



Katherine Hore¹, JC
Gaillard¹, David Johnston²,
Kevin Ronan³

¹The University of
Auckland, New Zealand
²Massey University / GNS
Science
³Central Queensland
University

Statement of purpose

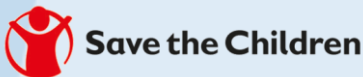
The Research-into-Action Brief series provides concise summaries of academic and grey literature on a range of topics for practitioners working in the fields of child-centred risk reduction (CCRR), climate change adaptation, and school safety. The purpose of this Brief is to provide a concise review of research findings for practitioners on the topic of child-centred disaster risk reduction. This brief was prepared as part of an ongoing research that is occurring alongside a five-year CCRR project being implemented by Save the Children Fiji. The project is taking a child-centered approach to strengthening resilience within national and local disaster risk reduction and management policies and processes.

Find the full Research-into-Action Brief series at:

www.gadrrres.net/resources

Produced by Save the Children and Risk Frontiers, with support from MFAT (NZ), C&A Foundation and C&A

C&A Foundation



Child-Centred Risk Reduction Research-into-Action Brief:

Child-centred disaster risk reduction

Overview

The past decade has seen an increased focus within research and practice on placing children at the centre of efforts to reduce disaster risk, including those risks associated with climate change. An increasing body of research demonstrates that children can, and do, play an active role in reducing disaster risks, and the benefits of involving children in disaster risk reduction not just to the children themselves but to families, schools and wider communities. This brief provides an outline of the rationale and supporting evidence for CCDRR, including 4CA, and suggests some key principles, recommendations for integrating child-centered approaches into DRR efforts. It also identifies key challenges to when implementing CCDRR in practice.

Glossary

Term	Definition
Disaster risk reduction (DRR)	“The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment and improved preparedness for adverse events” (UNISDR 2009: 10-11).
Climate Change Adaptation (CCA)	“Changes in processes, practices and structures to moderate potential damages or to benefit from opportunities associated with climate change” (UNFCCC 2014).
Child centered disaster risk reduction (CCDRR)	Recognising and drawing on the rights, needs and capacities of children in reducing risk and enhancing the resilience of communities and nations (Save the Children 2013) with the ultimate goal of safeguarding the rights of children relating to disaster risk. It focuses on actively involving children in DRR, both in DRR that is for children, and DRR that is with children (UNICEF 2014) while recognising that children’s needs and capacities vary according to multiple factors such as age, gender, geography and socio-economic status (Save the Children 2013).

Term	Definition
Child-centred climate change adaptation (4CA)	Climate change adaptation focuses on both the right and unique needs of children to live safe from all sorts of hazards. It aims to address the unique vulnerabilities of children while also fostering their participation in analysing and taking action on climate-related changes and associated hazards. At the same time, 4CA also capitalises on opportunities provided by changing climates.
Children's participation	Children's participation entails a process through which children influence or control the decisions that affect them (modified from Saxena 1998).

Introduction

Children are often perceived as passive or helpless “victims” in times of disasters, with limited potential to help safeguard themselves, their families and communities against natural hazards, including those associated with climate change, and other shocks and stressors (Tanner et al, 2009). Consequently, DRR, including climate change adaptation (CCA), often excludes children. Instead, it focuses on “top-down” efforts targeted at adults, with the assumption that they are appropriate to the needs and priorities of their families, including children and young people (Mitchell et al, 2009).

However, a growing body of research shows that children can, and do, play an active role in reducing disaster risks (Tanner, 2010). Evidence also demonstrates the benefits of involving children in DRR, including CCA, not just to children but to families, schools and the wider community (Haynes and Tanner, 2015; Lopez et al, 2012; Ronan et al, 2015; Save the Children, 2008). The concept of CCDRR has been receiving increasing focus in literature and in the practice of child-focused agencies as a term to encompass the values and commitment to involving children in DRR, including CCA* (e.g., Amri et al. in press).

In CCDRR, children are acknowledged as actors whose perspectives, ideas and knowledge – as well as their active efforts – contribute meaningfully before, during and after disasters, including those associated with climate change, both in DRR programming and beyond (Lopez et al, 2012; Penrose and Takiki, 2006). CCDRR takes a child-centred approach, drawing from the notion that when children are empowered and supported by adults, they can be better prepared to protect themselves and others, and also generate positive changes among their family and communities (Back, Cameron, and Tanner, 2009). As CCDRR includes addressing risks associated with a range of hazards, including those linked to a changing climate, it should also encompass 4CA in research, policy and practice.

