genderbased violence common within the refugee camps. The heightened vulnerability of women within temporary refuge camps has been linked to a lack of pre-disaster planning and investment in the camps' design and long-term functionality which the literature (Pittaway et al., 2007; Akerkar et al., 2007) stressed needs to be rectified and prioritised in future disaster mitigation plans.

In response to the disproportionate impact disasters has been found to have on women survivors, the literature recommends a number of methods for social workers to employ. Most comprehensively, corrective and proactive practices which take into account gendered vulnerabilities should be embedded in all recovery plans. For example, First and colleagues (2017) recommended co-producing a set of gender-responsive objectives with women survivors which then all recovery efforts such as, safety planning, securing long-term support services and promoting psychosocial well-being activities when these are designed. Likewise, Enarson and Chakrabarti (2009) emphasised women respond best to women-only group-based relief and rehabilitation services which empower and build resilience among women by focusing on their strengths and capabilities. Thus, effective disaster management plans should budget for the identification, development and creation of women specific services if no such services already exist in an affected community. Importantly, the literature further stressed that the most successful gender-responsive initiatives require social workers' support in the early stages of establishing and developing the service. However, these should be managed, run and organised by local women community members including survivor-service users where appropriate (Akerkar, 2007). Therefore, the programmes' survival can be assured once the initial recovery practitioners leave an area because they will be self-sufficiently run by the women in the community from the outset.

In terms of medical needs, a number of resources also evidenced how crucial, free at the point of use, reproductive healthcare is for women, especially pregnant women (Enarson et al., 1999). Similarly, Alston (2013) noted that in light of the gendered division of informal care responsibilities and domestic labour, it is essential that professionals design and deliver services for women survivors in locations and times which fit around the demands on their time. In this sense, practices cannot be gender-neutral but rather are required to be genderresponsive in order to address women-specific vulnerabilities. A practice that has been advocated by the United Nations, especially UNWomen, for some time. In the field, for instance, Pyles and Lewis (2007) suggest offering services to women where women live so that they do not need to organise child-care cover or travel to a service. Or, if practitioners are aware that women will not attend decision-making forums, it is recommended that social workers should help encourage and support women to feel able to participate in community recovery efforts (Alston, 2013). In circumstances in which women still cannot attend, workers should advocate for the gendered unmet needs of this population. Social workers can contribute to meeting these objectives as they have been trained to be gender-sensitive and address women's differentiated needs since the publication of Dominelli and McLeod's (1989) Feminist Social Work.

In summary it is clear that throughout the entirety of the literature reviewed concerning the support of socially vulnerable groups during a disaster, the entirety of BASW's learning outcomes can be identified as relevant. These are:

- 'Explain the role of the social worker in disaster cycle including preparedness, response and recovery';
- 'Utilise social work skills for psychosocial, practical and emotional support';
- 'Reflect on the wider contexts, causes and implications of a disaster including at local, national and international levels';
- 'Promote the importance of the social work role in and advocate for the highest quality social work services for people before, during and after a disaster';
- 'Prioritise the perspectives of victim-survivors who have been impacted by a disaster'; 'Utilise research-informed practice in disasters and apply relevant evidence';
- 'Engage with multi-professional teams, agencies and/or stakeholders to provide a coordinated response'; and 'Develop creative and ethical responses to the unique/unpredictable challenges of a disaster'.

A Social Justice Rights-Based Approach to Disaster Intervention

Throughout all the literature which examines the disproportionate impact of disasters on particular social groups, the most overriding conclusion found was that disaster efforts must recognise the intersectionality of vulnerability. Indeed, despite different resources focusing on different populations, they all recognised that membership to one marginalised social group did not determine vulnerability; but rather it was the intersection of multiple disadvantages which made particular communities more at risk to long-term adversity following a disaster (Zakour, 2008). As Zakour and Harrell (2004) exemplified, although ethnicity significantly influenced survivors' barriers to recover post-disaster, it was the combination of living in a geographically isolated, low-income community as well as being African American which made participants in their study most acutely at risk to death, serious health issues, prolonged mental health illness and long-term economic problems following the disaster. Similarly, it was found to be the combination of the pervasive impact of poverty, the lack of physical mobility and the structural disadvantages faced by minority ethnic women in the Adhikari and colleagues (2018) study that made certain older survivors more vulnerable to developing psychosocial problems following a disaster than others. Therefore, the existing literature advocates that in order to support vulnerable populations, it is vital that practitioners within disaster interventions recognise that the unmet needs of survivors are shaped by a multitude of long-standing, intersecting forms of discrimination and social disadvantage (Akerkar and Devavaram, 2015). Bell (2008) highlighted how these can markedly limit the effectiveness of case management recovery plans when social workers have to navigate a broken system on the behalf of clients. For instance, Hall and colleagues (2002) found chronic un(der)employment, a lack of affordable housing and inadequate public transportation infrastructures coupled with survivors' scepticism of social workers and pre-existing needs made it impossible to focus solely on disaster-related unmet needs according to how case management models discussed previously suggested that they should.

In response to these deeper institutionalised vulnerabilities, a social justice, rights-based model has been recommended within a range of the literature reviewed as the most appropriate

approach to disaster intervention for social workers. Despite being central to a lot of social work practices, Alston (2013) argued that social justice-based models remain critically absent within environmental and man-made disaster event policies and initiatives. A social justice approach to disaster management is one where all the practices and mechanisms supporting risk reduction are designed and understood as part of a larger universal human rights approach to institutional support (Akerkar, 2007). As Annan (1998: 62) discussed, the key tenet which differentiates a human rights approach from a charity-based humanitarian one is the recognition that social work intervention is more than simply meeting survivors' needs but rather:

"the state's obligation to respond to the inalienable rights of individuals [by] empowering people to demand justice as a right, not as charity, which gives communities a moral basis from which to claim international assistance where needed".

In the context of disaster intervention, a human rights approach demands all relief efforts uphold human dignity, embed participation, ensure transparency and accountability as well as equitably distribute resources to all members of an affected group (Barney, 2019). Additionally, Dominelli (2018; 2012) advocated for social justice orientations to include environmental justice including removing the most susceptible groups from degraded environments and blocking the perpetration of models of industrial development that disregarded such concerns. Furthermore, as Gabel (2016) explained a human rights-based approach within a post-disaster recovery situation must be underpinned by the moral and legal obligation of professionals to support survivors to understand their civil, political, social and economic rights.

In practical terms this can encompass listening to and believing survivors' first-hand experiences of obtaining rights. As well as teaching impacted communities, especially marginalised populations, the process of claiming their rights; and empowering them to participate in initiatives which determine and advocate for their rights (Barney, 2019). Additionally, the social justice-based model of social work can help address instances of human rights violations including: advocating for disadvantaged populations' experiences of macrolevel systems and institutions which prevent rights from being upheld; lobbying for more resources; and representing the needs of communities lacking resources within recovery plans (Wu et al., 2019). As Akerkar and Devavaram (2015) discussed, a rights-based approach is only possible if recovery professionals and disaster mitigation organisations work with socially vulnerable groups with a locality on a sustained basis for extended periods of time. This model stands in stark contrast to the typical practice of external support where organisations leave an affected area within three to six months following a disaster. According to Bemak and Chung (2011), this short-term approach stresses, undermines and often completely disables the initiatives established to support the rights of marginalised survivors. As the literature highlights, a critically engaged human-rights approach to disaster support needs to be constructed to respond to the subjectivities of survivors' unmet needs and enable workers to be reflexive and adaptable to new emerging issues as they arise (Ellis et al., 2018). This is preferable to applying a top-down, standardised legal approach to human rights which predetermines how best to support disaster survivors without listening to and including local contributions in the planning of those relief efforts.

Overwhelmingly, the research on rights-based approaches to disaster intervention advocates that if planned and responded to in an ethical and socially just way, crises situations such as an environmental disaster or a terrorist attack can provide the opportunity to implement practices which challenge societal inequalities. Whether that is through gender responsive risk management (Enarson, 1999), age-appropriate psychosocial interventions (Adhikari et al., 2018), or shaping social work practices to reflect and respect cultural norms and values of minority ethnic communities (Benson et al., 2016), interventions to emergency situations can begin to rebalance pervasive inequalities present long before a disaster occurs. A successful example of this approach to social work was discussed by Akerkar (2007) following a Tsunami in Thailand. Social workers supported the local community to establish and run a Foundation which financially supported impoverished women to get back into employment and Burmese migrants to gain work permits lost in the disaster. Social work practitioners trained the local staff of the Foundation on people's human rights and helped identify practical steps that the organisation could take to help service users' claim those rights. This initiative provided not only assistance to the disaster-related needs of vulnerable survivors, but also the means for a community to begin the slow and prolonged process of systematically challenging discriminatory policies and practices which led to particular social groups facing disproportionate risk under the impact of the Tsunami in the first place.

