


# Core principles for a community-based approach to supporting child disaster recovery

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## ABSTRACT

**This paper proposes core principles for a community-based approach to supporting disaster recovery for infants, children and young people up to the age of 24 years. The principles are based on the collective expertise of the authors in child psychology, sensitive participatory research with children and families, disaster management, and clinical and service delivery expertise in post trauma situations. The alignment with existing theoretical and empirical research is also demonstrated. The core principles are relevant to service providers working in the planning and preparedness phase, the disaster response phase, and the recovery phase of a disaster. The principles take an ecological approach that recognises the important role of families, carers and the community context.**

## Introduction

Natural disasters are, and will continue to be, a reality for many Australians. Each year the Australian landscape and the Australian people are changed by floods, bushfires, cyclones and storms as well as other catastrophic events. The immediate, medium and long-term impact of these disasters has been the attention of increased research over the last ten years. This paper focuses attention on the needs of infants, children and young people following a disaster. Under this collective grouping we include infants, children and young people up to the age of 24 years, recognising that the United Nations defines a child up to the age of 18 years, and the World Health Organisation uses the terms 'young person' and 'youth' to refer to individuals up to 24 years. In this paper we have not defined the nature of the disaster, as the focus is on the impact the disaster has on the child, not only the physical occurrence of the disaster (Ronan & Johnston 2005). This impact includes the developmental, social, familial and educational impact on the child, as well as the impact on their wellbeing and mental health.

It is important to note that the majority of infants, children and young people will recover from a disaster experience without needing specialised support (Alisic *et al.* 2011, McDermott & Cobham 2012). However, the traumatic impact of a disaster can potentially be severe and may be long term, continuing in many and complex ways in the weeks, months and years following the event, potentially extending into adulthood (McFarlane & Van Hooff 2009). Factors that provide security to infants, children and young people may be disrupted, such as sense of safety and sense of routine. They may experience terror; the loss of loved ones or others in the community; the loss of schooling and the everyday occurrence of seeing friends; potentially the loss of pets and property and damage to their housing. Infants, children and young people are also affected by the impact the disaster has on parents, carers, teachers and their ability to respond to the child as they normally would, as they deal with the multiple losses from the impact of disaster (Department of Education and Early Childhood Development 2009).

A community-based public health approach to supporting child disaster recovery is proposed. This uses an ecological framework for understanding the impacts and needs of people affected by disasters, recommended as best practice by international disaster experts (Wessells 2009, Boothby, Strang & Wessells 2006, Trickett 1995, Trickett 2009, Masten & Obradovic 2007). An ecological framework recognises the interplay between an individual's health behaviours and outcomes and the multiple layers of influence from their physical and sociocultural environment (Kickbusch 1989). Therefore, how each child responds to and recovers from a disaster event will depend on their individual temperament, family and home environment, social and school setting, and community and response and recovery contexts. Accordingly, recovery can be a long-term process involving many levels of change. Infants, children and young people are growing and developing so recovery should be viewed through the course of the individual's life. This life-course perspective allows for the different types of impact on infants, children and young people's development and pathways to recovery.

Together the ecological framework and life-course perspective shows that responses to disaster by

infants, children and young people are contextual and dynamic. These conceptual frameworks work well with a principle-based approach, highlighting the need for a range of multi-sectoral interventions that address essential characteristics while acknowledging the variability in response.

## Universal principles in responding to disasters

According to a consensus of international experts, initial responses after a disaster event need to focus on the essential elements of safety, calming, hope, connectedness, and self and collective efficacy (Hobfoll *et al.* 2007). Universal principles across the lifespan include:

- ‘do no harm’
- ensure a co-ordinated response
- understand the local context, and
- recognise the impact the external intervention may have.

Local care solutions that emerge from the community and build on existing community strengths and resources strike a balance between a deficits and resilience framework. Responses should include provision of support to the supporters and have well-trained staff who can provide a mix of universal and targeted services to ensure a comprehensive range of supports are provided<sup>5</sup>.

