Children and young people's wellbeing post-disaster: Safety and stability are critical

L. Gibbs [a,*], K. Block [a], L. Harms [b], C. MacDougall [a,c], E. Baker [a], G. Ireton [a,d,1], D. Forbes [e], J. Richardson [a,f], E. Waters [a]

[a] Jack Brockhoff Child Health and Wellbeing Program, Melbourne School of Population and Global Health, University of Melbourne, Australia
[b] Department of Social Work, University of Melbourne, Australia
[c] Discipline of Public Health and Southgate Institute for Health, Society and Equity, Flinders University, Adelaide, Australia
[d] Health and Human Services Emergency Management, Department of Human Services, Victoria, Australia
[e] Phoenix Australia: Centre for Posttraumatic Mental Health and Department of Psychiatry, University of Melbourne, Victoria, Australia
[f] Emergency Services, Australian Red Cross, Australia

ARTICLE INFO

ABSTRACT

Children, young people and parents from communities affected by the February 2009 bushfires in Victoria, Australia, were interviewed four to five years post-fires as part of the Beyond Bushfires research study. Participant-guided mobile methods were used, in conjunction with interviews, with 35 people aged 4–66 years, to explore their current sense of place and community. Analysis of their stories revealed how children and young people sought safety and stability in the aftermath of a disaster experience in their home, school, social, recreational and work environments. For some families, this was a significant factor in a decision to move away from affected communities, whereas for others the familiarity of the local environment and community members counteracted the post-disaster disruption. The interplay of child, parent and grandparent mutual support and protection was evident, with friends, schools and communities also providing important support in creating safe environments for children.

© 2015 Elsevier Ltd. All rights reserved.

1. Background

There is strong evidence demonstrating the short and long term impacts of disasters on the physical, emotional, psychological and social wellbeing of children and young people [1–10]. While most disaster survivors will recover without the need for specialised support [5,11], post-disaster community interventions to support positive outcomes are important for reducing the risk of serious problems arising in multiple areas of a child or young person's life with detrimental consequences for critical developmental functions [12].

In the absence of a substantial evidence base, an international network of experts in disaster and mass violence collectively identified, based on their experience, five essential elements to guide psychosocial interventions in the short term (hours to months) after a disaster [13]. Restoration of safety was named as one of the five essential elements, in addition to calming, sense of self and collective efficacy, connectedness and hope. A sense of safety and stability is recognised as a fundamental human need [14] critical to children's health, development and wellbeing [15] and hence enshrined in the UN Convention on the Rights of the Child [16]. Children's sense of safety and stability is often threatened, disrupted and sometimes severely damaged in disaster contexts due to the hazard event itself, the often community-wide impact and the prolonged dislocation during the recovery period. However, there is limited evidence about how to restore a sense of safety and stability, particularly given the high impact usually resulting from a disaster that requires community-wide intervention [5,13,17].

A review of interventions for children and young people after the 2009 Black Saturday bushfires in Victoria, Australia indicated that there were very few recovery services with an explicit focus on restoring safety and stability [18], although it was acknowledged that existing information resources incorporate these as priorities [19,20] and it is likely that other services addressed this issue without articulating it in aims and objectives.

Gaffney [21] notes that the concepts of safety and stability refer to more than a physical state:

A sense of safety is achieved through the elements of a physically safe environment, psychological and social safety, the ability to

* Correspondence to: Jack Brockhoff Child Health and Wellbeing Program, University of Melbourne, Level 5, 207 Bouverie Street, Carlton, 3053, Australia.
E-mail address: lgibbs@unimelb.edu.au (L. Gibbs).
[1] Previous appointment.

trust oneself and others, and behavioural safety, knowing that one will be secure with the appropriate structures, limits, and expectations in place (p1011).

Safety is related to the concept of ontological security, the confidence people have in the continuity of their self-identity, social and material environments [22,23]. "Ontological security provides psychological protection from the anxiety of uncertainty and risk" (p144) but can be undermined by the impacts of a disaster experience [23].

There is limited understanding of how children and young people experience the dislocation of a disaster and their role in restoring safety and stability. Gaffney, in her report of the impact of terrorist attacks on the World Trade Centre on the lives of children and young people, provides examples of a range of psychosocial impacts, including in some cases a loss of safety [21]. She also describes various clinical and non-clinical strategies to address these impacts and restore wellbeing, including children's own self-regulation methods. Another study of the immediate period after a major tornado in Minnesota showed that moving to a new home was associated with higher levels of behaviour problems for children and youth, but disaster exposure and PTSD symptoms did not significantly predict behavioural problems [24]. The authors speculate that "Children may be more resilient than once thought, and this particular type of trauma may not pose a major threat to a child's psychological well-being, as long as their life circumstances are minimally disrupted" (p32), thus emphasising the importance of a safe and stable home environment. This is consistent with a growing discourse about children's resilience post-disaster, recognition of their competence and the benefits of being actively engaged in overcoming adversity, engaging in their community from a safe psychological space rather than being seen and treated as passive victims [1,5,8,25–28]. As noted by Payne [27], "Instead of looking only at factors in the situation that might present a risk, we can also look for factors that will offer security" (p11). He also points out, "Therefore, a problem does not mean incapacity, and it may even stimulate strong and effective responses" (p13).