However, despite a handful of effective examples of recovery initiatives driven by a humanrights approach, Rowlands (2013a) emphasised many professionals are not adequately trained to employ such an approach. Of the literature which focused on training, all resources conclusively advocated more needs to be included in the formal educational programmes to enable social workers to employ a social justice approach to disaster relief. For instance, Allen and Nelson (2009) found that on average social work graduates only received four hours of disaster-specific training. As a result, this highlighted that most western social workers who respond to disasters are delivering support with no knowledge of what best practice in these contexts involves or what the messages from research are. In light of this, a number of the resources included in this review have advocated for and developed an environmental social work model that recognise the importance of placing social work practices during disasters within the formal curricula. Originally classified as 'green social work', by Dominelli (2018) in a book of that name, this emerging field of social work centres around a more holistic understanding of the individual to recognise the interconnected roles that the community, the environment and social institutions play in maintaining and often reinforcing inequality and risk (Hayward and Joseph, 2018). Since the environmental inequalities discussed at the 'First National People of Color Environmental Leadership' Summit in 1991 (Alston, 2010), green social work models have expanded understandings of injustice to also account for climate change. Indeed, environmental justice social work models now acknowledge that the growing number of environmental disasters which are closely linked to human's role in climate change are widening gap between those able to adapt to environmental vulnerability and those who are not, due to the impact of structural inequalities (Boodram and Johnson, 2016).

Responding to this growing challenge to support those most at risk to climate-related disasters due to extreme poverty and inequality is argued by Dominelli (2018) as one of the more significant challenges globally facing social workers in the 21st century. An environmental social justice approach to social work intervention therefore, favours social inclusion by centring community orientated support on those most impacted by environmental degradation and poverty, as these conditions have repeatedly been evidenced to worsen risk and vulnerability when disasters occur (Dominelli, 2014a). Moreover, Alston (2015) discussed there are far reaching benefits to employing a green social work approach that ethically and co-productively addresses the economic, environmental and psychosocial needs of marginalised populations. To do so, they advocated social workers must both ensure that resources are equally distributed across an affected population; and prioritise empowering local stakeholders to identify and challenge both the micro- and macro-practices and inactions which increase the disaster risk of certain communities.

Consequently, this review of the literature on socially just rights-based social work approaches to disaster intervention most markedly reflect three key BASW (2019) CPD outcomes. Namely, these are:

- 'Apply relevant social work theories and models to a specific disaster context';
- 'Reflect on the wider contexts, causes and implications of a disaster including at local national and international levels':
- 'Promoting the importance of the social work role and advocate for the highest quality of social work services for people before, during and after a disaster'.

Self-Care for Social Workers During Disaster Intervention

In addition to the multifaceted ways, discussed throughout this review, that social workers support victim-survivors of disasters, a noteworthy number of resources also examined the support practitioners themselves require in crisis situations. As Ben-Porat and Itzhaky (2014) noted, there is a number of well-known psychological conditions which social workers are particularly susceptible to due to the traumatic casework and circumstances they support; including: burnout, compassion fatigue and Secondary Traumatic Stress. Maslach and Leiter (2008) defined burnout as a mental health condition caused by emotional exhaustion in the workplace. Amongst a wide range of empirical studies (including Lee et al., 2011; Boscarino et al., 2004; Adam et al., 2007), the continual exposure to harrowing events which social workers often bear the burden of responsible for, burnout has been found in practitioners to manifest as emotion detachment, cynicism, withdrawal, fatigue, apathy, changes in beliefs, a sense of helplessness and the inability to recognise the effectiveness of their work. Although very similar to burnout, rather than a loss of empathy towards service user's trauma, compassion fatigue is the preoccupation with absorbing others' trauma (Figley 2002a). A number of symptoms of this condition can also be found in those who suffer with burnout however, Figley (2002b) found depression, avoidance or dread of work, intrusive thoughts,

loss of control, somatic complaints and poor focus and judgement are acutely present in those diagnosed with compassion fatigue. Indeed, prolonged experiences of both burnout and compassion fatigue has been found to significantly impact front-line worker's ability to prioritise self-care; maintain professional boundaries; and leave the stresses of work out of their personal lives (Tonsone et al., 2003). Furthermore, studies have linked these work-related conditions to a heightened vulnerability to clinical Secondary Traumatic Stress (STS) - also often referred to as Vicarious Traumatisation (McCann and Pearlman, 1990) - a condition which mirrors many of the symptoms found in those with PTSD (Adams et al., 2007). For example, as Bride (2007) found within their sample of professionals who directly supported trauma survivors, 70% had experienced at least of one STS symptom in the previous week with 55% found to meet the criteria for a clinical diagnosis of STS. Moreover, their study further evidenced that 15% of those involved in the study also met the diagnostic criteria for PTSD due to the traumatic events they have been exposed to through their job (Bride, 2007). This correlation between the roles of the social work profession and an increased vulnerability for STS is especially concerning given Colins and Longs (2003) highlighted a significant relationship between the poor mental health of care workers and ineffective services.

In the context of disaster situations however, the literature highlights these work-related psychosocial conditions are even more acutely found in emergency social care responders. Geographically located disasters, such as extreme weather incidents or terrorism, affect whole communities including the front-line crisis response practitioners who live and work in the area (Tonsone et al., 2011). Therefore, alongside their professional roles and responsibilities social workers are also disaster survivors themselves, facing all the same trauma, loss and fear other victims are confronted with. Yet, as Sweifach and colleagues (2013) stressed following a disaster, social workers are expected to respond to the profound needs of survivors with confidence, skill and focus whilst simultaneously processing their own personal trauma and challenges created by the event. In practice, professional-survivors have recalled a heightened vulnerability to service-users' trauma due to an overidentification with their experiences and grief (Seeley, 2008). Therefore, this review found disaster events markedly blur the distinction between practitioners and service users. For example, in a study with New Orleans social workers who directly supported their affected community following Hurricane Katrina, Tonsone and colleagues (2015) found the resilience of professionals to support the recovery efforts was significantly reduced due to the enduring distress attributed to the Hurricane they were personally processing. The severity of impact the disaster had on social worker's resilience in this study, however, was found to subjectively vary depending on individual's exposure to previous trauma as well as their personal attachment style in addition to the distress the Hurricane caused. As Peled Avram and colleagues (2020) discussed, the psychosocial impact professional-survivor first responders hold is best understood as 'shared trauma'. Or as it was commonly known following the 9/11 terror attack in New York, 'double exposure' as they are simultaneously first-hand victim-survivors and also impacted by secondary exposure through witnessing the aftermath and listening to the traumatic experiences of others (Baum, 2014; 2010).

Building Resilience

Despite the wealth of literature which has evidenced the profound impact double exposure can have on social workers who respond to disasters, as Naturale (2007) highlighted, there remains a noteworthy lack of research into how best to reduce social workers' susceptibility to burnout, compassion fatigue and STS. However, within a very limited number of resources two key recommendations of how the profession can build and protect practitioners' resilience have been discussed. Firstly, as Baum (2014) stressed, social workers shared traumatic realities require regular team debriefings, one-to-one supervisions and institutional recognition of the psychosocial impact disaster recovery can have on workers' mental wellbeing. These top-down methods of supporting front-line practitioners have been found to significantly mitigate the most acute consequences of STS and shared trauma, as they formally recognise and destignatise the symptoms of burnout and compassion fatigue (Tosone, 2006; Saakvitnae, 2002). Indeed, Adams and colleagues (2007) noted that the prioritisation of professional support between co-workers and superiors positively impacts self-care strategies and improves practitioner's resilience. Most markedly, supervision and regular debriefings were found to both: legitimatise social worker's feelings in a way that assures their responses are common amongst the profession and not necessarily a reflection on individual's competency; as well as stop detrimental work habits early on by providing a space to formal discuss issues concerning wellbeing (Pack, 2013). Nevertheless, as Ben-Portat and Itzaky (2014) emphasised, financial resources and protected time are required to embed this kind of work-based psychosocial support into the budget and operational running of social work teams. Moreover, this recommendation to structurally support first responder's resilience also requires a degree of flexibility to be built in social work teams so the person-centred needs of staff are able to be met as they arise (Baum, 2014). These needs could include enabling staff to ensure their families are safe post-disaster and supplying them with food, drink and a place to rest at work during emergency recovery incidents, for example. Secondly, the literature highlights the importance of including self-care and resilience into social work training programmes. For instance, Figley (2002a; 2002b) explores how formal training on sector specific resilience skills and self-care strategies can considerably reduce practitioners' likelihood of suffering with the most profound work-related psychological conditions discussed above. Similarly, Dane (2000) emphasised how crucial training on the challenges of SDS are for professional caregivers. In particular, their study (also noted in Baum, 2004; Ting et al., 2006; and Ben-Portat and Itzaky, 2014) highlighted how heighted awareness of work-related mental health illnesses results in more honest and supportive communication between colleagues; more effective coping strategies; and a healthier cultural acceptance of the impact social work roles during traumatic events can have.

