

How Complex Developmental Trauma, Residential Out-of-Home Care and Contact with the Justice System Intersect

Jenna Bollinger,¹ Stephanie Scott-Smith² and Philip Mendes³

¹Department of Social Work, Monash University, PhD Candidate

²Personality and Behaviour Disorder Services, Corrective Services NSW

³Department of Social Work, Monash University, Melbourne

Complex developmental trauma impacts on neurobiological development through the creation of a frightening and unpredictable environment in which the brain develops. This early experience results in an underdeveloped limbic system and pre-frontal cortex. For some children and young people, their experiences of early trauma lead them into the residential Out-of-Home Care (OOHC) system. Neurodevelopmental delays that occur as a result of early trauma and abuse often become particularly pronounced during adolescence, including limited impulse control, poor emotional regulation and attachment impairments. These same delays contribute to offending behaviour and subsequent contact with the justice system. Complex developmental trauma has serious repercussions both for the individual and the society in which he or she lives. These repercussions may take the form of offending behaviour and contact with the justice system, drug and alcohol abuse, and continuing cycles of abuse and violence within families or victimisation.

■ **Keywords:** trauma, out-of-home care, criminal justice system, attachment, brain development, residential care

Residential Care

According to the Australian Institute of Health and Welfare (AIHW), in 2014–2015, just over 5% of young people in Out-of-Home Care (OOHC) live in residential care, which equates to approximately 2394 young people in the residential care system throughout Australia. Residential care in New South Wales (NSW) generally looks like an average house on an average street inhabited by between one and four young people with ages ranging between 12 and 18 years. Thus, residential care provides accommodation to young people who have either been brought into care later in life or, alternatively, young people who have had at least two significant placement breakdowns (first, family and subsequently foster/kinship placement) before entering residential care. Children and young people enter the care system in NSW for a number of reasons, including neglect, physical abuse, sexual abuse and family violence (Australian Institute of Family Studies, 2015). It has been suggested that children and young people with particularly hard to manage and high risk behaviours make up a significant cohort of residential care alumni due to the difficulty of finding them safe and consistent housing else-

where (Ainsworth & Hansen, 2005; Barber & Delfabbro, 2003).

Understanding Complex Trauma

Complex trauma is generally accepted to involve the experience of multiple and/or chronic and prolonged, developmentally adverse events of an interpersonal nature beginning early in life (Van der Kolk, 2009). These exposures often occur within the child's caregiving system and include physical and emotional neglect and maltreatment beginning in early childhood and, crucially, exceed the child's ability to cope.

Trauma impacts on a child's or young person's ability to cope well with stress. According to Teicher (2016), human brains have selectively developed to be susceptible to stress and evolved to become more threat-aware as a means of ensuring survival. Early in human history, life expectancy was

ADDRESS FOR CORRESPONDENCE: Associate Professor Philip Mendes, Department of Social Work, Monash University.
E-mail: philip.mendes@monash.edu

short and threat was plentiful in the form of large mammals and other humans (Perry, Pollard, Blakeley, Baker, & Vigilante, 1995). As such, in childhood, brains develop to reflect their environment (Perry, 2009) and when that environment is chaotic, dangerous or impoverished (of stimulation), the brain wires to become hypersensitive to threat to increase the likelihood of survival (e.g., becoming more sensitive to a tone of voice or facial expression that indicates that the child should leave the environment because violence is likely to follow). As the child ages, their brain continues to reflect the early dysfunction (Perry, 2006) and the child continues to perceive threat where there is none (Crenshaw & Mordock, 2005), and is more likely to evaluate a neutral expression as negative and a positive expression as neutral. Van der Kolk (2014) indicated that those individuals with histories of complex trauma tend to evaluate situations solely on emotional reactions, rather than reasoning (executive functioning) and emotion. For example, rather than using higher order functions, such as consequential thinking or mentalising (thinking about another person's experience), they make judgments based on their own emotional reactions and react accordingly, in the moment. The effect of this mode of behaviour results in an increased use of the systems such as mental health, correctional and medical services.

It is also relevant to note that the Adverse Childhood Experiences Study (ACES) (Felitti et al., 1998) which had a large sample size of 9508 found that those individuals with four or more adverse childhood experiences (ACEs) were 12 times more likely to have attempted suicide, 7 times more likely to consider themselves an alcoholic, 4 times more likely to have used illicit drugs and 10 times more likely to have ever injected drugs than someone with no ACEs. The authors identified ACEs as being psychological, physical or sexual abuse; exposure to substance abuse; parental mental illness; mother treated violently or a close family member imprisoned. This robust research indicates that exposure to trauma in childhood has a significant impact on later life decisions and experiences, some of which may be linked to later offending.

