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Research report

Pathways of Care Longitudinal Study: Outcomes of Children and Young People in Out-of-Home Care

Caseworkers' Communication with Children and Young People in Out-of-Home Care and their Caregivers

Pathways of Care Longitudinal Study: Outcomes of Children and Young People in Out-of-Home Care in NSW

Research Report No. 12

Caseworkers' Communication with Children and Young People in Out-of-Home Care and their Caregivers

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Disclaimer
DCJ funds and leads the Pathways of Care Longitudinal Study. The analyses reported in this publication are those of the authors and should not be attributed to any data custodians. The authors are grateful for the reviewers' comments.

About the information in this report
All the analyses presented in this report are based on Wave 1-3 unweighted data collected in face-to-face interviews with children, young people and caregivers; and DCJ administrative data.

Pathways of Care Longitudinal Study Clearinghouse
All study publications including research reports, technical reports and briefs can be found on the study webpage www.facs.nsw.gov.au/resources/research/pathways-of-care

Study design by NSW Department of Communities and Justice Insights, Analysis and Research; Australian Institute of Family Studies; Sax Institute, Professor Judy Cashmore, University of Sydney; Professor Paul Delfabbro, University of Adelaide; Professor Ilan Katz, University of NSW; Dr Fred Wulczyn, Chapin Hall Center for Children University of Chicago.

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Preface

The Pathways of Care Longitudinal Study (POCLS) is funded and managed by the New South Wales Department of Communities and Justice (DCJ). It is the first large-scale prospective longitudinal study of children and young people in out-of-home care (OOHC) in Australia. Information on safety, permanency and wellbeing is being collected from various sources. The child developmental domains of interest are physical health, socio-emotional wellbeing and cognitive/learning ability.

The overall aim of this study is to collect detailed information about the life course development of children who enter OOHC for the first time and the factors that influence their development. The POCLS objectives are to:

- Describe the characteristics, child protection history, development and wellbeing of children and young people at the time they enter OOHC for the first time.
- Describe the services, interventions and pathways for children and young people in OOHC, post restoration, post adoption and on leaving care at 18 years.
- Describe children's and young people's experiences while growing up in OOHC, post restoration, post adoption and on leaving care at 18 years.
- Understand the factors that influence the outcomes for children and young people who grow up in OOHC, are restored home, are adopted or leave care at 18 years.
- Inform policy and practice to strengthen the OOHC service system in NSW to improve the outcomes for children and young people in OOHC.

The POCLS is the first study to link data on children's child protection backgrounds, OOHC placements, health, education and offending held by multiple government agencies; and match it to first-hand accounts from children, caregivers, caseworkers and teachers. The POCLS database will allow researchers to track children's trajectories and experiences from birth.

The population cohort is a census of all children and young people who entered OOHC over an 18 month period for the first time in NSW between May 2010 and October 2011 (n=4,126). A subset of those children and young people who went on to receive final Children's Court care and protection orders by April 2013 (2,828) were eligible to participate in the study. For more information about the study please visit the study webpage www.facs.nsw.gov.au/resources/research/pathways-of-care.

The POCLS acknowledges and honours Aboriginal people as our First Peoples of NSW and is committed to working with the DCJ Aboriginal Outcomes team to ensure that Aboriginal children, young people, families and communities are supported and

empowered to improve their life outcomes. The POCLS data asset will be used to improve how services and supports are designed and delivered in partnership with Aboriginal people and communities.

DCJ recognises the importance of Indigenous Data Sovereignty (IDS) and Indigenous Data Governance (IDG) in the design, collection, analysis, dissemination and management of all data related to Aboriginal Australians. The POCLS is subject to ethics approval, including from the Aboriginal Health & Medical Research Council of NSW. DCJ is currently in the process of scoping the development of IDS and IDG principles that will apply to future Aboriginal data creation, development, stewardship, analysis, dissemination and infrastructure. The POCLS will continue to collaborate with Aboriginal Peoples and will apply the DCJ research governance principles once developed.

1 Summary

The relationship between children[1] in OOHC and their caseworkers is a key factor in maintaining the children's wellbeing and achieving positive outcomes. Caseworkers provide support to children and their carers and help them to access specialist and support services (Walsh, et al. 2019).

The objectives of this analysis are to:

1. Determine the factors that influence effective communication practices between caseworkers and children as reported by children, and to explore whether different factors influence high versus low levels of communication;

2. Explore the influences that effective communication practices have on children's socio-emotional functioning over time.

The analysis has indicated that there was a range of levels of contact between children and caseworkers, with some children reporting little or no contact with their caseworker and others having high levels of contact. As expected, children in foster care had more contact with caseworkers than those in relative/kinship care. Contact differed by service provider, with those whose case was managed by a non-government organisation (NGO)[2] reporting more contact than those under the care of FACS.[3] Further exploration of the relationship between contact quality and socio-emotional outcomes found no significant association.

[1] Throughout this report the term children refers to children and young people aged up to 17 years.

[2] Non-government organisations (NGOs) funded by DCJ to provide OOHC services are now referred to as Funded Service Providers (FSPs). However, this report uses the term NGO because that was the term used at the time of writing.

[3] The Department of Communities and Justice (DCJ) was formed on 1 July 2019 following the state election. The department assumed most of functions from the former Department of Family and Community Services (FACS) and the Department of Justice. However, this report refers to FACS because that was department responsible for OOHC at the time of writing.