Therefore, from this examination on the self-care of social workers during disasters four BASW (2019) CPD guidelines are acutely relevant. They are:

- 'Practice self-care and utilise available support and supervision';
- 'Evaluate the impact of disasters on individuals, families, communities including firms and institutions';

- 'Promote the importance of the social work role and advocate for the highest quality of social work services for people before, during and after a disaster';
- 'Prioritise the perspectives of victim-survivors who have been impacted by a disaster'.

UK Specific Disasters

Finally, in addition to the findings and conclusions discussed above, this review also specifically searched for resources which examined the role of social work in UK disasters. These purposeful data searches were included within the wider literature review to provide a British perspective amongst the resources reviewed which consisted predominantly of international literature. Notably, there is a scarcity of UK specific literature in this area of social work. Arguably, this not too surprising given that disaster intervention is neither taught nor researched much in Britain within the social work discipline. This absence of nationally focused literature could be attributed to the geographical distribution of disaster events throughout the world since, compared to the Global South, the UK is not considered a 'disaster prone' country, and it has not experienced many extreme weather events in comparison to others. However, as Jones (2018) discussed, despite a lack of exposure to most of the serious environmental disaster types, the UK has experienced a number of terrorist attacks, major fires and devastating floods in recent years. Thus, there is a pressing need to fully understand the roles and responsibilities that social work plays in disaster mitigation, preparation and recovery processes within the British context.

Throughout the limited literature which explores this national perspective in disaster research, the governing plan for crisis intervention in the UK is clearly outlined. The official national 'civil protection and emergency response' strategy that has been centrally established stipulates which individuals are responsible for identifying and mitigating risk within each local authority, as well as how statutory services should respond during emergencies (Jones, 2018). However, this national strategy only outlines the protocols that emergency services require for each individual incident. These tend to highlight the police, the NHS and bomb squads. In contrast, the governance of social workers in crisis situations within the UK is devolved to individual local authorities (Davis, 2013) under the 2004 Civil Contingencies Act. As the UK Government (2013) Emergency Response and Recovery guidelines state, a local Crisis Support Team holds lead responsibilities within local disaster management planning and recovery. Alongside locally identified stakeholders from a range of statutory and third sector organisations, these teams include social workers who primarily provide practical and pragmatic crisis support post-disaster such as community coordination, psychosocial support and trauma counselling for survivors and bereaved families (Davis, 2011). UK legislation specifies that local authorities are duty-bound to recruit and train "an appropriate number of emergency response personnel" (HM Government 2005: 52 cited in Davis 2013) to meet their legally required duty to support the physical impacts of disasters. These roles are predominantly fulfilled by in-post social services staff on a voluntary basis. This approach relies on 'spare' capacity within the social work sector. Corbacioglu and Kapucu, (2006) problematised this response and argued that it was preferred because it did not disrupt the everyday commitments and incidents that local authority social workers are tasked to deal with. Thus, specified social work disaster capacity does not exist in any local authority in the UK, a reality exacerbated by increasing pressures for cost-efficiency and the implementation of austerity measures (Dominelli, 2012, 2020), and opposed by the British Association of Social Work (BASW, 2017) in recent years. Thus, as Eyre (2008) has highlighted, the levels of preparedness to respond effectively to a disaster situation varies significantly across the country and often relies heavily on trained relief volunteers and commitment from the local authorities to implement necessary secondments.

From a mixed methods evaluation of the UK's current capabilities within planning, training and expertise in meeting the needs of survivors of emergency situations in 2007, Eyre (2008) found a diverse amount of good practice examples but also, a significant number of areas which would benefit from further development. In particular, the study emphasised local authorities' ability to identify and address the longer-term recovery needs of survivors required ongoing independent evaluation, continuous professional improvement and evidence-informed development. Beyond the general principles of disaster planning and response protocols, Eyre (2008) stressed that there remains a significant lack of good practice examples or nationally specific guidance which accounts for the devolved organisational difference which exist across the UK's 4 nations (England, Northern Ireland, Scotland and Wales). This review echoes Eyre's (2008) findings. Consequently, the remainder of the section on UK specific disasters seeks to exemplify and discuss the responses to a number of specific incidents which have occurred throughout the whole of Britain in recent history. Although not a comprehensive or equally representative review of all emergency situations that the UK has faced in the past 30 years, due to a noteworthy absence of discipline-specific literature, how social work responds to both incidents of terrorism and other environmental disasters are included.

Responding to Terrorism

In Britain's recent history there has been a number of intentional disasters formally acknowledged as instances of terrorism within official discourse⁶ including: the 2017 Manchester Arena bombing, killing 23 people and injuring over 800 more; the attack on London Bridge and Borough Market in 2017 which killed 11 individuals and injured a further 48; the 7/7 London underground and bus bombings in 2005 in which 52 people died and over 700 were injured; and the deadliest terror attack in UK history, the 1998 bombing on the Pan Am flight 103 which exploded over Lockerbie killing a total of 270 people. Just like other kinds of disasters, emergency services respond to the immediate physical harms caused by terrorist disasters whereas, the longer-term psychosocial impacts of these incidents remain largely the responsibility of social work. Yet, despite the important role social work has played in response to these disasters, there is only a very limited amount of literature, as Dominelli

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⁶ It is worthwhile noting the politics surrounding what is and is not recognised as acts of terror is a nuanced and highly debated topic. See Jackson (2018) for a comprehensive exploration of this issue). However, for the purpose of this review some of the recent disasters which were intentional in nature are discussed in this section. The emergency situations discussed are not intended to be an exhaustive list of all acts of deliberate terror experienced in the UK's recent history, but those identified as of specific interest by BASW.

(2007) highlighted, which accounts for the perspectives and role of social workers. Nevertheless, amongst the small amount of literature available in this area, there remains a number of key findings. First, as Jumbe and colleagues (2020) discussed, unlike the protocols that emergency services follow in response to the physical impacts caused by terror attacks, including those that were upgraded after the 11 September 2001 (9/11) Terror Attack on the World Trade Centre in New York, the guidance on how best to support the longer-term psychosocial effects of terrorism is much less well-established. Nonetheless, within the international literature which predominantly focuses on the outcomes of victims from the 9/11 attack in the US, survivors of terrorism have been found to present complex and notably adverse psychosocial reactions. Tosone and colleagues (2011) discussed how the devastation and trauma of terrorism can lead to more collective manifestations of PTSD and widespread suspicion of both authority figures and people from other social groups. For instance, following the 2017 Manchester arena bombing, which was perpetrated by a suicide bomber claiming to support extremist Islamic beliefs, an increase in Islamophobic political discourse and hate crimes was noted throughout England (Parker and Ashencaen Crabtree, 2013). Secondly, as Jacobs and Kulkarni (1999 cited in Novick 2003) discussed, the most unique and psychologically pervasive characteristic of contemporary terrorist attacks in the UK is that they are deliberate, targeted and primarily aimed to kill civilians and disrupt daily life routines. Due to this, the loss of safety and feelings of fear have been found to be markedly severe in survivors of terror disasters compared to other emergency situations (Dyregrov et al., 2015). Additionally, as Eyre (2008) stressed, those effected by terrorism often go beyond those who were injured and/ or bereaved by the attack to include those who were within the immediate proximity of the attack and witnessed the aftermath. Thus, thirdly the distinction between victims and non-victimised locals is not a clear differentiation within terrorist situations. Indeed, as Marshall and colleagues (2007) highlighted, terrorism creates very far-reaching populations of 'hidden victims' who require professional support to address the psychosocial impacts of intentional attacks.

