

Comparing outcomes for maltreated children: Out-of-home care versus remaining at home – A literature summary

This literature summary reviews key research studies that compare developmental, educational, health and wellbeing, and criminal justice outcomes for maltreated children who were placed in out-of-home care (OOHC) with those who remained with their birth families.

Key messages

- NSW Communities and Justice has a responsibility to achieve the best outcomes for children at risk. While safety is always of paramount concern, it is important to determine whether children in out-of-home care fare better or worse than maltreated children who remain with their birth families.
- Findings from research are ultimately inconclusive. Some evidence suggests out-of-home care might have a protective effect for children in the physical health, language, cognitive and education domains, but not in the emotional or social domains or in relation to police contacts. Children in out-home-care have considerably higher rates of diagnosed mental health disorders.
- Research into this question faces methodological challenges that make it hard to determine the contribution of out-of-home care placements to varied outcomes for maltreated children. Children in out-of-home care have often experienced greater socio-economic disadvantage, more severe maltreatment and trauma, and higher levels of prior contact with child protection services than children at risk who were not removed from their parents' custody.
- There is also limited research that differentiates outcomes for Aboriginal and non-Aboriginal children at risk.
- Further research could provide stronger evidence of the effectiveness of out-of-home care versus remaining at home for improving the wellbeing of maltreated children. However, some methodological challenges will remain, even with robust research.
- These findings reinforce the importance of continued intra- and inter-agency collaboration to support children at risk and in out-of-home care to improve a range of developmental and wellbeing outcomes. In particular, there is an ongoing need for investment in programs that address high rates of mental health disorders and higher police contacts for children in out-of-home care.

Introduction

The NSW Department of Communities and Justice (DCJ) is committed to improving the lives of vulnerable children and their families with better laws, policies, systems and practices. DCJ strives to determine and address the needs of children and families early to give them a strong foundation for a better life. Continued revision of policy and practice ensures that decisions about child wellbeing and the ongoing health and developmental needs of vulnerable children and their families are facilitated by comprehensive information and evidence-based practice (Green et al. 2021).

DCJ has a responsibility to achieve the best outcomes for children at risk. The immediate aim of out-of-home care is to remove children from a home environment deemed too harmful or risky for the child's safety. Safety is thus a central consideration in placement decisions, but it is not self-evident that out-of-home care is effective in improving child wellbeing. Knowing whether an out-of-home care placement mitigates or heightens developmental risks for maltreated children is crucial for assessing the efficacy of child protection policies and interventions, as well as for understanding the relative risks and benefits of major discontinuities in children's care.



This literature summary reviews key findings from Australian and international research, comparing outcomes for maltreated children (in NSW that means children with one or more substantiated Risk of Significant Harm or ROSH report) who were not removed from their families and children who were placed in out-of-home care. Outcomes were compared for the domains of child development, education, mental health and wellbeing, and involvement with the criminal justice system. After outlining the findings for each of these domains we discuss the methodological issues associated with this research question and present ideas for future research.

Method and scope

The research studies included in this review were identified through the following search strategy:

1. Our review drew heavily on the extensive publications from the NSW Child Development Study (NSW-CDS). Research findings from this study are highly relevant as they present results not only from Australia but even more narrowly from NSW.
2. We also included studies identified through a literature search conducted by the DCJ library.
3. In addition, we screened the reference lists of relevant research studies to identify additional papers.
4. We also included selected findings from the Family is Culture: Independent Review into Aboriginal Children and Young People in Out-of-Home Care in NSW (Family is Culture Review), as research that explores the differences in outcomes for Aboriginal children in out-of-home care and those remaining at home is very limited.

Preference was given to studies from Australia, but some international studies were included as comparison or because of their high quality.

Limitations

Due to time and capacity constraints, this literature summary comprises a limited number of research studies. It is not a comprehensive or systematic literature review of all available research, which would be a larger piece of work requiring extensive resources. However, it provides a good summary of the most relevant findings and issues in relation to the research question.

There are also important methodological limitations inherent to the question of whether outcomes for children with substantiated ROSH reports (who remain at home) can be meaningfully compared with those for children in out-of-home care. Outcomes for these children cannot necessarily be attributed to the characteristics of placements or other DCJ services. Pre-existing risks are known to contribute to later outcomes for all children known to child protection services, and there are many observed and unobserved differences between children who are removed from their family and those who are not. These methodological challenges will be highlighted throughout this paper and explored in more detail in the concluding section.

What did the literature summary find?

We have summarised the key findings from this review on the following pages. This includes an overview of some of the difficulties in determining the contribution of out-of-home care placements to the varied outcomes for maltreated children and some ideas about how these could be addressed going forward.

Key findings summary

Findings from research evidence

- A high-quality systematic review compared health and wellbeing outcomes for maltreated children placed in out-of-home care with those remaining with their birth family reported mixed findings (Maclean et al. 2016). 29 of 40 international studies included in the review showed no evidence of benefit or harm associated with an out-of-home care placement. Seven studies reported worse outcomes and four studies suggested benefits for out-of-home-care.
- Data from the NSW-CDS study showed that children placed in out-of-home care before school entry had slightly better developmental outcomes across **physical**, **cognitive** and **communication** domains but no differences in **social** or **emotional** domains, relative to children with substantiated ROSH reports that remained with their families (Rossen et al. 2019).
- Data analysis undertaken for the Family is Culture Review found a higher burden of developmental vulnerability among Aboriginal children who escalate through child protection services during early childhood than non-Aboriginal children involved in the child protection system. The Review highlights the fact that rather than supporting recovery and healing the out-of-home care system can compound and add to the trauma of Aboriginal children and young people.