This paper seeks to increase understanding of the experiences and needs of children and young people after a disaster that emerged from interviews to explore current sense of place and community with children, young people, parents and grandparents. The participants had all been affected by severe bushfires that occurred in February 2009 across the State of Victoria, Australia. The worst of the fires occurred on 7 February 2009, commonly referred to as 'Black Saturday'. The fires resulted in 173 lives lost, including 35 children and young people. In addition, 16 children and young people were orphaned and many more were injured and traumatised by their experiences [29]. One hundred and nine communities self-identified as being affected by bushfires. More than 3500 buildings were destroyed including 2133 homes, and over 60 schools and childcare settings were highly affected through building and student exposure, as were other community resources such as sporting facilities and playgrounds, resulting in family and community level disruption for years after the event. For the purposes of this paper, 'children' refers to those aged 0–12 years and 'young people' refers to those aged 13–18 years.

2. Methods

2.1. Setting

Beyond Bushfires is a mixed methods study investigating individual and community recovery following the 2009 Victorian bushfires [30] (www.beyondbushfires.org.au). It is being conducted using a participatory approach with 24 communities based in 10 locations across Victoria, Australia. These communities were selected and invited to participate based on diversity criteria relating to community size, location, socio-demographics and bushfire impact.

2.2. Sampling and recruitment

Current and previous (2009) residents in the participating communities were eligible to participate in both the survey and interview components of the Beyond Bushfires study. The first round of surveys was conducted in 2012, prior to the interviews. Maximum variation sampling [31] was used initially to identify a diverse range of potential interview participants and invite them to participate in an interview. Sample diversity was sought in terms of demographics, residential location, and bushfire experiences, based on the participants' 2012 survey responses. Following data collection and concurrent analysis, further participants were sought to explore emerging themes relating to the experiences of children and young people, and the experiences of those who had relocated out of their communities. In some cases this included community members who had not previously participated in the study survey.

2.3. Data collection

Participant-guided mobile methods were used in conjunction with interviews to explore participants' sense of place and community to build understanding of recovery trajectories. A detailed account of these methods is reported elsewhere [32] but essentially they involved an in-depth interview with the participant combined with a walk or drive around their property or local area to stimulate discussion about events, places and things that are important to them. Three researchers (LG, KB, and ES) conducted the interviews in pairs. Some people were interviewed with family members, e.g. as a couple or parent with child, according to their preference. This resulted in two children being interviewed on their own, three children being interviewed with their mothers, and the young adults interviewed together as a couple. The interviews were audio-recorded and subsequently transcribed with identifying information removed for reporting purposes. The researcher took photographs of places and things that participants identified as important to them. Participants had the option to take the photos themselves but all opted for the interviewer to take them. This choice appeared to arise from their preferred role as 'tour guide' in the interview, with the taking of the photographs almost incidental to their telling of the story of why the topic of the photo was important. The photographs will be used in reporting elsewhere to illuminate some of the issues discussed.

2.4. Data analysis

The conduct of the interviews by two researchers allowed for immediate debriefing after the interview on the drive back to the city. This was the first stage of analysis allowing for discussion and agreement about the key messages from the interview, a chance to compare impressions and interpretations of issues raised and the way they were expressed, and provided mutual emotional support for the researchers given the often intense nature of the interview discussion. The analysis for this paper focussed on issues relating to the experiences of children and young people. All of the interview transcripts were initially thematically coded in a joint process involving the three researchers. Two of the emergent codes were 'children and families' and 'schools and education'. A separate line by line coding of those transcripts with a strong emphasis on the

experiences of children, young people and families was then conducted by one of the researchers (LG) [33]. This progressed to focussed coding which was supported by concurrent memo writing to develop a theoretical interpretation of the issues being raised, which was discussed and developed with co-authors and then cross-checked against the 'children and families' and 'schools and education' codes to ensure it provided a clear account of the data. Quotations have been used to illuminate the findings and all names were replaced with pseudonyms. Theoretical and empirical literature was then examined to determine alignment or contradictions with the study findings.

3. Results

The interviews were conducted in 2013 and 2014, four to five years after the bushfires, with 35 participants in 25 interviews (18 male and 17 female), ranging in age from 4 to 66 years. They included two grandparents, 17 parents, five children and two young adults who were teenagers at the time of the fires. All the participants were from high fire-affected communities in Victoria, Australia. Four of the families had relocated to other communities since the bushfires.