Therefore, in light of the profound mental health responses terrorist survivors have been found to present, empirical research has evidenced a number of ways social workers are well positioned to provide the support needed for this distinctive type of disaster. For example, Novick (2003) explored how the therapeutic skills social workers employ in non-disaster circumstances such as empathic listening, supporting self-efficacy, community empowerment and assessing the nuanced experiences and responses to adverse circumstances are all essential roles required following a terrorist attack too. Moreover, Possick and colleagues (2017) discussed the importance of social workers in supporting whole communities to identify and organise grassroots level initiatives and programmes to address the shared trauma they face in light of a targeted attack. Effective social work assessments of the disaster related needs individuals and families have following a crisis underpin and directly inform the micro-level recovery initiatives community-based organisations often deliver to reunite, safeguard and rebuild survivors of terrorism (Parker and Ashencaen Crabtree, 2013). Additionally, due to the rise in terrorist attacks in the Global North, Sweifach and colleagues (2010) noted that a lot of the most immediate social work practices are now outlined in specific state-approved localised response plans to reduce confusion between different response teams of what urgent needs they

should be prioritising. For example, social workers have formally been recognised as the professionals best equipped to liaise with the families of victims in certain local authorities throughout the UK. As a number of empirical studies (including (Sweifach et al., 2013; McFarlane and Williams, 2012; and Yanay and Benjamin, 2005) have acknowledged, the responsibilities of liaising with families post-attack can include: meeting with families who are still searching for missing relatives; accompanying people to the morgue if a missing person is found dead to support them whilst they identify their relatives; providing psychosocial assessments to bereaved survivors; as well as building relationships with grieving families. Consequently, although the roles of social workers during the different phases of recovery vary widely based on the specific needs of survivors. Nonetheless, throughout all the tasks they support, social workers use their person-centred skills to provide the human touch to state recovery protocols within terrorist situations.

One noteworthy example of the UK's response to a terrorist disaster is the local authority response employed by the London Borough of Southwark's Public Health Team following the London Bridge and Borough Market terrorist attack in 2017. In the evening of June 3rd, three attackers drove a van into pedestrians on London Bridge before continuing on foot with knives into the Borough market killing 8 people and injuring a further 48 individuals. In addition to those physically harmed during the attack, approximately 850 members of the public witnessed the attack and a further 3000 were evacuated from the area. As Jumbe and colleagues (2020) examined in great detail, the local council's public health team delivered an innovative and noteworthy approach in response to mitigating the longer-term effects of the attack. In the first couple of days immediately following the incident, a Humanitarian Assistance Steering Group consisting of a comprehensive collection of relevant local stakeholders was established to develop a holistic response plan to meet the specific needs of this attack.

Within the first week a rapid literature review of the expert opinions and experiences from the recent Manchester Arena attack was conducted. Simultaneously, a health needs assessment of survivors was undertaken by a Mental Health and Wellbeing Sub-Group governed by the Director of Public Health. The assessment established three key areas of recovery that the teams needed to prioritise: (1) the mental health and wellbeing of victim-survivors directly affected by the incident; (2) the economic impact and loss of business within the evacuated area; and (3) re-establishing broader community cohesion, especially to support the local Muslim community. The steering group established and delivered a wide range of initiatives to meet these three areas of need, including co-ordinating a social media response; producing a wellbeing factsheet which signposted survivors to local pre-existing services; and arranging a number of mental-health workshops for the local community. From their evaluation of Southwark's social work response Jumbe and colleagues (2020) found that the wellbeing workshops had a significant reach as the techniques employed in these group sessions were also taught to teachers, faith leaders and other community stakeholders who then replicated these workshops with others. Furthermore, due to the positive response, these early workshops received a subsequent community-led Outreach and Screening Programme was set up. This delivered trauma-informed cognitive behavioural therapy and other counselling methods on a more permanent basis throughout the Borough. Although the Mental Health and Wellbeing

Sub-Group was disbanded four months following the attack, the Director of Public Health remained within the Humanitarian Assistance Steering Group to ensure the psychosocial needs of victims continued to be prioritised. This steering group continued to meet once a month to guide and shape the macro-level recovery processes for two-years following the incident.

As part of their evaluation Jumbe and colleagues (2020) returned to the Borough a year after the incident and interviewed a range of practitioners and local residents to assess the impact that Southwark's innovative public health response initiatives had had on the effected community's mental health and wellbeing. What they found was a community of victimsurvivors with nuanced and highly subjective experiences of long-term recovery. Unsurprisingly, in line with the literature examined earlier in this review, vulnerable social groups were noted to be more acutely affected. In particular, the local Muslim community discussed their increasing fear of becoming a target of hate crimes - an issue the local authorities had responded to by providing CCTV security outside local mosques. Likewise, local residents also emphasised the profound impact the police-led evacuation from their homes had on their sense of security and ability to focus on rebuilding their lives following the attack. A further finding of the interviews with minority ethnic survivors, was the lack of regular communication between statutory bodies and evacuated residents. This led to a significant amount of distrust and resentment towards law enforcement. However, it was acknowledged that the council was operating under extraordinary circumstances with little guidance and very limited human resources. For instance, the council's emergency planning team consisted of only 3 members of staff. Yet, a key finding of the Jumbe and colleagues (2020) study for future terrorism response plans was the pressing need to prioritise the communication feedback loops with local residents more. Social workers are in an advantageous position to fulfil this action due to their training in communication, engagement and participation (Dominelli, 2015). In addition, despite very positive feedback from those who attended the wellbeing initiatives, the majority of interviewees said they had not attended the workshops or seen the wellbeing factsheet. Thus, the visibility and reach of the Humanitarian Assistance Steering Group's response was limited.

Nonetheless, within the study's follow up interviews, a significant number of positive impacts were also found. For instance, the inclusion of locally nominated stakeholders to the Steering Group was identified as particularly effective in establishing and strengthening community cohesion. Importantly, this recovery approach was highlighted as only possible due to the social capital and organic relationships practitioners already had embedded with the victimised community prior to the attack. Likewise, the bottom-up nature of the trauma-responsive initiatives and events in the weeks and months following the disaster meant collaborative support between local non-profit organisations and the council was prioritised. This factor was of great importance once the funding for the Mental Health and Wellbeing Sub-Group stopped. One of the highly praised examples of multi-agency collaborations which focused on supporting the wellbeing of the effected community was the ceremonial clear up of the flowers laid at the sites of the attack. The Major, key members of the council, local religious leaders as well as some of the survivors from the attack created a human chain to remove the flowers.

Events like these required the involvement of social workers to inform and support bereaved families to attend.

Finally, in relation to UK-specific social work responses to terrorism⁷, a substantial amount of the literature related to the political conflict known as 'the Troubles' in Northern Ireland. Throughout the 30-year period of ethno-nationalist sectarian conflict between two populations, commonly referred to as nationalist Republicans (mainly self-identified as Irish or Roman Catholics) and unionist Loyalists (mainly self-identified as British or Protestants), over 3,600 people died and approximately 40,000 are known to be have injured (Manktelow, 2007). Indeed, what makes this disaster unique within Britain's recent history is how deep rooted the historical and current socio-political, geographical, economic and cultural ramifications and institutional structures present in Northern Ireland still are (Heenan and Birrell, 2011; Hayes and Campbell, 2000). Profound adverse psychological and social consequences of the Troubles have been identified within research. Most notably, the 'Cost of the Troubles' study (Fay et al., 1999) characterised the range of traumatic experiences and psychosocial impacts into two distinct categories. First, instances of 'low-level violence' such as being stopped and searched by law enforcement and being caught up in a bomb scare were found to be the most frequently experiences of local residents. These more pervasive and regular forms of trauma were found to result in the loss of community cohesion and feelings of personal safety, as well as heightened stress and anxiety, and fear of state authorities. On the other hand, 'high-intensity' experiences such as witnessing the aftermath of an acutely violent incident or having a family member injured or killed within a bomb explosion or shooting were less common but found to result in more long-lasting mental health conditions such as PTSD and clinical depression (Dorahy and Alan Lewis, 1998). However, as Peake (2001) ascertained, the organisational shift of the country's social work provisions from Northern Ireland's 11 local authorities to 4 central Health and Social Services Boards in 1972, resulted in social workers largely ignoring the consequences of the Troubles until relatively recently. The centralisation of social work provisions was implemented to provide a level of statutory impartiality regarding the geographically divided sectarian conflict. Yet, as Pinkerton and Campbell (2002) stressed, the ideological desire to remain neutral within state-led services resulted in a highly individualised social work practices which were detached from the communities that the profession aimed to serve. Thus, a more managerialist social work sector, unable to the delivery the kind of personcentred care required to meet the acute psychosocial needs disaster survivors required, was evident during the heights of the Troubles (Campbell and Healey, 1999). For instance, in an historical examination of social work caseloads in the 1970s – the most violent years of this political conflict, Haverty (1983 in Manktelow, 2007) found only 10% of the cases supported by social workers in Northern Ireland were Troubles-related.