- Children in out-of-home care were more often diagnosed with **mental health disorders**, in particular stress-related, conduct, and hyperkinetic disorders (including attention deficit and hyperactivity disorder) than children with substantiated ROSH reports as the highest child protection intervention (Green et al. 2020).
- There is some evidence that children in out-of-home care do better than children with substantiated ROSH reports who remain in the home in the **educational** domain (Green et al. 2021). After controlling for potential confounding factors, children with substantiated ROSH reports who were not removed into care demonstrated the worst educational attainment on all educational measures, among all children known to DCJ. (Laurens et al. 2020). School attendance, which was significantly higher in the out-of-home care group, was found to serve an important protective role. Regular school attendance was equally effective at promoting educational achievement for Aboriginal and non-Aboriginal students (Maclean et al. 2016).
- The NSW-CDS study found a stepwise increase in **police contacts** across the increasing levels of child protection responses, with the exception that children with substantiated ROSH reports had a marginally higher number of contacts than those in out-of-home care placements (Green et al. 2021). International studies showed mixed results regarding **involvement with the criminal justice system**. Some studies showed worse outcomes for children in out-of-home care compared to remaining at home, while other studies showed no difference in outcomes.
- Overall, children with any kind of contact with the child protection system (non-ROSH, non-substantiated ROSH, substantiated ROSH or out-of-home care) fare worse in all outcome domains than their peers without child protection involvement.

Challenges in determining how placement contributes to outcomes

- A number of challenges make it difficult to determine the contribution of out-of-home care placements to the varied outcomes for maltreated children.
- Children in out-of-home care are likely to have experienced a greater socio-economic disadvantage, more severe maltreatment and trauma, and higher levels of prior contact with child protection services than children at risk who were not removed from their parents' custody.
- The two groups also tend to differ on factors such as parental cooperation with child protection services, parental stress, parenting skills, social support, substance abuse, family and domestic violence, and criminal justice involvement.
- Associations between out-of-home care placement and child wellbeing are also likely to vary by the length and stability of placements as well as carer characteristics.
- Placement decisions vary according to local policies, practices and individual staff members' propensity to use out-of-home care, which impacts on the allocation to the two groups.
- Different support services for children reported at Risk of Significant Harm (ROSH) and services for children in out-of-home care may also have different impacts on outcomes, making the two groups difficult to compare.

Ideas for further research

- More research is needed to provide stronger evidence of the effectiveness of out-of-home care versus remaining at home for maltreated children.

- Data from existing studies need be interrogated further to determine whether outcomes differ between Aboriginal and non-Aboriginal children at ROSH and in out-of-home care.
- Studies could address selection bias by identifying cohorts before decisions about an out-of-home care placement are made, and ensure measurement of important confounding factors at baseline and during follow up.
- Careful propensity matching could help create more comparable groups, although this still has limitations due to unobservable factors that impact on outcomes.
- Researchers could look at individual differences in maltreated children to try to understand under what circumstances out-of-home care placement is likely to be beneficial and under what circumstances it is likely to do more harm than good.
- Mixed method studies with a qualitative component could help to contextualise, deepen and explain findings, and give voice to carers, families and – where appropriate – children themselves.
- However, ultimately, it may remain very difficult to estimate the unique ‘effect’ of out-of-home care given that children have different backgrounds, genetic predispositions, experiences in care, and levels and types of trauma, and enter care at different ages and developmental stages.

What are the findings from systematic reviews and meta-analyses?

Systematic reviews are considered the highest quality research evidence because they synthesise findings of multiple studies identified in comprehensive, systematic literature searches. Systematic reviews that contain meta-analyses provide the most reliable estimates of the effects of an intervention, because they are based on the combined results of many studies of the same outcome rather than a single evaluation. However, the capacity to conduct meta-analyses relies on comparable methodology across studies.

We found one systematic review (Maclean et al. 2016) and one meta-analysis (Goemans et al. 2016) that compared outcomes for maltreated children in out-of-home care with those who remained at home. 29 of the 40 international studies (largely from the US) included in Maclean et al.’s 2016 systematic review showed no evidence of benefit or harm associated with an out-of-home care placement. Seven studies were consistent with worse outcomes, and four studies were suggestive of the benefits of out-of-home-care. However, there was significant heterogeneity in study methodology, and a high risk of ‘selection bias’ among the included studies, limiting firm conclusions. Selection bias in research studies arises when the different groups of participants differ in ways *other* than the interventions under investigation. For example, children who enter out-of-home care are likely to have more disadvantaged backgrounds and are thus already at higher risk for poor outcomes than other maltreated children.

Key insights from the Maclean et al. (2016) systematic review included:

- **Academic achievement:** Overall there was no clear evidence of differences in academic achievement between children in out of-home care and those who remained at home.
- **Cognitive and language skills:** Three studies that reported on cognitive and language skills found no difference between children who remained at home and children in out-of-home care.
- **School attendance and engagement:** There was limited evidence regarding school attendance and engagement, however there were some indications of favourable results for children in out-of-home care.

- **Health:** Overall, there was no difference in physical symptoms between children placed in out-of-home care and other children known to child protection services.
- **Mental health and behaviour:** The review found no evidence of significantly different mental health outcomes for children in out-of-home care after accounting for baseline characteristics.
- **Substance abuse:** There were some indications of increased substance use among children in out-of-home care, although overall results were mixed and studies limited.
- **Suicide attempts:** The researchers found no clear evidence for increased or decreased suicide risk for children placed in out-of-home care compared to children who remained with their birth families.
- **Teenage births:** Available evidence indicated no significant differences between children who remained at home and the out-of-home care group for increases in teenage births.
- **Risky sexual behaviour:** There was limited evidence available regarding risky sexual behaviour, with indications of worse outcomes for maltreated children who remained with their families.
- **Involvement with criminal justice system:** Overall, there was a mix of studies showing worse outcomes for children in out-of-home care and studies showing no difference.

Goemans et al. (2016) performed a series of meta-analyses on the results from 13 international studies (again mainly from the US), comparing the **cognitive, behavioural** and **adaptive functioning**¹ of children placed in out-of-home care with children at risk who remained with their biological parents. Results showed that while both groups experienced developmental problems, there were no clear differences between children in care and at-risk children who remained at home.

Below is a more detailed summary of research findings for the different outcome domains, drawing mainly on retrospective analyses of linked government administrative data from Australia/NSW.

Can out-of-home care placement be beneficial to child development?

