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Post-disaster social work research: A scoping review of the evidence for practice

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Abstract

The aim of this study was to understand the extent, range and nature of social work research activity after natural disasters and to identify the implications for future research and practice. A Scoping review methodology framework was used search of three databases: Web of Science, ProQuest and Informit was conducted to identify relevant studies between 2000 and 2018. Selection of studies was based on empirical research about social work and natural disasters and/or authored by social workers. Study selection found a total of 38 relevant articles. Charting the data was conducted and the following areas of focus were summarised: (1) interventions relating to psychosocial care, aid work and community work; (2) the effects of disasters on people and mediators of these effects; (3) social work education and challenges in disaster relief; and (4) measuring mental health outcomes of people who have experienced a disaster event. This scoping review has established that there is a range of social work literature focused on natural disasters that primarily examines social work interventions, the effects of disasters and social work education. Future social work research and practice needs to focus on the types and timing of interventions that promote positive recovery following natural disasters.

Keywords

Disaster, interventions, mental health, social work

Introduction

Alongside other emergency services and health and social care professionals, social workers play key roles in response and recovery efforts in many disaster contexts. As such, they contribute to practice, policy and research. A Social Work Disaster Network was established in 2016 to bring together social work academics and practitioners from Australia and New Zealand through an annual workshop. This network has sought to articulate the social work contribution to disaster management, and in doing so has become aware of the need to establish a research agenda. The paucity of appropriate literature available means the evidence for social work practice in disaster contexts is still in its infancy, with much of the published literature providing a description of practice approaches (Abbas and Sulman, 2016), programmatic or educational interventions through case studies (Cooper and Briggs, 2014; Findley et al., 2017; Ku and Ma, 2015) or reflective pieces (Corin, 2011; Du Plooy et al., 2014). While these forms of knowledge are critical for our profession (reflecting the values-based and reflexive stance of social work), it makes establishing an evidence for social work practice challenging and therefore the development of a knowledge base more urgent. This study highlights the valuable social work research endeavours that have been undertaken to date and the implications these have for future social work research and practice.

This aim of this scoping review is to establish the extent, range and nature of the published literature relating to social work research in disaster contexts to date, to identify the implications for current practice and to propose a future research agenda. The emphasis in this scoping review is on the role of social work practice *following* natural disaster events. Less research evidence for social work contributions to disaster risk reduction and mitigation is apparent, despite growing recognition of the socio-environmental dimensions of disasters (World Health Organization [WHO], 2019).

Given our national contexts and particular disaster experiences, we chose to focus on natural disasters. For the purposes of this review, the WHO's (2019) description of natural disaster events was used, as it is widely recognised globally and includes events such as

earthquakes, tsunamis, volcanic eruptions, landslides, hurricanes, floods and wildfires. They have an immediate impact on human lives and often result in the destruction of the physical, biological and social

environment of the affected people, thereby having a longer-term impact on their health, wellbeing and survival.

We note from the outset that this definition of ‘natural’ disasters is highly contentious given the many human factors in climate change and the increase in catastrophic events (Drolet and Amy, 2019). We note, for instance, that the United Nations Office for Disaster Risk Reduction (UNDRR, 2017) defines disasters as being natural, anthropogenic or socio-natural in origin, and in this scoping review we use the WHO (2019) definition in acknowledgement of our primary focus on these types of disaster events (as distinct from a terrorist-related disaster or conflict, for example) where there is a major impact on both the physical environment and people’s lives. The disasters to which we refer in this review as ‘natural disaster’ events were chosen as a focus as these are more likely to prompt an immediate and collective response that will involve the social work profession regardless of their origin. We also note that while ‘natural hazards’ is the more contemporary term (Drolet and Sampson, 2017; UNDRR, 2017), a preliminary literature search yielded no results for social work studies according to our inclusion criteria.

Method

A scoping review method enables the identification of research knowledge and gaps. As Arksey and O’Malley (2005) note, rather than examining the quality of the research activity, scoping reviews are a way to understand phenomena and are often used as a first step as they allow researchers to see whether undertaking a full systematic review is a feasible option. The scoping review method proposed by Arksey and O’Malley (2005) was used to establish ‘the extent, range, and nature of research activity’ in relation to social work and disasters. This method involves five stages: (1) identifying the research question; (2) identifying relevant studies; (3) study selection; (4) charting the data; and (5) collating, summarising and reporting results (Arksey and O’Malley, 2005). It was anticipated that there would be a paucity of evidence in the social work literature related to natural disasters, and that this methodological approach would elicit the richness and depth of the quality of the research that has been done on this topic.

This scoping review wanted to understand the following *research question*: ‘What is the extent, range and nature of social work research activity following natural disaster events?’

Searches were conducted using the Web of Science, ProQuest and Informit databases for literature published between January 2000 and December 2018 to *identify relevant studies* to current social work practice. The search was limited to this time period as this is more reflective of contemporary practice and research in disaster events/management that are ever-changing and evolving. During this period, there has been much change in how disaster management is conceptualised, and the intention of this review was to understand this evidence to inform and drive a future research agenda. The search terms used were ‘social work’ and ‘disaster’. Table 1 summarises the inclusion and exclusion criteria.

As shown in Figure 1, based on the search terms (‘social work’ and ‘disaster’) and the inclusion criteria, a total of 556 articles were initially retrieved, with 63 articles identified as potentially relevant to the study. To determine *study selection*, close full text review of these 63 articles by three of the authors (M.A., J.B. and L.H.) led to the exclusion of a further 25 articles based on non-empirical research, book chapters and disasters that were not within the WHO (2019) definition of a natural disaster. After full review of the remaining articles, 38 met all study inclusion criteria. Throughout screening and full review, any disagreements about inclusion or exclusion were discussed and reconciled as a team.

Table 1. Inclusion and exclusion criteria.

Inclusion criteria	Exclusion criteria
Keyword: 'social work'	
Keyword: 'disaster'	
Empirical studies only, relating to disasters according to the WHO definition: 'earthquakes, tsunamis, volcanic eruptions, landslides, hurricanes, floods and wildfires'	–Articles relating to social work policy, theory or critical reflections
Peer-reviewed journals	–Articles relating to human-made disasters such as terrorist attacks or war
English language	Grey literature, conference papers, reviews, reflections
No geographic limitation	Book chapters
	Inaccessible online

WHO: World Health Organization.

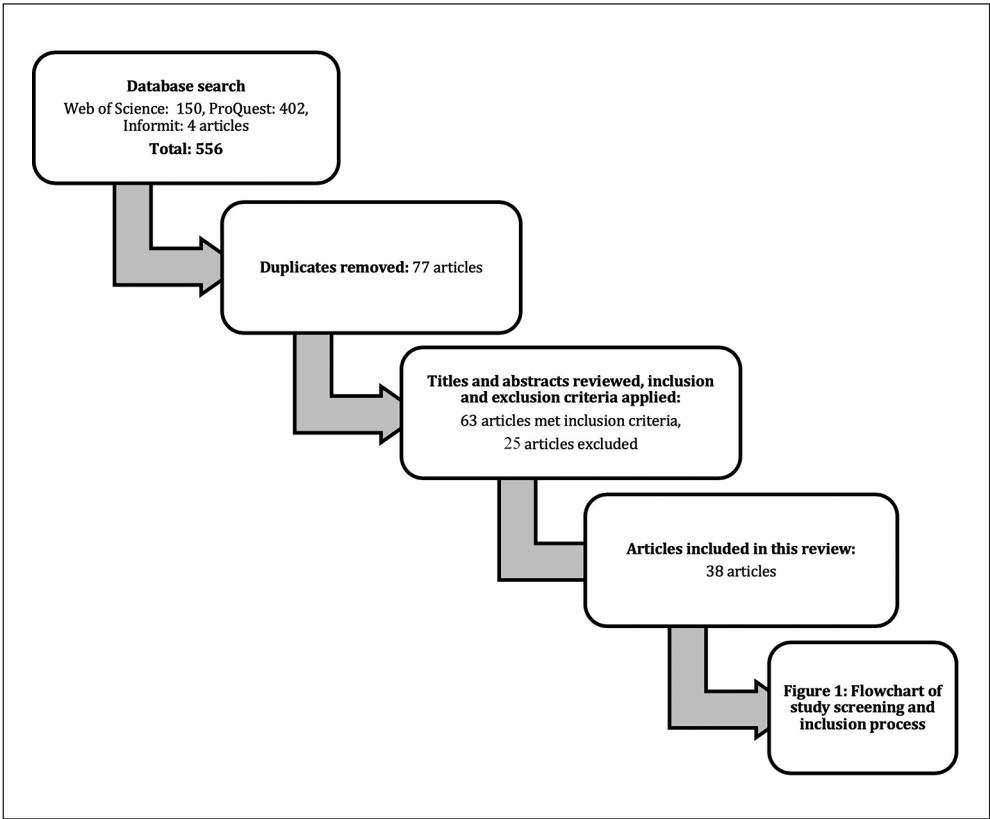


Figure 1. Flowchart of study screening and inclusion process.