2 Methods

The POCLS is not intended to be representative of every child in OOHC at any given point. The study includes children who are first-time entries to OOHC who received final orders by 30 April 2013, of all ages, all geographic locations in NSW, and all placements with government and non-government agencies.

The POCLS includes children who enter care and:

- Remain with the same carer
- Move to a new carer
- Restored to their birth parents (planned and self-restored)
- Adopted
- Re-enter care, or
- Leave care (except for those ageing out at 18 years).

The study includes interviews with children and their carers at each wave and a selection of other related persons (e.g. caseworkers, teachers) less frequently.

The study only considers children who entered OOHC for the first time between May 2010 and October 2011 (NSW Department of Family and Community Services, 2015; Paxman, Tully, Burke, & Watson, 2014).

This analysis examines child and carer reports of frequency and quality of contact with their caseworker across the first three waves of the POCLS (2011–13; 2013–15; 2014–16) using unweighted data[4].

The primary sources of information are child-completed surveys, carer-completed surveys and FACS administrative data. This report provides the results of a series of descriptive bivariate and multivariate longitudinal analyses exploring the relationship between communication, child and carer demographics and placement characteristics.

[4] The data used in this report are the Wave 1 to 3, version 3 (2018), child and carer interview datasets, and the 2018 FACS Summary dataset.

Two groups of analysis were conducted; the first, focused on child-reported contact with their caseworker among children aged seven years and older. The second focused on responses of carers, who were asked about their satisfaction with the ability to contact their child's caseworker and the support provided by the caseworker. Including carer responses provides an understanding about casework support for children of all ages.

The focus of this paper is children who remained in care over the three waves of the study. Children who were restored, adopted or placed under guardianship orders were not included in this analysis. For analysis of individual waves, only children in a foster or relative/kinship care placement (and where sample size allows, residential care placement) are included in the results. For analysis of change over time, children who were not linked to a foster care or relative/kinship care placement in any wave were excluded from the analysis.[5]

Variables used in this analysis include a range of demographic information about each study child: age, gender, cultural background, placement location (divided into metropolitan and regional/remote)[6], plus an indicator of the type of placement and service provider at the time of each interview. Information about these variables, and the definition and counting rules used to create outcome variables can be found in the Appendix (Section 7).

2.1 Sample information

More information about sample characteristics can be found in the Appendix (Section 7).

Contact with caseworker at Wave 1

Regression analysis (N = 275) includes children aged at least seven years with a non-missing outcome response and non-missing independent variable responses. Only includes children under Parental Responsibility of the Minister/Director-General (DG) or relative/non-relative in Wave 1. Descriptive/bivariate analysis n=278.

[5] It may be of interest to examine casework communication among children who left OOHC, however there were too few of these cases to include them as part of this analysis.

[6] The statistical models did not end up including location of placement and child gender, as during preliminary model testing these were found to be unrelated to the outcomes, taking into account other variables being modelled.

Contact with caseworker over time

Regression analysis (n=193) includes children aged at least seven years with at least two non-missing waves of outcome response and non-missing independent variable responses. Only includes children under Parental Responsibility of the Minister/DG or relative/non-relative in any wave. Descriptive/bivariate analysis N = 220.

Communication quality over time

Regression analysis includes children aged at least seven years with non-missing responses in each wave, with non-missing independent variables and under Parental Responsibility of the Minister/DG or relative/non-relative across all observed waves. Descriptive/bivariate analysis Wave 1 n=235, Wave 2 n=238, and Wave 3 n=268.

Type of contact between carer and caseworker

Regression analysis of email/phone contact (n=951) includes carers across all three waves with non-missing outcome and independent variables responses. Excludes placements with no valid service provider or placement type. Only includes study children (carers of these children) who were under Parental Responsibility of the Minister/DG or relative/non-relative across all observed waves.

Regression analysis of face-to-face contact (n=1,054) includes carers across all three waves with non-missing outcome and independent variables responses. Excludes placements with no valid service provider or placement type. Only includes study children (carers of these children) who were under Parental Responsibility of the Minister/DG or relative/non-relative across all observed waves.

Communication quality and child socio-emotional outcomes

Regression analysis (n=219) includes children aged at least seven years with non-missing responses in at least two waves, with non-missing independent variables and under Parental Responsibility of the Minister/DG or relative/non-relative across all observed waves. Excludes children whose Child Behaviour Checklist (CBCL) scores were mixed over time and those with less than two observed waves of response due to small group sizes.