## Core principles for infants, children and young people

### Debunking myths about infants, children and young people in disaster contexts

There was a time, not so long ago, when it was widely believed that infants, children and young people were either not affected by frightening and overwhelming experiences or they eventually bounced back—sometimes sooner or sometimes later—regardless of what had happened to them, or what they had seen, been told, heard or smelled.

These ‘myths’ were often phrased as infants, children and young people being too young to be affected, unable to understand or appreciate what was happening to them or around them, or were naturally resilient. There was also concern that they were at risk of being ‘re-traumatised’ by talking, playing or otherwise consciously engaging with their experiences (Terr 1983, Gordon & Wraith 1991, 1993, Wraith 1995). If an infant, child or young person had reactions it was considered they would be short-lived or they would grow out of them, or forget them. In the authors’ experiences some of these attitudes remain.

It is particularly important to debunk these myths in relation to the unborn child, newborn babies, infants, toddlers and pre-school children. Infants, children and young people are never too young to be negatively impacted by disasters (Masten & Osofsky 2010). Research has shown that very stressful experiences can affect a young child’s learning, behaviour, physical and mental health (National Scientific Council on the Developing Child 2004). It is important to consider unborn children too. A number of studies have connected the mother’s stress during pregnancy to changes in babies and children, for example fearfulness in infants (Bergman *et al.* 2007) and possible delays in motor and cognitive development (Huizink *et al.* 2003).

Relationships are the key to young children’s development. Research has shown that a child’s relationships with parents, caregivers and other adults actually shapes pathways in the brain and affects future developmental outcomes (National Scientific Council on the Developing Child 2004). Infants, children and young people are alert to their physical surroundings and experiences, sensitive to their emotional and social environments, and, according to their age and personalities, will try to make sense of what is happening to them, as adults do. Consequently they need caring relationships, clear, factual information, the opportunity to ask questions, and honest straight forward explanations according to their ability to understand and without overwhelming them with detail.

### Principles to guide child-specific interventions after disasters

Providing targeted services for infants, children and young people is an important means of meeting their particular post-disaster needs and building their capacities. However, there is limited evidence available about intervention effectiveness. In the absence of strong evidence, the use of core guiding principles to inform intervention development and implementation for a community-based approach to supporting child disaster recovery is proposed.

### Principle 1: Restoration of safety

Restoration of safety is a fundamental component to promote recovery for infants, children and young people during disasters, from which all other core principles build. Infants, children, young people and their families should endeavour to remain together and receive support relevant to their experiences and needs. They should not be separated unless for medical or safety reasons, or unless the infant, child or young person is in a secure and familiar environment such as the school, kindergarten or childcare setting. In restoring safety, it is important to aim for stability, consistency, continuity and routine (Hobfoll *et al.* 2007). A child’s sense of safety comes from both the objective reality and perceived reality, therefore a young person not only has to *be* safe in their environment but they also need to *feel* that they are currently safe.

<sup>5</sup> Adapted from IASC guidelines on mental health and psychosocial support in emergency settings (Inter-Agency Standing Committee 2007).

Research indicates that prolonged physical and psychological stress increases the chance of the development of a range of mental health concerns including Post Traumatic Stress Disorder (PTSD). Therefore restoring a sense of safety as soon as possible is vital (Hobfoll *et al.* 2007). Interventions that support the restoration of safety include:

- Moving the child/young person to an area that is safe. Make it clear that they are safe.
- Reuniting infants, children and young people with family and trusted adults and youth with friends. Reduce uncertainty about any other loved ones who the child may be concerned about. A child's worry and fears for loved ones may be greater than for the self.
- Providing safety from bad news and rumours. This does not mean exclusion from information but, rather, providing age-appropriate and accurate information.
- Providing an authoritative voice to assist with the perception of safety.
- Educating parents to limit the exposure to media, particularly repetitive images that may cause distress (Hobfoll *et al.* 2007).