Trauma and the Criminal Justice System

People with childhood histories of trauma, abuse and neglect make up a significant portion of the NSW criminal justice population: 74% of young people on community orders identified histories of maltreatment (Kenny & Nelson, 2008). The 2011 Young People in Custody Health study identified 27% of young people in custody had been placed in care prior to their 16th birthday (Indig et al., 2011). According to a 2015 Bureau of Crime Statistics and Records (BOCSAR) report, in 2007, 24% of young people on community orders and 28% of offenders in custody had a history of being placed in care, while at that time, young people in care comprised 0.6% of the general NSW population (Ringland, Weatherburn, & Poynton, 2015). Ringland and colleagues (2015) also conducted a study examining the

predictive power of child protection information to identify likely recidivists in NSW and found that while it does not appear to be particularly predictive of recidivism, they found that almost half of the young offenders in the study ($n = 17,368$) had a Risk of Significant Harm report in the 5 years prior to the study and almost 10% had spent time in OOHC. They also identified that maltreatment was likely to be under-represented in the study because the data was taken from official records, rather than self-reports. As such, the data only includes the official reports made about the young people, so less-observed maltreatment, or less-reported maltreatment would not have been captured.

Children who have been placed in OOHC are over-represented in the juvenile justice system and have been found to experience poorer mental and physical health (Malvaso & Delfabbro, 2015). This includes difficulties in completing and accessing education, employment and housing and higher rates of early parenthood (Mendes, Johnson, & Moslehuddin, 2011). As a result, these young people experience significant disadvantage and are more likely to be frequent users of crisis-response community and social services (Bromfield & Osborn, 2008). As demonstrated by the prospective study by Widom and Maxfield (1996), a high proportion of survivors of childhood abuse go on to have significant contact with the criminal justice system.

Substantial research has been conducted to identify the particular risk factors for offending, as well as identify both early predictors and possible treatment methods to reduce recidivism. A number of predictors of offending behaviour have been identified: hyperactivity, impulsivity, antisocial parents, poor attachment history, poor academic performance and antisocial friends (Hemphill, Toumbourou, & Catalano, 2005; Shader, 2003). When considering the substantial link between offending behaviour and childhood maltreatment, it is notable that the risk factors for offending behaviour map directly onto the correlates and consequences of trauma.

Trauma and Brain Development

The mediating factor between trauma exposure and offending behaviour appears to be disrupted brain development as a result of the trauma. According to Perry (2009), early childhood impairments can have cascading disruptions on normal development of the rest of the brain. Thus, development of higher regions of the brain (e.g., the prefrontal cortex, which is responsible for higher order activities such as consequential thinking, delayed gratification and meta-cognition among others) requires that the lower regions (brain stem and limbic system) are sufficiently developed, and when early traumatic events (including neglect) disrupt the development of the lower regions, the higher regions develop reflecting this dysfunction.

When a child is faced with threat, there are two significant responses that may follow: a hyper-aroused response or a

hypo-aroused response (Ziegler, 2009). For the purposes of this article, the hyper-arousal response will be discussed as in a general sense, hyper-arousal is more likely to lead to an aggressive response. Hyper-arousal involves the sympathetic nervous system and results in a ‘fight or flight’ reaction, preparing the body to fight or flee from the threat (Ziegler, 2011). The major brain systems involved are the amygdala, locus coeruleus and ventral tegmental area (Crenshaw & Murdoch, 2005; Perry et al., 1995, Teicher et al., 2003). These brain regions play a critical role in regulating arousal, vigilance, affect, behavioural irritability and attention. After the acute fear response subsides, the systems will be reactivated when the child is ‘triggered’. These triggered responses can then generalise to less specific reminders of the traumatic incident, leaving the child particularly prone to outbursts when distressed (Crenshaw & Mordock, 2005). The areas become sensitised and identify threat more readily – to a greater number of stimuli and at a lower threshold than non-sensitised brains.

As the brain areas involved in the acute stress response also play vital roles in those other systems such as vigilance and behavioural irritability, sensitisation of these areas by triggers are linked to dysregulation of these functions. Thus, a child who has been traumatised may display signs of hyperactivity, behavioural impulsivity, sleep problems and anxiety. The children are sensitive and reactive due to being in a persistent fear state (Perry et al., 1995). This essentially means the child will be easily moved from being mildly anxious to feeling terror, and is more likely to find stimuli threatening (Van der Kolk, 2014) and to react with a fight/flight set of responses. Over time what is observed is a set of maladaptive emotional, behavioural and cognitive problems that result from an original adaptive response as a result of coping with an early traumatic event (Schore, 2001, Ziegler, 2011). Young people exposed to traumatic events, whose brains develop to reflect dysfunction as a result of their trauma, become more sensitive to threat and more prone to anxiety and terror. Perry (2006) explained that hyper-arousal responses circumvent the higher order parts of the brain (particularly the prefrontal cortex) and instead rely on the lower, instinctive brain regions (particularly the brain stem) to determine courses of actions to ensure survival. De Bellis (2002) also identified that early maltreatment leaves the young person more prone to substance use disorders and alcohol abuse. Alcohol and substance use are known to be related to reduced inhibitions and increased impulsivity (De Wit, 2008). This is likely to be significantly related to offending behaviour, given that traumatised young people have greater rates of impulsivity due to the lower level of functioning of the prefrontal cortex.