The early childhood period (birth to 5 years of age) is a time when the brain is rapidly developing and particularly sensitive to stress. Exposure to maltreatment during this period may impair developmental achievements and learning opportunities, with long-term ramifications for cognitive and educational outcomes (Rossen et al. 2019). Research from the NSW Child Development Study (NSW-CDS) explored the question of whether out-of-home care placement during the early formative years (before age 5 years) may bring any benefit to the otherwise known negative associations between substantiated maltreatment and early developmental functioning (Green et al. 2017).

The NSW-CDS is a longitudinal study of the mental health and wellbeing of a cohort of 91,635 children. The study combines children's Australian Early Development Census (AEDC) records with birth, health, education, justice and child protection records from birth to 13-14 years. The majority of the NSW-CDS population cohort were assessed using the AEDC when they commenced their first year of formal schooling (kindergarten) in 2009. The AEDC measures the early childhood development across five domains:

- physical health and wellbeing
- social competence

¹ 'Adaptive functioning' describes how well a child handles common demands in life and how independent they are compared to others of a similar age and background.

- emotional maturity
- language and cognitive skills (school-based)
- communication skills and general knowledge.

These domains have been shown to predict later health, education and social outcomes. Children are deemed ‘developmentally vulnerable’ if they score below the 10th percentile of the national population (according to the 2009 census), and ‘developmentally at-risk’ if they score between the 10th and 25th percentile of an AEDC domain.

Findings have shown that, overall, children with the highest levels of child protection response (those placed in out-of-home care or with substantiated ROSH reports) had the highest odds of presenting with multiple developmental vulnerabilities at the age of 5 years, relative to children with lower child protection responses. However, children placed in out-of-home care before school entry had slightly better developmental competencies in physical, cognitive and communication domains (but not in social or emotional domains) relative to children with substantiated child protection reports that did not result in out-of-home care placements. These findings account for other potential contributing factors, such as child’s sex, English as a second language, socioeconomic disadvantage, young maternal age at child’s birth, preterm birth, prenatal smoking exposure, and parental mental illness. The differences in the odds ratios for social and emotional developmental domains were not statistically significant between the two groups of children.

Figure 1. Odds of vulnerability on AEDC domains according to each level of child protection response

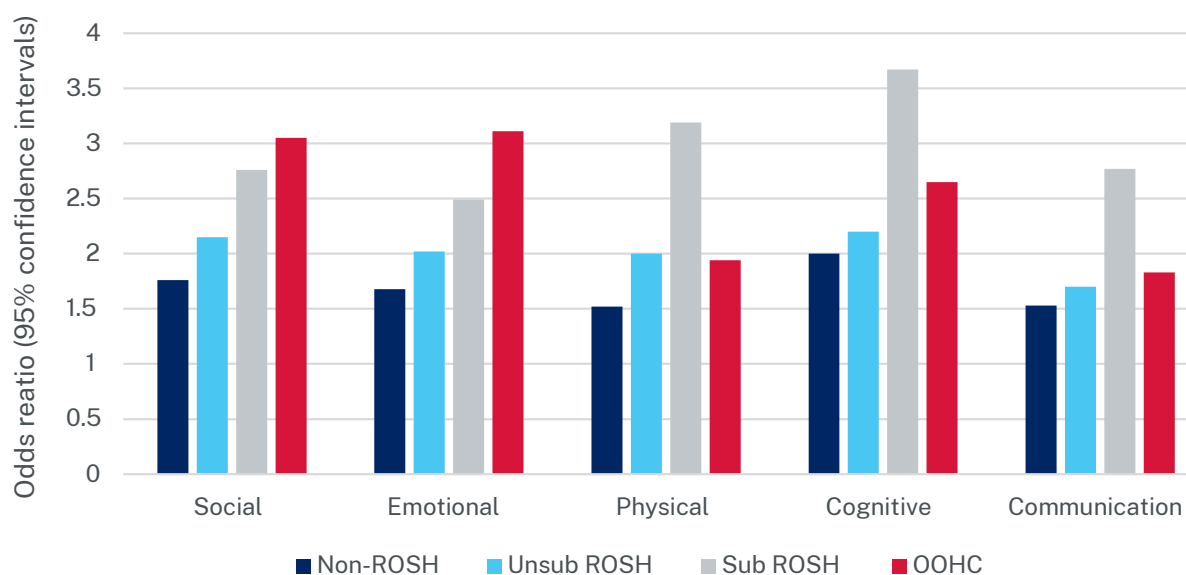


Figure 1: Adjusted odds ratios for each level of child protection response and vulnerability on AEDC domains account for child’s sex, English as a second language, socioeconomic disadvantage, young maternal age at child’s birth, prenatal smoking exposure and parental mental illness. Source: Rossen et al. 2019.

These findings suggest that there may be some protective effects of out-of-home care placement before age 5 years, with placement in out-of-home care conferring lesser odds of vulnerability on the physical, cognitive and communication domains than that observed for children with substantiated ROSH reports remaining at home. At the same time, social and emotional skills seem to be less influenced by the home environment or carers’ characteristics in the early childhood period (Rossen et al. 2019).



Rossen et al. (2019) point out that this may reflect the opportunities for better developmental functioning in a safe environment provided by the out-of-home care placement. However, the specific reasons for removal from home (e.g., type and extent of abuse or neglect) could also have influenced the developmental functioning of these children. The different groups might also receive different levels of support. For example, the families of children with substantiated reports may receive significant interventions in the home (e.g., intensive family-based interventions) that children in out-of-home care may not receive. Likewise, children in out-of-home care receive specific early childhood or psychological interventions that other children who remain in the home do not.

Data analysis prepared by Kathleen Falster and Mark Hanly for the Family is Culture Review provides a comparison between Aboriginal and non-Aboriginal children on AEDC outcomes. Their report is based on findings from the population-based, cross-sectoral data linkage Seeding success: identifying factors that contribute to positive early childhood health and development in Aboriginal children (Seeding Success Study). The Seeding Success Study examined children who were assessed with the AEDC in their first year of full-time school in NSW in 2009 or 2012. The research found that Aboriginal children who escalate through child protection services during early childhood have a higher burden of developmental vulnerability and diagnosed health and developmental conditions or impairments than non-Aboriginal children involved in the child protection system (Falster & Hanly 2019, cited in the Family is Culture Review 2019, p. 145).