3.1. Fire experiences

The initial questions for the interviews and mobile methods were deliberately focussed on the present to give participants control over what was discussed and to minimise re-activation of traumatic memories and distress associated with their bushfire experiences [32,34]. Despite that, many participants took the opportunity to give detailed accounts of what happened to them on Black Saturday and their recovery experiences as an essential part of the story about their current lives.

Vivid accounts emerged of children and young people's exposure to the fires, including a narrow escape with a grandmother in the car, helping parents fight the fires to defend the house, experiencing the terror of the flames, fearing death, and witnessing the distress of their parents and grandparents. Many of the families interviewed lost their homes in the fires, most of the children's kindergartens or schools had burned down, some children and young people witnessed dead bodies and destruction and chaos, and most had friends who had died in the fires, sometimes with their whole family. These experiences became an ongoing part of the family life history, so much so that even children born after the fires absorbed it. One four year old boy referred to his house burning down and when his brother said, "No, it's not his house because he wasn't alive when that happened", the younger brother responded, "I was in Mummy's tummy." He also commented 'he died' and 'she died' when new names were mentioned at different points in the tour of places they identified as important. His mother corrected that they were not referring to anyone who had died. It appeared it was his understanding of what is said in normal conversation about social contacts. Similarly, another four year old child at the time of the fires, would tell strangers 'his story' but actually reported the experiences of his friend of the same age who had lost his home and toys and was talking of suicide.

For many children and young people, there was a lost sense of safety, as described by one mother about her son who lost his house, school friends, school and pet:

So for a little boy like that who is eight years old, I mean it's another planet and he lost his chook [chicken]. Even that, his favourite chook, things like that, there was no place safe and he did say to me "What would have happened if this, and what would

have happened if that happened", you know kids go through scenarios and I said "Well I wouldn't have let anything happen to you Thomas", and then he said, "Well I bet so and so's parent said that" and they were the child that died. So then I realised, well he's now not even got safety in that concept, that your parents are super heroes, they would always keep you safe.

Understanding of the nature and risks of the environment they live in may have had a protective effect for some. One young adult who was 16 years old at the time of the fires said that he felt unaffected by the experience:

I don't know. I think I dodged most of all of that stuff. I don't feel like the bushfires affected me that much. I don't know if I was just a little bit older, sort of coped with it a bit better. It was sort of just something that happened and it's done and move on, that's it, keep going. But I was in Year 11 when it happened, in the middle of VCE (final years of secondary school) and I sort of just kept going. I didn't think about it that much. Some of my friends, they were affected by it but for me it's like "alright well I live in the community in the country and this thing can happen and it did happen" and keep going.

But even he was affected by hot weather in subsequent summers:

Yeah, you'd be at work on a 45 °C day and it's like, oh what's going on up at home, am I going home to a house tonight?

In the recounting of bushfire experiences, participants were mostly 'matter of fact' in their accounts of exposure except in some instances when parents were speaking with emotion of the impacts on their child. There was a supportive interplay between parent and child with a shared coherent account evident when there was joint participation in the interview.

3.2. Post-disaster adjustments

In the immediate aftermath of the fires, children and young people made major adjustments in every facet of their lives. Children had to be flexible to cope with disrupted routines. One 13 year old boy, who was eight years old at the time of the fires, referred to the custody arrangements with his separated parents:

I remember changes all the time after the fires, things changing, doing things on different days and stuff like that.

He also clearly remembered the feelings of fatigue:

I seem to remember being constantly worn out. I don't know why. Just after the fires. I just remember feeling worn out and not really feeling like doing much. I didn't really want to go on a holiday or I didn't want to go anywhere, I kind of just wanted to stay where I was. I don't know-it's such a big thing to happen.

Children also had to deal with anxiety, sometimes specific episodes of anxiety triggered by sensory reminders of the fire experience such as dense winter fog reminding them of thick smoke, and at other times anxiety for extended periods requiring professional support.

3.3. School adjustments

Many children had to deal with disruptions to their schooling after the school burnt down, and then adjustments to new school environments. A boy who was eight years old at the time of the fires reported attending another primary school for a short time before a temporary school was established and then eventually a new school was built. He showed us the sites of the old, temporary

and the new schools, describing his preference for what was familiar:

> I think I liked the old school the best. Just because it was the way it always was. I don't know, I find that it was a change to go to this new school because I went from kinder to here so it was a big transition and then you're here for a couple of years and then you have to have another transition to a different area, you get used to that and then you go to a different area. I don't know. I think it's just because I started here, I liked it here. I got to know everyone here.