Campbell and Healey (1999) highlighted that this seeming reluctance on the part of social workers to deal with Troubles-related incidents is not as clear-cut as the quantitative data portrays. These authors explained that any attempt to examine the role of social work (or lack

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⁷ It is important to acknowledge that many recognise the Troubles in Northern Ireland as a civil war rather than terrorism (Parker and Ashencaen Crabtree, 2013)

of it) in conflict-related interventions throughout this era must recognise the problematic nature of the State within Northern Irish society. The critique of the State's biases, especially within Republicans communities, has been argued to influence the perceived silence and inaction of social work in two concurrent ways. Firstly, Manktelow (2007) discussed how the lack of trust in the British State extended to a lack of confidence and willingness to turn to social workers for help within local communities. Likewise, the literature describes how social work training programmes and institutional policies in Northern Ireland effectively prepared social workers to respond to apolitical issues but failed to equip them to deal with the ramifications that their personal experiences and identity would have on responding to incidents relating to the sociopolitical conflict. Thus, statutory social services were historically ill-prepared to provide for the severe mental health and wellbeing impacts of this conflict within both the limitations of the training they received and the lack of relationships they held with the affected communities. Yet, as Campbell and colleagues (2013) discussed, a pivotal turning point in this disconnect was the signing of the Belfast Agreement in 1998. Also commonly referred to as the 'Good Friday Agreement', the Belfast Agreement was the pair of official documents agreed and signed by the British and Irish governments as the outcome of multi-party negotiations, approved by two referenda in both the Republic of Ireland and Northern Island which initiated a ceasefire. This monumental development in the Island of Ireland's peace process has been identified to have shaped social work provisions regarding the psychosocial needs of victimsurvivors of the Troubles (Heenan and Birrell, 2011). Indeed, the paramilitary ceasefire enabled professionals to move beyond prioritising both their own individual survival and the sector's apolitical stance to acknowledge legitimately the actuality of the violence this conflict inflicted. As Manketelow (2007) outlined, the signing of the Belfast Agreement enabled statutory organisations to move beyond a pretence of normality which their neutrality had resulted in, instead to enable the issue of sectarism to shape how social work practices could effectively respond to the psychosocial needs of affected individuals.

Moreover, a noteworthy focus of literature in this area explored, like other professions, the necessity of the social work sector (re)shaping the design and delivery of their practices to deal with the legacy of the Troubles and reflect the Agreement's official recognition that health and social services had to be reorganised. This included changes to the education and continuous professional development training offered within the profession. Moreover, these had to ensure that practices were actively anti-sectarian rather than passively neutral (Campbell and McCrystal, 2005; Pinkerton and Campbell, 2002). Consequently, social work training has been informed by reviews of best practices employed in other low-intensity civil conflicts throughout the globe including Israel, South Africa and Palestine (Heenan and Birrell, 2011) and the new social work qualifications required for those practising in Northern Ireland. Campbell and Healey (1999) stressed that during this transitional post-conflict period there remained a degree of resistance by some educators and local agencies to embedding antisectarian training into the social work curricula. This hesitancy has been found to come predominantly from personal fears for student and teacher safety as well as the apprehension of disclosing their perceived identify as either Republican or Loyalist due to the continued desire for social work to remain neutral on the conflict. Nevertheless, a number of Troublesrelated initiatives have been established within social work training in Northern Ireland in the past decade which have marked a significant shift in the position of the profession in responding to the far-reaching psychosocial impacts this conflict has inflicted. For instance, funded by the European Union through its PEACE III programme, an anti-sectarian course was added to the British social work qualification (Campbell et al., 2013). The course includes lectures and workshops specifically on social work and sectarianism which reviews government policies on supporting victim-survivors and provides explicit training on how to support conflict-related trauma to students. Within their evaluation of the programme, Campbell and colleagues (2013) highlighted a number of innovative pedagogical approaches employed throughout this module which have helped to create a sense of comfort and safety in order to openly discuss this area of the country's history which still remains so contentious even 20 years on from the Belfast Agreement. Of particular note, the evaluation praised the intentional mix of educators on the course to ensure both ethno-nationalist identities -Republican and Loyalist, were equally represented. Additionally, through the establishment of collective ground rules and the use of life stories training, most commonly employed in children and family social work training, students are encouraged to appreciate how their own experiences and family backgrounds can be utilised as a resource within their practice. Therefore, what the limited UK-specific literature regarding terrorism and social work highlights, is in addition to the acute impact disasters of any kind have been found to have on survivors; the deliberate and targeted nature of terrorism presents unique challenges for a community's recovery. Beyond the well-established protocols for first responders across the UK's different local authorities, the social work profession could benefit from more specific training, consideration and planning of what specific roles and responsibilities social workers should prioritise in terror-related incidents going forward.

The articles discussed in the terrorism section identify the importance of addressing identity issues, not only within specific communities, but also among the practitioners involved. In the grey literature, BASW funded a two-year study undertaken by Duffy and colleagues (2019) to explore the impact of 'The Troubles' on social work practice. This study also found that neutrality was key to social workers' failure to deliver the person-centred, community-based services needed in the localities they served. However, neutrality was perceived as a 'protective' or 'coping' strategy in extremely complex and challenging circumstances.

The complexities embedded within terrorist attacks mean that social workers would have to have a comprehensive set of skills to perform effectively within such contexts and be trained appropriately in doing so. A social worker functioning well within such settings would be able to complete all the BASW learning outcomes once they are given sufficient training and support to provide the holistic services required.

Supporting Other UK Disasters

In addition to the rising threat of terrorism, the UK is also increasingly being subjected to the adverse consequences of climate change. These include the significant rises in the incidents of flooding, heatwaves and wildfires experienced in the past decade. Likewise, in Britain's recent history there has been a number of tragedies which required long-term crisis support from

social work services. Namely, the Aberfan landslide in 1966 which killed 146 people; the 1985 football stadium fire in Bradford which injured 265 spectators and killed 56; the 2017 Grenfell tower fire in which 72 people died and a further 223 were displaced; the 1989 Hillsborough stadium crush which killed 96 individuals and injured over 760 more; as well as a number of pandemics including SARs, Bird-flu, Foot and Mouth disease and the current global strain of the coronavirus which produced Covid-19. What categorises these disasters together is the unintentional nature of the events. Unlike terrorism, environmental disasters do not deliberately target a specific population or area and therefore are often called 'natural' disasters. However, as Chmutina and Von Meding (2019) stressed, many hazardous situations occur due to the actions or inactions of humans with particular conditions of exposure, vulnerability or capacity. Although these conditions or hazards may arise within nature; giving the role of social vulnerability and inequality discussed throughout this review, the use of 'natural' to define particular disasters incorrectly insinuates these tragic events are 'acts of God' rather than inadvertent consequences of human acts of commission or omission.

Amongst the literature on social work in these environmental disasters, arguably the most influential incident is the Aberfan tragedy. Following a heavy period of rain, a 111-foot-high colliery spoil positioned on a hill above the Welsh village of Aberfan slid downhill into the village's junior school, killing 116 children and 28 adults. Occurring in 1966, Eyre (2008) noted that the development of formal humanitarian assistance within the UK post-disaster can be traced back to the Aberfan incident. In the mid-1960s there were very few trained mental health responders available outside of the big cities and no emergency crisis plans in place to respond to the longer-term needs of survivors. For example, as Johnes (2000) highlighted, only one family caseworker and three GPs were appointed to provide psychosocial welfare support to the whole affected community. This absence of sufficient bereavement and trauma support, although less understood in the 1960s, was heightened due to the local authority's decision to refuse outside support. The family caseworker was noted to play a highly pivotal role in the community's recovery during the two years following the disaster (Eyre, 2008). This event has shaped the key roles that social workers are now specifically trained to deliver. Most significantly, the local caseworker's responsibilities included: regularly visiting bereaved families; signposting victim-survivors to support groups; and offering counselling and grief support (although this was not formally recognised as counselling at the time due to the cultural stigma surrounding mental health interventions). However, after two years the funding for the caseworker's role in Aberfan ended and no further support was available. Nevertheless, as Johnes (2000) discussed, a number of small grassroots self-help initiatives were organically developed by local faith groups and other community-based networks which were found to aid the psychosocial recovery of this affected community informally (Johnes, 2000). Morgan and colleagues' (2003) follow up study into the longer-term impacts of Aberfan emphasised the lack of professionalised mental health and trauma recovery support, a concern that had lasting ramifications. In particular, their psychological examination of survivors found that even 33years after the disaster, over a third met the clinical criteria for PTSD. Likewise, a historical analysis of survivor's longitudinal medical files indicated significant health problems persisted for longer and more acutely in those victimised in the landslide than others who had not been involved. An issue McLean and Johnes (2000) found to be more striking occurred among male

survivors who, due to cultural attitudes towards masculinity and mental health, denied the impact that the tragedy had on their wellbeing. Consequently, they did not accept the very little support which was offered following the disaster.