Keeping familiar routines and structure will reduce unnecessary stress for the infant, child or young person and help them feel safe. Routines help to maintain consistency, even if it is just in one area of their life (for example maintaining a familiar bedtime routine). Returning to school, day care and pre-school can also assist in the restoration of predictability, social

### The trauma membrane

The trauma membrane is a temporary psychosocial structure that provides a buffer or healing space for those exposed to traumatic events. It allows space for natural healing processes, mediating what comes in and out. It is this monitoring that parents and caregivers can provide to children exposed to disasters and potentially traumatic events. An example of this monitoring would be limiting the exposure to media coverage of disturbing images and sounds, protecting children from hearing details that they are unable to cope with (developmentally or psychologically), or assessing professionals who work with children post disaster for competency and appropriateness. After the 2009 Victorian bushfires, school principals realised they had a full time job in protecting students from the media, interested parties who wanted to visit the school, and counsellors who had limited experience in working with children post disaster. One principal spoke of 'drawing the wagons into a circle' to protect the school community and to form a protective shield that allowed the space and time for the community to support itself in processing the events. This membrane provides a shield from unnecessary exposure to further psychological distress.

networks and supportive structures. It must be noted that such systems may first need to be re-established to be able to provide the required environment for positive recovery (Alisic 2012, Alisic *et al.* 2012, Baum *et al.* 2009). Supporting parents and communities to establish a 'trauma membrane' (see shaded box) for infants, children and young people is vital to restoring safety and promoting recovery for this group.

### Principle 2: Participatory approaches

The *United Nations Convention on the Rights of the Child* recognises the rights of children and their capacity to contribute to decisions affecting their lives (UNCRC 1989). When children are contributing and involved in the process, the decisions and actions that impact their lives are not only 'for' them, but also 'with' them.

There are emerging international examples demonstrating the capacity of children to make a meaningful contribution to community-level disaster recovery, with indications that there are mental health and wellbeing benefits arising from this involvement (Peek 2008, Anderson 2005, Hobfoll *et al.* 2007, Mitchell, Tanner & Haynes 2009). For example, it has been found that following severe flooding, children and young people appeared to cope better with changes to their home when they were given some involvement in the decision-making about the repairs (Walker *et al.* 2010).

Youth participation, as a concept, is not only about providing developmental opportunities for young people, it is also about improving the effectiveness of organisations. By tapping into the experiential knowledge of young people there is increased opportunity to ensure that a program is actually meaningful and operating in the best interests of the child.



Returning to school, day care and pre-school routines assists with the restoration of social networks and supportive structures.

Families and organisations need support to understand how children and young people can participate in ways that are appropriate to their maturity, abilities and skills. Parents and carers can encourage children and young people to join in family discussions, provide practical help at home with the clean-up, or re-establish shared and personal spaces. Children can contribute to broader community recovery and renewal projects, such as helping with delivery of supplies, providing their ideas and priorities for school and community rebuilding planning, and contributing to the development and implementation of community initiatives and events.

Organisations that traditionally work with children, such as schools, childcare settings and youth and recreational clubs, should work to involve children in decision-making processes. These organisations may also act as a resource to the community by partnering with other agencies that provide opportunities for children to contribute but may not be experienced in engaging children meaningfully.

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### Principle 3: Adults as advocates

While recognising the many strengths that infants, children and young people have, it is important to recognise that 'Children who are not protected at the time of disaster by effective caregivers may be particularly vulnerable to disaster effects' (Masten & Osofsky, 2010 p. 1032). This may be due to:

- the harmful impact of the disaster
- the ensuing disruption and potential instability in their lives afterwards, and
- the potential for exploitation.

Infants, children and young people need to be 'kept in mind' at all times by responsible adults in families, schools and other agencies to identify and enable both supports and opportunities.