Case Studies¹

Billy had 11 placements by the time he was 14 years old, these were a mixture of both kinship and foster placements, before finally being placed in residential care. Billy had suffered ex-

trême neglect, witnessed violent sexual abuse and suffered and witnessed severe physical abuse. Billy experienced multiple broken attachments before entering residential care. Through the 4 years he was in residential care, he experienced significant stability, both of placement and of staff. Billy began to thrive, attended school and was able to hold down a job for a short time. Towards the end of his stay in residential care, Billy became fully aware of the significance of being in residential care, that is, that the people who kept him safe and cared for him were paid to do so, and after he turned 18, he would not have somewhere safe and familiar to live. His damaged attachment system meant that he was not able to end the placement well, and he began to break down his attachments. It could be inferred that his limbic system became overactive because of his anxiety around leaving care and, as such, his prefrontal cortex and capacity to reason and predict the consequences of his actions was compromised. He demonstrated an increase in impulsive and reckless behaviour, an increase in risk taking behaviour, the forging of links with anti-social peers – possibly as a means to ensure he had support outside of his placement, and increased contact with the criminal justice system and mental health system. As a result, he entered custody two weeks prior to his 18th birthday.

Shelly, a 16-year-old girl was first brought into residential care as an emergency placement from her family. Shelly’s history includes sexual assault by her father, physical abuse by her mother and significant neglect. Given her age on entering care, she moved directly into residential care. In her first placement, she was moved after the house closed due to an organisational restructure. She was then moved to a second placement, and she began acting out with aggressive behaviour. A court order led to her being moved again, after assaulting another resident. At this stage, she was put in an interim placement while thorough matching took place. She was finally moved into a permanent placement, this being her fifth placement within a year, including her family of origin. Multiple aggressive outbursts led to contact with the juvenile justice system, overnight stays in custody, self-harm and failure to engage with school.

Toby entered residential care when he was 13-years old. He had been living with his aunt for a period of time prior to that, as his parents were unable to care for him. His mother suffered from drug dependence and ongoing mental health issues. His father was excessively violent. While he was in their care, he suffered from severe neglect, was sexually abused by multiple perpetrators, suffered from severe physical abuse and witnessed inappropriate sexual behaviour from both his siblings and wider relatives. He was removed from his aunt’s care when he sexually assaulted his young niece in a manner that mimicked his own sexual abuse.

Implications for Policy and Practise

While it is clear that trauma and the justice system regularly intersect, the underlying reasons *why* have been less

frequently attended to. Identifying the mediating factors of underdeveloped brain systems is an important next step in identifying likely predictors of offending behaviour and more satisfactory treatment methods, particularly in adolescence to prevent recidivism.

Young people who have been exposed to trauma and react out of a hyper-aroused fear response may need different treatment than those who think through the consequences of their actions and choose to offend. The data has not suggested that entry into the care system or a maltreatment history is a specific predictor of offending, however, the cohorts may be substantively different and this may need to be evaluated further.

There are also implications for leaving care policy and the need for it to be trauma-informed. Anxiety around attachment-related ruptures, particularly as the young person nears the end of their time in the care system, has the potential to be damaging and further traumatise an already vulnerable young person. Recent recommendations to reduce contact with the justice system by care-leavers identified the need for there to be specific strategies to address the needs of this particularly vulnerable cohort that are therapeutic in nature (Mendes, Baidawi, & Snow, 2014).