Literature Review

There is a long history of research on children and disasters, dating back to the 1970s and recurring famines in different regions of the world. The disproportionate death toll among children in these events encouraged researchers to explore the causes of children's vulnerability. Evidence that children's limited access to resources and power within society makes them more vulnerable than most adults in dealing with natural hazards, including those associated with climate, eventually built up in the 1980s and 1990s (Rivers, 1982; Bairagi, 1986). From the 1990s onward, there has been an increasing body of research and experiences demonstrating that children are not just the helpless "victims" of uneven and unfair societies (Delica, 1998). Evidence shows that they actually can, and do, play an active role in communicating risks, participating in decision-making processes and taking action to prevent disasters (Mitchell, Haynes, Hall, Choong & Oven, 2008; Martin, 2011; Peek, 2008; Tanner et al, 2009; Walker et al, 2012). Involving children as active participants in DRR, including CCA, is increasingly being shown in research and practice to present benefits to children, families and communities, both in the present and long term (Lopez et al. 2012).

Research demonstrates that children can both design and implement initiatives to reduce risk. Children can contribute to identifying and analysing risk, communicating about those risks, and mobilising their peers, families, schools and communities (Cameron and Norrington-Davies of Agulhas, 2010). Children have proven to be agents of change, both by themselves and as a direct function of DRR education programs (Webb and Ronan, 2014; Babugura, 2012; Seballos et al, 2011). This is explicitly acknowledged in the Sendai Framework for Disaster Risk Reduction (SFDRR), which includes commitments to providing children spaces and modalities to contribute to DRR, including CCA (UNISDR, 2015).

Further studies highlight children's unique ideas, perceptions of their environment and understanding of risks (Haynes, Lassa, and Towers, 2010; Tanner et al, 2009). They display creative initiatives and often spontaneously collaborate to prevent hazards, including those associated with climate change, and reduce disaster risk using their intrinsic capacities, i.e., their unique skills, knowledge and resources (Gaillard and Pangilinan, 2010). Involving children in DRR provides an opportunity for these perspectives and ideas to make valuable contributions to understanding the complex and context-specific factors that constitute disaster risk, and designing and implementing DRR initiatives (Mitchel et al, 2009).

Through being involved in CCDRR, children develop skills in negotiation, debate, co-operation, communication, compromise and decision-making. Children can also develop a sense of self-efficacy and develop self-esteem from having their views and ideas acknowledged (Miller, 2003). Learning and participating in DRR, including CCA, at an early age can develop knowledge, awareness and skills in understanding and addressing the root causes of disasters. Such knowledge, awareness and skills can go on to become an inherent part of adult life (Lopez et al, 2012). Thus, CCDRR can develop skilled and experienced citizens to face future disasters (Lopez et al. 2012).

“Children can both design and implement initiatives to reduce risk”

CCDRR should aim to balance child-focused initiatives that acknowledge the specific protection, needs and rights of children (DRR **for** children) with strategies that aim to empower children (DRR **with** children). These include creating opportunities for them to participate directly in the design and delivery of activities within their homes, schools and wider communities, express their views and analyse their own vulnerabilities and capacities (Back, Cameron, and Tanner, 2009). While separate DRR and CCA programmes and approaches that are “top down” can be useful, they have also been shown to be insufficient or problematic. For example, some scholarly evidence demonstrates that safety procedures and self-protective actions for disasters can be taught to children through exercises such as drills, and that such practices can contribute to lessening injuries and deaths related to disasters (Ronan and Johnston, 2003; Peek, 2008). However, other lines of research suggest these practices may not be sufficiently reducing risks for children and youth (Ronan et al, 2015) and in some cases, may increase risk (Ronan et al, 2016).

Alternatives to “top-down” approaches, which are based on normative key messages, include learning formats and programs that allow children to have leadership and decision-making roles, are interactive, and allow them to learn by reflecting on their experiences. For example, rather than being taught evacuation drills, some children in Sri Lanka identified hazards around their school and safe evacuation routes using mapping activities. They then visited the sites to identify on the hazardous and safe zones. Following this, they then participated in an evacuation drills (Nikku et al, 2006). Such approaches have been shown to increase children’s knowledge and develop their skills in ways that improve DRR, including CCA (Haynes & Tanner 2015; Nikku et al. 2006). “Top-down”-approaches focused on key messages should therefore be supplemented by participatory DRR for and with children (Amri et al, in press). This also aligns with children’s right to be involved in the decisions that affect them, as well as their right to be protected, in line with the United Nations Convention on the Rights of the Child (Price Cohen, 2012).