Difficulties coping with schooling and tertiary education after the fires were common themes for all ages. Participants reported children and young people having problems coping with key transitional stages such as the start of school or the final year of secondary school, which was not always reported by parents as a bushfire related issue. In some cases parents found it difficult to work out what was 'normal behaviour' for their child and what was 'fire-related'.

One parent spoke of her son starting his first year of primary school, two years after the fires:

> We did six months of Prep (first year of school) here and my child was so anxious. It's all about competition, it's all about who's got their red rainbow words and he's actually really bright for his age so he was right at the top of the competition… But it was like "Oh my God I've got to do this" and then I'm, "No you don't. You've got to play nicely with the other kids. Do you know what? You don't have to learn maths and writing because you can already do that. Just take it easy."

She ended up moving him to a school in an adjacent community and found that he thrived in the less competitive and more nurturing environment. She did not explicitly relate this anxiety and need for change to a less demanding environment, to their bushfire experiences. Another parent spoke of her older daughter's challenges returning to secondary school after the fires, with the added stress of losing their house and moving away:

> She had so much trouble going back to school. She couldn't think, concentrate at all. Everything seemed irrelevant that she was doing and they tried so hard. They were very helpful but she had a lot of trouble with just fitting in with the kids that she knew before there. They were not understanding her and she just felt that all their problems were very trivial. We went through a really hard time for several years just trying to work out what to do. We were put in touch with CAMS (Mental health service)… They were great. They got her onto a group workshop for kids of similar ages. They did that for about a month. She tried a few different types of schooling… So last year was her first proper year back at school really. It was that disrupted.

Other families described instances of taunting experienced by children in school, such as other children saying things like "*your friends like died and they turned into zombies and they ran into the water and drowned*". A range of strategies was described to manage these various difficulties with disruptions and stresses with schooling post-fires. They included decision making about which school to attend, and in some cases changing schools and relocating to new communities.

One family decided to relocate from their bushfire affected community and enrol their son in a new school. The mother described her concern for her son's mental health and wellbeing as a four year old in the aftermath of the fire:

> So by the end of 2009 he was starting to say "Mummy I hate the blackness, I hate these trees, I hate the fire, I hate, hate hate" and "I hate it here" and I thought, you know what? I just think that this is not right for us, I just don't think that's right for him. I don't want him growing up in this community where there's so much depression and sadness and it wasn't a positive community.

After moving, she found the new community very friendly and the school a very positive environment for her son, although she did find the parents' aspirations for their children competitive. Her now nine year old son was positive about the new community:

> Well there's lots of new and nice people and it's not as much, well I don't know, it's not black, it's more better and nice.

Conversely, a 13 year old boy described his preference as an eight year old to attend a nearby school after his was destroyed, rather than follow others and go to a school out of the bushfire affected area before their own temporary school was built:

> Just being away, I don't know, after that, just, you've got this huge bushfire and everything's destroyed in (this community) and you decide a good thing for you was to go to (a suburban area) to be schooled and then drive home. I didn't really get it and that's why I stayed here.

When it became time for him and his friends to progress to secondary school a few years later, they all decided to go to the same school to stay together, even though some of the older siblings went to different schools. His mother described the close emotional bonds that had formed between them:

> That group of boys that we've talked about, they are a very specific group of kids who are quite different. They're not your standard 13 year old boys. They have a huge amount of empathy and sympathy and they're very in tune to what goes on. You know 13 year olds seem to have tunnel vision, well because, which is the upside of all of this, these kids seem to have a really broad idea about the world and it's made them an absolutely terrific group of kids. So the good and the bad in it. But they look after one another and there's no issues with bullying or anything like that. Everyone's very close.

3.4. Community-level adjustments

At a community level, children and young people were conscious of changes around them. The two young adults spoke at length about the changes occurring in their local community and took us on a tour to share both the joy of old services returning and the dismay about new 'ugly' buildings and nostalgia for the buildings and services they replaced such as the original hardware store with the dirt floor out the back. She expressed concern about increased drug use among the local young people:

> One thing is that a lot younger kids were hanging around with a lot older kids afterwards just because of how everyone was trying to look after each other. There was just big groups of kids roaming around the streets and so everybody kind of linked together. So you've got these young kids going in and doing things that they, maybe a few of them were doing it at the time, beforehand, but now it's the vast majority.

They both still spoke with affection and hope for their local area and described their favourite activities. He showed us his dirt bike that he rode regularly through the local forest and she showed us a spot in the quiet of the local forest near the waterfalls where she went when she needed time alone.

One seven year old boy gave us a tour of places important to him, including the garden of his next door neighbour that he helped his mother to maintain in the absence of his neighbour whose house had burnt down with some of the inhabitants. He spoke in a very matter of fact manner about this dramatic experience right next door. He also joyfully showed us the new

native trees with edible fruit he was enjoying that were being planted in the local streets as part of the town redevelopment, and his favourite lolly and pizza shops that had been rebuilt.