Endnote

1 Case studies are written under pseudonyms and do not reflect any single young person. Any similarities are accidental.

References

- Ainsworth, F., & Hansen, P. (2005). A dream come true- no more residential care: A corrective note. *International Journal of Social Welfare*, 14, 195–199.
- Australian Institute of Health and Welfare (2016). *Child Protection Australia 2014–15*. Canberra: AIHW.
- Australian Institute of Family Studies. (2015). *Children in Care*. Retrieved from <https://aifs.gov.au/cfca/publications/children-care>.
- Barber, J. G., & Delfabbro, P. H. (2003). Placement stability and the psychosocial well-beng of children in foster care. *Research on Social Work Practice*, 13(4), 415–431.
- Bromfield, L., & Osborn, A. (2008). Australian research investigating residential and specialised models of care: A systematic review. *Developing Practice*, 20, 23–32.
- Crenshaw, D. A., & Mordock, J. B. (2005). Lessons learned from “fawns in gorilla suits”. *Residential Treatment for Children & Youth*, 22(4), 33–47.
- De Bellis, M. D. (2002). Developmental traumatology: A contributory mechanism for alcohol and substance use disorders. *Psychoneuroendocrinology*, 27, 155–170.
- De Wit, H. (2008). Impulsivity as a determinant and consequence of drug use: A review of underlying processes. *Addiction Biology*, 14(1), 22–31.
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventative Medicine*, 14(4), 245–258.
- Hemphill, S. A., Catalano, R. F., & Toumbourou, J. W. (2005). *Predictors of violence, antisocial behaviour and relational aggression in Australian adolescents: A longitudinal study*. Canberra, Australia: Criminology Research Council. Retrieved from <http://www.criminologyresearchcouncil.gov.au/reports/200304-26.pdf>.
- Indig, D., Vecchiato, C., Haysom, L., Beilby, R., Carter, J., Champion, U., . . . Whitton, G. (2011). *2009 NSW young people in custody health survey: Full report*. Sydney: Justice Health and Juvenile Justice.
- Kenny, D. T., & Nelson, P. K. (2008). *Young offenders on community orders: Health, welfare and criminogenic needs*. Justice Health NSW. Retrieved from <http://www.justicehealth.nsw.gov.au/publications/ch1-3.pdf>.
- Malvaso, C. G., & Delfabbro, P. (2015). Offending behaviour among young people with complex needs in the Australian out of home care system. *Journal of Child and Family Studies*, 24, 35–61.
- Mendes, P., Baidawi, S., & Snow, P. C. (2014). *Good practice in reducing the over-representation of care leavers in the youth justice system*. Leaving Care and Youth Justice – Phase Three Report. Melbourne: Monash University.
- Mendes, P., Johnson, G., & Moslehuddin, B. (2011). *Young people leaving state out-of-home care: Australian policy and practice*. Victoria: Australian Scholarly Publishing.
- Perry, B. D. (2009). Examining child maltreatment through a neurodevelopmental lens: Clinical applications of the neurosequential model of therapies. *Journal of Loss and Trauma*, 14, 240–255.
- Perry, B. D., Pollard, R. A., Blakeley, T. L., Baker, W. L., & Vigilante, D. (1995). Childhood trauma. The neurobiology of adaptation, and ‘use-dependent’ development of the brain: How states become traits. *Infant Mental Health Journal*, 16(4), 271–291.
- Perry, B. D., & Szalavitz, M. (2006). *The boy who was raised as a dog*. New York: Basic Books.
- Ringland, C., Weatherburn, D., & Poynton, S. (2015). Can child protection data improve the prediction of re-offending in young persons?. *Contemporary Issues in Crime and Justice*, 188. Sydney: NSW Bureau of Crime Statistics and Research.
- Schore, A. N. (2001). The effects of early relational trauma on right brain development, affect regulation and infant mental health. *Infant Mental Health Journal*, 22(2–1), 201–269.
- Shader, M. (2003). *Risk factors for delinquency: An overview*. Office of Juvenile Justice and Delinquency Prevention. Retrieved from http://www.ncjrs.gov/html/ojjdp/jjjournal_2003_2/index.html.
- Teicher, M. H., Andersen, S. L., Polcari, A., Anderson, C. M., Navalta, C. P., & Kim, D. M. (2003). Neurobiological consequences of early stress and childhood maltreatment. *Neuroscience and Biobehavioural Reviews*, 27, 33–44.

- Teicher, M. (2016). Childhood maltreatment: Sensitive exposure periods and the importance of type and timing of abuse. *Child Trauma Conference*. Melbourne, Australia 6–10 June, 2016.
- Van der Kolk, B. (2009). Developmental trauma disorder: Towards a rational diagnosis for chronically traumatised children. *Praxis der Kinderpsychologie und Kinderpsychiatrie*, 58(8), 572–586.
- Van der Kolk, B. (2014). *The body keeps the score*. New York: Viking Penguin.
- Widom, C. S., & Maxfield, M. G. (1996). A prospective examination of risk for violence among abused and neglected children. *Annals New York Academy of Science*, 794, 224–237.
- Ziegler, D. L. (2009). *Impacting the brain of the traumatized child*. Woodbury Reports, 180. Retrieved from <http://www.strugglingteens.com/archives/2009/pdf/180-August.pdf>.
- Ziegler, D. L. (2011). *Traumatic experience and the brain*. Arizona: Acacia Publishing.