2.2 Statistical methods

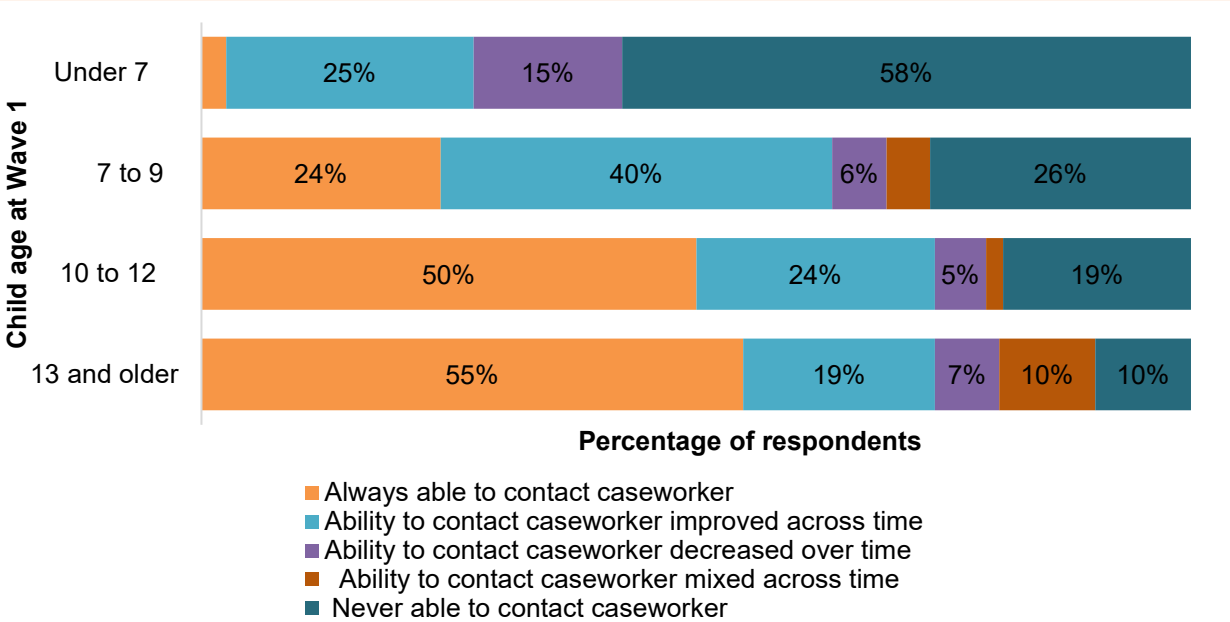
All statistical analysis was performed using SAS version 9.4. Specific methods used throughout this report and information about variable construction are detailed in Section 7 (Appendix).

3 Results of bivariate analysis

3.1 Child age and caseworker communication

Child age was the strongest predictor of perceived ability to contact caseworkers. Children aged seven to ten years at Wave 1 were much less likely to report being able to contact their caseworker when needed. Figure 1 below shows the change over time in child-reported ability to contact their caseworker when needed. Children who were younger than seven years at Wave 1[7][8] tended to have little contact with their caseworker across all three waves. Children entering care aged seven to nine years were most likely to report an improvement in their ability to contact the caseworker. Older children were most likely to report being able to contact their caseworker across all three waves of the survey.

Figure 1 Child-reported caseworker contact over time, by child age at Wave 1



Note: Age under 7 n = 40, 7 to 9 n = 91, 10 to 12 n = 58, 13 and older n = 31. Small numbers among those who reported a decrease and those reporting mixed contact make these categories unreliable.

[7] Differences presented in this section are significant unless otherwise indicated.

[8] This question was asked of children once they turned seven years of age. The category 'Under 7' in the associated figure relates to the group of children who entered care prior to turning seven years old and subsequently turned seven prior to Wave 2, enabling their responses to be recorded for two waves of analysis. Children who were not yet seven years old by Wave 2 were not included.

A multivariate logistic regression model was run to test whether the odds of reporting contact differed by age and a range of other placement and demographic variables (full results in Section 4.1). The test confirmed the results shown above. For every additional year of age at Wave 1, the odds of a child reporting contact with their caseworker increased by 34%. A logistic model indicated that with each additional year of age at Wave 1, study children had a 37% increase in the odds of reporting contact in all three waves, compared to those reporting no contact at any wave (full results in Section 4.2). Older children have more contact with caseworkers at Wave 1 and are more likely to maintain contact with caseworkers. Children entering care at younger ages were less likely to report being in contact with their caseworker across all three waves of the study. This may indicate that younger children have less opportunity to commence contact with their caseworker and/or to develop a relationship with their caseworker as they age in care, compared with children who enter care when they are older.

For those children who were in touch with their caseworkers, the quality of communication between caseworkers and children[9] was reasonably high, with a slight increase over time in quality for children as they aged. However, younger children reported lower communication quality compared to older children, echoing their ability to contact their caseworkers. A linear regression model explored the change in child-reported quality of communication with caseworkers (full results in Section 4.3). The results confirmed that age was associated with an increase in quality of communication, controlling for placement group and survey wave.

Child age did not make a difference to the frequency of contact between carers and caseworkers. Phone and email contact were most commonly reported as occurring weekly/fortnightly or less than once a month. Face-to-face contact was most commonly reported to occur less than once a month.

Carers were broadly satisfied with the amount of contact they had with their child's caseworker and the assistance provided by the caseworkers, although a substantial minority of carers reported that they were not satisfied. At Wave 1, around a third of carers were not satisfied with the ability to reach their child's caseworker when needed or with the assistance that caseworkers provided. At Wave 1, carers of older children were more likely to be satisfied compared to children in other age groups. Over time this difference in satisfaction by age narrowed. By Wave 3, children's age

[9] See Outcome variables in the appendix for a definition of quality of communication.

was not associated with any differences in carers' satisfaction with the ability to reach their caseworker or with the assistance provided by the caseworker. Satisfaction with both the ability to reach their caseworker and the assistance provided by the caseworker increased over time.