Contrary to the findings from the NSW-CDS and the Seeding Success studies, international studies conducted with children maltreated in the early childhood period found no significant effects of out-of-home care placement in terms of cognitive and language outcomes (Berger et al. 2009; Stacks et al. 2011; Stahmer et al. 2009). That is, out-of-home care did not seem to have a negative effect on child development but was not found to support it either.

How does child maltreatment impact on educational outcomes?

Children with maltreatment histories generally experience poorer literacy, numeracy and educational achievement levels, and increased rates of grade retention, absence and school drop-out with long-term occupational, social, and wellbeing impacts (Laurens et al. 2019).

In a report conducted for DCJ, the NSW-CDS study found that children with child protection reports were more likely to score below the national minimum standard on the Grade 5 National Assessment Program – Literacy and Numeracy (NAPLAN) test across all domains tested - reading, writing, spelling, grammar and punctuation, and numeracy. There appeared to be a stepwise increase in the rates of scoring below the national minimum standard alongside increasing levels of child protection responses for most NAPLAN domains. The exception was spelling, grammar and punctuation for children in out-of-home care. Given findings for children placed in out-of-home care on the AEDC, it is possible that out-of-home care may be mitigating against poor cognitive achievement, but this cannot be firmly concluded from these findings (Green et al. 2021).

Figure 2. NAPLAN Grade 5: below National Minimum Standard

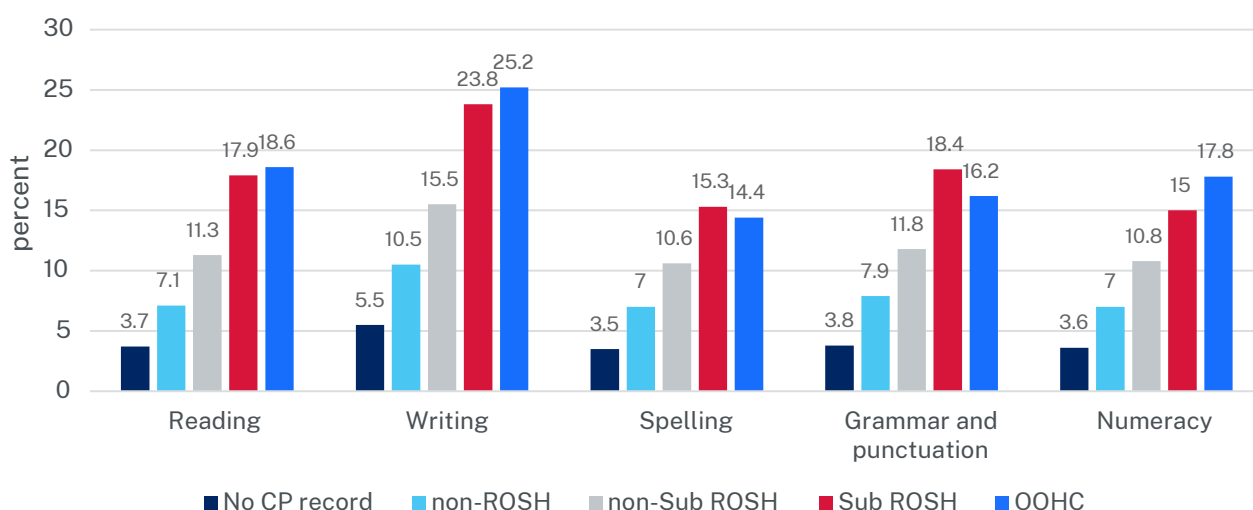


Figure 2 Percent of children within each level of child protection response (before the age 5-6 years) who are achieving below National Minimum Standard on NAPLAN domains (N=76,465). Source: Green et al. 2021, p. 21. Note: This graph is based on unadjusted statistics that do not take into account other factors such as socio-economic disadvantage.

Laurens et al.'s (2020) study, which is also based on NSW-CDS data, controlled for contributing factors when evaluating the effect of out-of-home care placement on educational outcomes. This ensures that other factors are taken into account when considering the relationship between children with an out-of-home care placement and other children. For example, children who are placed in out-of-home care are more likely to experience broader child, family, and neighbourhood adversities than their peers, such that some of their increased risk of poor educational attainment may be accounted for by other risk factors that are associated with out-of-home care placement (e.g., poor literacy and numeracy at school entry, socioeconomic disadvantage). In the adjusted model, children with substantiated ROSH reports who were not removed into care demonstrated the worst educational attainment on all measures, suggesting that there may be some protective effects for children in out-of-home care.

Other studies from the US that also included indicators of the child's sex and ethnicity, socioeconomic disadvantage, English language proficiency, prenatal and birth factors and parental factors, showed that the educational achievement gap for children in out-of-home care relative to children not reported to child protection services was eliminated in fully adjusted models that considered multiple other adversities (Berger et al. 2015; Maclean et al. 2016; Piescher et al. 2014). Maltreated children reported to child protection services but not removed from their homes experienced worse educational outcomes than the children placed in out-of-home care. These findings imply that targeted interventions such as Personalised Learning and Support Planning might benefit not just children placed in out-of-home care, but maltreated children in general who are identified by child protection services.

Maclean et al.'s (2016) research from Western Australia found that school attendance, which was significantly higher in the out-of-home care group, served an important protective role in mitigating against poor outcomes for these children. It was found to be equally effective at promoting educational achievement for Aboriginal and non-Aboriginal students.

It is important to note that these findings do not necessarily imply that children in out-of-home care are performing satisfactorily in school. Almost one in three in Maclean et al.'s 2016 study had poor reading achievement. However, given the highly increased risks they face through their family, community and individual characteristics as well as maltreatment experiences, these children might be expected to perform *even worse* than they do (Maclean et al. 2016). At the same time, educational outcomes for children who have entered care may reflect prior disadvantage and maltreatment experiences, rather than the placement itself (Maclean et al. 2017).