Results

Study design and features of post-disaster social work empirical literature

Following *study selection*, a total of 38 articles met the inclusion criteria, as shown in Table 2. These

38 articles related to 35 different empirical studies. Three articles related to one study after the Sri Lankan tsunami (Dominelli, 2014, 2015; Vickers and Dominelli, 2015); two articles related to one post-hurricane study in the United States (Tosone et al., 2015, 2016); and two articles related to one study related to the Wenchuan Earthquake in China (Huang and Wong, 2013; Huang et al., 2014).

Table 3 summarises the nature of these articles by way of disaster type and location and shows that most studies relating to social work and disasters have been published in the United States and focus on hurricanes.

Of note is that many of these studies were conducted by researchers located outside of the country where the disaster occurred (Becker, 2009; Benson et al., 2016; Cooper et al., 2018; Dominelli, 2014, 2015; Doostgharin, 2009; Drolet et al., 2018; Huang and Wong, 2013; Huang et al., 2014; Larson et al., 2015; Pentaraki, 2013; Powell and Leytham, 2014; Sim et al., 2013; Vickers and Dominelli, 2015). Studies of disasters in Australia, Barbados, Finland, Hong Kong, South Korea, Taiwan and the United States were conducted by researchers from within those countries (Bell, 2008; Chae et al., 2005; First et al., 2018; Fogel, 2017; Harms et al., 2015; Hawkins and Maurer, 2010; Hickson and Lehmann, 2014; Kranke et al., 2017; Kreuger and Stretch, 2003; Kulkarni et al., 2008; Leitch et al., 2009; Lemieux et al., 2010; Liu and Mishna, 2014; Marlowe, 2015; Plummer et al., 2008; Prost et al., 2018; Pyles, 2011; Rapeli, 2018; Rock and Corbin, 2007; Tang and Cheung, 2007; Tosone et al., 2015, 2016; Tudor et al., 2015). Disasters occurring in China, Iran and New Zealand also had studies that involved collaborations of both insider and outsider researchers (Benson et al., 2016; Cooper et al., 2018; Doostgharin, 2009; Drolet et al., 2018; Huang and Wong, 2013).

The research methods employed in the 35 studies were diverse, as illustrated in Table 4. The majority were qualitative studies ($n=18$, 51.4%), which used interviews (structured and semi-structured) and focus groups to collect data from participants. Data were also collected using surveys designed by the researchers or validated measures used in other study samples. Only two adopted mixed method designs (Harms et al., 2018; Hickson and Lehmann, 2014). A notable feature of these empirical studies is that most used multiple qualitative methods within their overall design.

Areas of focus in social work research

Charting the data showed that articles describing social work research in disaster contexts focused on (1) social work interventions ($n=15$), (2) the effects of disasters on people and mediators of these effects ($n=19$), (3) social work education and challenges in disaster relief ($n=11$), and (4) use of validated measures or development of research measures ($n=2$). Many of the 38 articles focused on multiple themes, as outlined below.

Social work interventions. Of the 15 articles that focus on social work interventions: five discuss psychosocial care and therapy (Becker, 2009; Bell, 2008; Benson et al., 2016; Cooper et al., 2018; Hickson and Lehmann, 2014); five articles focus on aid work (Alipour et al., 2015; Dominelli, 2014, 2015; Drolet et al., 2018; Kulkarni et al., 2008); another four look at group work (Huang and Wong, 2013; Larson et al., 2015; Powell and Leytham, 2014; Tudor et al., 2015); and one article examines community work (Tudor et al., 2015).

The findings from these studies highlighted the importance of psychosocial care, assessment, case management and counselling in responding to the mental health and well-being needs of individuals post disaster (Becker, 2009; Bell, 2008; Hickson and Lehmann, 2014). Typically, case management in disasters has entailed identifying, assessing, planning, linking, monitoring and advocating for survivors, with coordination being a critical element of a successful response (Bell, 2008). According to a study by Hickson and Lehmann (2014), Australian social workers involved

Table 2. Summary of articles included in the scoping review.

Author, year	Disaster type and country	Research design	Sample	Measured variables	Key findings	Theme
Alipour et al. (2015)	Earthquake, Iran	Qualitative. Interviews, focus groups and field notes	N=27 participants (20 earthquake survivors, 3 social workers, 3 psychologists, and 2 local health workers with expertise in disaster recovery).	Not applicable	Themes: (1) social vulnerability, (2) social uncertainty, and (3) ignorance of local social capital.	Mediator – (social) social capital.
Becker (2009)	Tsunami, India	Randomised control trial.	N=200 (100 women in psychosocial care group and 100 women in control group)	Impact on Event Scale (IES) and self-reporting questionnaire (SRQ).	Intervention group showed improvement in post-trauma symptoms after 3 months of psychosocial care intervention.	Psychosocial care. <u>Measuring outcome.</u>
Bell (2008)	Hurricane, USA	Qualitative. In-depth interviews, public meeting observations and document analysis.	N=78 case managers, volunteers, supervisors, and managers from 50 agencies.	Not applicable	Survivors continued to struggle towards self-sufficiency with many not understanding, trusting or engaging with service providers. Lack of cultural knowledge, lack of jobs, transportation and affordable housing coupled with survivors' trauma and pre-existing needs created new difficulties for both survivors and case managers. Case managers reported positively about their coordination of efforts to assist hurricane survivors.	Psychosocial care. <u>Effects: (social) self-sufficiency. Challenges for practitioners.</u>
Benson et al. (2016)	Multiple natural disasters, UK/NZ/USA/Norway	Quantitative.	N=2884 social workers were randomly sampled from their professional membership: 789 from the UK (2000), 162 from NZ (2006), 1804 from the USA (2008) and 134 Norway (2011).	Surveys developed by research team. Demographic information, educational background, religious and spiritual affiliation, and level of agreement on raising the topics of religion and spirituality with specific client issues.	Social workers reported on the importance of religion and spirituality for practice, including in the event of disasters. A large majority in each country believe that spirituality is a fundamental aspect of being human, yet there is a wide range of opinion about the appropriateness of various spiritually oriented helping activities and resources. Social workers reported that they did not receive formal educational preparation for addressing spirituality.	Psychosocial care. <u>Professional Education required. Measures developed by research team: Methodology.</u>
Chae et al. (2005)	Flood, South Korea	Quantitative measures	N=584 (339 individuals from the Gangneung area, 246 individuals from Yeosu County (non-disaster area)).	Well-being – Psychological Well-being Index Short Form (PWI-SF); Depression – Zung Self-Rating Depression Scale (ZDRDS); Anxiety – State Trait Anxiety Inventory (STAI); and post-traumatic stress disorder (PTSD) – adapted from the DSM-IV PTSD symptom list.	Individuals exposed to the natural disaster experienced negative changes in their mental health, compared with respondents from the unexposed control group. The exposed group experienced PTSD, depression, anxiety and health problems, whereas the non-exposed group did not.	Effects (psychological) PTSD, depression and anxiety; (physical) health problems. <u>Measuring outcomes.</u>
Cooper et al. (2018)	Earthquake, New Zealand	Qualitative. Semi-structured interviews.	N=19 participants (13 females and 6 males). 14 semi-structured interviews. Counsellors – social work, nursing, medicine, psychology or counselling.	Not applicable	Disaster exposed volunteer counsellors' shared experiences with clients making clinical distance challenging. Systems such as supervision and self-care arrangements to support volunteer counsellors were set up within a short period of time.	Psychosocial care.
Dominelli (2014)	Tsunami, Sri Lanka	Mixed method – 'ethnographic case-study' – field notes	N=100 (62 villagers, 38 university staff). Data from 173 interviews.	Not applicable	Themes: assistance in the immediate aftermath was welcomed; reciprocal assistance and exchanges were advantageous to parties concerned and met local need; people with connections in the right places received help sooner and more in keeping with their needs; inequitable distribution of aid.	Humanitarian Aid.

