

## ABSTRACT

Youth misuse of fire is a multifaceted, complex, and dangerous phenomenon. In response to this problem, Fire and Rescue NSW and Juvenile Justice NSW established a memorandum of understanding to facilitate firefighter involvement in the provision of fire safety education during Youth Justice Conferencing for young people who commit fire-related offences. Despite being used for over a decade, conferencing for youth misuse of fire is yet to attract theoretical analysis or empirical investigation. To partially fill this void, a theoretical analysis of Youth Justice Conferencing for youth misuse of fire was conducted. Comparative analysis revealed that child-centred disaster risk reduction offers a scaffold to explain and justify the mechanisms operating in Youth Justice Conferencing for youth misuse of fire. This theoretical alignment has implications for both Youth Justice Conferencing and child-centred disaster risk reduction.

# Youth Justice Conferencing for youth misuse of fire: a child-centred disaster risk reduction mechanism

Kamarah Pooley

Queensland University of Technology, Brisbane, Queensland.

Submitted: 26 September 2016. Accepted: 11 January 2017.

## Introduction

Youth misuse of fire (YMF) refers to any illegitimate use of fire or incendiary materials by a person under the age of 18 years (Pooley & Ferguson 2015). YMF is a multifaceted problem concerning a highly complex and heterogeneous population (Martin *et al.* 2004). The behaviour is difficult to predict and unlikely to be deterred by punishment alone (Houvouras & Harvey 2014). As a result, reduction of YMF relies heavily on prevention (McDonald 2010) and is increasingly becoming the responsibility of fire services (Haines *et al.* 2006). In response to this problem, Fire and Rescue NSW (FRNSW) and Juvenile Justice NSW established a memorandum of understanding to facilitate firefighter involvement in Youth Justice Conferencing convened for young people who have committed a fire-related offence. The aim of this paper is to document a theoretical analysis of an empirical investigation of the situation. First, the scope of the YMF problem in Australia, and New South Wales, is presented. One response to the problem is briefly described. The method employed to conduct a theoretical analysis of this response is outlined, followed by an overview of child-centred disaster risk reduction (CCDRR) and Youth Justice Conferencing for YMF. The discussion reveals that CCDRR and conferencing for YMF are theoretically aligned and that CCDRR provides a scaffold that explains and justifies the mechanisms operating in Youth Justice Conferencing for YMF.

## The scope of YMF

Existing literature relating to YMF has predominantly emerged from the United States and United Kingdom. However, there is a growing body of knowledge from Australia and, more specifically, from NSW. The Australian Institute of Criminology (2005) estimated that three-quarters of all deliberately lit fires were attributed to young people. Muller (2008) conducted an analysis of official arson statistics between 2001 and 2006, which revealed that 23 per cent of all arson defendants in NSW were under the age of 17 years. Bryant (2008) conducted an investigation into 280,000 vegetation fires attended by 18 fire agencies throughout Australia over a five-year period.

Based on secondary data maintained by fire services, Bryant (2008) found 24 per cent of vegetation fires were attributed to young people. In the same study, Bryant (2008) conducted an analysis of data derived from NSW fire services between 1997 and 2002. Bryant (2008) found that non-deliberate fires attributed to young people accounted for between 0.4 and 16 per cent of all vegetation fires. These fires peaked during the summer holiday season. In fact, the highest recorded number of fires in NSW attributed to young people occurred during the 2001-2002 bushfire crisis, now widely referred to as 'Black Christmas' (Bryant 2008). Although this study only included non-deliberate vegetation fires attributed to young people, the data highlights the significant number of vegetation fires for which young people were responsible and the heightened risks involved when these fires were lit during conditions conducive to fire spread.

These findings should be considered with caution despite providing insight into the scope of the YMF problem. Evidence suggests that:

- fires are only responded to or investigated when they cause personal or property damage (Tomison 2010)
- of fires responded to or investigated, a high proportion categorised as 'cause unknown' are likely to be the product of YMF (Bryant & Willis 2006)
- fires that occur outdoors are reported more often than fires that occur indoors (Corcoran *et al.* 2007)
- around half of all indoor fires occur as a result of YMF (Lowenstein 2003).