Do children in out-of-home care experience worse mental health and general wellbeing?

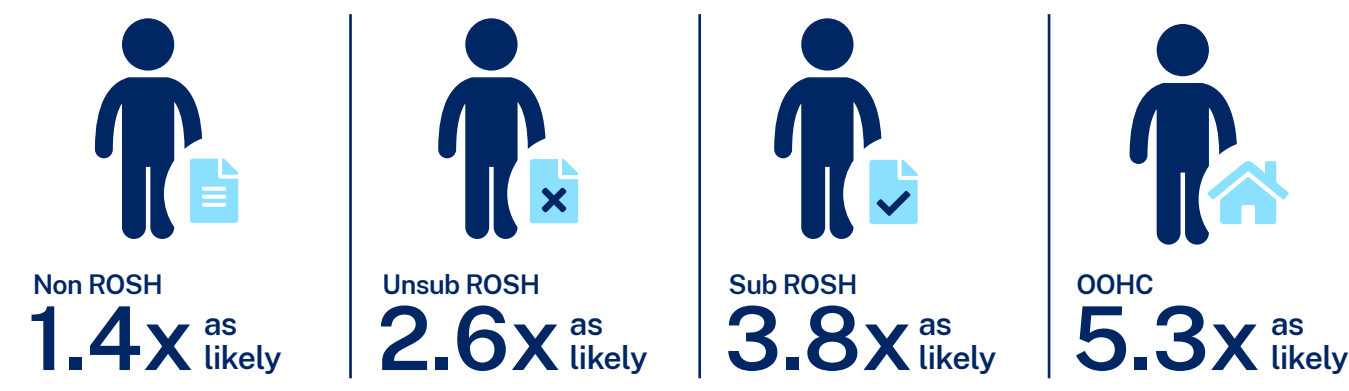
Research has shown that maltreatment during childhood - in particular emotional abuse and neglect - has a substantial adverse impact on mental health in adulthood and is associated with almost every type of adult mental disorder. Children known to child protection services are at increased risk of mental health difficulties, including anxiety, depression, aggression, and stress (Green et al. 2020).

Linked administrative data for children in the NSW-CDS from the NSW Mental Health Ambulatory Data Collection, the Emergency Department Data Collection, and the Admitted Patient Data Collection was analysed for diagnosed mental disorders. These include phobias and anxiety, stress reactions, childhood-onset emotional disorders, hyperkinetic disorders, conduct disorders, developmental disorders (including autism spectrum and unspecified developmental disorders) and self-harm. The findings showed that the prevalence of diagnoses in each category of mental disorder was highest for children who had been placed in out-of-home care. The prevalence of having at least one mental disorder diagnosis in middle childhood increased with the level of early childhood child protection contact (Green et al. 2020). The proportion of children with a mental disorder diagnosis in middle childhood was as follows:

- 4.5% of children with reports that did not reach the threshold for ROSH
- 8.9% of children with an unsubstantiated ROSH report
- 13.9% of children with a substantiated ROSH report
- 19.7% of those with an out-of-home care placement had a mental disorder diagnosis.

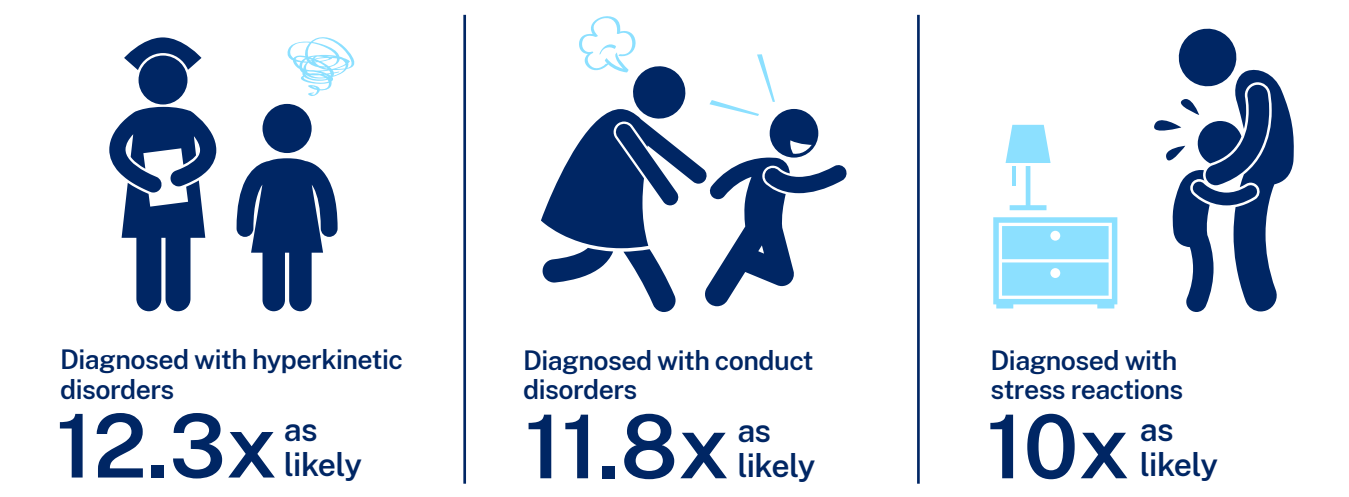
Children placed in out-of-home care were more than five times more likely to be diagnosed with any type of mental disorder, relative to children not known to child protection services; the odds were around four times more likely for children with a substantiated ROSH report.