(Continued)

Table 2. (Continued)

Author, year	Disaster type and country	Research design	Sample	Measured variables	Key findings	Theme
Dominelli (2015)	Tsunami, Sri Lanka	Same study as Dominelli 2014.	Data from 368 interviews, 10 focus groups and 35 sets of field notes with staff, volunteers and villagers	Not applicable	Top-down approaches from external agencies were most likely to become exploitative. Majority of villagers welcomed major players (such as Oxfam, the Red Cross and Save the Children), especially during the immediate relief and recovery phases. Bottom-up approaches were valued for the long-term sustainable development and reconstruction.	<u>Humanitarian Aid.</u>
Doostgharin (2009)	Earthquake, Iran	Qualitative – interviews	N=8 male youths.	Not applicable	The findings underline the need for immediate support by adults with training in disasters, and for developmentally appropriate mental health care for earthquake survivors.	<u>Effects – Psychological effects (shock, nightmares, sadness and grief, uncertainty, concerns about family members) and physical effects (lack of appetite).</u>
Drolet et al. (2018)	Hurricanes, USA	Qualitative – focus groups	N=26 (6 participants from emergency management and disaster service organisations and 20 participants from focus groups from the migrant Latin American and Hispanic farm worker community) affected by the disaster.	Not applicable	Migrant workers faced challenges due to the lack of consideration with regard to immigration status, linguistics and cultural needs in disaster recovery. Humanitarian aid emergency management saw the hurricanes as an opportunity to promote preparedness within the community. Church communities and local health departments provided practical support and material aid. Mexican community came together to mobilise support for those affected. Grass-roots collective action was used to bridge the gap between formal emergency response plans and marginalised migrant community.	<u>Humanitarian Aid, Social Capital, Mediator.</u>
First et al. (2018)	Tornado, USA	Quantitative – measures	N=438 adults of Joplin residents who were present during the tornado disaster event.	Tornado experience – 7 items used in other studies. Post-traumatic stress reactions – IES – Revised (IES-R); Tornado interpersonal communication; and post-traumatic growth inventory short form (PTGI-SF).	More tornado exposure and tornado post-trauma stress were related to more post-traumatic growth. Communication with family and community supports was related to post-traumatic growth. Female reported more positive post-traumatic growth than males. No association between education level and post-traumatic growth outcomes.	<u>Developing measures and measuring outcomes.</u>
Fogel (2017)	Multiple natural disasters, USA	Qualitative – focus groups	Group 1: N=31 participants identified as homeless in the Hillsborough/Pinella counties of southern Florida. Group 2: N=16 social service and first responders.	Not applicable	Homeless adults identified the need for early actions for evacuations and provisions to aid recovery after the event. Shared concern for homeless adults and social services/first responders was the challenge in transporting individuals to safety in the event of a disaster.	<u>Effects.</u>

(Continued)

Table 2. (Continued)

Author, year	Disaster type and country	Research design	Sample	Measured variables	Key findings	Theme
Harms et al. (2015)	Bushfire, Australia	Mixed methods, longitudinal – quantitative measures via survey, and a sub-sample took part in interviews	N = 1016 participants (612 females and 404 males) completed the baseline survey. The bereaved sub-sample comprised the 294 (29.2%) participants who reported that they had experienced the death of someone close to them as a result of the Black Saturday bushfires (117 males and 177 females). N = 40 (female – 34 and male – 6).	Survey questions focused on: interpersonal loss, fear and property loss and mental health. Probable major depressive episode (MDE) – Patient Health Questionnaire; Non-specific psychological distress – K6; and Grief – Inventory for Complicated Grief (ICG).	The loss through death of friends and community members was found to be predictive of poorer mental health outcomes, although prolonged grief outcomes were rare. The sense of relationships as being 'like family' was identified by interviewees as an important dimension of their communities, as was coping with multiple deaths and the hierarchy of grief that emerged, and the stress of notifying others of these deaths.	Effects – (psychological) poor mental health outcomes (caused by death of close friends). <u>Developing measures and measuring outcomes.</u>
Hawkins and Maurer (2010)	Hurricane, USA	Qualitative. Longitudinal study with 2 interviews, observation and field notes.	N = 22 social workers	Not applicable	Participants described a process through which close ties (bonding) were important for immediate support. Bridging and linking social capital offered pathways to longer term survival and wider neighbourhood and community revitalisation.	Mediator – (social) social capital.
Hickson and Lehmann (2014)	Bushfire, Australia	Mixed methods, qualitative – online survey and sub-sample of interviews.	N = 24 adults	Not applicable	Demands placed on social work practice were exacerbated by the lack of familiarity with geography, social networks and resources, as well as by higher levels of uncertainty and lack of clarity and detail relating to the event itself.	Psychosocial care and challenges for practitioners.
Huang and Wong (2013)	Earthquake, China	Qualitative – focus groups and in-depth interviews	N = 24 adults	Not applicable	Disaster survivors had resilience to loss and trauma and could recover themselves. Group participation via recreational activities facilitated disaster survivors' self-recovery and had positive effects on them physically and psychologically and socially. Their lives became more meaningful and their social network was broadened and strengthened.	Psychosocial care and Mediator – group work participants reported that distress and depressive symptoms were alleviated through group process.
Huang et al. (2014)	Earthquake, China	Qualitative. In-depth interviews.	N = 6 social workers	Not applicable	Social workers reported lack of government support; low professional status of social work; rapid changes in the social environment in disaster-affected areas; lack of supervision; lack of cooperation and coordination among social service agencies; and lack of experience and knowledge in working with disaster survivors.	Challenges for practitioners.
Kranke et al. (2017)	Multiple natural disasters, USA	Qualitative. Interviews.	N = 9 male combat veterans who volunteered with Team Rubicon – a disaster relief social service organisation.	Not applicable	Veterans did not experience negative mental health effects because of prior military training and preparedness relevant to disaster situations.	Psychosocial care and Mediator – Peer support and preparedness was perceived as influencing positive health outcomes.

(Continued)

Table 2. (Continued)

Author, year	Disaster type and country	Research design	Sample	Measured variables	Key findings	Theme
Kreuger and Stretch (2003)	Flood, USA	Quantitative – measures	N=3876 children and adolescents, 30 percent (1167) of whom were in grades K–3, and the remaining 70 percent (2719) were in grades 4–12.	Child and Adolescent Protocol on Flood Impact (CAPFI), Anxiety: Revised Children's Manifest Anxiety Scale (RCMAS), and Depression: Children's Depression Inventory (CDI).	83% of children and adolescents were in the lowest magnitudes, 6.3% in level 3, 5.6% were in level 4 and the remaining 5.3% were in level 5 (highest magnitude of flood impact). Longer term risk was empirically related to magnitude, with evacuation a major predictor of risk, and water in the residence (without evacuation) less well correlated to risk. Evacuees forced to navigate formal benefit systems that were tightly rationed and required proof of eligibility (criteria for access was often undecipherable). Local social services struggled with coordination but showed remarkable flexibility and agility in identifying needs and developing responses to address the needs of evacuees. Self-help groups were reported as having provided women with a measure of new social and economic opportunities, status and power. Little evidence existed for a substantial reduction of poverty levels or a change in the prevailing patriarchal attitudes.	Effects (psychological) PTSD. Mediator – risk mediated by magnitude of the disaster. Developing measures and measuring outcomes.
Kulkarni et al. (2008)	Hurricane, USA	Qualitative. Observational notes, field interviews.	N=14 (8 evacuees and 6 service providers).	Not applicable		Humanitarian Aid. Mediator – recovery and reconstruction policies. Mediator – socioeconomic and structural inequalities.
Larson et al. (2015)	Tsunami, India	Qualitative. Semi-structured focus groups and interviews.	N=109 individuals (57 female and 52 male).	Not applicable		Psychosocial care – group work.
Leitch et al. (2009)	Hurricane, USA	Quantitative. Non-randomised control trial.	N=142 (social service workers who were survivors of Hurricanes Katrina and Rita in New Orleans and Baton Rouge, Louisiana, 2–3 months after the disasters).	Demographics. Coping: 4-item scale used by the agencies (not specified). Symptom Checklist-90 Revised (SCL-90-R).	Somatic Experiencing proved beneficial with the treatment group having statistically significant gains in resiliency indicators and decreases in post-traumatic stress disorder symptoms. Although psychological symptoms increased in both groups at the 3- to 4-month follow-up, the treatment group's psychological symptoms were statistically lower than those of the comparison group.	Psychosocial care (Therapy).
Lemieux et al. (2010)	Hurricane, USA	Quantitative – measures	N=416 social work students.	Demographics and intern status. Spirituality support: Spiritual Support Scale (SSS). Altruism: Self Report Altruism Scale. Optimism: Life Orientation Test (LOT) Peritraumatic emotional responses: types of Peritraumatic Emotional Responses checklist. Hurricane-related stressors: checklist designed by researchers that included common stressor experiences in various domains of living, previous traumatic experiences and negative reactions. Coping: Brief COPE.	Respondents experienced, on average, approximately 6 hurricane-related stressors, with the number of stressors ranging from 0 to 18. The most frequently reported negative emotional responses: horror/shock, fear/anxiety/worry and numbness/dissociation. Participants also demonstrated high levels of volunteerism. Among participants, 47% scored at or above the clinical level for depression, with 6% of students showing clinical PTSD-like symptoms, and 16.9% reporting substance use. Two-thirds (66.9%) employed 8 of the 10 adaptive coping responses. Negative cognitive and emotional reactions to the hurricanes correlated positively with mental health symptomatology and 7 of the 10 adaptive coping responses.	Challenges for students.