CCDRR involves both children and adults, including parents, teachers, and government officials (Amri et al, in press). Addressing the underlying causes of children’s vulnerability, many of which are outside children’s everyday lives, requires adult initiatives and action. Further, while children can and should be supported in playing lead roles in DRR, including CCA, responsibility and accountability for preparedness, mitigation and prevention as well as response lies with adults (Martin, 2011). In upholding such responsibilities, adults should acknowledge and advocate for children as actors with valuable contributions to create opportunities for meaningful participation that allows children to harness and build upon their capacities (For more detail, see Gaillard et al, 2018 in this research-into-practice series).

“CCDRR involves both children and adults, including parents, teachers and government officials.”

Case Study

The recent ENCORE (Enhancing Community Resilience to Disasters) project run by Save the Children in the Philippines is a good example of fostering CCDRR, including 4CA. The project focused on two municipalities, Calumpit and Hagonoy, of the province of Bulacan.

Although children were not fully involved in the design of the project, they eventually played a leading role in crafting activities geared towards reducing the risk of disaster under the broader umbrella of sustainable local development. These activities covered disaster risk assessment and preparedness, solid waste management (associated with increasing flooding and other forms of environmental degradation), and livelihood diversification (to strengthen everyday wellbeing and better cope with the harmful effect of seasonal floods).

Primary and high school children took the lead in many of these initiatives, not only within their schools, but also through interacting with their parents and the community. They contributed to Hazard, Vulnerability and Capacities Analyses (HVCA) (Fig. 1), designed DRR plans for both their schools and neighbourhoods, set up early warning systems (Fig. 2), carried out awareness campaigns, and organised disaster response drills at the school and for the whole municipality. Children also organised village and municipality-wide fairs and sports tournaments to raise awareness and discuss DRR. These initiatives opened up a dialogue between children and adults, thus enabling adults to recognise the vulnerabilities and capacities of the children. This also helped to address unequal power relationships in decision-making.

The children of Calumpit and Hagonoy also made sure that their actions would be sustainable by training younger generations of leaders and passing on their knowledge and skills. Therefore, when the initial project leaders graduated from high school and moved on to continue their studies in Manila or other cities, a new generation of DRR champions took over.

Finally, children were involved in assessing the impact of the project through participatory research. They designed and conducted their own questionnaire survey to assess whether their own and the broader initiatives of the ENCORE project were reaching out to the entire community and had an impact towards DRR (Fig. 3). The survey shows that the project, especially the disaster response drills, contributed to enhancing people's – including children's – understanding of disaster risks, and to increasing participants' willingness to prepare emergency kits, evacuate should need be, and collaborate with the management of evacuation centres (Gaillard et al. 2014). They eventually wrote an unedited section of the project assessment report, thus conveying their own views without being filtered by adults and external researchers.



Figure 1. School-based and child-centred DRR disaster risk reduction plan in Hagonoy, Jan. 2014.



Figure 2. School-based flood early warning system in Calumpit, Jan. 2014.



Figure 3. Children leading the analysis of the participatory survey data in Calumpit, Jan. 2014.

Practical Applications

Literature provides a range of tools, recommendations and key messages for promoting and implementing CCDRR (Amri et al, in press; Hart, 2013). These include:

1. Children's genuine participation is crucial for effective CCDRR. Understanding both the unique vulnerabilities of children and their capacities can only be developed by children themselves, as their perspective and experiences differ significantly from adults. CCDRR requires participation that is characterised by trust, the transfer of decision-making power, appropriate participatory tools and skilled facilitation. These all create opportunities for children to participate and express their views, needs, ideas, priorities and ideas.

2. Tools for CCDRR should be flexible, engaging and enjoyable. Tools for fostering children's participation in CCDRR should involve a mix of oral, visual and written activities that allow children to express their views, experiences and ideas. They should be undertaken in enjoyable lively settings. These tools also need to allow children to shape and change them as they take on different roles in DRR, and investigate, learn and discuss among each other, with their families and communities (Miller, 2003). A key challenge in implementing CCDRR lies in having sufficiently flexible tools and frameworks to accommodate the diversity of characteristics that impact children's capacities and vulnerabilities, such as age, gender, beliefs, culture, disability and family structure (Hart, 2013; Lopez et al, 2012). As well as their differing knowledge and strengths (Peek, 2008) and desire to participate (Shaw, 2006).

3. Adults and practitioners must recognise children as "agents of change". Children's participation requires dramatic shifts in the dominant ways children are perceived (Hart, 2013). CCDRR requires adults to recognise that children can be agents of change, with valuable roles to play in DRR, including CCA, and resilience strengthening in line with the

SFDRR. Acknowledging children's inputs before, during and after disasters, their capacities and perspectives, and the wider benefits these have to families and communities is crucial for children's participation to be a firm part of DRR (Lopez et al, 2012).