Misuse of fire by young people is regarded as a covert behaviour that is difficult to detect and empirically investigate.

Although the true prevalence of YMF is undetermined, the risks associated with the behaviour are high. In 2011-2012, estimates reveal there were 44,925 incidents of arson nation-wide, costing approximately \$2.3 billion (Smith *et al.* 2014). The NSW Bureau of Transport Economics (2001) found that between 1967 and 1999, bushfires accounted for over half (57 per cent) of the total injuries caused by natural disasters in Australia. Ronan and Towers (2014) point out that structure-fire fatalities occur at seven times the rate of bushfire fatalities. An incident outcome analysis of YMF recorded by FRNSW and the NSW Rural Fire Service revealed that, as a result of the 26,380 instances of YMF committed between July 2004 and June 2014 in NSW, 4097 people were evacuated, 414 suffered injury, 43 required rescue and 10 fatalities occurred (Pooley 2015). These statistics provide an indication of the risks associated with YMF. However, a recent study conducted in Sweden found single data sources, such as fire service data or police data, under-report fire injuries and fatalities by approximately 20 per cent (Jonsson, Bergqvist & Andersson 2015). YMF is thus conceivably more problematic than existing literature indicates.

## The response to YMF

In response to the YMF problem in NSW, FRNSW and Juvenile Justice NSW signed a Memorandum of Understanding (MoU) in 2006. This MoU emerged out of a mutual, legislative obligation to reduce misuse of fire by young people in NSW. FRNSW is one of two primary response agencies for fire in NSW. The organisation's purpose and functions are governed by the *Fire Brigades Act 1989* (NSW). Section 6(1) indicates that it is the duty of the Commissioner to take all reasonable measures for the prevention and suppression of fire. This provision places a legislative obligation on FRNSW to prevent YMF.

Juvenile Justice NSW is the primary response agency for youth delinquency and crime in NSW. Juvenile Justice NSW works to prevent and reduce crime and recidivism by building safe and resilient communities and diverting people from the criminal justice system (NSW Government 2015). Juvenile Justice NSW is obligated to prevent YMF that meets the threshold of criminalisation and to divert young people away from criminal justice intervention where appropriate.

The MoU (2016) governs firefighter participation in Youth Justice Conferencing convened for young people who commit fire-related offences. The MoU states that a firefighter will attend conferencing in the role of a participant and will:

- provide fire safety education to the young person
- suggest fire-safety-related tasks to include within the young person's outcome plan
- monitor relevant components of the outcome plan to determine compliance and completion.

This collaboration helps to educate the young person about the consequences of misuse of fire and teach them safe fire practices.

## Method

Youth Justice Conferencing for YMF has operated for over 10 years but has not undergone theoretical analysis or empirical investigation. To partially fill this void, theoretical analysis of Youth Justice Conferencing for YMF was undertaken to explain and justify the mechanisms operating within the program. Data included existing literature and documentation. Data was collected from major criminal and public policy databases, the Australasian Legal Information Institute, Hansard, the Juvenile Justice NSW and FRNSW websites, Google and Trove searches. Juvenile Justice NSW and FRNSW internal documentation were accessed. Data was summarised and comparatively analysed to identify commonalities and inconsistencies. Comparative analysis revealed theoretical alignment. This has implications for both Youth Justice Conferencing for YMF and CCDRR.

## Child-centred disaster risk reduction

Risk reduction refers to measures that mitigate the frequency or intensity of losses (International Risk Management Institute 2016). Disaster risk reduction narrows this scope, referring to systematic efforts to analyse and reduce the causal factors of disasters associated with natural and man-made hazards (United Nations Office for Disaster Risk Reduction 2016). Child-centred disaster risk reduction tailors these efforts towards children and young people (Towers *et al.* 2014). Mechanisms employed include disaster resilience education, school emergency management and community-based programming (Towers *et al.* 2014). The primary objective of CCDRR is to enhance knowledge and strengthen skills in children and young people so they understand disaster risk and are able to participate in mitigating risk (Towers *et al.* 2014).