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### Principle 4: Take a life-course perspective

Child development takes place through processes of progressively more complex interaction between an active child and the people, objects and symbols in their immediate environment (Bronfenbrenner 1998, McFarlane 1987, Norris *et al.* 2002, Peek 2008, Alisic *et al.* 2011). Disasters rupture and disrupt elements of that environment and have the potential to impact on the child or young person throughout the course of their life (Saltzman *et al.* 2003). The brain development of a traumatised child can be slowed down severely or stunted (Perry & Salavitz 2006) resulting in developmental and academic delays later in life (Buchanan *et al.* 2009, Osofsky 2007). Therefore, it is unrealistic to expect that children who have experienced trauma will be developmentally equivalent to their chronological age cohort (Saltzman *et al.* 2003). This does not mean that every event in early childhood invariably determines later development. However, significant events can set children on pathways that

become more difficult to change (Hertzman & Power 2003). Difficulties can appear when starting a new school or university and may happen a long time after a disaster experience increasing the risk that the post-trauma influence will be missed (Pooley & Cohen 2010). Difficulties may also emerge when there are changes in a program. A program may do fantastic work for a period of time, and then the child or young person may be moved from a program environment where they feel safe to a new environment, or relationship, or worker. These changes can interrupt recovery as the child becomes re-traumatised or experiences compounded distress.

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### Principle 5: Ecological model and enabling environments

The experiences, reactions and outcomes of infants, children and young people following a disaster are shaped by the quality of their social system and environment (Masten & Obradovic 2008, Weems & Overstreet 2009, Harvey 1996). Evaluating and strengthening the capacity and capability of these environments will increase the context of support for, and capacity of, these groups. This notion of thinking about the ecological context in which young people flourish has become crucial to understanding their recovery (Henley 2010, Saltzman *et al.* 2003, Weems & Overstreet 2009). Table 1 shows the influences around ecology.

If contextual factors are addressed, the capacity of infants, children and young people for resilience will likely be enhanced. If the context is damaged or impeded, the potential for resilience will likely be compromised. To map the needs and aspirations of infants, children and young people a view from their perspective is required. They can be active in this process of identifying who are the most important people in their life. Who can support them? Who empowers them? Which groups do they belong to and who is likely to provide post-intervention support? From here ways to restore balance and optimise aspects of the infant's, child's and young person's environment can be established (Department of Education and Early Childhood Development 2009). This 'enabling environments' approach builds on local capacities and strengthens the structures of support. Enabling the capacities and capabilities within each setting, and the connections between them, enhances outcomes.

The ecological approach emphasises the need to ascertain how the systems for infants, children and young people are functioning and whether each layer of their ecological environment is providing the optimal degree of support (refer Table 1). That is, asking how these environments can continue providing the necessary care and support. Invariably this calls for a layered and comprehensive range of co-ordinated and multi-sectoral supports and interventions.

**Table 1:** Influences around each layer of the ecology of infants, children and young people.

		Ecological environment				
		Family, carers and households	Peer relationships	Community	Organisations	Wider society
Influences	Families and immediate care networks are key to fostering the attachments, relationships and context of security and comfort that buffers the impact of adversity (Weems & Overstreet 2009, Department of Education and Early Childhood Development 2009).	The impact of disasters is mediated by providing opportunities for peer relationships. Peer relationships provide mutual encouragement and emotional support. They also play a role in the exchange of age-appropriate and meaningful information and referral. They support the development of skills that enable a person to negotiate and navigate social environments (Henley 2010).	Interactions and involvement with community activities and settings enhance positive outcomes for young people and families (Weems & Overstreet 2009). Benefits include structure and stability, sense of belonging, opportunities to 'receive' and 'give back', and increased individual and community resilience (Obrist 2006, Henley 2010, Sonn & Fisher 1998).	The trajectory for recovery of children and young people may be significantly influenced either directly via interaction between the child and organisation (e.g. a school), or indirectly through flow-on effects of an organisation's impact on a young person's environment and/or their network of support, e.g. family workplace (Weems & Overstreet 2009).	The availability and types of information, values, expectations and knowledge systems (i.e. media) operating in the wider society may influence adaptive capacity. Societal prejudices, climate of support versus isolation, government infrastructure and policies, economics and socio-political conditions can all have an impact (Masten & Obradovic 2008, Walker <i>et al.</i> 2010, Weems & Overstreet 2009).	