4. The local cultural, social and political context has to be carefully negotiated when implementing CCDRR. Cultural barriers at local, national and global scales present differing and crucial challenges to implementing CCDRR. Going forward, CCDRR will require strategies and approaches to navigating social, cultural and political contexts to promote recognition, acceptance and support of the benefits of CCDRR, while ensuring that the foundations of communities, social relationships and cultural practices that sustain the daily lives of children are not disrupted or undermined (Mason and Bolzan, 2010).

5. Evaluation of CCDRR projects is important and further practice-based research is needed. More understanding is required about which particular initiatives and tools are most effective to reduce the risk of disasters and fostering resilience, particularly in the Pacific. There are numerous resources using different tools and frameworks for use in CCDRR, including 4CA (for example, see Save the Children 2010, Plan International 2010). Their positive impact on children and communities has been well documented through academic research (for example, see Amri et al, in press; Haynes & Tanner, 2015; Mudavanha, 2016; Peek, 2008). On the other hand, there is limited reflection and research on the effectiveness and scalability of different initiatives, their long-term sustainability and how to apply them in different cultural, political, and environmental settings.

Conclusions

Although children are at special risk in disasters, much research supports the idea that they are not simply passive victims. Values-based and evidence-supported rationales for involving children as active participants within DRR, including CCA, are strong and cannot be overstated (Mitchell et al. 2009). Children are motivated to learn about disasters, be involved in DRR/CCA decision-making and problem-solving, have the capacity to analyse and communicate risk, design and implement DRR initiatives, and mobilise their peers, families, schools and communities (Cameron and Norrington-Davies of Agulhas, 2010). Involving children as active participants in DRR not only ensures it is responsive to their needs and unique vulnerabilities but is a means to enhance children's capacities to deal with disasters, now and as the future decision makers in DRR (Lopez et al, 2012). Children's participation in DRR, both through specific CCDRR initiatives and through mainstreaming CCDRR within wider DRR planning and projects, also has widely acknowledged and supported knock-on benefits for families, schools and wider communities (Back et al, 2009).

However, CCDRR, including 4CA, is not without its challenges and limitations. There are significant gaps in understanding the effectiveness and efficiency of particular CCDRR initiatives, both within CCDRR frameworks and within other community-based and national DRR, planning and initiatives. Questions around effective design and delivery, monitoring and evaluation, scalability, sustainability and applicability across different cultures need to be addressed to foster DRR that

Recommendations for promoting and implementing CCDRR:

- *Children's genuine participation is crucial*
- *Tools for CCDRR should be flexible, engaging and enjoyable*
- *Adults must recognise children as 'agents of change'*
- *The local cultural, social and political context has to be carefully negotiated*
- *Evaluation of CCDRR projects is important and more practice-based research is needed*

successfully recognises and draws upon the rights, needs and capacities of children, to the benefit of children, families and communities and to improve existing DRR, including CCA, and foster long-term resilience.

Follow-up Questions

1. What are the main benefits of CCDRR to children and communities, both short term and long term?
2. What are the key obstacles to implementing CCDRR, including 4CA?
3. What is the role of adults in CCDRR, including 4CA?
4. How might CCDRR be implemented within existing DRR and CCA programs and approaches?
5. How might practitioners ensure their practices contribute to the body of knowledge on effective approaches and tools for CCDRR, including 4CA?

Bibliography

All the references cited in this Research-into-Action Brief, can be found in the CCRR and CSS Bibliography at:

https://www.zotero.org/groups/1857446/ccrr_css

Find all the references on this topic by searching for “CCDRR”

Readings

- Amri, A., Haynes, K., Bird, D.K. & Ronan, K. (2017), ‘Bridging the Divide Between Studies on Disaster Risk Reduction Education and Child-Centred Disaster Risk Reduction: A Critical Review’. *Children’s Geographies*, in press.
- Back, E., Cameron, C. & Tanner, T. (2009), ‘Children and Disaster Risk Reduction: Taking Stock and Moving Forward’, Institute of Development Studies, Brighton.
- Lopez, Y., Hayden, J., Cologon, K. & Hadley, F. (2012), ‘Child Participation in Disaster Risk Reduction’ *International Journal of Early Years Education*, vol. 20, no. 3, pp. 300-308.
- Peek, L. (2008), ‘Children and Disasters: Understanding Vulnerability, Developing Capacities and Promoting Resilience – An Introduction’, *Children, Youth and Environments*, vol. 18, no. 1, pp. 1-29.

Suggested citation: Hore, K., Gaillard, J.C., Johnston, D., & Ronan, K. (2018). Child-Centred Research-into-Action Brief: Child-Centred Disaster Risk Reduction, *GADRRRES*.

© 2018 Global Alliance for Disaster Risk Reduction in the Education Sector
The complete series of case studies can be found at <http://www.gadrrres.net/resources>