CCDRR is a relatively new concept, yet the body of knowledge has grown considerably in recent years (Ronan *et al.* 2016). The three main pillars of disaster risk reduction, and thus CCDRR, are:

- prevention and mitigation
- preparedness
- response and early recovery (United Nations Children's Fund 2016).

The importance of this comprehensive and integrated approach was highlighted in the Yokohama Message in 1994 (International Decade for Natural Disaster Reduction 1994). Since that time education programs have been increasingly used around the world to prepare children and young people for disasters associated with natural and man-made hazards, to prevent or mitigate the risks and consequences associated with these hazards, and to enhance response and recovery by engendering resilience (Ronan & Towers 2014). Such programs have been found to improve preparedness, perception of risk, awareness of appropriate safety behaviours and resilience (Ronan & Towers 2014).

## Youth Justice Conferencing for YMF

Youth Justice Conferencing is one of three graduated sanctions legislated under the *Young Offenders Act 1997* (NSW). The juvenile justice mechanism helps divert young offenders away from state intervention and future criminal behaviour. Youth Justice Conferencing is based on the philosophy of restorative justice (Parliament of NSW Legislative Assembly June 22 2002, p. 7446). Restorative justice is 'a process whereby all the parties with a stake in a particular offence come together to resolve collectively how to deal with the aftermath of the offence and its implications for the future' (Marshall 1996, p. 37). Conferencing involves bringing a young offender and their support group face-to-face with their victim(s) or their representative(s), and their support group (s47 *Young Offenders Act 1997* (NSW)).

The purpose of conferencing is to create and implement an outcome plan for the young person to complete. Outcome plans for bush fire/arson juvenile offenders must include a fire safety education component, assistance in clean-up operations or the treatment of injured animals, and payment of compensation (s8 *Young Offenders Regulation 2016* (NSW)).

## Conferencing for YMF as a CCDRR mechanism

Conferencing for YMF can be positioned as a CCDRR mechanism. Firefighter participation in conferencing in NSW is administered by the FRNSW Community Safety Directorate. The objective of the Directorate is to manage risk, on and off an incident ground, through risk management within strategic policy, management responsibilities and operational functions (FRNSW 2016). One mechanism implemented to reduce risk, improve safety and protect the community is conferencing for YMF (FRNSW 2016). Where CCDRR manages risk associated with man-made hazards like YMF (and conferencing for YMF aims to manage risk), the program can be strategically positioned as a CCDRR mechanism.

The applicability of CCDRR to conferencing is supported through a mutual aspiration to attain Article 6 Convention on the Rights of the Child that proposes the State has an obligation to ensure the survival and development of young people (United Nations 1989). CCDRR uses a multidisciplinary approach and draws from the fields of health, urban planning, public policy, education and emergency management within government and non-government realms (Tatebe & Mutch 2015). In line with this approach, conferencing for YMF is facilitated by two arms of state government; FRNSW and Juvenile Justice NSW. Both organisations have legislative obligations to prevent YMF from occurring. In addition, conferencing brings stakeholders of YMF together. These stakeholders include the offender and their support group, the victim(s) and their support group, a firefighter, and other members of the community affected by the offence (s47 *Young Offenders Act 1997* (NSW)). Conferencing for YMF thus involves state government intervention alongside community participation to provide fire safety education to young people and their families.