Then as awareness of disaster-related needs developed and scientific knowledge regarding mental ill-health and trauma progressed, including crucially the recognition of PTSD as a psychiatric condition in 1980, social work's role within disasters recovery plans began to be slowly accepted. Most significantly, a series of poorly handled mass fatalities in the late 1980s, including the Lockerbie bombing, the Bradford stadium fire and the fatal Hillsborough crush, led to the development of formal emergency protocols which included health and social care bodies throughout the UK (Eyre, 2008). What was especially noteworthy about these disasters, according to Hodgkinson and Stewart (1991), was the lack of preparedness and immediate involvement of social services to respond to and mitigate the long-term mental health effects that disasters are known to cause, even though the newly established emergency response teams were situated within the same local authority services as the social work teams.

In the weeks following the Hillsborough disaster, for example, crisis support teams coordinated recovery efforts with social work teams from across nine local authorities to provide the longerterm support bereaved families and traumatised victims required (Jones, 2018). In practice, this support involved a variety of pragmatic responsibilities such as, staffing crisis help lines and signposting victims to relevant services, as well as the more therapeutic roles involving grief counselling and community outreach where possible (Eyre, 2008). Yet, Davis (2013) noted the cross-authority involvement resulted in confusion as to which team was responsible for all the different recovery initiatives. Moreover, Newburn's (1993) critical examination of the Hillsborough disaster revealed that social work support was not well received. As a statutory body, social work in the UK represents the State, especially in working class communities. In the case of the fatal stadium crush, this initially resulted in a significant lack of trust and suspicion when social workers visited the family homes of bereaved and non-fatally injured victims (Jones, 2018). A wealth of empirical studies of the disaster (including Coleman et al., 1990; Davis and Scraton, 1999; and Scraton, 1999) found that official responses and state-led initiatives within the recovery processes often exacerbated rather than mitigated the adverse impact of the incident. Thus, social work roles and responsibilities within the UK have developed over time in response to the learning from range of diverse and politically complicated disaster situations. Informed by the learning the resources reviewed here, local authority crisis management teams always now include social workers to understand more comprehensively the complexities mitigating the longer-term psychosocial effects of disasters.

Finally, flooding has arguably become the most pressing and increasingly common kind of environmental disaster from which the UK is at risk. Twigger-Ross and colleagues (2014) in their government commissioned report into UK flood resilience, argued that effective mitigation strategies and recovery responses to flooding are now essential issues for all local authority and community-based organisations. In light of this, the health and social impacts of flooding have been documented in a number of studies. Amongst the factors noted in the literature, Easthope (2012) identified the damage to survivors' homes had the most widespread

impact. Most acutely, the loss of personal space and material possessions, including sentimental items, has a significant impact upon an individual's sense of security and community cohesion. The social, environmental and emotional ability to recover from severe flooding has been found to closely influence a community's resilience and economic wellbeing and therefore, become a central priority within British emergency planning in recent years (Twigger-Rose et al., 2014). Of particular note, the extensive flooding throughout June and July 2007, which affected several parts of England, ended in a major civil emergency. As Pitt (2008: 3) described in the report commissioned by the UK Environmental Secretary of State:

"The floods that struck much of the country during June and July 2007 were extreme, affecting hundreds of thousands of people in England and Wales. It was the most serious inland flood since 1947. In the exceptional events that took place, 13 people lost their lives, approximately 48,000 households and nearly 7,300 businesses were flooded and billions of pounds of damage was caused. In Yorkshire and Humberside, the Fire and Rescue Service launched the 'biggest rescue effort in peacetime Britain'.

In addition to the immediate harm to residents' safety, the flooding caused significant damage to local services and infrastructures and delayed the recovery processes. As McFarlane and Williams (2012) outlined, there was a lack of available clean water, power supplies and the sewage system were damaged, and many of the key workers for the local emergency services and essential industries were also personally impacted by the floods. Thus, due to the farreaching damage of the flooding, even those whose homes or businesses had not been directly affected by the extreme levels of water, whole communities were still impacted by the structural, institutional and environmental destruction that the extreme weather caused (Mendonza-Tinoco et al., 2017). According to Jones (2018) this incident of flooding demonstrated a severe lack of preparedness in both environmental mitigation strategies such as dredging sections of rivers and improving the drainage systems; and in disaster planning to ensure essential services would continue to run and that recovery processes to support vulnerable groups would be enacted quickly.

Moreover, a number of the resources on flooding stressed how the 2007 flood significantly impacted survivor's mental health and psychosocial resilience. Eyre (2008) emphasised it is the combination of multiple stresses which has been found to most adversely impact an individual's ability to cope and recover. Most notably, flooding incites fear and anxiety over the threat of further incidents; the loss of safety and belonging caused by being placed in temporary housing; as well as financial concerns regarding fixing physical damage and the loss of income due to the damage businesses faced. As Gloucestershire County's Scrutiny Inquiry (2007) Committee recalled, residents experienced acute anxiety every time it rained out of fear it would flood again, with many survivor's noting the fear and vulnerability of the approaching winter was impacting their sleep and overall mental health. Furthermore, in their follow up examination of the longer-term wellbeing of flood survivors, Paranjothy and colleagues (2011) found the prevalence of anxiety, PTSD and depression were all between two and five times higher amongst those who had experienced floods than the rest of the population. Most severely, psychological distress increased amongst the residents who had had to evacuate their

homes due to the flooding event. Thus, amongst all recommendations for public health and social care agencies to embed psychosocial risk factors into future emergency planning and preparedness, their study stressed evacuations should only be considered where absolutely essential and suggested instead that other non-evacuation strategies be explored in the first instance (Paranjothy et al., 2011).

In response to the 2007 floods, a number of mitigation strategies were developed throughout the UK including property protection measures, the creation of flood resilience networks and community champions as well as the appointment of volunteer flood wardens (Twigger-Ross et al., 2014). However, reflecting a much more substantial body of international literature into the environmental justice issue underpinning flood recovery, Easthope and Mort (2014) examined the disproportionate impact the flood and recovery strategies had on socially vulnerable groups. For instance, in their interviews and observations in the two years following on from the floods in Toll Bar near Doncaster, a severely damaged working-class town in England, a dominant finding throughout the community was that residents felt that they had been forgotten and abandoned by the local authorities. In response to this lack of top-down support, Easthope (2012) evidenced the often hidden, community-led methods of recovery at risk populations employed. In the first-year post-flood, they found residents rallied together to share laundry and childcare responsibilities due to the absence of washing machines in the caravans that they were temporarily housed in and the loss of childcare services that followed the flooding. Walker and Burningham (2011) highlighted, that although flooding in the UK has yet to be fully examined as an environmental justice issue as has occurred, for example, in the US following the acute impact that Hurricane Katrina had on poor and marginalised communities, there is still a limited body of research which is beginning to account for the social distribution and fairness in flood management strategies. Within the context of Britain, this rights-based critique of the inequalities evident in patterns of flood exposure and ability to recover highlights the disproportionate impact that extreme weather events have had on those from deprived and socially excluded groups (Pitt, 2008; Walker and Burningham, 2011; Easthope and Mort, 2014).

Therefore, for the social work profession, these limited but significant UK-specific findings reflect the BASW (2019) CPD guidelines need internationally for practitioners to:

- 'Develop creative and ethical responses to the unique/unpredictable challenges of a disaster'; and
- 'Engage with multi-professional teams, agencies and/or stakeholders to provide a coordinated response' advocate.

Conclusion

This systematic review of the global literature on social work's roles and responsibilities in disaster interventions has concluded that there are seven overarching themes that involve social workers. First, social workers play a crucial role in the preparation, planning and adaption strategies employed to mitigate disaster situations. In particular, their knowledge and expertise on trauma, counselling and family support is vital when designing and disaster mitigation plans

to ensure the profound psychosocial impact crisis situations can have on survivors are sufficiently accounted for and addressed. Secondly, this detailed review has highlighted the multi-faceted role that social workers play in the micro-, meso- and macro-levels of recovery. Most notably, this review found two distinctive areas which benefit from social work support post-disaster: designing and delivering person-centred mental health interventions; and empowering affected residents to organise and collectively be actively involved in the longer-term recovery of their community. Following this, a critical exploration of the theme of community engagement exposed the pressing need for social workers actively to shape their practice responses in culturally responsive ways that fit the specific needs of the affected community. To achieve this end, this review discussed the benefits of prioritising the communication strategies and feedback loops between state authorities and local communities as well as reflecting the values and cultural norms of affected communities within recovery efforts.