(Continued)

Table 2. (Continued)

Author, year	Disaster type and country	Research design	Sample	Measured variables	Key findings	Theme
Liu and Mishra (2014)	Earthquake, Taiwan	Qualitative. Interviews.	16 female earthquake survivors	Not applicable	Coping strategies guided by female gender norms in the family, embedded in Taiwanese culture – including children's needs as the first priority as a maternal role norm; men working outside and women working inside; and female gender norms of supporting the family when husbands could not – were the major resources participants accessed and utilised to successfully cope with the difficulties after the 921 Earthquake. The participants' narratives demonstrated that cultural norms can serve as coping resources for survivors. A sense of belonging as individuals and as a wider community was important in the recovery effort. Belonging had contextual, chronological and gendered dimensions that helped inform effective and resonant disaster responses with culturally and linguistically diverse populations. This analysis also illustrates how the participants' perspectives of belonging shifted over time.	<i>Mediator</i> – culture as a mediator.
Marlowe (2015)	Earthquake, NZ	Qualitative. Semi-structured interviews and focus groups.	N=101 participants who have a refugee background.	No applicable	One-size-fits-all recovery policies tended to enhance socioeconomic disparities, and the larger political and economic context mediated and exacerbated the class differentiation of the impact of the recovery policies. Most participants experienced numerous stressors: students lost personal property and were evacuees themselves, as well as sharing their homes with other evacuees. Hurricanes K and R triggered recollections of previous traumatic experiences for almost one-quarter of participants. Even though participants experienced a wide range of disaster-related stressors, social work students responded in great numbers (94%) to the urgent need for voluntary assistance.	<i>Mediator</i> – Sense of belonging.
Pentarakis (2013)	Bushfire, Greece	Qualitative – interviews and community forums	N=36 individuals who are villagers affected by the fires and attended community forums.	Not applicable	Demographics and previous volunteer experience. Hurricane related stress – 18-item scale developed by researchers. Previous traumatic experiences – 7-item measure developed by researchers. Faith – 2 questions adapted by a previous study. Altruism – SRAC. Increased commitment to social work values – 13-item checklist developed by researchers. Volunteerism – 16-item checklist developed by researchers.	<i>Mediator</i> – recovery and reconstruction policies. <i>Socioeconomic and structural inequalities. Challenges for students. Developing measures and measuring outcomes.</i>
Plummer et al. (2008)	Hurricane, USA	Quantitative. Self-report measures.	N=416 graduate and undergraduate social work students.			
Powell and Leytham (2014)	Earthquake, NZ	Quantitative. Survey.	N=106 parents who participated in the Journey of Hope workshop after the earthquake.	Surveys developed by research team. Basic demographic information, educational background, religious and spiritual affiliation, and level of agreement on raising the topics of religion and spirituality with specific client issues.	After the Journey of Hope workshop, findings indicated statistically significant gains ($p < .05$) in knowledge and reductions in stress. Parents were more able to identify (1) social supports in their community, (2) the ability to identify signs of stress and how stress affects their body, (3) how to cope with stress and (4) a more positive outlook for the future.	<i>Psychosocial Care</i> – group work.

(Continued)

Table 2. (Continued)

Author, year	Disaster type and country	Research design	Sample	Measured variables	Key findings	Theme
Prost et al. (2018)	Hurricanes (2), USA	Quantitative. Self-report measures.	N=357 college students enrolled in social work programmes across 5 universities and who provided answers to questions regarding prayer, coping strategies and PTSS in a cross-sectional survey administered 3 months after Hurricane Rita.	Demographics. Prayer – prayer used for coping, active and avoidant coping strategies. Active and Avoidant Coping – Brief COPE. Post-Trauma Symptoms – Modified PTSD Symptom Scale, Self-Report.	Majority of respondents were female. Minority students used coping via prayer more often than their non-minority peers. Moderate, positive associations between the use of avoidant coping strategies and PTSS for minority and non-minority groups.	<u>Effects – Poorer coping is associated with post-trauma symptoms. Developing measures and measuring outcomes.</u>
Pyles (2011)	Hurricane, USA	Qualitative – focus groups	N=11 participants (40 years +, 9 participants were African American and 2 were White; 7 female and 4 male)	Not applicable	Seven domains identified by research participants as central to neighbourhood revitalization: (1) physical space/environment; (2) crime and safety; (3) housing; (4) health and social services; (5) children, youth, and family; (6) education and employment; and (7) community and social capital. Domains are mutually dependent.	<u>Developing measures and measuring outcomes – development of baseline indicators to measure recovery at the neighbourhood level. Mediator – (social) social capital.</u>
Rapeli (2017)	Multiple natural disasters, Finland	Quantitative – content analysis	Data consisted of 255 Finnish municipalities social service disaster preparedness plan documents (2013–2014).	Content analysis of documents. Categories are the following: (1) roles of the sector (social workers in this study), (2) cooperation partners, (3) management-related tasks or structures such as alarming procedure, (4) risk assessment and (5) training and exercises.	Micro-level social work interventions and bonding social capital are emphasised more than cooperation or management roles in disaster plans. Finnish social sector preparedness had deficiencies, especially in bridging to the private social sector and in supporting management and decision-making with situational picture, alarming systems and information to the public. Social workers were not linked adequately to the local-level disaster-management actors. Social workers, role of supporting clients was present, but it was not enough for sustainable recovery. Bridging and linking social capital is needed for post-disaster recovery.	
Rock and Corbin (2007)	Multiple natural disasters, Barbados	Quantitative. Survey.	N=72 social work students and practitioners.	Survey designed by research team.	Social workers and other human service professionals should be trained in disaster management. Workshop and in-service training identified as the preferred mode of delivery. 75% wanted a course on disaster management to be offered in the BSc Degree in Social Work and 94% were of the view that the field of disaster management was becoming more important given the recent disasters worldwide.	<u>Professional education is required to improve social work response to natural disasters. Developing measures and measuring outcomes.</u>
Sim et al. (2013)	Earthquake, China	Quantitative – survey	N=45 social workers.	Survey designed by research team.	Social workers reported poor professional recognition, harsh working conditions and limited prospects and support in the early aftermath of the earthquake. Recovery and reconstruction have given new purpose for the profession to integrate theory, values and further develop practice for disaster social work response.	<u>Challenges for practitioners. Developing measures and measuring outcomes.</u>
Tang and Cheung (2007)	Tsunami, Hong Kong	Quantitative. Survey.	N=215 social work students.	Not applicable	Social work students encountered difficulties arising from barriers of culture, language, lifestyles and social work or service systems and concluded that their relief efforts were not a success.	<u>Challenges for students.</u>

(Continued)

Table 2. (Continued)

Author, year	Disaster type and country	Research design	Sample	Measured variables	Key findings	Theme
Tosone et al. (2016)	Hurricane, USA	Qualitative. Measures	N = 244 mental health clinicians.	Post-traumatic growth – the Shared Trauma and Professional Post-traumatic Growth (STPPG) Inventory.	STPPG supports the reciprocal nature of shared trauma and correlates well with existing measures for post-traumatic stress, secondary trauma, shared trauma and post-traumatic growth. STPPG suggests that personal traumatic experience can impact professional practice, and client traumatic narratives influence one's personal trauma responses. Insecure attachment, greater exposure to potentially traumatic life events in general and distress related to the events surrounding Hurricane Katrina were predictive of higher levels of shared traumatic stress (SdTS). Resilience was found to mediate the relationship between insecure attachment, enduring distress attributed to Katrina and SdTS but not the relationship between exposure to potentially traumatic life events and SdTS.	<u>Developing measures and measuring outcomes.</u>
Tosone et al. (2015)	Hurricane, USA	Quantitative. Measures – same study as above.	N = 244 social workers.	Shared Traumatic Stress (SdTS) among social workers		<u>Challenges for practitioners.</u>
Tudor et al. (2015)	Earthquake, NZ	Qualitative – interviews and focus groups	N = 32 (9 had individual interviews: 8 female, 1 male; and 23 participated in focus groups).	Not applicable	The 5 main themes derived from the data were 'Crafting for recovery and healing', 'Social connection', 'Learning and meaning making', 'Giving to others' and 'A vision for the future'.	<u>Psychosocial Care – group work.</u> <u>Community work.</u>
Vickers and Dominelli (2015)	Tsunami, Sri Lanka	Qualitative – interviews, focus groups and field notes, a subsample of the other the remainder were from other Dominelli study cited.	N = 173 (70 students and 38 staff from universities in the UK, Slovenia and Sri Lanka of which 30 students and 7 staff were from social work programmes and the remainder were from other programmes.	Not applicable	Structural inequalities perpetuated inequalitarian relationships, despite individual attempts to the contrary.	<u>Professional education is required to improve social work response to natural disasters.</u>

DSM-IV: Diagnostic and Statistical Manual of Mental Disorders (4th edn); SRAC: Self-Report Altruism Scale; PTSD: Post traumatic stress disorder; PTSS: post-trauma stress syndrome
 Note. The underlined words in the Theme column highlight the themes that are discussed throughout the paper.