CCDRR prioritises the education and agency of young people (Plan International 2010). Plan International developed a toolkit for CCDRR that describes best practice as that which unpacks risk, making it visible and transparent, so that young people have the capacity to make informed decisions about how much risk to accept and how it can be managed. Ronan and Towers (2014, p. 1) suggest that CCDRR helps young people 'connect the physical world and science with the social world and human factors'. Conferencing for YMF theoretically attains this benchmark. It provides young people with access to knowledge and information through fire safety education that unpacks and makes transparent the risks

of YMF. Fire safety education provided by firefighters in the context of conferencing helps to manage risk by:

- providing fire safety advice to young people and their families to improve preparedness
- informing young people about the consequences of their behaviour that has implications for response and recovery
- reducing the likelihood of reoffending and, thus, preventing and mitigating the risk of YMF.

Fire safety education provides young people with the knowledge to make informed decisions about safe fire behaviour and how fire risk can be managed.

CCDRR promotes the participation of young people in understanding and managing the risks associated with disasters. This tenet aligns with Article 12 Convention on the Rights of the Child that states a young person has the right to express their opinion and to have that opinion taken into account in any matter or procedure affecting them (United Nations 1989). Conferencing for YMF is led by an adult who mediates discussion between all participants (s60 *Young Offenders Act 1997* (NSW)). Although conferencing for YMF is an adult-initiated and mediated program, decision-making is shared with young people. In fact, young people maintain the right to reject the whole, or any part, of their outcome plan regardless of the views of other conference participants (s52(4) *Young Offenders Act 1997* (NSW)). This power of veto gives young people the right to express their opinion and have that opinion taken into account. Further, outcome plans are an obligatory component of conferencing as they provide the mechanism through which young people repair harm caused by their offence and mitigate the likelihood of similar harm occurring in the future. Outcome plans provide a process through which young people can take direct action to reduce the risks associated with their own YMF. As a CCDRR program, conferencing for YMF is an adult-initiated mechanism which vests decision-making power in young people. It aligns with the sixth rung on Hart's (1992) ladder of participation and is an example of what Hart described as true child participation.

The theoretical alignment of CCDRR and conferencing for YMF is supported by shared respect. The CCDRR Toolkit (Plan International 2010) states that the views of children and young people should be respected to ensure full participation and engagement with CCDRR programs. This reliance on respect is shared by conferencing for YMF. One aim of conferencing for YMF is to disapprove of offending behaviour within a culture of respect without disapproving of, or punishing, the young offender (Harris 2001). The role of conference participants is to support the young offender through the conferencing process, to elicit shame associated with the offending behaviour, not the self (Harris 2001). Both CCDRR and conferencing for YMF enable the sharing of young people's opinions and perspectives alongside mutual respect between young people and other participants.

Plan International (2010) listed two desired outcomes of CCDRR programs: democratic outcomes and developmental outcomes.

## Democratic outcomes

Democratic outcomes include citizenship change where young people become aware of their rights and use this power to participate in decision-making processes, and institutional or systems change, where young people are involved in the process of decision-making and are accountable for disaster management. Democratic processes that give young people the power to create opportunities are used within conferencing for YMF to achieve democratic outcomes. Young people must give voluntary consent to participate in conferencing (s36 *Young Offenders Act 1997* (NSW)). If young people decide to participate, they are actively involved in the decision-making process of their outcome plan. Young people make suggestions as to the type of tasks they can complete to make reparation for their behaviour. While other conference participants also engage in this process, the young offender maintains the right to veto components or the entirety of the plan (s52(4) *Young Offenders Act 1997* (NSW)). If vetoed, all or any component of the outcome plan may be re-negotiated until agreement is reached. These consultative processes allow young people to be involved in decision-making processes and to negotiate outcomes. However, the opportunity to engage in conferencing only arises as an alternative to more punitive options. Voluntariness is therefore constrained as the decision to participate is influenced by the ramifications associated with non-participation (referral back to police or the court). Further, gatekeepers, such as police and the courts, are vested with the power of discretion to determine which individuals are granted access to conferencing. Although this discretion is bounded by legislation that specifies that offences must not involve sexual, serious drug or traffic offences, or one involving the death of a person (s8 *Young Offenders Act 1997* (NSW)), there exists evidence to suggest discretion may be applied differentially by gatekeepers (Murphy *et al.* 2010). Conferencing for YMF is therefore limited in its capacity to attain CCDRR principles because access to democratic and consultative processes is mediated by legislation and gatekeeper discretion. Nevertheless, when considered in the criminal justice context, conferencing for YMF is the only mechanism in NSW that gives young people the power to decide whether or not to participate, and a voice to negotiate outcomes. Conferencing for YMF is the most voluntary, democratic, and consultative of the juvenile justice mechanisms available in NSW.