Fourth, this systematic literature review evidenced the far-reaching inequalities and vulnerabilities that at risk social groups face within disaster situations. Although a small number of resources explored every socially differentiating characteristic, the volume of literature gathered on age, race and gender outlined the stark disparities that older populations, minority ethnic groups and women have faced globally. Following on from the disproportionate impact socially vulnerable groups were found to face, the next section of the review outlined a social justice rights-based approach to disaster interventions that social workers could employ to counteract these intersecting risks. Specifically, this section underpinned by the green social work model, found that the reviewed the literature advocated that social workers' roles in disasters supported environmental justice by prioritising the equal distribution of both preparation and recovery efforts for marginalised and often politically forgotten communities. Next, an examination of self-care and psychosocial resilience within social workers highlighted the adverse consequences a lack of training and top-down institutional support can have on front line practitioners. Especially within disaster situations, this section discussed the ways in which double exposure to a traumatic event can result in a number of work-related mental health illnesses including burnout, compassion fatigue, secondary traumatic stress and even PTSD among social workers. Then finally, the seventh section of this review purposefully discussed the responses to a number of UK disasters to outline the key lessons future training and responses can learn from previous recovery efforts. Notably, this section was unable to review comprehensively or proportionately all the disasters that Britain has experienced in recent years as there was a significant lack of social work literature which examined or theorised a particular disaster intervention. Consequently, this review recommends future research into social work and disasters. In particular, such research would benefit from prioritising the roles and responsibilities that social workers have held both historically within national incidents and the learning that these examinations can have on future practice throughout the four nations of the UK. This future research could include the fire in the Grenfell Tower disaster, the social work responses to the COVID-19 pandemic, and the best structures to support self-care and mitigate the psycho-social impact that disaster interventions can have on the practitioners supporting others in these catastrophic situations.

The review concludes the mapping of the skills sets in the *BASW CDP Guidance On Social Workers' Roles Undertaken During Disasters* against the resources most often cited within the systematic literature search and which are also referred to within this review in Table 2 below. These resources have been mapped against the 12 learning outcomes identified within BASW's (2019) guidance. Table 2 aims to assist social workers continued professional development (CPD) by signposting practitioners to specific resources relevant to particular skills and areas for improvement established within the CPD guidelines⁸. Their identification enables social workers to read them in greater detail.

Table 2: The BASW CDP Skill Sets Mapped Against Key References Cited

Learning outcomes	Key Articles
Explain the role of the social worker in the disaster cycle	Hall, J. A., Carswell, C., Walsh, E., Huber, D. L., and Jampoler, J. S. (2002) 'Iowa Case Management: Innovative social casework', <i>Social Work</i> , 47(2), pp. 132- 141.
including preparedness, response and recovery.	Dominelli, L. (2015) 'The opportunities and challenges of social work interventions in disaster situations', <i>International Social Work</i> , 58(5), pp.659-672.
	Huimin, B., Kenan, W., Hua, F. and Qiongwen, Z. (2009) 'A study of social workers' involvement in the relief and reconstruction efforts following the 5.12 Wenchuan earthquake' <i>China Journal of Social Work</i> , 2(3), pp.211-219.
	Enarson, E. (1999) 'Violence against women in disasters: A study of domestic violence programs in the United States and Canada', <i>Violence Against Women</i> , 5(7), pp.742-768.
	Rowlands, A. (2004) 'Reappraising social work's contribution to recovery from disaster and trauma: Applying a strengths perspective', <i>Asia Pacific Journal of Social Work and Development</i> , 14(2), pp.67-85.
	Video on social workers in the Wenchuan Earthquake: https://www.youtube.com/watch?v=-EH84DZIjCg
	Video on disaster reduction management (IFRC): https://www.youtube.com/watch?v=Mxp6R1D2Kng

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⁸ However, it is worthwhile noting, that all 12 CPD outcomes are purposefully cross-cutting and therefore, the resources listed within the table may speak to more than the one outcome that they are mapped against.

Utilise social work skills for psychosocial, practical and emotional support.

Adhikari, R. P., Upadhaya, N., Paudel, S., Pokhrel, R., Bhandari, N., Cole, L. and Koirala, S. (2018) 'Psychosocial and Mental Health Problems of Older People in Post-earthquake Nepal', *Journal of Aging and Health*, 30(6), pp. 945-964.

Alawiyah, T., Bell, H., Pyles, L. and Runnels, R.C. (2011) 'Spirituality and faith-based interventions: Pathways to disaster resilience for African American hurricane Katrina survivors', *Journal of Religion and Spirituality in Social Work*, 30(3), pp. 294-319.

Alston, M., Hargreaves, D. and Hazeleger, T. (2018) 'Postdisaster Social Work: Reflections on the Nature of Place and Loss', *Australian Social Work*, 71(4), pp. 405-416

Barney, R. (2019), 'How Social Workers Can Use a Human Rights Approach to Disasters: Lessons Learned from the International Community', *Journal of Human Rights and Social Work*, 5, pp.1-11.

Sim, T. and Dominelli, L. (2017) 'When the mountains move: A Chinese post-disaster psychosocial social work model', *Qualitative Social Work*, 16(5), pp.594-611.

Warsini, S., West, C., Ed, G.D., Res Meth, G.C., Mills, J. and Usher, K. (2014) 'The psychosocial impact of natural disasters among adult survivors: An integrative review'. *Issues in Mental Health Nursing*, 35(6), pp.420-436.

Evaluate the impact of disasters on individuals, families, communities including firms and institutions.

Dombo, E.A. and Ahearn, F.L. (2017) 'The aftermath of humanitarian crises: A model for addressing social work interventions with individuals, groups, and communities', *Illness, Crisis & Loss*, 25(2), pp.107-126.

Drolet, J., Ersing, R., Dominelli, L., Alston, M., Mathbor, G., Huang, Y. and Wu, H. (2018) 'Rebuilding lives and communities postdisaster: a case study on migrant workers and diversity in the USA', *Australian Social Work*, 71(4), pp.444-456.

Twigger-Ross, C., Kashefi, E., Weldon, S., Brooks, K., Deeming, H., Forrest, S., Fielding, J., Gomersall, A., Harries, T., McCarthy, S. and Orr, P. (2014) *Flood resilience community pathfinder evaluation: Rapid evidence assessment.* London: Defra.

Reflect on the wider contexts, causes and implications of a disaster including at local, national and international levels.	Walker, G. and Burningham, K., (2011) 'Flood risk, vulnerability and environmental justice: evidence and evaluation of inequality in a UK context', <i>Critical social policy</i> , 31(2), pp.216-240.
	Zakour, M.J. and Gillespie, D.F., (2013) Community disaster vulnerability. <i>Theory, Research, and Practice</i> . London: Springer
	Video of responses to Lockerbie, showing its impact on everyday life: https://www.youtube.com/watch?v=d21PKVeMURA
	Video of impact of the 2008 Wenchuan Earthquake on bereaved parents: https://www.youtube.com/watch?v=tjI_S15gIHY
	Dominelli, L. (2010) 'Globalization, contemporary challenges and social work practice'. <i>International Social Work</i> , <i>53</i> (5), pp. 599-612.
	Findley, P.A., Isralowitz, R. and Reznik, A. (2014) 'Emergency preparedness and intervention: Social work education needs in Israel', <i>Journal of emergency management</i> , 12(3), pp.229-235.
	Wu, Y., Wen, J. and Wei, H. (2019) 'Community-centred' as an integrated model for post-disaster social work: The case of earthquake-stricken Ludian, China', <i>Asia Pacific Journal of Social Work and Development</i> , 29(2), pp.163-177.
	Video on the contexts within which social workers have to operate in during the Balkan Floods: https://vimeo.com/97121764
Promote the importance of the social work role in and advocate for the highest quality social work services for people before, during and after a disaster.	Akerkar, S. (2007) 'Disaster Mitigation and Furthering Women's Rights: Learning from the Tsunami', <i>Gender, Technology and Development</i> , 11(3), pp. 357-388.
	Akerkar, S. and Devavaram, J. (2015) 'Understanding Rights-Based Approach in Disasters: A Case for Affirming Human Dignity', <i>Hazards, Risks and, Disasters in Society</i> . London: Academic Press, pp. 79-97.
	Dominelli, L. (2014) 'Internationalizing professional practices: The place of social work in the international arena', <i>International Social Work</i> , 57(3), pp.258-267.
	Hayward, R.A. and Joseph, D.D. (2018) 'Social Work Perspectives on Climate Change and Vulnerable Populations in the Caribbean:

	Environmental Justice and Health', <i>Environmental Justice</i> , 11(5), pp.192-197. Rapeli, M. (2018) 'Social capital in social work disaster preparedness plans: The case of Finland', <i>International Social Work</i> , 61(6), pp.1054-1066.
Explain legislation, policy, procedures and guidance that are relevant in specific disaster contexts.	Rowlands, A. (2013) 'Disaster recovery management in Australia and the contribution of social work', <i>Journal of Social Work in Disability & Rehabilitation</i> , 12 (1-2), pp.19-38. Dominelli, L. (2011) 'Climate Change: Social Workers' Roles and Contributions to Policy Debates and Interventions', <i>International Journal of Social Welfare</i> , 20(4), pp. 430-438. Eyre, A. (2008) Meeting the needs of people in emergencies: a review of UK experiences and capability. <i>Emerging Health Threats Journal</i> , <i>I</i> (1), p.7070.
	Video on the improvements made to emergency policies and practices in China after the 2008 Wenchuan Earthquake: https://www.youtube.com/watch?v=5DE2e4AKi_w
Prioritise the perspectives of victim-survivors who have been impacted by a disaster.	Alipour, F., Khankeh, H.R., Fekrazad, H., Kamali, M., Rafiey, H., Foroushani, P.S., Rowell, K. and Ahmadi, S., (2014). Challenges for resuming normal life after an earthquake: a qualitative study on rural areas of Iran. <i>PLoS currents</i> , 6.
	Baum, N. (2014) 'Professionals' double exposure in the shared traumatic reality of wartime: Contributions to professional growth and stress', <i>The British Journal of Social Work</i> , 44(8), pp.2113-2134.
	Barusch, A. S. (2011) 'Disaster, vulnerability, and older adults: Toward a social work response', <i>Journal of Gerontological Social Work</i> , 54(4), pp. 347-350.
	Bragin, M., Tosone, C., Ihrig, E., Mollere, V., Niazi, A. and Mayel, E. (2016) 'Building culturally relevant social work for children in the midst of armed conflict: Applying the DACUM method in Afghanistan', <i>International Social Work</i> , 59(6), pp.745-759.
	Video of the impact of the Aberfan Disasters on the community: https://www.youtube.com/watch?v=QpcUV-m0iU0

	Video of a victim-survivor speaking about the Dunblane massacre https://www.youtube.com/watch?v=3Box9xnJSWM
	Video of the impact of the 2008 Wenchuan Earthquake on people: https://www.youtube.com/watch?v=UiJWl6kPgnI
Utilise research-informed practice in disasters and apply relevant evidence.	Rowlands, A. (2013) 'Social work training curriculum in disaster management', <i>Journal of Social Work in Disability & Rehabilitation</i> , 12(1-2), pp.130-144.
	Ku, H.B. and Ma, Y.N. (2015) 'Rural–Urban Alliance' as a new model for post-disaster social work intervention in community reconstruction: The case in Sichuan, China', <i>International Social Work</i> , 58(5), pp.743-758.
	Dominelli, L. (ed.) (2018) <i>The Routledge handbook of green social work</i> . London: Routledge.
Engage with multi-professional teams, agencies and/or stakeholders to provide a coordinated response.	Rapeli, M. (2018) 'Social capital in social work disaster preparedness plans: The case of Finland', <i>International Social Work</i> , 61(6), pp.1054-1066.
	Zakour, M (2008) Social capital and increased organizational capacity for evacuation in natural disasters. <i>Social Development Issues</i> , 30(1), pp.13-28.
	Yagi, A. (2016) 'Report on Fukushima Counseling Support Professional Team: Interdisciplinary Team Approach for Psychosocial Care of Evacuees'. In <i>Mental Health and Social</i> <i>Issues Following a Nuclear Accident</i> . Tokyo: Springer, pp 29-43.
Develop creative and ethical responses to the unique/ unpredictable challenges of a disaster	Abbas, S. R. and Sulman, J. (2016) 'Nondeliberative Crisis Intervention in Disaster Zones: Social Group Work Using Guided Artwork with Child Survivors', <i>Social Work with Groups</i> , 39(2-3), pp. 118-128.
	Dominelli, L. (2013) 'Environmental Justice at the Heart of Social Work Practice: Greening the Profession', <i>International Journal of Social Welfare</i> , 2013, 22(4): 431-439. DOI: 10.1111/ijsw.12024.
	Bryant, L., Garnham, B., Tedmanson, D. and Diamandi, S. (2018) 'Tele-social work and mental health in rural and remote communities in Australia', <i>International Social Work</i> , 61(1), pp.143-155.

	Pyles, L. (2015) 'Participation and other ethical considerations in participatory action research in post-earthquake rural Haiti', <i>International Social Work</i> , 58(5), pp.628-645.
Practice self-care and utilise available support and supervision.	Adams, R. E., Figley, C.A and Boscarino, J.A. (2007) 'The Compassion Fatigue Scale: Its Use with Social Workers Following an Urban Disaster', <i>Research on Social Work Practice</i> 18(3), pp. 238-250.
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Finally, three overarching research questions were explored through the 325 resources gathered through the systematic method employed for this review. These concerned the roles that social workers perform in disaster situations; the efficacy of their actions; and how disaster interventions could be improved. The systematic literature review revealed that although there are countless articles on disasters in general, only a limited number are social work specific. Within these, the review revealed that social workers perform a wide range of roles which vary according to the stage of the disaster, the type of disaster, the location of the disaster, and the people involved in the disaster including local populations, national political leaders, and external actors from overseas. These roles draw upon generic social work skills with adaption to local circumstances and cultures, and the profession's value base and ethical norms. The main focus of their roles in the immediate relief period is to provide practical assistance. Later, especially during recovery and reconstruction, their roles are varied and include advocating for transformations that change policy and eliminate the structural inequalities that undermine people's lives, livelihoods and well-being before, during and after a disaster when communities seek to rebuild themselves.

Social workers' endeavours were found to be fairly successful in achieving a considerable amount with the limited resources at their disposal. However, their efficacy was often hampered by inadequate resourcing, political conflicts, mistrust if they were from outside the local area, and being viewed with suspicion if they were seen as (even when they were not) biased among the different sides in a local conflict, regardless of the cause. Moreover, the lack of care towards social workers, whether by employers who were often located elsewhere, irregular debriefing, and overcommitment on the part of social workers who often worked themselves to the ground by not taking sufficient care of themselves with regular rest, leisure activities and plenty of sleep, meant that the amount of time that social workers could stay in the field was limited if they were to avoid burnout. Consequently, a number of agencies limited field duty to two weeks. The stronger, and larger organisations, especially those headquartered overseas had better policies to implement a duty of care towards their employees. But this often set up local conflicts between overseas helpers and local ones, especially in matters of pay

where local workers paid by local organisations were less well-remunerated than those employed by large overseas donor agencies.

Overall, social workers felt more comfortable providing services on the ground than they did lobbying governments or advocating for social change in local communities or structures. This could lead to their disappointing victim-survivors who then felt unsupported by the lack of what they called 'active intervention' on the part of those that came to their help. Consequently, they felt better supported during the immediate relief and recovery than they did during the reconstruction phases. At the same time, the majority of overseas social workers left within a short period of time, and often before the reconstruction phase. And, they did not consider it their role to change existing social relations, although they often worried about the inequalities that persisted, and in some cases were strengthened by the realignments that occurred politically, economically and socially following a disaster.

Social work during times of disasters is a complex, nuanced and difficult business. Responding after a disaster is the most problematic of responses, and it is the reason many veterans of the disaster risk management systems argue that prevention and preparedness should be where the main humanitarian efforts are prioritised. In this regard, the United Nations (UNISDR) claims that for every \$1 spent on prevention, it saves \$7 in reconstruction. Disaster work is not appropriate for all social workers, and so employers should resist the temptation to require that all social workers participate in disaster interventions. However, for those that do, whether mandated social workers or volunteers, employers should fulfil their duty of care towards their employees. This includes providing adequate training — for long-term and short-term interventions; adequate resources to their work; and regular high quality supervision and support.

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