Multivariate linear regression models were conducted of the three factors associated with carer perception of communication quality (ability to contact their caseworker when needed, the assistance provided by the caseworker and information about the child provided by the caseworker) (full results in Section 4.4). This analysis showed that, over time, child age did not have a significant association with carers' satisfaction with caseworkers once other factors were controlled for (placement type, service provider, and cultural background). Therefore, younger children's difficulties accessing caseworkers were not offset by their carers having higher levels of contact with caseworkers.

A fourth model examined the carer's perception of the ability for the child's case plan to meet their needs. This analysis indicated that the older a child was at Wave 1, the more likely carers believed that the case plan did not meet the child's needs. The full results are shown in Section 4.4.

3.2 Placement type and service provider

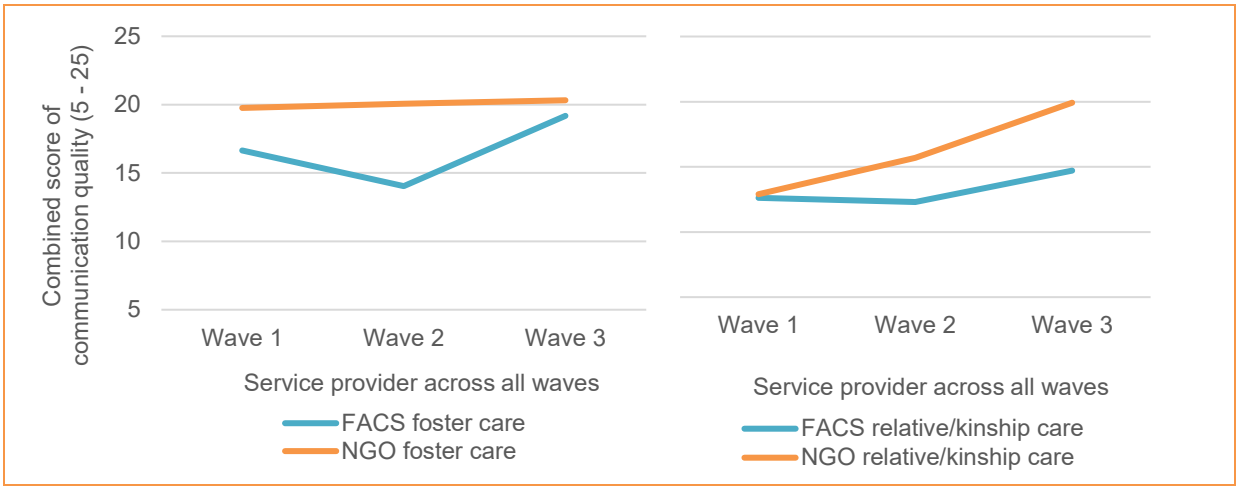
Both placement type and service provider were strongly associated with a child's ability to contact their caseworker, and the quality of contact. Children in foster care were more likely to report being able to contact their caseworker than those in relative/kinship care. Children in residential care reported the highest level of contact with their caseworker. This may be associated with the older age of children in residential care, however the small number of children in this group with responses across two or more waves prevented any substantial analysis of change over time.

At Wave 1, there was no difference in reported contact with their caseworker between FACS-managed and NGO-managed children in relative/kinship care. However, for children in foster care, NGO-managed cases were slightly more likely than FACS-managed cases to report being able to contact their caseworker.

As shown below in Figure 2, the quality of communication between caseworkers and study children was generally good, with an increase over time among groups that started with lower quality. Children in foster care reported higher average quality of communication compared to those in relative/kinship care. NGO foster children reported high-quality communication with caseworkers than FACS foster children over the three waves. The quality of communication between FACS foster children and caseworkers increased over the study period. By Wave 3, children in FACS foster care and NGO kinship care reported similar levels of quality to children in

NGO foster care, while those in FACS kinship care continued to report lower levels of quality of contact. Nevertheless, the quality of communication for this group improved over the three waves.

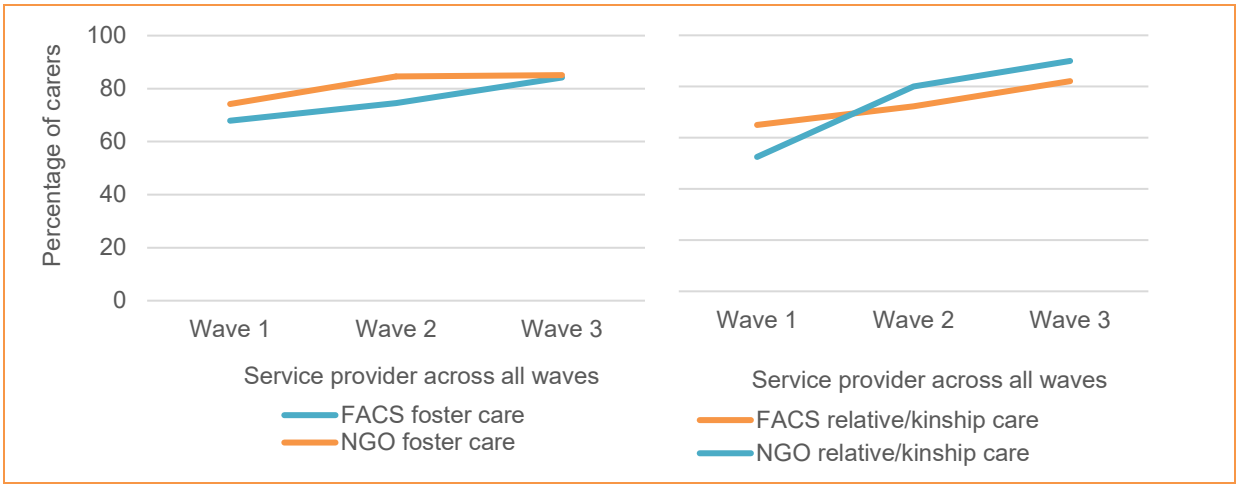
Figure 2 Change over time in child-reported quality of communication with caseworker, by placement type and service provider