## Developmental outcomes

Developmental outcomes include capacity change as a result of increased knowledge, skills and abilities gained through education, training or workshops, and wellbeing change as a result of changes related to risk reduction (Plan International 2010, p. 74). One of the main principles of conferencing is to promote the development of young people by providing the impetus for capacity and wellbeing change (s34 *Young Offenders Act 1997* (NSW)). In accordance with s8 *Young Offenders Regulation*

2016 (NSW), young people are provided with fire safety education and fire safety-related tasks to expand their knowledge and strengthen their skills. The aim is to initiate cognitive and behavioural changes that reduce the risk and impact of future YMF. Such changes are likely to occur when YMF manifests from a lack of fire safety education or poor fire safety skills. Changes are not expected to occur when YMF manifests as malicious behaviour or as a symptom of psychopathology (McDonald 2010). The relationship between fire safety education and behavioural change is also mediated by adaptive capacity, a young person's cognitive capacity to adapt to additional information gained through social interaction (Bandura 1971). If targeted towards young people who possess adaptive capacity yet engage in YMF due to a lack of fire knowledge and skill, conferencing for YMF offers an avenue through which CCDRR developmental outcomes may be attained.

## Conclusion

Despite some limitations, CCDRR and conferencing for YMF are theoretically aligned. CCDRR provides a scaffold that explains and justifies the mechanisms operating in conferencing for YMF. Conferencing for YMF can be defined as a CCDRR mechanism where the program has been strategically positioned as a risk reduction strategy that involves collaboration between government and non-government agents. The program provides young people with access to knowledge and information through fire safety education to enhance preparedness, improve response and recovery, and prevent and mitigate the risks and consequences of YMF. Conferencing for YMF acts as a democratic mechanism through which young people engage in voluntary, participatory, and consultative processes, within a culture of respect, to take direct action to engender capacity and wellbeing change. In return, conferencing for YMF has the potential to act as a CCDRR mechanism, contributing to an increasing number of programs that strengthen understanding of fire risk and how risks related to fire can be managed.

The applicability of CCDRR to conferencing for YMF suggests that there may be other programs not traditionally defined as CCDRR mechanisms that aid CCDRR principles. Further, findings derived from CCDRR research may be used to inform the mode of delivery of fire safety education in conferencing to align with CCDRR best practice. This is necessary as fire safety education delivered by firefighters, as well as the resources used, have not been evaluated in the context of conferencing. It is recommended that CCDRR researchers partner with juvenile justice and fire agencies to develop evidence-based fire safety education plans and resources for use within conferencing. This advancement will enable the development and implementation of in-built monitoring and evaluation mechanisms, as recommended by Towers *et al.* (2014), to determine the capacity of fire safety education delivered by firefighters in the context of conferencing to change fire-related cognitions and

behaviours in young people. Although further theoretical and empirical inquiry is required to evaluate conferencing for YMF as a CCDRR mechanism, this analysis provides a theoretical foundation upon which further investigation may transpire.

## Acknowledgements

This (PhD) research is supported by the Bushfire and Natural Hazards Cooperative Research Centre. The author would like to acknowledge Juvenile Justice New South Wales and Fire and Rescue New South Wales for supporting this research. The views expressed herein do not necessarily represent any official views of Juvenile Justice New South Wales or Fire and Rescue New South Wales.