### Principle 6: Support parents, carers and families

Reactions by parents to traumatic events have a powerful influence on how their children cope (Cohen *et al.* 2010). Parental traumatic stress is one of the key factors that determines the likelihood of a child developing PTSD (Cohen *et al.* 2010). Other factors associated with poorer outcomes for children include:

- high levels of traumatic stress in either parent
- increased parental conflict and irritability
- a lack of family cohesion or togetherness
- parental avoidance of the trauma, and
- parental suppression of awareness of the child's traumatic stress symptoms (Cohen 2009, DeVoe *et al.* 2011).

However, there's good news. The negative effects of stress on young children can be buffered by responsive care giving (National Scientific Council on the Developing Child 2004). If parents and carers are supported as they recover, it helps them to help their children cope.

### Principle 7: Use child focused interventions over time

Recovery from a disaster is a journey with different needs at different times. Infants, children and young people, perhaps even more than adults, need different services and supports at different stages of their recovery. Responses can be tiered in terms of the timeframe post disaster being, immediate, short and long-term response.

Responses can also be tiered in the acknowledgement of impact for different groups, namely:

- Responses to whole-of-population with general information on the impacts of disasters on infants, children and young people over time.
- Responses to help parents, carers, and educators identify which infants, children and young people may not be coping well and may be in need of additional support.



Talking and sharing experiences include playing games and using other ways to express thoughts and feelings.



This mosaic is a feature of 'Kin Play-space' in the township of Marysville, Vic, which was devastated by the Black Saturday bushfires in 2009. The Kin Play-space is on the site of the former kindergarten and provides a place of quiet reflection and the extension of exploratory play for children.

- Responses to support and assist infants, children and young people with identified trauma response.

There needs to be an awareness and acknowledgement that, especially for infants and children, their response to a disaster may change over time as they grow older, mature and move into different developmental phases. Options for interventions vary. As for adults, children talking and sharing experiences, reactions and solutions, playing games and using other ways of expressing their thoughts and feelings, can be a helpful road to recovery. This is especially so in the context of a warm, responsive and supportive relationship, and when the child is able to manage the timing, topics and depth of connection with their experiences.

Younger children can be actively engaged in 'meaning making' and 'sense making' by providing them with accurate and abundant information. People who experienced *Hurricane Katrina* reported that providing age-relevant and developmentally appropriate information to children was one of the most helpful responses to a child's emotional and mental health needs (Fothergill & Peek 2006). Children and young people can also be encouraged to explore experiences and possibilities through play, social activities, involving them in community renewal activities, using educational curriculum that can address a sense of change or loss, and engaging them in the rebuilding and recovery of neighbourhoods and communities (Buchanan *et al.* 2009). Other options include drama (O'Connor 2013), storytelling, peer interviews, and creating beautiful shared spaces using artwork (Gibbs *et al.* 2013).

All people involved in developing and implementing interventions and responses need to be aware of and take into account the unique culture and context in which they take place. In culturally diverse communities it is important to recognise that there may be different

understandings of disasters and recovery, and different beliefs and practices. A participatory approach is still appropriate with an understanding of the added complexity arising from cross-cultural differences (Cross *et al.* 1989, National Health and Medical Research Council 2006, Gibbs *et al.* 2007). Engaging with local experience and taking time to ensure the response is appropriate to the culture and context will increase the likelihood of the success of the response.

## Conclusion

There are many multi-sectoral considerations in the planning of support for infants, children and young people following a disaster. There is international consensus that the ideal focus in the immediate aftermath of an event is safety and creating a sense of calm and self efficacy. However, despite the potential for a disaster experience to impact on child mental health, development and social and learning experiences, there is limited direction for interventions. Guiding principles that are informed by evidence and practice will assist with the planning, implementation and review of interventions designed specifically for infants, children and young people. The seven principles take an ecological approach that recognises the influence of families, carers and the community context on outcomes for infants, children and young people. The importance of a life-course perspective recognises that issues may arise at different life stages. Activities that engage infants, children and young people in play, social activities, and creative expression enhances resilience and strengths and give space for expressions of vulnerability. Participatory approaches that engage infants, children and young people in community preparedness, response and recovery processes in a supported way promote a sense of self efficacy and competence that can help offset the disabling effects of exposure to disasters.