Note: Average n across waves: FACS foster care = 42, NGO foster care = 62, FACS relative/kinship care = 52, NGO relative/kinship care = 45. These are population averages.

There were some differences between service provider, placement type and carer satisfaction with ability to contact their child's caseworker over time (Figure 3). A higher proportion of NGO foster carers reported satisfaction with the ability to contact their caseworker compared to FACS carers at Waves 1 and 2, however this difference disappeared by Wave 3. Relative/kinship carers' satisfaction with caseworkers, especially those supported by NGOs, improved over the three waves relative to foster carers. This may be because they became more accustomed to the role of carer and/or because of increased focus by caseworkers on engaging with kinship carers as a result of policy changes over the three waves of the study. Prior to 2014, under the resubmit system, many children in OOHC were not allocated a caseworker. The Safe Home for Life program started in 2014. This initiative resulted in a large number of caseworkers and casework support workers being recruited, and guardianship orders being introduced. It also increased the focus on permanence, including more attention to restoration and contact with birth families and the preparation for FACS to become accredited by the Children's Guardian began. These developments all required greater levels of contact with caseworkers, and focused on quality improvements for casework practice.

Figure 3 Percentage of carers reporting satisfaction with ability to contact their child's caseworker over time



Note: Average n across waves: FACS foster care = 173, NGO foster care = 307, FACS relative/kinship care = 202, NGO relative/kinship care = 119. These are population averages.

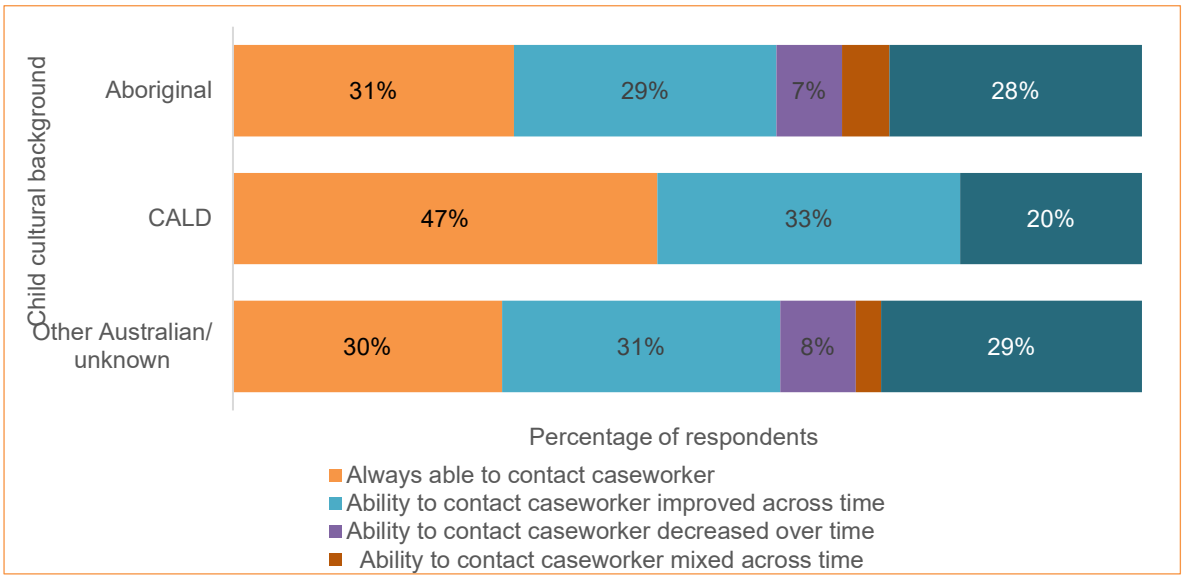
Carers were also asked about their satisfaction with the assistance provided by their caseworker. The results are almost identical to the satisfaction with ability to reach caseworker results shown above.

3.3 Cultural background

Aboriginal and culturally and linguistically diverse (CALD) children reported similar levels of communication and communication quality to other Australian children. Figure 4 shows the change over time in children reporting the ability to contact their caseworker by cultural background. CALD children were more often able to contact their caseworker at all waves compared to other children.[10] Very similar proportions of Aboriginal children were able to contact their caseworker compared to other Australian children.

[10] Child age may influence this relationship for CALD children, however there are too few cases to perform detailed analysis with reliability by age.