## Conflict of Interest

The author is a full-time firefighter with Fire and Rescue NSW. The author's PhD research involves the collection of data from Fire and Rescue NSW. The author's employment is not a requirement of, and has no bearing on, the conduct of the research, nor does the research require, or have a bearing on, the author's employment. This potential personal conflict of interest was made transparent throughout the ethics process to the Queensland University of Technology Human Research Ethics Committee, Juvenile Justice NSW and Fire and Rescue NSW. The relationship was deemed to have no bearing on the ethical conduct of the research.

## References

- Australian Institute of Criminology 2005, *Preventing juvenile firesetting*, *AICrime Reduction Matters*, no.39. At: [www.aic.gov.au/media\\_library/publications/crm/crm039.pdf](http://www.aic.gov.au/media_library/publications/crm/crm039.pdf) [1 September 2016].
- Bandura A 1971, *Social learning theory*, General Learning Corporation, New York. At: *Ebook library* [23 August 2016].
- Bryant C 2008, *Understanding bushfire: Trends in deliberate vegetation fires in Australia*, *AIC Technical and Background paper*, no. 27. At: [www.aic.gov.au/publications/current%20series/tbp/21-40/tbp027.html](http://www.aic.gov.au/publications/current%20series/tbp/21-40/tbp027.html) [3 January 2016].
- Bryant C & Willis M 2006, *Human caused: reducing the impact of deliberately lit bushfires*, paper presented at *Bushfire Conference*, Brisbane, 6–9 June. At: [www.fireandbiodiversity.org.au/LiteratureRetrieve.aspx?ID=48247](http://www.fireandbiodiversity.org.au/LiteratureRetrieve.aspx?ID=48247) [3 July 2016].
- Bureau of Transport Economics 2001, *Economic costs of natural disasters in Australia*, no. 103. At: [https://bitre.gov.au/publications/2001/report\\_103.aspx](https://bitre.gov.au/publications/2001/report_103.aspx) [1 September 2016].
- Corcoran J, Higgs G, Brunson C, Ware A & Norman P 2007, *The use of spatial analytical techniques to explore patterns of fire incidence: A South Wales case study*, *Computers, Environments and Urban Systems*, vol. 31, no. 6, pp. 623–647.
- Fire Brigades Act 1989 (NSW). At: [www.austlii.edu.au/au/legis/nsw/consol\\_act/fba1989112/](http://www.austlii.edu.au/au/legis/nsw/consol_act/fba1989112/).