Table 3. Disaster types and locations.

Country of disaster	Bushfire	Earthquake	Flood	Tornado	Hurricane	Multiple	Tsunami
Australia	2						
Barbados						1	
China		3					
Finland						1	
Greece	1						
Hong Kong							1
India							2
Iran		2					
NZ		4					
South Korea			1				
Sri Lanka							3
Taiwan		1					
UK/NZ/USA/Norway						1	
USA			1	1	12	2	
Total	3	10	2	1	12	5	6

Table 4. Research design.

Research method ^a	Number of studies (n = 35)	% of studies
Interviews	19	54.3
Focus groups	8	22.9
Field notes	4	13.8
Observation	3	10.3
Document analysis	3	8.6
Community forums	1	3.5
Survey designed by researchers	7	24.1
Standardised measures	8	22.8

^aNot mutually exclusive.

in the Victorian bushfire recovery in 2009 ($n=22$) were surveyed about the skills and qualities needed for effective interventions during a disaster recovery response. Strong practice skills in assessment, listening, engagement, debriefing, crisis intervention, grief counselling and problem solving were reported as valuable skills. Social workers should also be confident, empathetic, reflective, willing to help, compassionate, flexible and patient, among other things. In a study by Cooper et al. (2018), the concept of psychosocial care was extended to volunteer counsellors, many of whom were also exposed to the disaster. Soon after the disaster event, these volunteer counsellors recognised their own need for self-care management plans and supervision in order to optimise the psychosocial care delivered to the survivors (Cooper et al., 2018). In addition to these professional skills, personal qualities and organisational support, Alipour et al. (2015) also recommend that social workers have good knowledge of local social capital as part of an effective skill set.

Social work interventions in disasters may be founded in crisis intervention frameworks. In India, a study was conducted to ascertain the efficacy of a community-based mental health psychosocial programme aimed at reducing negative physical and emotional effects of a disaster (Becker, 2009). The programme was designed using the 'train the trainer model': three social workers and

one psychiatrist trained community health workers to deliver 3 months of psychosocial care to a group of women ($n=100$) who had survived a tsunami 2 years previously. The programme intervention targeted trauma symptoms of hypervigilance, avoidance and intrusion as measured by the Impact of Event Scale (IES). The IES was administered to the intervention group and a control group ($n=100$) of people who lived in the neighbouring village and were also affected by the disaster. Pre- and post-intervention outcomes of the intervention group were compared with the control group. The intervention group showed significant improvement in trauma symptoms in all three domains compared with the control group outcomes (Becker, 2009). Similarly, a brief intervention therapy (one to two sessions) informed by Somatic Experiencing was shown to reduce post-traumatic stress disorder (PTSD) symptoms and promote resiliency in social work clinicians who had been exposed to a disaster recovery effort following the intervention and again at 3 months post-intervention (Leitch et al., 2009). In a multi-national study by Benson et al. (2016), social workers reported varying levels of comfort and skill exploring religion and spirituality with clients who had experienced a disaster. Despite some reservations, the majority of respondents did perceive positive effects when social work assessments and interventions recognised and acknowledged the importance of spirituality to people, particularly in times of trauma (Benson et al., 2016).

Social work research in this scoping review also emphasises the importance of providing aid in a bottom-up approach (Alipour et al., 2015; Dominelli, 2015), which is one that involves community participation in solving problems arising from disasters, is reciprocal in nature, and is responsive to local needs and cultures (Dominelli, 2014). Such approaches are thought to reinforce social capital, while also promoting empowerment and resilience among community members (Alipour et al., 2015; Dominelli, 2015). Such work is hampered when there are limited local resources due to underfunding and reliance on non-government sources of support (Kulkarni et al., 2008).

These studies suggest that group work, including self-help groups (Larson et al., 2015), recreation activities (Huang and Wong, 2013) and a parental psycho-educational curriculum (Powell and Leytham, 2014), may be beneficial. Groups can alleviate distress and depression, while improving people's well-being and recovery (Huang and Wong, 2013). Furthermore, they can help group members locate social supports, recognise their stress, identify ways of coping with stress and provide a sense of hope (Powell and Leytham, 2014). In Larson et al.'s (2015) study following a tsunami in India, survivors ($n=109$) reported that self-help groups provided women with new social and economic opportunities by providing employment and income, generating opportunities, training, access to microcredit and savings, and the ability to undertake banking. Thus, social group work can be healing and empowering for survivors.

Social work practice described in the research has also drawn from innovative approaches, including, for example, craft (Tudor et al., 2015), and can align well with community-led practice initiatives that focus on relationship healing and community growth. There is some, albeit limited, focus on the use of social and community development type approaches following disasters. Tudor et al. (2015), for example, describe how a community work project that included a craft group promoted recovery and healing, social connectedness, meaning making, giving and hope for the future.

The effects of disasters on people and mediators of these effects. Nineteen articles in this scoping review focused on the effects and/or mediating influences in disasters (Alipour et al., 2015; Bell, 2008; Chae et al., 2005; Dominelli, 2014; Doostgharin, 2009; Drolet et al., 2018; First et al., 2018; Harms et al., 2015; Hawkins and Maurer, 2010; Huang and Wong, 2013; Kreuger and Stretch, 2003; Kulkarni et al., 2008; Lemieux et al., 2010; Liu and Mishna, 2014; Marlowe, 2015; Pentarakis, 2011; Plummer et al., 2008; Prost et al., 2018; Tosone et al., 2015).

Table 5. Effects and mediators.

Theme	No. of articles
Effects	9
Psychological effects	6
Social effects	3
Physical effects	3
Mediators ^a	8
Social connectedness (culture, social capital and sense of belonging)	4
Socioeconomic influences	3
Reconstruction and recovery policies and responses	3
Degree of exposure to disaster	1

^aNot mutually exclusive

Many of these articles highlighted the *effects of disasters* on people and communities, particularly as they relate to mental health outcomes and grief and loss (Chae et al., 2005; Doostgharin, 2009; First et al., 2018; Harms et al., 2015; Huang and Wong, 2013; Kreuger and Stretch, 2003; Lemieux et al., 2010; Plummer et al., 2008; Tosone et al., 2016). The negative effects on mental health as well as complicated grief and loss associated with the disaster events were common for survivors in all these studies. It was only after psychosocial interventions that survivors started to experience improvement in these outcomes, which could be described as a form of recovery. The literature describes how adverse effects are felt more acutely among marginalised groups (Drolet et al., 2018; Fogel, 2017; Pentaraki, 2013). Furthermore, some literature highlights how factors such as social connectedness, particularly as it relates to culture, social capital and sense of belonging, mediate the adverse effects of disasters on people and communities (Dominelli, 2014; Hawkins and Maurer, 2010; Liu and Mishna, 2014; Marlowe, 2015).

As shown in Table 5, nine articles examine the *effects of disasters* (Alipour et al., 2015; Bell, 2008; Chae et al., 2005; Doostgharin, 2009; First et al., 2018; Harms et al., 2015; Kreuger and Stretch, 2003; Prost et al., 2018). Of the nine articles that describe post-disaster effects, six articles focus on the psychological effects (Chae et al., 2005; Doostgharin, 2009; First et al., 2018; Harms et al., 2015; Kreuger and Stretch, 2003; Prost et al., 2018) and three focus on each social effects and physical effects (Chae et al., 2005; Doostgharin, 2009; Huang and Wong, 2013).