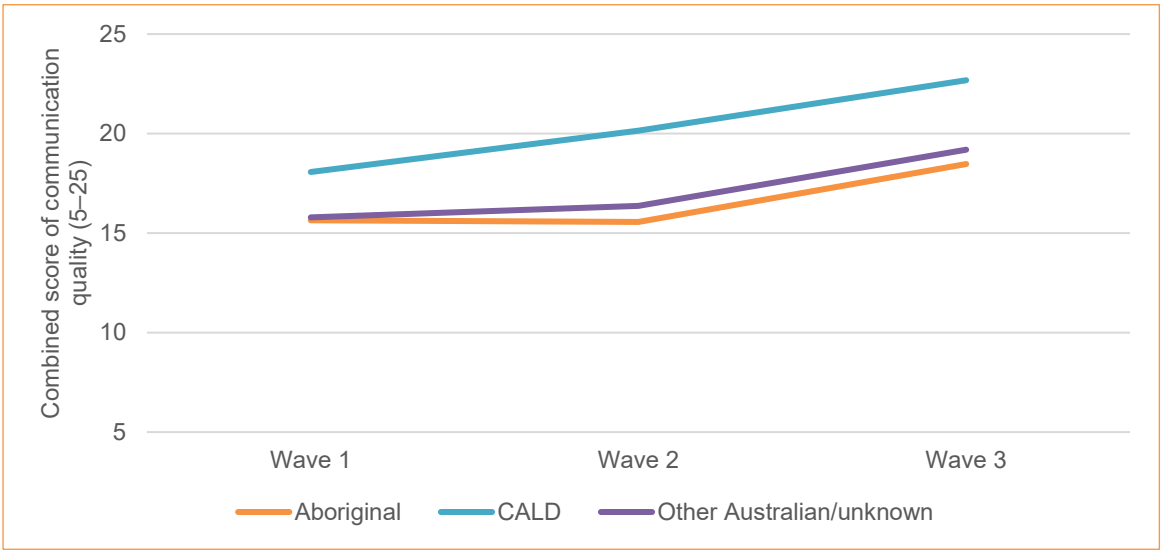
Figure 4 Child-reported caseworker contact over time, by child cultural background



Note: Aboriginal n = 97, CALD n = 15, Other Australian/unknown n = 108. Small numbers among those who reported a decrease and those reporting mixed contact make these categories unreliable.

Quality in communication with caseworkers improved for children from all cultural backgrounds over the three waves. CALD children reported higher communication quality compared to both Aboriginal and other Australian children at each wave of the study (as shown below in Figure 5). Aboriginal and other Australian children reported similar levels of communication quality across time. Further analysis will be required to explore the reasons for CALD children's' higher quality of communication with caseworkers.

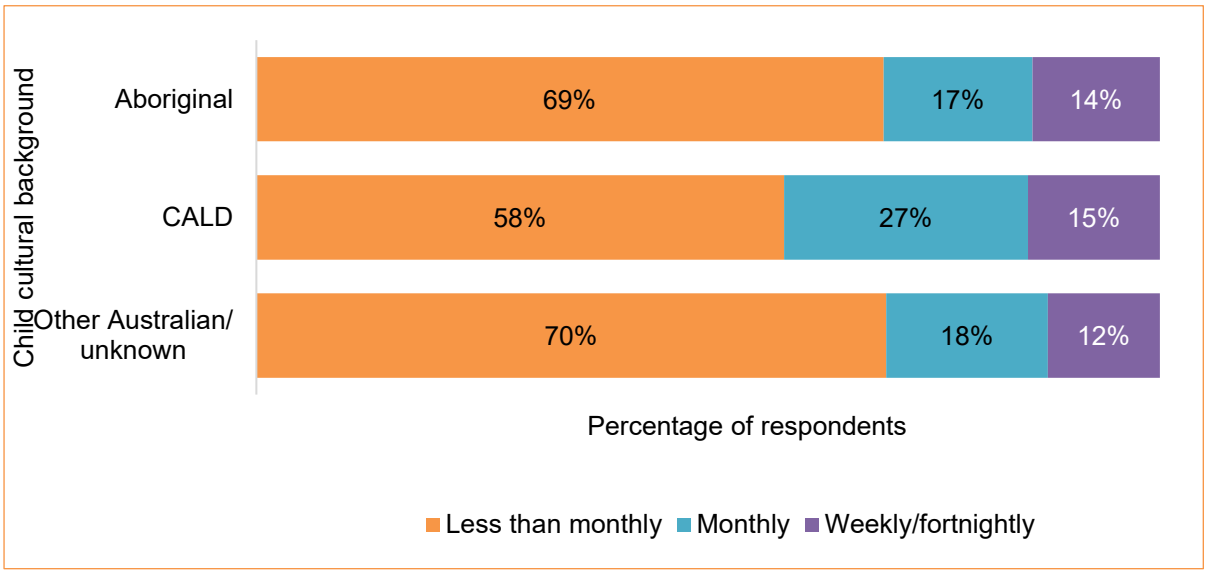
Figure 5 Child-reported quality of communication with caseworker over time, by child cultural background



Note: Average n across waves: Aboriginal = 95, CALD = 19, Other Australian/unknown = 120. These are population averages.

When looking at the average amount of contact across all three waves, carers of CALD children reported more frequent face-to-face interaction with caseworkers compared to those of Aboriginal and other Australian children (shown below in Figure 6). There were no differences in frequency of caseworker face-to-face interaction between carers of Aboriginal and other Australian children, with face-to-face visits occurring less than once a month for around two-thirds of these children as reported by their carer.