- FRNSW 2016, *FRNSW Annual Report 2015/2016*. At: [www.fire.nsw.gov.au/gallery/files/pdf/annual\\_reports/annual\\_report\\_2015\\_16.pdf](http://www.fire.nsw.gov.au/gallery/files/pdf/annual_reports/annual_report_2015_16.pdf) [1 July 2016].
- Haines S, Lambie I & Seymour F 2006, *International approaches to reducing deliberately lit fires: Prevention programmes*, Auckland UniServices Limited. At: [www.fire.org.nz/Research/PublishedReports/Documents/f681f64ad67dc137741540efc6a452bf.pdf](http://www.fire.org.nz/Research/PublishedReports/Documents/f681f64ad67dc137741540efc6a452bf.pdf) [16 August 2015].
- Harris N 2001, *Testing the dimensionality of shaming*, in E Ahmed, N Harris, J Braithwaite & V Braithwaite (eds), *Shame Management through Reintegration*, pp. 131–156. Cambridge University Press, Cambridge.
- Hart RA 1992, *Children's participation: From tokenism to citizenship, Innocenti Essay*, no. 4. At: [www.unicef-irc.org/publications/100/](http://www.unicef-irc.org/publications/100/) [5 January 2016].
- Houvouras AJ & Harvey MT 2014, *Establishing fire safety skills using behavioural skills training*, *Journal of Applied Behavior Analysis*, vol. 47, no. 2, pp. 420–424.
- International Decade for Natural Disaster Reduction 1994, *Yokohama Strategy and Plan of Action for a Safer World*. At: [www.unisdr.org/we/inform/publications/8241](http://www.unisdr.org/we/inform/publications/8241) [6 January 2016].
- International Risk Management Institute 2016, *Risk reduction*. At: [www.irmi.com/online/insurance-glossary/terms/r/risk-reduction.aspx](http://www.irmi.com/online/insurance-glossary/terms/r/risk-reduction.aspx) [1 June 2016].
- Jonsson A, Bergqvist A & Andersson R 2015, *Assessing the number of fire fatalities in a defined population*, *Journal of Safety Research*, vol. 55, pp. 99–103.
- Lowenstein LF 2003, *Recent research into arson (1992–2000): Incidence, causes and associate features, predictions, comparative studies and prevention and treatment*, *Psychiatry, Psychology, and Law*, vol. 50, no. 1, pp. 192–198.
- Marshall TF 1996, *The evolution of restorative justice in Britain*, *European Journal on Criminal Policy and Research*, vol. 4, no. 4, pp. 21–43.
- Martin G, Bergen HA, Richardson AS, Roeger L & Allison S 2004, *Correlates of firesetting in a community sample of young adolescents*, *Australian and New Zealand Journal of Psychiatry*, vol. 38, no. 3, pp. 148–154. At: <http://espace.library.uq.edu.au/view/UQ:8493> [5 Oct 2015].
- McDonald K 2010, *Perspectives on effectiveness: What works in a juvenile fire awareness and intervention program*, PhD thesis, Victoria University. At: <http://vuir.vu.edu.au/16037/> [15 February 2015].
- Memorandum of Understanding 2016, *NSW Government Memorandum of Understanding between Fire & Rescue New South Wales and Juvenile Justice*, Department of Attorney General & Justice. At [www.juvenile.justice.nsw.gov.au/Pages/Juvenile%20Justice/ourpartners/ourpartners.aspx](http://www.juvenile.justice.nsw.gov.au/Pages/Juvenile%20Justice/ourpartners/ourpartners.aspx) [30 January 2016].
- Muller DA 2008, *Offending and reoffending patterns of arsonists and bushfire arsonists in New South Wales*, *Trends and Issues in Crime and Criminal Justice*, no. 348. At: [www.aic.gov.au/publications/current%20series/tandi/341-360/tandi348.html](http://www.aic.gov.au/publications/current%20series/tandi/341-360/tandi348.html) [1 March 2014].
- Murphy P, McGinness A, Balmaks A, McDermott T & Corriea M 2010, *A Strategic Review of the New South Wales Juvenile Justice System*. At: [www.juvenile.justice.nsw.gov.au/Documents/Juvenile%20Justice%20Review%20Report%20FINAL.pdf](http://www.juvenile.justice.nsw.gov.au/Documents/Juvenile%20Justice%20Review%20Report%20FINAL.pdf) [1 July 2015].
- NSW Government 2015, *Department of Justice Strategic Plan 2014–2015*. At: [www.justice.nsw.gov.au/publications-research/corporate-plans-policies](http://www.justice.nsw.gov.au/publications-research/corporate-plans-policies) [15 September 2016].