## References

- Alisic, E 2012, *Teachers' Perspectives on Providing Support to Children After Trauma: A Qualitative Study*. *School Psychology Quarterly*, 27, pp. 51-59.
- Alisic, E, Bus, M, Dulack, W, Pennings, L & Splinter, J 2012, *Teachers' Experiences Supporting Children After Traumatic Exposure*. *Journal of Traumatic Stress*, 25, pp. 98-101.
- Alisic, E, Jongmans, MJ, van Wesel, F & Kleber, R 2011, *Building child trauma theory from longitudinal studies: A meta-analysis*. *Clinical Psychology Review* 31, 736-747.
- Anderson, WA 2005, *Bringing Children into Focus on the Social Science Disaster Research Agenda*. *International Journal of Mass Emergencies and Disasters*, 23, pp. 159-175.
- Baum, N, Rotter, B, Reidler, E & Brom, D 2009, *Building resilience in schools in the wake of Hurricane Katrina* *Journal of Child and Adolescent Trauma*, 2, pp. 62-70.
- Bergman, K, Sarkar, P, O'Connor, TG, Modi, N & Glover, V 2007, *Maternal Stress During Pregnancy Predicts Cognitive Ability and Fearfulness in Infancy*. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46, pp. 1454-1463.
- Boothby, N, Strang, A & Wessells, M (eds.) 2006, *A world turned upside down: Social ecological approaches to children in war zones*, Westport, CT: Kumarian.
- Bronfenbrenner, U 1998, *The ecology of developmental processes*. In: Damon, W & Lerner, RM (eds.) *Handbook of Child Psychology: Vol 1: Theoretical Models of Human Development*. New York: Wiley.
- Buchanan, TK, Casbergue, RM & Baumgartner, JJ 2009, *Young children's demonstrated understanding of hurricanes*. In: Cherry, KE (ed.) *Lifespan perspectives on natural disasters: Coping with Katrina, Rita, and Other Storms*. New York: Springer Science and Business Media.
- Cohen, E 2009, *Parenting in the throes of traumatic events: risks and protection*. In: Brom, D, Pat-Horenczyk, R & Ford, J (eds.) *Treating traumatised children: risk, resilience and recovery*. New York: Routledge.
- Cohen, JA, Bukstein, O, Walter, H, Scott Benson, R, Chrisman, A, Farchione, TR, Hamilton, J, Keable, H, Kinlan, J, Schoettle, U, Siegel, S, Stock, S & Medicus, J 2010, *Practice parameters for the assessment and treatment of children and adolescents with posttraumatic stress disorder*. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49, pp. 414-430.
- Cross, T, Bazron, B, Dennis, K & Isaacs, M 1989, *Towards a Culturally Competent System of Care: Vol I*. Washington, DC: National Technical Assistance Centre for Children's Mental Health, Georgetown University Child Development Centre.
- Department of Education and Early Childhood Development 2009, *Delivering a focus on children and young people in helping Victorian communities recover from the 2009 bushfires. A paper prepared by the Children's Services Coordination Board for the Victorian Government*.
- DeVoe, ER, Klein, TP, Bannon, W & Miranda-Julian, C 2011, *Young children in the aftermath of the World Trade Center attacks*. *Psychological Trauma: Theory, Research, Practice, and Policy*, 3, pp. 1-7.
- Fothergill, A & Peek, L 2006, *Surviving catastrophe: A study of children in Hurricane Katrina*. *Learning from catastrophe: Quick response research in the wake of Hurricane Katrina*.
- Gibbs, L, Mutch, C, O'Connor, P & MacDougall, C 2013, *Research with, by, for, and about children: Lessons from disaster contexts*. *Global Studies of Childhood*, 3.