A 13 year old boy spoke of his feelings about his community. "*The community is pretty good. I guess I just like it because it's where I've grown up ever since I was born.*" Then he spoke of significant changes to the infrastructure and buildings, "*Yeah so I think that's a big change, like the look of* (*our community*). *The big change is people, new people coming in, different people leaving.*" He was also conscious of the community-wide emotional impact of the fires that echoed his own feelings of fatigue described earlier:

> *I remember feeling worn out. I think maybe it was just because everyone was kind of flat, it was not a very good time for the community itself, I don't know, just a bit in an odd-their head space was a bit weird, a bit zoned out of everything.*

Describing his appreciation for the temporary housing provided at that time on a community site for anyone who had lost their home, and where his extended family were located as well, he said he preferred it to being in a caravan on the family property, because "It was good being around Pa and Nan and my cousins and that."

The importance of familiar people, routines and expectations was a recurring theme. One family moved out of a rental property in a neighbouring township to live in a tin shed on their land until their new home was built, as this allowed them to return to their daily routine of walking with the children to the shops and the local kindergarten instead of using the car to get everywhere. They pointed out the first thing they rebuilt on their property-a sheltered sandpit for the children to play in, ensuring they could be kept close, happy and supervised even while the parents worked on rebuilding the house.

Many families showed us nature sites locally and spoke of returning to their favourite family nature activities post-fires, even though the environments were changed. Families endeavoured to purchase identical toys and household items rather than new things, finding the reassurance of the familiar was significant for children and young people. One boy refused to join a new football club outside his local area when his own closed due to insufficient players, but was prepared to consider joining a new team in the local area that was started a year later. One teenager chose to move out of home while her father was 'out of control', dealing with mental health problems triggered by the fire and its aftermath. When his condition stabilised, their relationship was restored and she spoke of wanting to move back home. Significant family decisions about where to live were heavily influenced by children's schooling needs and the commitment to situate them within a supportive connected community:

> *I'm all for sending her to the local community school, I think it's important rather than sending her away, I want her to know kids locally so that on the weekends they can go and hang out together. I'm a big one for that.*

While in some cases this reflected normal parenting considerations in school choices, in others it was specifically related to a need for a positive environment post-fires. As children's routines were restored there was evidence of thriving. One nine year old child, likely influenced by the extensive rebuilding of houses and community facilities in his local community, spoke of his plans to be a 'house building engineer' when he grew up, which had taken precedence over the other careers he had previously considered – as an Olympian or a professional footballer.

3.5. Family support

Extended family, but particularly grandparents, also had a key role in reciprocal caregiving with children and parents. They were often responsible for removing children from fire zones during the fires, they had ongoing caring roles and were a constant reassuring presence for children. In return, children provided grandparents with a sense of purpose and continuity. One grandfather spoke of a letter he had received from his grandson:

> *Yes, well our youngest grandson, following the fires, that was the thing he was most concerned about-did the tree house catch fire? He was five. He wrote a letter "Dear Grandad, thank you so much for saving the tree house. You're so brave."*

Grandparents also had an important role in connecting children to family history and to homes and communities that had been part of the family for generations.

4. Discussion

Interviews conducted with children, young people and adults about their lives after the 2009 Victorian bushfires revealed dramatic bushfire experiences and significant disruption and dislocation in every facet of their lives, consistent with evidence from other disasters such as Hurricane Katrina [35]. There was evidence of mental health and wellbeing problems as a result, in some cases requiring professional support for the child and/or young person. These children and their families also showed resilience in their processing of the trauma and changes and ongoing challenges, and their capacity to return to everyday life over the four to five years since the bushfires. Their comments and manner indicated that their disaster-affected surroundings had become part of the accepted backdrop of their lives. Children and young people were often involved in significant decisions affecting their lives and those of their family, demonstrating their capacity to actively engage in dealing with adversity. This supports the potential for children to develop a sense of self efficacy [12] and to be 'competent survivors', a term used in relation to armed conflict [26]. It is also consistent with the model of the 'citizen child', described in the sociology of childhood, as being capable of contributing to decisions affecting their lives, a right enshrined in the UN Convention on the Rights of the Child [16,28,36].