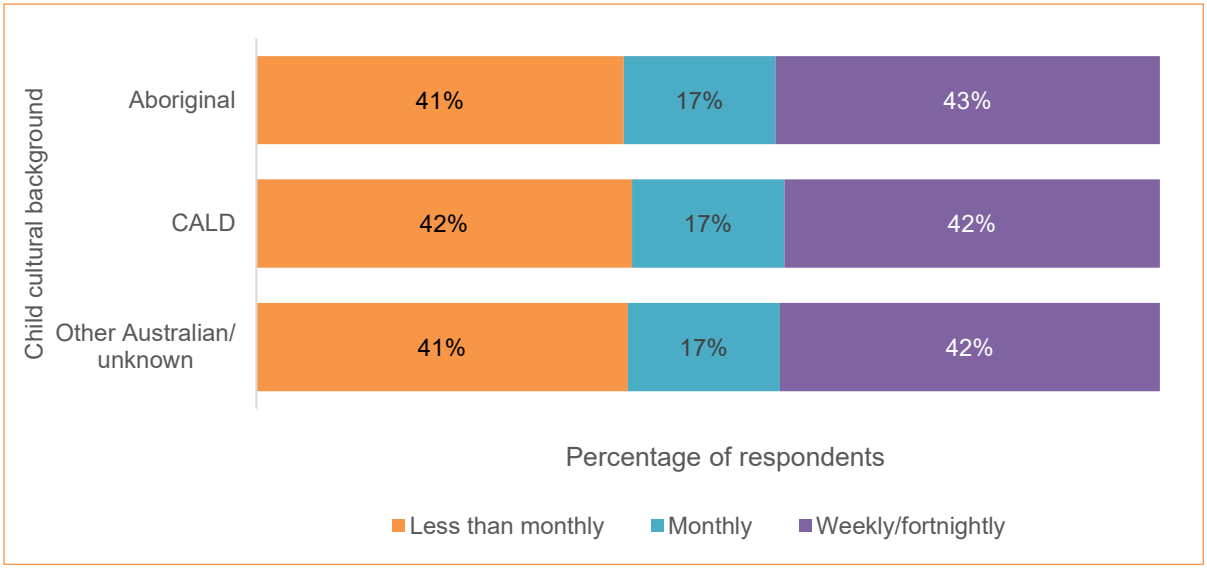
Figure 6 Carer-reported frequency of face-to-face contact with caseworker, by child cultural background (average across Wave 1 to Wave 3)



Note: Aboriginal n = 376, CALD n = 89, Other Australian/unknown n = 485.

Phone and email contact were much more frequent than face-to-face contact, with just over 40% of carers reporting weekly or fortnightly contact with their child's caseworker. There was no reported difference in the frequency of phone and email contact by child cultural background.

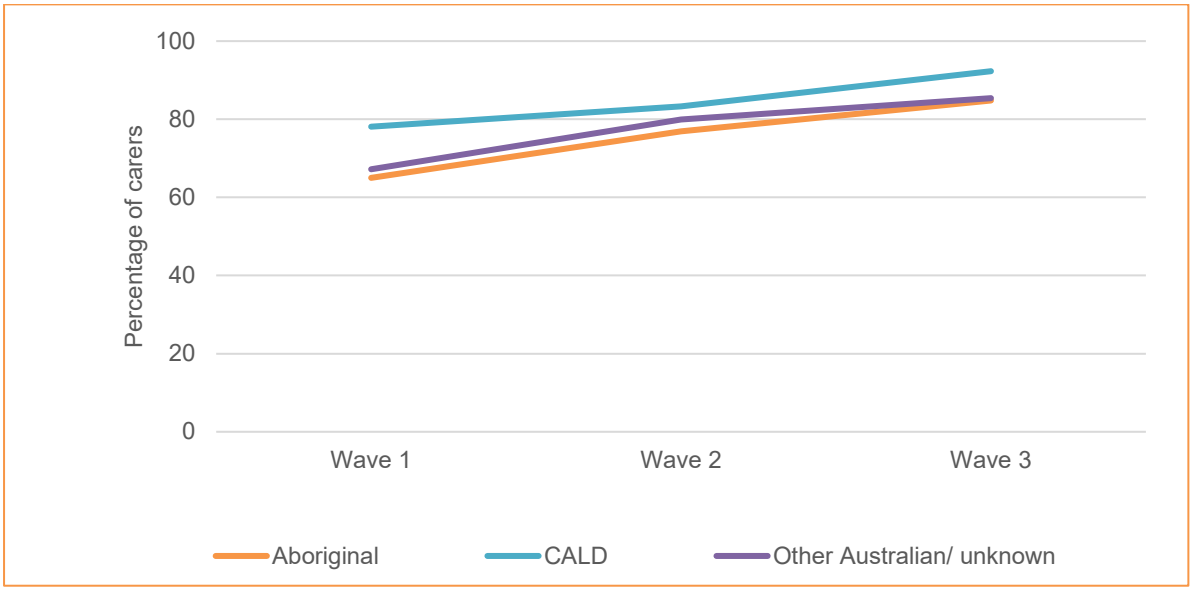
Figure 7 Carer-reported frequency of phone/email contact with caseworker, by child cultural background



Note: Aboriginal n = 376, CALD n = 89, Other Australian/unknown n = 485.