Eight articles examine *mediating factors* that reduce the negative impacts of disaster events on people: four identify social connectedness as a mediator (Drolet et al., 2018; Hawkins and Maurer, 2010; Liu and Mishna, 2014; Marlowe, 2015); another three identify higher socioeconomic status as a mediator (Alipour et al., 2015; Kulkarni et al., 2008; Pentaraki, 2013); three comment on reconstruction and recovery policies and responses as mediators (Alipour et al., 2015; Kulkarni et al., 2008; Pentaraki, 2013); and one highlights the mediating effect of the degree of exposure to the disaster (Kreuger and Stretch, 2003).

The effects of disasters on individuals and communities are extensive. The social work literature emphasises how disasters can increase people's vulnerability (Alipour et al., 2015), with the effects from disasters compounded for people who are marginalised and disadvantaged (Kulkarni et al., 2008; Pentaraki, 2013). Disasters can also create a sense of uncertainty and confusion (Alipour et al., 2015), impact people's ability to be self-sufficient (Bell, 2008), reduce people's sense of safety and increase grief in both adults (Harms et al., 2015) and children (Doostgharin,

2009). These events can have lasting impacts on people's mental health, with survivors reporting increased rates of post-traumatic stress disorder (Chae et al., 2005; Kreuger and Stretch, 2003), as well as stress, anxiety and depression (Chae et al., 2005). For adults, the death of close friends and community members is predictive of poorer mental health outcomes (Harms et al., 2015), while for children and young people, experiencing loss of family members, friends and protection from caregivers can make them vulnerable to malnutrition, diseases, injuries, nightmares and harm from others (Doostgharin, 2009). Thus, incorporating knowledge and understanding about grief and its role in and effect on disaster recovery is important (Harms et al., 2015).

Studies show that effects of disasters are mediated by some factors. High levels of social capital (Hawkins and Maurer, 2010) and a sense of community belonging through civic participation and social connection (Marlowe, 2015) appear to reduce the adverse impacts of disasters. For example, following Hurricane Katrina in the United States, people used connections and close ties for immediate support (that is, bonding social capital), and bridging and linking social capital to revitalise their communities (Hawkins and Maurer, 2010). Thus, it is important for social workers to build community capacity by harnessing social capital, while also recognising, where appropriate, the value of cultural norms in promoting resiliency (Liu and Mishna, 2014). Furthermore, recovery and reconstruction policies that exacerbate socioeconomic and structural inequalities can mean that the effects of disasters are more acutely felt by vulnerable, low-income groups within a community affected by a natural disaster (Kulkarni et al., 2008). Finally, the degree to which a young person is exposed to a disaster can also mediate risks such as PTSD (Kreuger and Stretch, 2003). It is thus important for practitioners to recognise the interconnected nature of physical environment, access to services, education and employment, policies, and community and social capital in recovery from disasters.

Social work education and challenges in disaster relief. Of the 10 articles focused on the challenges of working in disasters and the importance of education in these areas (Bell, 2008; Benson et al., 2016; Hickson and Lehmann, 2014; Huang et al., 2014; Lemieux et al., 2010; Rock and Corbin, 2007; Tang and Cheung, 2007; Tosone et al., 2015; Vickers and Dominelli, 2015; Plummer et al., 2008), 3 comment on the importance and role of education in preparing social workers for disaster work (Benson et al., 2016; Rock and Corbin, 2007; Vickers and Dominelli, 2015), five articles comment on the challenges faced by practitioners (Bell, 2008; Hickson and Lehmann, 2014; Huang et al., 2014; Sim et al., 2013; Tosone et al., 2015) and four comment on the challenges faced by students (Lemieux et al., 2010; Plummer et al., 2008; Rock and Corbin, 2007; Tang and Cheung, 2007).

Social work practice in disasters can be particularly challenging, as disaster situations are characterised by trauma, grief and chaos. The impacts on social workers can be exacerbated when they are unfamiliar with the geography of the area, the backgrounds and experiences of residents affected by disaster, details of the disaster, local cultures and social networks, and available resources (Bell, 2008; Hickson and Lehmann, 2014). Furthermore, social workers can face challenges around lack of support and supervision, coordination among services, and experience and knowledge in disaster-related work, which is compounded by the rapidly changing environment of disasters and the low professional status of social work (Huang et al., 2014; Sim et al., 2013). Such challenges can mean that working in disasters adversely affects social workers' well-being (Hickson and Lehmann, 2014; Huang et al., 2014; Sim et al., 2013).

Such challenges can contribute to increased rates of secondary trauma (Tosone et al., 2015), meaning that social workers must be particularly adept at self-care (Hickson and Lehmann, 2014). The importance of self-care care management and supervision was recognised by a sample of counsellors ($n=19$) who volunteered to deliver therapeutic support to survivors of the earthquakes

in Canterbury, New Zealand. In this qualitative study, the counsellors noted the challenges associated with maintaining professional boundaries when they also shared the experience of surviving the disaster. In this post-recovery response, many of the systems and supports that are typically in place were not initially present. However, supervision, debriefing and documentation of learning were all recognised as valuable and necessary for the counsellors and were put in place on the run (Cooper et al., 2018).

Adverse impacts can also be felt by students who volunteer in disasters, as students confront the horror of disasters and experience a range of emotional responses, such as fear, anxiety, worry and disbelief (Lemieux et al., 2010). Plummer et al. (2008) pointed out in their study ($n=416$) that at times students are survivors of the disaster themselves, and for others, disasters can trigger recollections of past traumatic experiences. Tang and Cheung (2007) described that students who helped survivors of the 2004 Indian Ocean tsunami by caring for and supporting survivors materially and emotionally, while also fundraising, experienced difficulties that arose from cultural barriers, differing languages and lifestyles, and a lack of knowledge about social work and service systems (Tang and Cheung, 2007). Unfortunately, many students concluded that their efforts were unsuccessful.

Considering the impacts on social workers and students, many authors have made recommendations around education and training. Rock and Corbin (2007), for example, recommend training social work students in stress management, grief counselling, conflict resolution, group work, problem solving, data collection and research, case management, networking, advocacy and leadership (Rock and Corbin, 2007). Vickers and Dominelli (2015) also describe how real-time disasters can provide opportunities for educators to work with students to equip them with skills and knowledge for responding to disasters, and how this can be particularly successful when working with local partners (Vickers and Dominelli, 2015). In addition, participants in Benson et al.'s (2016) study said they had not received formal education around how to address spirituality in disaster responses, but most thought this would be important. Greater education and training may reduce the secondary trauma at times experienced by social workers and better prepare social workers for responding helpfully following disasters.

Use of validated measures or development of research measures. Finally, two articles describe the development of measures. One of these articles (Tosone et al., 2016) describes the development of the Shared Trauma and Professional Posttraumatic Growth (STPPG) Inventory, while the other (Pyles, 2011) describes the development of baseline indicators to measure community recovery from disasters. It stipulates seven domains that research participants identified as important to revitalising neighbours, including (1) physical space/environment, (2) crime and safety, (3) housing, (4) health and social services, (5) children, youth, and family, (6) education and employment, and (7) community and social capital. Findings reveal that the domains are mutually dependent.

Discussion

The aim of this study was to understand the extent, range and nature of social work research activity following natural disaster events, and the implications for future research and practice. Collating, summarising and reporting the scoping review results related to the research question provides a foundation for ongoing empirical research about social work and disasters internationally. In combination, the articles signal the value and importance of social work practice in disaster-related work. The predominant focus of the research has been on post-disaster work where social workers have engaged with a range of practice activities, as opposed to pre-disaster social work practice about which there is less recognition and research activity. These

include group work, case management, aid and psychosocial care. Social workers are trained in assessment and intervention and therefore have much to contribute in the immediate response and ongoing recovery phases of disaster management (Mathbor, 2007). They are also equipped to engage with diversity and so have the skills to communicate and build relationships with people across the community. The recognition in the empirical articles that social workers may themselves be immediately impacted by the disaster is important and supports the emphasis on initial and continuing social work education around self-care and stress management. Ensuring their own well-being enables them to successfully support others. Sustaining additional support for students who are engaged in responding to disasters should be a consideration for both educational providers and responding organisations so that they do not become disillusioned about social work practice or personally burnt out.

Further research into the elements that would create a robust organisational infrastructure including clear policies and procedures around immediate response to a disaster is critical within social workers' own organisations. Understanding their roles and responsibilities supports the maintenance of personal and professional boundaries, further ensuring protection of social workers themselves (Cooper et al., 2018). International conversations around best practice in preparation for social work organisations could add considerable impetus to disaster readiness of the social work community. Of course, these conversations are important not only for the social work profession but also for all those concerned in disaster-management work, a context described in the Sendai Framework for Disaster Risk Reduction (United Nations Office for Disaster Risk Reduction [UNDRR], 2015) as typically multidisciplinary, as well as multi-layered from local initiatives through to the international. While the focus of this review has been on post-disaster social work, we also acknowledge the important role of social workers in preventing and managing disasters. Such work is not only consistent with the United Nations 2030 Agenda for Sustainable Development (UNDRR, 2015), but aligns with the Global Agenda for Social Work and Social Development 2020–2030 (IFSW, 2020).