Boyden, in her review of the role of children in armed conflict zones, challenges the expectation that a loss of safety and stability necessarily undermines children's wellbeing and development [21]. She promotes children's capacity to resolve problems and deal with change, and advocates for agencies to work with families and communities to restore social structures. This may well be a mechanism for restoring the lost sense of safety and stability. This would certainly be supported by the findings of this study in which the decisions made by and for children and young people post-bushfires reflected the need for a restoration of routines and familiar social and physical environments. In some cases this was achieved by minimising change, such as replacing household items and choosing schools and sporting clubs that were locally based and involved familiar people. These steps are likely to restore ontological security and reduce anxiety as a result [23]. A strong attachment to place that was central to the child's development of identity is also likely to encourage continuation of the familiar in times of stress [37]. In other cases, change was necessary to maintain a sense of emotional safety and security by reducing demands and high expectations, and reducing exposure to the significantly changed built and natural environment. This was apparent through shifts to new schools, tertiary and work

environments for the child or young person, and/or families moving to different homes and to new communities. Attachment to the original community may have become compromised and experienced as negative in these cases as a result of the bushfire experience, changed environment and subsequent social interactions [37].

There was also a clear reliance on family and community connections to support a positive, nurturing environment for children and young people [21,26,38,39]. This influence of family and community reflects a socioecological understanding of the different levels of influence on children's wellbeing which is reflected in Bronfenbrenner's ecological framing of resilience post-disaster and recognises shifting influences and experiences over time [40,41].

The incidences of bullying-related behaviour in the school environment, which has also been reported in other post-disaster studies [21,42], highlights the importance of teaching affected children and their peers to deal with the emotional intensity of their respective experiences and responses. However, there was also evidence of strong ongoing supportive emotional bonds for children of different ages with their friends. This reflects the literature on bonds between children who experienced the trauma of wars together, particularly when supervising adults did not survive [43]. Some aspects of the fire experience have comparable elements of dislocation and trauma involved and the reduced capacity of parents to protect children.

Parents also described with gratitude the kindness of neighbours, service providers and staff at schools and childcare centres in supporting their children during times when they were under stress themselves. This highlights the role of schools, recreational organisations and the broader community in supporting positive outcomes for children and young people and the importance of directing post-disaster services accordingly [13,17,18,44–46].

Collectively these findings point to the importance of physical, psychological, emotional and social safety and stability in the lives of children and young people post-bushfires [21]. There were no apparent age differences in these findings. Lack of safety and stability was identified as a source of stress for children and young people of all ages and decisions were based on its restoration. In some cases families decided to move away from the ongoing community level disruption of the bushfire affected communities to help children to regain their sense of safety and stability. However, for many, the familiarity of the environment, friends and community members counteracted the post-disaster disruption and was a critical element in children's and young people's sense of security.

Recruitment in post-disaster contexts is always difficult and many parents and/or children declined the invitation to participate in interviews [5,13,17]. The most common reasons provided included a wish to protect children and young people from further trauma, or an expressed need by children and young people to 'move on' from the fire experiences. Therefore, this study cannot claim to represent the full range of post-disaster experiences. However, the consistency in the findings does provide important insights into the importance of safety and stability in considerations of family, school and community-level interventions to support positive outcomes for children and young people. The participant-guided mobile methods provided a stimulus for raising issues not always present in the interview discussion. For example, in separate tours a mother and her child both showed us the grandmother's house as an important place for them. Where family experiences were discussed with both parents and children, a shared narrative was evident, demonstrating an ability to share memories and discuss the bushfire experiences of children and young people.

There is limited evidence of how positive outcomes may be supported for children and young people. It is unlikely that a singular focus on safety and stability will suffice in post-disaster interventions for children and young people given the multiple influences on wellbeing [5,47]. It is more likely that a multi-strategy, multi-setting plan will make a meaningful contribution, with due consideration for support of safety and stability within that plan [18,48] and engagement of children, young people and families to identify appropriate strategies [16]. This paper may be a useful resource for starting conversations about recovery decisions for families post-fire. The stories could be used to map out some of the experiences of other families and to engage children and young people in talking about things they like/dislike about staying in a particular school, recreation or community setting, what they think they would like about moving/what they would dislike, and what would they miss by leaving/what they would miss by staying. This would initiate and enable conversations and decisions based on deliberative family and community processes.

5. Conclusion

This study contributes to increased understanding of the needs of children and young people in the five years following a disaster. In interviews children, young people and parents highlighted the exposure to individual and community level trauma and dislocation, the effects of which were expressed in every element of their lives. There was clear evidence of children's capacity to recognise and address the challenges of a post-disaster context, contributing to important decision making about their lives. The life adjustments they made consistently aimed to increase children's sense of physical, emotional, psychological and social safety and stability. In some cases, they did this by embracing the familiar surrounds and social connections of their local community. At other times it required a shift away from the familiar to another environment perceived as more positive and/or less demanding. Efforts to increase the safety and stability of children and young people were strongly supported by parents with the additional support of grandparents, friends, schools and community members. These conclusions reflect a broad understanding of safety and stability and demonstrate its influence on child wellbeing, reinforcing its key role in international agreements relating to children's rights. While it is likely that there are different experiences and perspectives not captured in this research, it is also clear from the consistency of responses that safety and stability are important considerations in multi-strategy support plans, developed in consultation with children, young people and families post-disasters.