The odds of being diagnosed with a mental disorder in middle childhood by the level of early childhood child protection contact



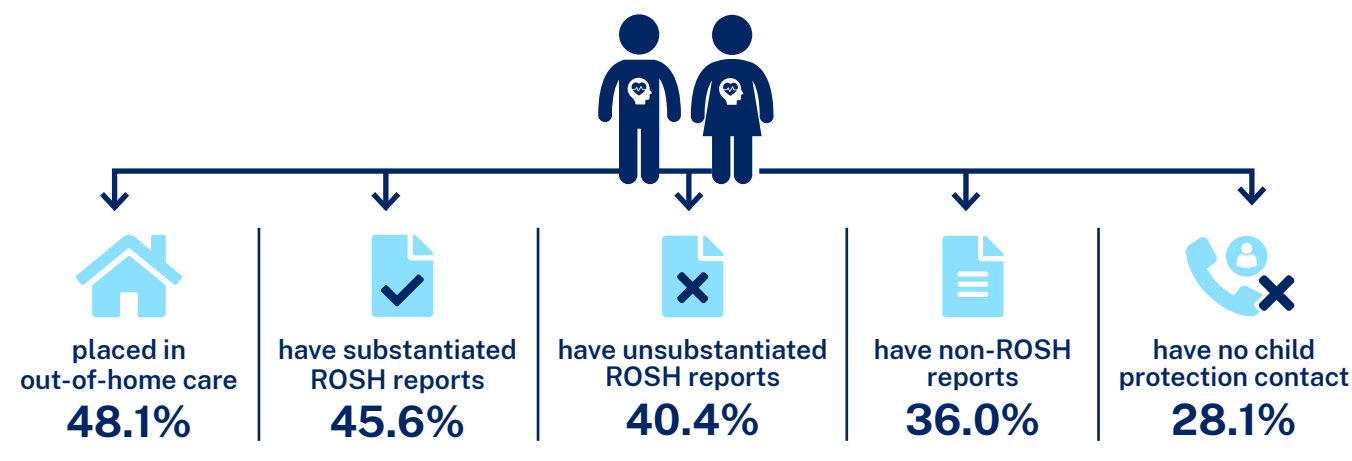
Even more striking, the odds of developing stress-related, conduct and hyperkinetic disorders (including attention deficit and hyperactivity disorder) were between ten and twelve times higher for children placed in care, even after accounting for sex, socio-economic disadvantage, perinatal complications and parental mental illness. By comparison, children with substantiated ROSH reports were around five times more likely to develop these disorders.

The odds of a child with an early childhood out-of-home care placement being diagnosed with a specific mental disorder in middle childhood



Another study provided mixed results as to whether children in out-of-home care experience more mental health difficulties than other maltreated children (O'Hare et al. 2021). A subset of the children in the NSW-CDS completed the online self-report Middle Childhood Survey when they were aged 11 years. Middle childhood represents an important developmental period where early signs of mental ill-health might be detected so that effective interventions could reduce the risk of later mental disorder. Children answered questions about their *subjective perception* of difficulties with emotional symptoms, peer relationships, conduct problems, hyperactivity-inattention, prosocial behaviours (helping others) and psychotic-like experiences. Relative to their peers, children with child protection contact were again more likely to report difficulties in all these areas of mental health, with 45.6% of children with substantiated ROSH reports and 48.1% of children in out-of-home care reporting clinical levels of difficulties in at least one mental health domain.

The proportion of children that have abnormal levels (top 10%) of difficulties in at least one of the mental health domains



In this survey however, children with substantiated ROSH reports generally showed similar odds of mental health difficulties as children placed in out-of-home care. Some domains - peer-relationship problems, prosocial behaviours and conduct problems - were more strongly related to out-of-home care. Other domains - hyperactivity-inattention and total difficulties - were slightly more strongly related to substantiated ROSH reports (O'Hare et al. 2021).

The findings reported for the broader NSW-CDS cohort showed that children in out-of-home care had higher odds of being diagnosed with a mental disorder than children with substantiated reports. However, the different pattern of findings reported for self-reported mental health difficulties versus diagnostic information obtained from health records may in part reflect policies that mandate health screening for children in out-of-home care in NSW. As such, the increased exposure of children in out-of-home care to health services may increase the rate of mental disorder diagnoses among these children. Alternatively, it is possible that children with substantiated ROSH reports have more sub-threshold symptoms of mental health problems but are less likely than children in out-of-home care to have a significant functional impairment that would result in a formal diagnosis (O'Hare et al. 2021).

A longitudinal study from Israel (Davidson-Arad 2005) more broadly compared the quality of life of 93 at-risk children who were removed from their family home into care with that of children who remained at home. Social workers assessed the children's psychological, physical, social and cultural aspects of quality of life at the point when removal was considered and then again at 4 months and 15 months in out-of-home care. The findings indicated that the quality of life of the children who were taken into care incrementally improved over the course of the 15 months in all aspects, while that of the children who remained at home stayed at the same level. This conclusion was regarded as tentative because of the small number of children in each group, but also the possibility of selection bias. Since removing a child from home is highly intrusive and often unpopular, the social workers' higher assessments of the quality of life of the children in out-of-home care placements may reflect their desire to justify their decision to remove them from the home.

What is the association between contact with child protection services and contact with the criminal justice system?

In the NSW-CDS Study children with child protection reports had higher rates of police contact of any type by the age of 14 years than those without child protection contact. There was a stepwise increase in police contacts across the increasing levels of child protection responses, with those

with substantiated ROSH reports marginally higher than those in out-of-home care. Only around 35 per cent of children with a substantiated ROSH report or an out-of-home care placement by age 5-6 years had *not* been in contact with the police by age of 14 years, either as a victim, a witness, or a person of interest. The highest rate of police contact was as a victim of crime (Green et al. 2021).