Possible gaps in current tertiary curricula are suggested in the found literature, although this may differ across countries and in specific higher education institutions. Further examination of what is taught and learned and then applied by students would add value to current practice and research. Preparing students for social work practice in disaster management may be seen to be of more relevance in some countries that experience disasters more frequently. That said, the international nature of social workers and the transferability of skills required for disaster work could be an argument for increased focus across all social work curricula.

The articles also point to the devastating effects on people, some of whom will already have been engaged with social workers prior to the disaster. The disproportionate impact of disasters on marginalised and vulnerable individuals and communities has been well canvassed but requires particular attention by social workers in frontline practice, policy and management. Mitigating the extent of these impacts can be assisted by a deliberate focus pre-disaster event on building social capital, educating people around disaster preparedness, and having a strong local and regional policy framework that can be actioned immediately after the event.

The use of baseline indicators and other measurements to assess community and individual growth is of considerable value and is a current gap in the social work research to date. The use of validated measures for constructs related to disaster effects and recovery require further examination in the research. The development and validation of measures that test the efficacy of social work interventions with populations affected by natural disasters is also needed. Ideally, these measures would also have clinical utility so that they can be integrated into social work practice and used for research purposes.

While the social work literature articulates the interventions and role of social work in disaster relief, there is less certainty in the empirical literature about the extent to which social workers are utilised and their work is understood both by other professionals and by community members. Huang and Wong (2013) noted the low professional status of social workers and the limited resources and support often available to them. The research agenda could further examine the previous engagement of social workers in disaster work, especially in countries where there is limited understanding of their engagement in this domain (Huang and Wong, 2013).

Understanding what roles social workers have had in the span of disaster events, from readiness, reduction, response through to recovery, may raise the visibility of social work activity and support future engagement locally, regionally, nationally and internationally. The global definition of social work (IFSW, 2014) emphasises the commitment of social workers to human rights and social justice, thus appropriately positioning the social work profession in the disaster space. Whether social workers and their practice are understood and appreciated by other professionals, and so whether they are being utilised to their full potential, is another question for further research. An additional area for future research is social workers' engagement in the typically multidisciplinary context of disaster-management work.

The emphasis in the literature on individual interventions raises questions as to the appropriateness of these methods for indigenous communities who may prefer group- or community-focused models of practice. Understanding the impact of disasters on indigenous peoples and how social workers can best practice in these environments is important. This has implications for the teaching curriculum, policy and practice so that non-indigenous social workers are equipped to engage in culturally relevant ways both pre- and post-disaster. An understanding of the timing of when social work interventions are most effective is also needed. The studies to date provide important insights into the range of interventions that can be helpful for individuals and communities post-disaster event. Future research needs to examine the types and timing of interventions in order to test their efficacy in improving recovery trajectory outcomes.

The articles describe research that has occurred on a range of natural disasters, across multiple nations (developed and developing countries), in diverse social work contexts and at varying stages of disaster recovery. This makes it challenging for social work practitioners and drivers of social policy to draw any meaningful conclusions as to best practice approaches in a disaster event. This further supports the need for a research agenda that will inform a way of conceptualising disaster recovery responses regardless of their type, location and context.

Limitations

The aim of this study was to review the empirical literature on social work research following natural disaster events using a scoping review methodology. Consequently, the search terms were limited to 'social work' and 'disaster'. This means that the scope of the review was limited and some studies that social workers contribute to, such as those focused on psychosocial research and disaster management more broadly, may not have been included. Importantly, however, we verified that no articles met the selection criteria using the alternate term 'natural hazard'. Furthermore, this scoping review focused only on social work research in the context of natural disasters, rather than disasters in a broader sense. Given there are some differences in the responses to and impact of human-made disasters compared with natural disasters, this was deemed appropriate (Shaluf, 2007). Another limitation was including only those studies published in the English language as this precluded any research reported in other languages. As a scoping review, the quality and rigour of studies was not assessed. However, using a scoping review methodology, we were able to include a range of study designs, which can be valuable in a growing field of practice and research.

Conclusion

This scoping review has established that there is range of social work literature focused on disasters which primarily examines social work interventions, the effects of disasters, and social work education. It is evident from this literature that the social work profession can play an integral role in responding to disaster events at various levels (micro, meso and macro) to minimise the harmful effects and promote recovery. In the multidisciplinary context of disaster management, understanding the unique disciplinary contributions of social work is important. In order to advance this field of practice, more research is needed on the types, timing, role and extent of social work practice and interventions after disasters. This should coincide with examination of the elements that would create a robust organisational infrastructure during disasters, including clear policies and procedures around immediate responses to a disaster. Educators should reflect upon what is taught, learned and then applied by social work students regarding disasters. Finally, the field would benefit from the development of validated measures for constructs related to disasters.

Beyond the focus of this article, more research is also needed in relation to social work's broader role in disaster prevention and response. While there has been considerable work undertaken in both the research and practice of social work in disasters, there is clearly still more to be done.

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References

- Abbas, S.R. and J. Sulman (2016) 'Nondeliberative Crisis Intervention in Disaster Zones: Social Group Work Using Guided Artwork with Child Survivors', *Social Work with Groups* 39: 118–28.
- Alipour, F., H. Khankeh, H. Fekrazad, M. Kamali, H. Rafiey and S. Ahmadi (2015) 'Social Issues and Post-Disaster Recovery: A Qualitative Study in an Iranian Context', *International Social Work* 58: 689–703.
- Arksey, H. and L. O'Malley (2005) 'Scoping Studies: Towards a Methodological Framework', *International Journal of Social Research Methodology* 8: 19–32.
- Becker, S.M. (2009) 'Psychosocial Care for Women Survivors of the Tsunami Disaster in India', *American Journal of Public Health* 99: 654–8.
- Bell, H. (2008) 'Case Management with Displaced Survivors of Hurricane Katrina: A Case Study of One Host Community', *Journal of Social Service Research* 34: 15–27.
- Benson, P.W., L.D. Furman, E.R. Canda, B. Moss and T. Danbolt (2016) 'Spiritually Sensitive Social Work with Victims of Natural Disasters and Terrorism', *British Journal of Social Work* 46: 1372–93.
- Chae, E.-H., T.W. Kim, S.-J. Rhee and T.D. Henderson (2005) 'The Impact of Flooding on the Mental Health of Affected People in South Korea', *Community Mental Health Journal* 41: 633–45.
- Cooper, L. and L. Briggs (2014) 'Do We Need Specific Disaster Management Education for Social Work?', *The Australian Journal of Emergency Management* 29: 38–42.
- Cooper, L., L. Briggs and S. Bagshaw (2018) 'Postdisaster Counselling: Personal, Professional, and Ethical Issues', *Australian Social Work* 71: 430–43.