References

[1] Anderson WA. Bringing children into focus on the social science disaster research agenda. Int. J. Mass Emerg. Disasters 2005;23(3):159–175.

[2] Bal A. Post-traumatic stress disorder in Turkish child and adolescent survivors three years after the Marmara earthquake. Child Adolesc. Mental Health 2008;13(3):134–139.

[3] Bonanno GA, Brewin CR, Kaniasty K, La Greca AM. Weighing the costs of disaster: consequences, risks, and resilience in individuals, families, and communities. Psychol. Sci. Public Interest 2010;11(1):1–49.

[4] Dell'Osso L, Carmassi C, Massimetti G, Conversano C, Daneluzzo E, Riccardi I, Stratta P, Rossi A. Impact of traumatic loss on post-traumatic spectrum symptoms in high school students after the L'Aquila 2009 earthquake in Italy. J. Affect. Disord. 2011;134:59–64.

[5] McDermott B, Cobham V, Road Less A. Travelled: a Guide to Children Emotions and Disasters. Queensland, Australia: TFD Publishing; 2012.

[6] McFarlane AC. Posttraumatic phenomena in a longitudinal study of children following a natural disaster. J. Am. Acad. Child Adolesc. Psychiatry 1987;26(5):764–769.

[7] McFarlane AC, Van Hooff M. Impact of childhood exposure to a natural disaster on adult mental health: 20-year longitudinal follow-up study. Br. J. Psychiatry: J Mental Sci., 195; 2009. p. 142–148.

[8] Peek L. Children and disasters: understanding vulnerability, developing capacities, and promoting resilience – an introduction. Child. Youth Environ. 2008;18(1):1–29.

[9] Yelland C, Robinson P, Lock C, Greca AML, Kokegei B, Ridgway V, Lai B. Bushfire impact on youth. J. Trauma. Stress 2010;23(2):274–277.

[10] Gordon R. When children won't talk about trauma. Psychother. Aust. 2002;8(4):14–20.

[11] Alisic E, Jongmans MJ, van Wesel F, Kleber R. Building child trauma theory from longitudinal studies: a meta-analysis. Clin. Psychol. Rev. 2011;31:736–747.

[12] Gilligan R. Adversity, resilience and young people: the protective value of positive school and spare time experiences. Child. Soc. 2000;14:37–47.

[13] Hobfoll SE, Watson P, Bell CC, Bryant RA, Brymer MJ, Friedman MJ, et al. Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence. Psychiatry 2007;70(4):283–315.

[14] Maslow AH. A theory of human motivation. Psychol. Rev. 1943;50(4):370.

[15] National Society for the Prevention of Cruelty to Children (NSPCC), A child's needs and rights, NSPCC Fact Sheet. ⟨http://www.nspcc.org.uk/Inform/resourcesforprofessionals/neglect/childs-needs_wda91849.html⟩, 2012 (accessed 01.09.12).

[16] UNCRC, United Nations Convention on the Rights of the Child, in: G.A. Resolutions 44/25, annex, 44 U.N. GAOR Supp. (No. 49) at 167, U.N. Document A/44/49 (1989), entered into force September 2 1990. /C/93/Add.5 of 16 July 2003, 1989.

[17] Masten AS, Narayan AJ. Child development in the context of disaster, war, and terrorism: pathways of risk and resilience. Annu. Rev. Psychol. 2012;63(1):227–257.

[18] Gibbs L, Snowdon E, Block K, Gallagher HC, MacDougall C, Ireton G, Pirrone-Savona A, Forbes D, Richardson J, Harms L, et al. Where do we start? A proposed post disaster intervention framework for children and young people Pastor. Care Educ. 2014;32(1):68–87.

[19] Department of Human Services, Child Development and Trauma. ⟨http://www.dhs.vic.gov.au/for-service-providers/children,-youth-and-families/child-protection/specialist-practice-resources-for-child-protection-workers/child-development-and-trauma-specialist-practice-resource⟩, 2013 (accessed 21.08.14).

[20] L. Downey, Calmer classrooms: a guide to working with traumatised children, Office of the Child Safety Commissioner. ⟨http://www.ccyp.vic.gov.au/childsafetycommissioner/downloads/calmer_classrooms.pdf⟩, 2007 (accessed 21.08.2014).

[21] Gaffney DA. The aftermath of disaster: children in crisis. J. Clin. Psychol. 2006;62(8):1001–1016.

[22] Giddens A. The Consequences of Modernity. Cambridge: Polity; 1990.