Figure 3. Police contacts: highest level of child protection status

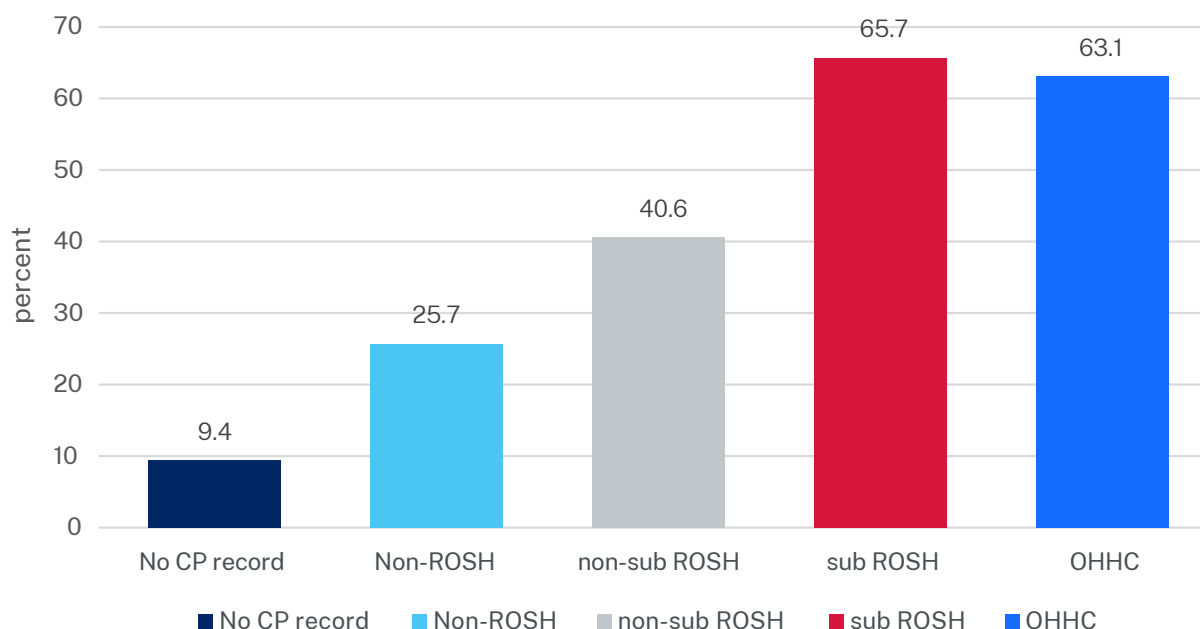


Figure 3: Percent of children within each level of child protection response before 6 years of age, who have had police contact (for any reason) (N=91,631. Source: Green et al. 2021, p. 45. Note: This graph is based on unadjusted statistics that do not take into account other factors such as socio-economic disadvantage.

Findings from international studies (mainly from the US) included in the systematic review were mixed and inconclusive. Some studies showed worse outcomes for children in out-of-home care regarding involvement with the criminal justice system while other studies showed no difference (Maclean et al. 2016).

A Swedish study (Berlin et al. 2011) compared criminality among maltreated children who remained with their families or were removed into out-of-home care with children in the general population. Both child welfare groups had increased risks of serious criminality but risk was lower for those who remained at home than for the out-of-home care group Doyle (2011) found that out-of-home care was associated with an 18 per cent increase in delinquency. In Goodkind et al.'s (2013) study out-of-home care was associated with increased likelihood of spending time in a juvenile justice facility or detention. Baskin and Sommer's (2011) findings indicated a lower risk for the group of children who remained at home for total arrests and non-violent arrests, but a higher risk for violent crime arrests.

Conversely, Lee (2009) found no significant difference in court appearances for children in out-of-home care (with or without family preservation services) compared to care at home with family preservation services. Runyan and Gould (1985) found no significant difference in the rate of crime per person/year between out-of-home care and care at home groups, and McMahon and Clay-Warner (2002) found no difference in arrests (see Maclean et al. 2016 for a summary of these findings).

What are the outcomes for Aboriginal children and young people in out-of-home care?

There is a dearth of research that separately considers outcomes for Aboriginal children reported at ROSH who stay with their family and those taken into care. While not directly responding to the research question, some findings from the Family is Culture Review (the Review) contribute to the discussion.

The Review found that almost one in two Aboriginal children in NSW are known to DCJ before they are 5 years old, almost one in ten are known before they are born, and Aboriginal children known to the system early are more likely to escalate through the higher levels of the child protection system. Child protection services involvement is more common among Aboriginal children with multiple indicators of socioeconomic and health vulnerabilities early in life, and Aboriginal children who escalate through child protection services during early childhood have a higher burden of developmental vulnerability and diagnosed health and developmental conditions or impairments than their same-aged peers. (Falster & Hanly 2019, cited in Family is Culture Review 2019, p. 145).

The Review highlights the need to counter the, often implicit, assumption made by stakeholders in the child protection system that removal will result in better outcomes for a child. The safety and wellbeing of Aboriginal children is of paramount importance, and the Review acknowledges that in some cases Aboriginal children may need to be removed from their families to ensure their safety and wellbeing. However, it points out that it is also harmful when Aboriginal children are removed from their parents and put into unsafe environments where they may experience ongoing abuse, where their connections to family and culture may not be sustained or respected, and where they may experience considerable trauma and disconnection that has lifelong consequences.

DCJ administrative data included in the Review show that Aboriginal children were more likely than non-Aboriginal children to experience substantiated actual or risk of harm while in out-of-home care (8.6% of Aboriginal children who entered care during the cohort period versus 5.2% of non-Aboriginal children who entered care during the cohort period). Legal Aid NSW note in their submission that rather than supporting recovery and healing, the out-of-home care system can compound and add to the trauma of Aboriginal children and young people. This inevitably compromises their ability to parent their own children in the future, and therefore results in more Aboriginal children and young people in out-of-home care.



The review also highlights evidence for the negative effects of the placement of children and young people with a history of maltreatment in out-of-home care, particularly in residential care. Placing a child in out-of-home care increases his or her risk of being involved in the juvenile justice system. This risk, known as ‘care-criminalisation’, arises from the fact that children are often charged with offences against carers or residential home staff due to conduct that would usually result in a disciplinary response from parents and not a criminal justice related response from police officers. For example, children may be arrested for offences that occur in their placements, such as damage to property or assaults against staff or kinship carers. Care-criminalisation also results from placement instability, a lack of cultural connection, and a lack of secure accommodation for children in custody and seeking bail. This ‘drift’ of children from out-of-home care into the juvenile justice system is of paramount concern to the Aboriginal community, as Aboriginal children are more likely to be affected by this phenomenon due to their gross over-representation in the out-of-home care system.