- Gibbs, L, Waters, E, Renzaho, A & Kulkens, M 2007, *Moving towards increased cultural competency in public health research*. In: Williamson, A & DeSouza, R (eds.) *Researching with Communities: Grounded perspectives on engaging communities in research* London: Muddy Creek Press.
- Gordon, R & Wraith, R 1991, *The human response to disaster. The Mt. Macedon Digest: The Australian newsletter of disaster management: (1986-1988)* Mt. Macedon: Australian Counter Disaster College.
- Gordon, R & Wraith, R 1993, *Responses of children and adolescents to disaster*. In: Wilson, JP & Raphael, B (eds.) *International Handbook of Traumatic Stress Syndromes*. N.Y: Plenum Press.
- Harvey, M 1996, *An ecological view of psychological trauma and trauma recovery*. *Journal of Traumatic Stress*, 9.
- Henley, R 2010, *Resilience enhancing psychosocial programmes for youth in different cultural contexts: Evaluation and research*. *Progress in Development Studies*, 10, pp. 295-307.
- Hertzman, C & Power, C 2003, *Health and human development: Understandings from life-course research*. *Developmental Neuropsychology*, 24, pp. 719-744.
- Hobfoll, SE, Watson, P, Bell, CC, Bryant, RA, Brymer, MJ, Friedman, MJ, Friedman, M, Gersons, BP, de Jong, JT, Layne, CM, Maguen, S, Neria, Y, Norwood, AE, Pynoos, RS, Reissman, D, Ruzek, JI, Shalev, AY, Solomon, Z, Steinberg, AM & Ursano, RJ 2007, *Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence*. *Psychiatry*, 70, pp. 283-315.
- Huizink, AC, Robles de Medina, PG, Mulder, EJ, Visser, GH & Buitelaar, JK 2003, *Stress during pregnancy is associated with developmental outcome in infancy*. *Journal of Child Psychology and Psychiatry*, 44, 810-818.
- Inter-Agency Standing Committee 2007, *IASC guidelines on mental health and psychosocial support in emergency settings*. Geneva, Switzerland.
- Kickbusch, I 1989, *Approaches to an ecological base for public health*. *Health Promotion International*, 4, pp. 265-268.
- Masten, A & Obradovic, J 2007, *Disaster preparation and recovery: Lessons from research on resilience human development*. *Ecology and Society*, 13.
- Masten, A & Osofsky, J 2010, *Disasters and their impact on child development: Introduction to the special section*. *Child development*, 81, pp. 1029-1039.
- Masten, AS & Obradovic, J 2008, *Disaster preparation and recovery: Lessons from research on resilience in human development*. *Ecology and Society*, 13, p. 9.
- McDermott, B & Cobham, V 2012, *A Road Less Travelled: A Guide to Children, Emotions and Disasters*, Queensland, Australia, TFD Publishing.
- McFarlane, AC 1987, *Posttraumatic phenomena in a longitudinal study of children following a natural disaster*. *Journal of the American Academy of Child and Adolescent Psychiatry*, 26, pp. 764-769.
- McFarlane, AC & Van Hooff, M 2009, *Impact of childhood exposure to a natural disaster on adult mental health: 20-year longitudinal follow-up study*. *The British journal of psychiatry: the journal of mental science*, 195, pp. 142-148.
- Mitchell, T, Tanner, T & Haynes, K 2009, *Children as agents of change for Disaster Risk Reduction: Lessons from El Salvador and the Philippines*. Working paper No. 1: Children in a changing climate research. Brighton, UK: Institute of Development Studies.

National Health and Medical Research Council 2006, *Cultural Competence in Health: A guide for policy, partnerships and participation*. Commonwealth of Australia.