[23] Hawkins RL, Maurer K. You fix my community, you have fixed my life': the disruption and rebuilding of ontological security in New Orleans. Disasters 2011;35(1):143–159.

[24] Houlihan D, Ries BJ, Polusny MA, Hanson CN. Predictors of behavior and level of life satisfaction of children and adolescents after a major tornado. J. Psychol. Trauma 2008;7(1):21–36.

[25] Hagan JF. Psychosocial implications of disaster or terrorism on children: a guide for the pediatrician. Pediatrics 2005;116:787–795.

[26] Boyden J. Children under fire: challenging assumptions about children's resilience. Child. Youth Environ. 2003;13(1):1–29.

[27] Payne M. Risk, security and resilience work in social work practice. Rev. Asist. Soc. 2011;1:7–14.

[28] MacDougall C, editor. Understanding twenty-first century childhood. Melbourne: Oxford University Press; 2009.

[29] Victorian Bushfires Royal Commission, The 2009 Victorian Bushfires Royal Commission Final Report Summary, in: vol. PP No. 332-Session 2006–10, Government Printer for the State of Victoria. ⟨http://www.royalcommission.vic.gov.au/Commission-Reports/Final-Report⟩, 2009 (accessed 08.07.13).

[30] Gibbs L, Waters E, Bryant R, Pattison P, Lusher D, Harms L, Richardson J, MacDougall C, Block K, Snowdon E, et al. Beyond bushfires: community, resilience and recovery – a longitudinal mixed method study of the medium to long term impacts of bushfires on mental health and social connectedness. BMC Public Health 2013;13:1036.

[31] Patton MQ. Qualitative Research and Evaluation Methods. 3rd ed.. London: Sage Publications Ltd.; 2002.

[32] Block K, Gibbs L, Snowdon E, MacDougall C. Participant guided mobile methods: investigating personal experiences of communities. SAGE Research Methods Cases 2014 http://dx.doi.org/10.4135/978144627305014536373.

[33] Charmaz K. Constructing Grounded Theory. 2nd ed.. London: SAGE; 2014.

[34] Gibbs L, MacDougall C, Harden J. Ethical and appropriate involvement of children and families in bushfire research. Health Sociol. Rev. 2013;22(2):114–123.

[35] Weems CF, Taylor LK, Cannon MF, Marino RC, Romano DM, Scott BG, Perry AM, Triplett V. Post traumatic stress, context, and the lingering effects of the Hurricane Katrina disaster among ethnic minority youth. J. Abnorm. Child Psychol. 2010;38(1):49–56.

[36] Morrow V. Perspectives on children's agency within families: a view from the sociology of childhood. In: Kuczynski L, editor. Handbook of Dynamics in Parent–Child Relations. Thousand Oaks, CA: Sage; 2003. p. 109–129.

[37] Jack G. Place matters: the significance of place attachments for children's well-being. Br. J. Soc. Work 2010;40:755–771.

[38] Masten AS, Best KM, Garmezy N. Resilience and development: contributions from the study of children who overcome adversity. Dev. Psychopathol. 1990;2:425–444.

[39] Hafstad GS, Haavind H, Jensen TK. Parenting after a natural disaster: a qualitative study of norwegian families surviving the 2004 tsunami in southeast asia. J. Child Fam. Stud. 2012;21:293–302.

[40] Bronfenbrenner U. The Ecology of Human Development: Experiments by Nature and Design. United States of America: Harvard University Press; 1979.

[41] Bronfenbrenner U. Making Human Beings Human: Bioecological Perspectives on Human Development. Thousand Oaks: Sage Publications; 2005.

[42] Pfefferbaum B, Houston JB, Wyche KF, Van Horn RL, Reyes G, Jeon-Slaughter H, North CS. Children displaced by hurricane katrina: a focus group study. J. Loss Trauma 2008;13(4):303–318.

[43] Mann G. Networks of Support: a Literature Review of Care Issues for Separated Children. Stockholm, Sweden: Save the Children; 2001.

[44] Alisic E. Teachers' perspectives on providing support to children after trauma: a qualitative study. Sch. Psychol. Q. 2012;27(1):51–59.

[45] Alisic E, Bus M, Dulack W, Pennings L, Splinter J. Teachers' experiences supporting children after traumatic exposure. J. Trauma. Stress 2012;25:98–101.

[46] Smilde-van den Doel DA, Smit C, Wolleswinkel-van den Bosch JH. School performance and social-emotional behavior of primary school children before and after a disaster. Pediatrics 2006;118(5):e1311–e1320.

[47] Harden BJ. Safety and stability for foster children: a developmental perspective. The Future of Children 2004;14(1):30–47.

[48] Walsh F. Traumatic loss and major disasters: strengthening family and community resilience. Fam. Process 2007;46:207–227.