- Parliament of NSW Legislative Assembly 2002, *Parliamentary debate (Official Hansard) – Crimes Amendment (Bushfires) Bill – First Reading*. At: [www.parliament.nsw.gov.au/prod/parliament/HansArt.nsf/0/CA256D11000BD3ACA256BA3000D7976](http://www.parliament.nsw.gov.au/prod/parliament/HansArt.nsf/0/CA256D11000BD3ACA256BA3000D7976) [19 October 2015].
- Plan International 2010, *Child-centred DRR toolkit*. At: <https://plan-international.org/child-centred-disaster-risk-reduction-toolkit#download-options> [1 June 2016].
- Pooley K 2015, *An analysis of youth misuse of fire in New South Wales*. At: [www.slideshare.net/KamarahPooley/crim402h-honours-thesisassigned-71529375](http://www.slideshare.net/KamarahPooley/crim402h-honours-thesisassigned-71529375).
- Pooley K & Ferguson CE 2015, *Using environmental criminology theories to compare 'youth misuse of fire' across age groups in New South Wales*, *Australian and New Zealand Journal of Criminology*, pp. 1–25.
- Ronan KR, Haynes K, Towers B, Alisic E, Ireland N, Amri A, Davie S & Petal M 2016, *Child-centred disaster risk reduction: can disaster resilience programs reduce risk and increase the resilience of children and households?*, *Australian Journal of Emergency Management*, vol. 31, no. 3, pp. 46–58. At: <https://ajem.infoservices.com.au/items/AJEM-31-03-16> [23 September 2016].
- Ronan KR & Towers B 2014, *Systems education for a sustainable planet: Preparing children for natural disasters*, *Systems*, vol. 2, no. 1, pp. 1–23. At: [www.mdpi.com/2079-8954/2/1/1](http://www.mdpi.com/2079-8954/2/1/1) [1 September 2016].
- Smith R, Jorna P, Sweeney J & Fuller G 2014, *Counting the costs of crime in Australia: A 2011 estimate: Arson*, *Research and public policy series*, no.129. At: [www.aic.gov.au/media\\_library/publications/rpp/129/rpp129.pdf](http://www.aic.gov.au/media_library/publications/rpp/129/rpp129.pdf) [8 February 2015].
- Tatebe J & Mutch C 2015, *Perspectives on education, children and young people in disaster risk reduction*, *International Journal of Disaster Risk Reduction*, vol. 14, no. 2, pp. 108–114.
- Tomison A 2010, *Bushfire arson: Setting the scene, Keynotes address at Collaborating for change: A symposium advancing bushfire arson prevention in Australia*, Melbourne, March 25–26. At: [www.aic.gov.au/media\\_library/staff\\_presentations/tomison\\_adam/2010-03-bushfire-notes.pdf](http://www.aic.gov.au/media_library/staff_presentations/tomison_adam/2010-03-bushfire-notes.pdf) [7 April 2016].
- Towers B, Haynes K, Sewell F, Bailie H & Cross D 2014, *Child-centred disaster risk reduction in Australia: progress, gaps and opportunities*, *Australian Journal of Emergency Management*, vol. 29, no.1, pp. 31–38. At: <https://ajem.infoservices.com.au/items/AJEM-29-01-09> [1 June 2016].
- United Nations 1989, *Convention on the Rights of the Child*. At: [www.ohchr.org/en/professionalinterest/pages/crc.aspx](http://www.ohchr.org/en/professionalinterest/pages/crc.aspx) [1 October 2015].
- United Nations Children's Fund 2016, *Child-centered disaster risk reduction: Contribution to resilient development*. At: [www.childreninachangingclimate.org/uploads/6/3/1/1/63116409/child-centered\\_drr-\\_contributing\\_to\\_resilient\\_development.pdf](http://www.childreninachangingclimate.org/uploads/6/3/1/1/63116409/child-centered_drr-_contributing_to_resilient_development.pdf) [6 January 2016].
- United Nations Office for Disaster Risk Reduction 2016, *What is disaster risk reduction?* At: [www.unisdr.org/who-we-are/what-is-drr](http://www.unisdr.org/who-we-are/what-is-drr) [1 June 2016].
- Young Offenders Act 1997 (NSW). At: [www.austlii.edu.au/au/legis/nsw/consol\\_act/you1997181/](http://www.austlii.edu.au/au/legis/nsw/consol_act/you1997181/).
- Young Offenders Regulation 2016 (NSW). At: [www.legislation.nsw.gov.au/regulations/2016-560.pdf](http://www.legislation.nsw.gov.au/regulations/2016-560.pdf).

## About the author

**Kamarah Pooley** is a career firefighter with Fire and Rescue NSW. She has a Bachelor of Criminology and Criminal Justice, Honours in Criminology and is a PhD Candidate with Queensland University of Technology, Faculty of Law. Kamarah's research experience and interest concerns misuse of fire and its prevention from a criminological perspective.