National Scientific Council on the Developing Child 2004. *Young Children Develop in an Environment of Relationships: Working Paper No. 1*. At: [http://developingchild.harvard.edu/index.php/resources/reports\\_and\\_working\\_papers/working\\_papers/wp1/](http://developingchild.harvard.edu/index.php/resources/reports_and_working_papers/working_papers/wp1/) [29 August 2013].

Norris, FH, Friedman, MJ, Watson, P, Byrne, CM, Diaz, E & Kaniasty, K 2002, *60 000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981-2001*. *Psychiatry: Interpersonal and biological processes*, 65, pp. 207-239.

O'Connor, PJ 2013, *Theatre in Education: The Pedagogic as the Aesthetic in a Crumbling World*. In: Jackson, T & Vine, C (eds.) *Learning Through Theatre*. 3rd Edition. New York: Routledge.

Obrist, B 2006, *Struggling for health in the city. An anthropological inquiry of health, vulnerability and resilience in Dar es Salaam, Tanzania*. Bern and Oxford, Peter Lang.

Osofsky, JD 2007, *Young children and trauma: Intervention and trauma*, New York, Guilford Press.

Peek, L 2008, *Children and Disasters: Understanding Vulnerability, Developing Capacities, and Promoting Resilience - An Introduction*. *Children, Youth and Environments* 18, pp. 1-29.

Perry, BD & Salavitz, M 2006, *The Boy who was Raised as a Dog: And Other Stories from a Child Psychiatrist's Notebook*, New York, Basic Books.

Pooley, JA & Cohen, L 2010, *Resilience: A definition in context*. *The Australian Community Psychologist*, 22, pp. 30-37.

Ronan, KR & Johnston, DM 2005, *Promoting community resilience in disasters: The role for schools, youth and families*, New York, Springer Science and Business, Inc.

Saltzman, WR, Layne, CM, Steinberg, AM, Arslanagic, B & Pynoos, RS 2003, *Developing a culturally and ecologically sound intervention program for youth exposed to war and terrorism*. *Child and Adolescent Psychiatric Clinics of North America*, 12, pp. 319-342.

Sonn, C & Fisher, A 1998, *Sense of community: Community resilient responses to oppression and change*. *Journal of Community Psychology*, 26, pp. 457-472.

Terr, LC 1983, *Chowchilla Revisited: the effects of psychic trauma four years after a school bus kidnapping*. *Am.J. Psychiatry*, 140, pp. 1543-1550.

Trickett, EJ 1995, *The community context of disasters and traumatic stress: An ecological perspective from community psychology*. In: deVries, S. E. H. M. W. (ed.) *Extreme stress and communities: Impact and intervention The Netherlands: Dordrecht*.

Trickett, EJ 2009, *Community psychology: Individuals and interventions in community context*. *Annual review of psychology*, 60, pp. 395-419.

UNCRC 1989, *United Nations Convention on the Rights of the Child*. G.A. res. 44/25, annex, 44 U.N. GAOR Supp. (No. 49) at 167, U.N. Doc. A/44/49 [1989], entered into force September 2 1990.

Walker, M, Whittle, R, Medd, W, Burningham, K, Moran-Ellis, J & Tapsell, S 2010, *Children and young people 'After the rain has gone' - learning lessons for flood recovery and resilience, final project report for 'Children, Flood and Urbane Resilience: Understanding children and young people's experience and agency in the flood recovery process'*. Lancaster UK: Lancaster University.

Weems, C & Overstreet, S 2009, *An Ecological-Needs-Based Perspective of Adolescent and Youth Emotional Development in the Context of Disaster: Lessons from Hurricane Katrina*. In: Cherry, KE (ed.) *Lifespan perspectives on natural disasters: Coping with Katrina, Rita, and Other Storms*. New York: Springer Science and Business Media.

Wessells, MG 2009, *Do no harm: Toward contextually appropriate psychosocial support in international emergencies*. *American psychologist*, 64, pp. 842-854.

Wraith, R 1995, *Children and personal disaster: risk and preventive intervention*. In: Burrows, GD & Raphael, B (ed.) *Handbook of Studies on Preventive Psychiatry*. Elsevier Science.

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