Methodological limitations are impacting on these research findings

There are important limitations of the studies included in this literature summary. It is therefore imperative that the findings presented are read with extreme caution.

Most importantly, studies of the effects of out-of-home care placement on child wellbeing have to overcome challenges related to ‘selection bias’ in relation to who enters out-of-home care. Maltreated children who remain in the care of their parents and those who are placed in out-of-home care are likely to differ on a range of observable and unobservable factors. Such differences pose a considerable barrier to producing unbiased estimates of the effects of out-of-home care placement on child outcomes (Berger et al. 2009).

Berger et al. (2009) outline some key differences between the groups:

- Children in out-of-home care are likely to have experienced a greater degree of socio-economic disadvantage, more severe maltreatment, and higher levels of prior contact with child protection services than children at risk who were not removed from their parents’ custody.
- The two groups also tend to differ on factors such as parental cooperation with child protection services², parental stress, parenting skills, social support, substance abuse, domestic violence, and criminal justice involvement.
- Many studies are further limited in that they do not account for baseline differences in children’s scores on the measured outcomes, in spite of the fact that children placed in out-of-home care and those remaining at home are likely to differ in this regard.
- Associations between out-of-home care placement and child wellbeing are also likely to vary by the length and stability of placements as well as carer characteristics (see also the findings from the Pathways of Care Longitudinal Study, e.g. Wells et al. 2020)
- In addition, placement decisions vary according to local policies, practices and individual staff members’ propensity to use out-of-home care, which impacts on the allocation to the two groups.
- Maclean et al. (2016) add that different support services for children reported at ROSH and for children in out-of-home care may have different impacts on outcomes, making the two groups difficult to compare.

² Parental collaboration with child protection services was also found to be a factor in placement decisions in the final research report “Decisions Count: Making decisions to bring children into care”, prepared by the Office of the Senior Practitioner (2019, unpublished).

This all points to a need for more high-quality research. Randomised controlled trials (RCTs) are considered the best method for ensuring intervention and comparison groups are equivalent. Understandably, there are no RCTs examining effects of out-of-home care versus remaining at home care on child outcomes. Because it is not possible to simultaneously observe a child both in his or her home and in an out-of-home care placement, or to randomly assign children to out-of-home care placement, researchers must rely on statistical methods to adjust for selection bias in who enters out-of-home care.

One approach is to control for potential confounding or contributing factors while comparing outcomes for children who have experienced out-of-home care placement and those who have not. Although this strategy is useful for adjusting for the confounding or contributing effects of *observed* variables (such as sex, socio-economic disadvantage, perinatal complications, maternal smoking and parental mental illness etc.), estimates of child outcomes are still subject to bias due to *unobserved* factors (such as differences in support services, carer skills and cooperation etc., see Berger et al. 2009).

Another approach could be to study individual differences in maltreated children to understand under what circumstances out-of-home care placement is likely to be beneficial and under what circumstances it is likely to do more harm than good.

Conclusion

DCJ has a responsibility to achieve the best outcomes for children at risk. While safety is always the paramount concern, there is a strong interest to determine whether children in out-of-home care fare better or worse than maltreated children who stay with their birth families.

Findings from the international research literature, including a high-quality systematic review and a meta-analysis, are mixed and ultimately inconclusive. The majority of studies (29 of 40) included in the only available systematic review showed no evidence of benefit or harm associated with an out-of-home care placement. Seven studies reported worse outcomes, and four studies suggested benefits for out-of-home care.

Studies from Australia, in particular from the NSW-CDS, have found some evidence to suggest that out-of-home care might have a protective effect for children in the physical, language, cognitive and education domains but not in the emotional or social domains, or in relation to police contacts, but this cannot be definitively concluded from these studies alone. In Australia, children in out-of-home care have considerably higher rates of diagnosed mental health issues than children with ROSH reports who remained at home.

These findings reinforce the importance of continued intra- and inter-agency policy collaboration to support children at risk and in out-of-home care to improve a range of development and well-being outcomes. In particular, there is an ongoing need for investment in programs that address high rates of mental health disorders and increases in police contacts for children in out-of-home care.

As explained above, research into this question faces important methodological challenges that impact on the validity of these findings.

There is a need for more rigorous research to provide stronger evidence of the effectiveness of out-of-home care versus remaining at home to allow for better informed decision-making about placements for children in the future:

- More analysis is needed to investigate potential differences in outcomes for **Aboriginal and non-Aboriginal children** at ROSH and in out-of-home care. Given the over-representation of Aboriginal children in the out-of-home care system, it is important to ask these questions. The data available in the NSW-CDS could be analysed to respond to this particular question (see Green et al. 2021).
- Maclean et al. (2016) suggest that studies should address selection bias by **identifying cohorts prior to decisions about an out-of-home care placement**, and ensure **measurement of important confounding factors at baseline and during follow up**. They also point out that appropriate methods are needed to compare outcomes for maltreated children, including careful propensity matching. **Propensity matching** is a quasi-experimental method in which the researcher uses statistical techniques to construct an artificial control group by matching each treated unit (child) with a non-treated unit (child) of similar characteristics. This approach may still have issues with unobserved or unquantifiable differences mentioned above.
- As mentioned above, research could look at individual differences in maltreated children to understand under what circumstances out-of-home care placement is likely to be beneficial and under what circumstances it is likely to do more harm than good. That means asking **when** out-of-home care is likely to be beneficial rather than **whether** out-home-care is likely to be beneficial.
- **Mixed-method studies** using both quantitative and qualitative research components could help contextualise and explain the findings from quantitative studies. For example, interviews with teachers, parents, carers, social workers and – where appropriate the children themselves – could account for the diverse circumstances that exist and deepen understanding of why children may fare better or worse in out-of-home care.
- Ultimately, not all of the methodological issues outlined above can be solved irrespective of the robustness of the research. It may be very difficult to estimate the unique ‘effect’ of out-of-home care considering that children have different backgrounds, genetic predispositions, experiences in care, and levels and types of trauma, and enter care at different ages and developmental stages.

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