- Corin, C. (2011) 'The Christchurch Hospital Social Work Service Response in the First Hours after the Christchurch Earthquake of 22nd February 2011', *Aotearoa New Zealand Social Work* 23: 58–62.
- Dominelli, L. (2014) 'Internationalizing Professional Practices: The Place of Social Work in the International Arena', *International Social Work* 57: 258–67.
- Dominelli, L. (2015) 'The Opportunities and Challenges of Social Work Interventions in Disaster Situations', *International Social Work* 58: 659–72.
- Doostgharin, T. (2009) 'Children Affected by Earthquakes and Their Immediate Emotional Needs', *International Social Work* 52: 96–106.
- Drolet, J., R. Ersing, L. Dominelli, M. Alston, G. Mathbor, Y. Huang and H. Wu (2018) 'Rebuilding Lives and Communities Postdisaster: A Case Study on Migrant Workers and Diversity in the USA', *Australian Social Work* 71: 444–56.
- Drolet, J.L. and A. Fulton (2019) 'Introduction', in J. Drolet (ed.) *Rebuilding Lives Post-Disaster*, pp. 3–16. New York: Oxford University Press.
- Drolet, J.L. and T. Sampson (2017) 'Addressing Climate Change from a Social Development Approach: Small Cities and Rural Communities' Adaptation and Response to Climate Change in British Columbia, Canada', *International Social Work* 60: 61–73.
- Du Plooy, L., L. Harms, K. Muir, B. Martin and S. Ingliss (2014) "'Black Saturday" and Its Aftermath: Reflecting on Postdisaster Social Work Interventions in an Australian Trauma Hospital', *Australian Social Work* 67: 274–84.
- Findley, P.A., K.J. Pottick and S. Giordano (2017) 'Educating Graduate Social Work Students in Disaster Response: A Real-Time Case Study', *Clinical Social Work Journal* 45: 159–67.
- First, J., N. First, J. Stevens, V. Mieseler and J.B. Houston (2018) 'Post-Traumatic Growth 2.5 Years after the 2011 Joplin, Missouri Tornado', *Journal of Family Social Work* 21: 5–21.
- Fogel, S.J. (2017) 'Reducing Vulnerability for Those Who Are Homeless During Natural Disasters', *Journal of Poverty* 21: 208–26.
- Harms, L., R. Abotomey, D. Rose, R. Woodward Kron, B. Bolt, J. Waycott and L. Alexander (2018) 'Post-Disaster Posttraumatic Growth: Positive Transformations Following the Black Saturday Bushfires', *Australian Social Work* 71: 417–29.
- Harms, L., K. Block, H.C. Gallagher, L. Gibbs, R.A. Bryant, D. Lusher, J. Richardson, C. Macdougall, E. Baker, V. Sinnott, G. Ireton, D. Forbes, D. Kellett and E. Waters (2015) 'Conceptualising Post-Disaster Recovery: Incorporating Grief Experiences', *British Journal of Social Work* 45: 170–87.
- Hawkins, R.L. and K. Maurer (2010) 'Bonding, Bridging and Linking: How Social Capital Operated in New Orleans Following Hurricane Katrina', *British Journal of Social Work* 40: 1777–93.
- Hickson, H. and J. Lehmann (2014) 'Exploring Social Workers' Experiences of Working with Bushfire-Affected Families', *Australian Social Work* 67: 256–73.
- Huang, Y.N. and H. Wong (2013) 'Effects of Social Group Work with Survivors of the Wenchuan Earthquake in a Transitional Community', *Health & Social Care in the Community* 21: 327–37.
- Huang, Y.N., Y. Fu and H. Wong (2014) 'Challenges of Social Workers' Involvement in the Recovery of the 5.12 Wenchuan Earthquake in China', *International Journal of Social Welfare* 23: 139–49.
- International Federation of Social Workers (IFSW) (2014) 'Global Definition of Social Work'. Available online at: <https://www.ifsw.org/what-is-social-work/global-definition-of-social-work/>
- International Federation of Social Workers (IFSW) (2020) 'Global Social Work Agenda 2020–2030'. Available online at: <https://www.ifsw.org/social-work-action/the-global-agenda/>
- Kranke, D., E.L. Weiss, K.C. Heslin and A. Dobalian (2017) "'We Are Disaster Response Experts": A Qualitative Study on the Mental Health Impact of Volunteering in Disaster Settings among Combat Veterans', *Social Work in Public Health* 32: 500–9.
- Kreuger, L. and J. Stretch (2003) 'Identifying and Helping Long Term Child and Adolescent Disaster Victims: Model and Method', *Journal of Social Service Research* 30: 93–108.
- Ku, H.B. and Y.N. Ma (2015) "Rural-Urban Alliance" as a New Model for Post-Disaster Social Work Intervention in Community Reconstruction: The Case in Sichuan, China', *International Social Work* 58: 743–58.

- Kulkarni, S., H. Bell, J. Beausoleil, L. Lein, R.J. Angel and J.H. Mason (2008) 'When the Floods of Compassion Are Not Enough: A Nation's and a City's Response to the Evacuees of Hurricane Katrina', *Smith College Studies in Social Work* 78: 399–425.
- Larson, G., J. Drolet and M. Samuel (2015) 'The Role of Self-Help Groups in Post-Tsunami Rehabilitation', *International Social Work* 58: 732–42.
- Leitch, M.L., J. Vanslyke and M. Allen (2009) 'Somatic Experiencing Treatment with Social Service Workers Following Hurricanes Katrina and Rita', *Social Work* 54: 9–18.
- Lemieux, C.M., C.E. Simon, C.A. Plummer, A.L. Ai and R. Richardson (2010) 'Mental Health, Substance Use, and Adaptive Coping among Social Work Students in the Aftermath of Hurricanes Katrina and Rita', *Journal of Social Work Education* 46: 391–410.
- Liu, C.L.J. and F. Mishna (2014) 'Resilience in a Cultural Context: Taiwanese Female Earthquake Survivors', *Qualitative Social Work* 13: 288–303.
- Marlowe, J. (2015) 'Belonging and Disaster Recovery: Refugee-Background Communities and the Canterbury Earthquakes', *British Journal of Social Work* 45: 188–204.
- Mathbor, G.M. (2007) *Enhancement of Community Preparedness for Natural Disasters: The Role of Social Work in Building Social Capital for Sustainable Disaster Relief and Management*. Thousand Oaks, CA: SAGE.
- Pentarakis, M. (2011) 'Grassroots Community Organising in a Post-Disaster Context: Lessons for Social Work Education from Ilias, Greece', in M. Lavalette and V. Ioakimidis (eds) *Social Work in Extremis: Lessons for Social Work Internationally*, pp. 51–63. Bristol: Policy Press.
- Pentarakis, M. (2013) 'The Class Impact of Post Disaster Restoration Policies: The Example of Ilia, Greece and the Need for a Politics of Disaster', *International Social Work* 56: 761–74.
- Plummer, C.A., A.L. Ai, C.M. Lemieux, R. Richardson, S. Dey, P. Taylor, S. Spence and H.J. Kim (2008) 'Volunteerism among Social Work Students during Hurricanes Katrina and Rita: A Report from the Disaster Area', *Journal of Social Service Research* 34: 55–71.
- Powell, T. and S. Leytham (2014) 'Building Resilience after a Natural Disaster: An Evaluation of a Parental Psycho-Educational Curriculum', *Australian Social Work* 67: 285–96.
- Prost, S.G., H.B. Appel and A.L. Ai (2018) 'Coping and Post-Traumatic Stress after Hurricanes Katrina and Rita: Racial Disparities in Social Work Student-Practitioners', *Journal of Social Service Research* 44: 459–69.
- Pyles, L. (2011) 'Toward Sustainable Post-Katrina Recovery: Lessons Learned from African American Neighborhoods', *Families in Society: The Journal of Contemporary Social Services* 92: 344–9.
- Rapeli, M. (2018) 'Social Capital in Social Work Disaster Preparedness Plans: The Case of Finland', *International Social Work* 61: 1054–66.
- Rock, L.F. and C.A. Corbin (2007) 'Social Work Students' and Practitioners' Views on the Need for Training Caribbean Social Workers in Disaster Management', *International Social Work* 50: 383–94.
- Shaluf, I.M. (2007) *Disaster Types*. Bingley: Emerald Group Publishing Limited.
- Sim, T., A. Ki, C.H. Quen and Q.H. Dong (2013) 'Rising to the Occasion: Disaster Social Work in China', *International Social Work* 56: 544–62.
- Tang, K.L. and C.K. Cheung (2007) 'The Competence of Hong Kong Social Work Students in Working with Victims of the 2004 Tsunami Disaster', *International Social Work* 50: 405–17.
- Tosone, C., J. Bauwens and M. Glassman (2016) 'The Shared Traumatic and Professional Posttraumatic Growth Inventory', *Research on Social Work Practice* 26: 286–94.
- Tosone, C., J.P. McTighe and J. Bauwens (2015) 'Shared Traumatic Stress among Social Workers in the Aftermath of Hurricane Katrina', *British Journal of Social Work* 45: 1313–29.
- Tudor, R., J. Maidment, A. Campbell and K. Whittaker (2015) 'Examining the Role of Craft in Post-Earthquake Recovery: Implications for Social Work Practice', *British Journal of Social Work* 45: 205–20.
- United Nations Office for Disaster Risk Reduction (UNDRR) (2015) 'Sendai Framework for Disaster Risk Reduction'. Available online at: <https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030> (accessed 4 February 2020)
- United Nations Office for Disaster Risk Reduction (UNDRR) (2017) Available online at: <https://www.undrr.org/terminology/disaster> (accessed 4 February 2020)

Vickers, T. and L. Dominelli (2015) 'Students' Involvement in International Humanitarian Aid: Learning from Student Responses to the 2004 Tsunami in Sri Lanka', *British Journal of Social Work* 45: 1905–22.

World Health Organization (WHO) (2019) 'Natural Events'. Available online at: https://www.who.int/environmental_health_emergencies/natural_events/en/ (accessed 22 July 2019).

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