Carers of CALD children had small but significantly higher levels of satisfaction with their ability to contact their caseworker when needed compared to carers of Aboriginal and other Australian children (Figure 8). The difference in satisfaction between the groups did not change over time. Carers of Aboriginal children reported similar levels of satisfaction with the ability to contact their caseworker as carers of other Australian children.

Figure 8 Percentage of carers reporting satisfaction with ability to contact their child's caseworker over time, by child cultural background



Note: Aboriginal n = 411, CALD n = 105, Other Australian/unknown n = 534.

3.4 Other factors explored in the analysis

Age, gender and location

Child age, gender and placement location were also explored to determine whether there were any changes in caseworker communication over time. Results indicated there were minimal changes, and the results are broadly similar to those shown above.

3.5 Communication quality and socio-emotional development

This section provides the results of descriptive analysis of the relationship between communication quality and child socio-emotional development over time, as

measured by the Child Behaviour Checklist (CBCL).[11][12] The study theorised that there may be a positive relationship between caseworker-child communication and child socio-emotional development because caseworkers are important in maintaining the wellbeing of children in OOHC by supporting the child and the carer, and facilitating access to specialist services (Walsh et al., 2018).

The following chart (Figure 9) illustrates the relationship between the combined communication quality measure and the change in CBCL scores over three waves of the study. The change in CBCL is grouped by whether a child has remained in the normal or borderline/clinical ranges, or whether they have changed – either from normal to borderline/clinical, or from borderline/clinical to normal. A final category describes a small group of children whose CBCL scores were mixed over time (e.g. normal in Wave 1, borderline/clinical in Wave 2 and normal in Wave 3).

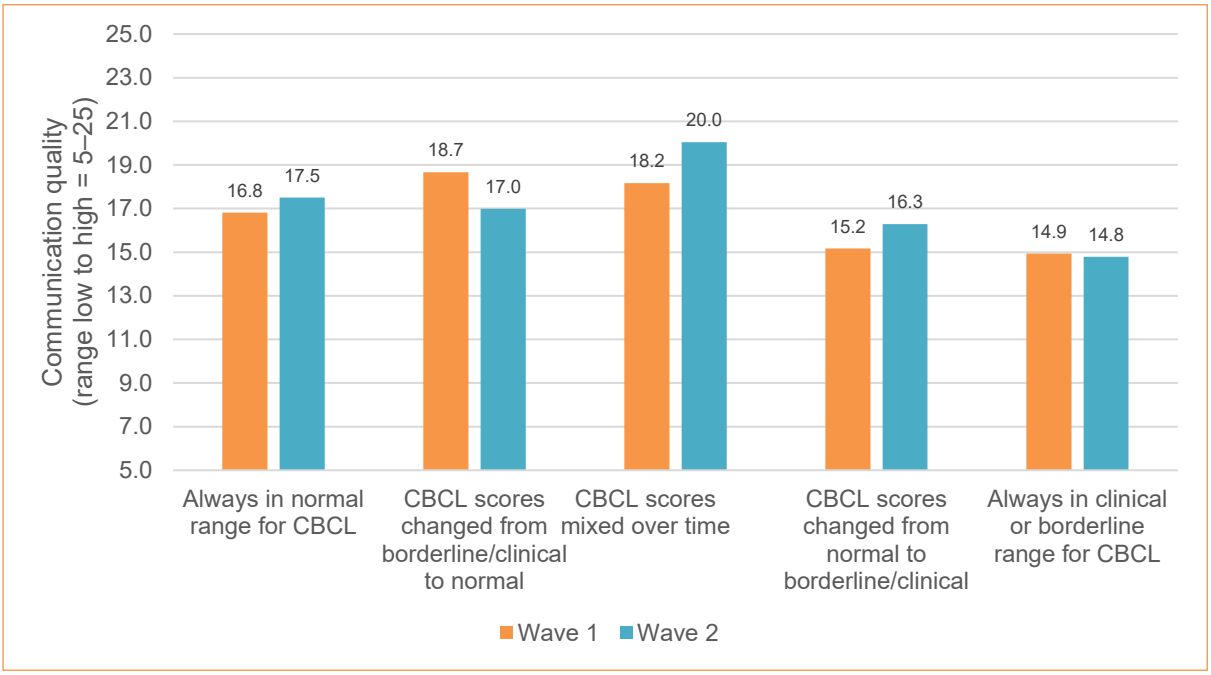
The communication quality scores are shown for Waves 1 and 2 in order to show whether there is a 'lagged' effect associated with communication and subsequent change in CBCL scores.

The descriptive results shown in Figure 9 indicate that there is little association between child-reported communication quality and change in CBCL scores over time and the changes observed are not statistically significant. Regression modelling shown in Section 4.7 confirms this.

[11] The Child Behaviour Checklist (CBCL) is a checklist that carers complete to measure emotional and behavioural problems in children and adolescents.

[12] It is important to note that due to the various restrictions on the group of children being analysed in this report, the results presented here will not be the same as those published in other reports that use the same CBCL measure. This report only includes children who were old enough to both respond to the CBCL and also respond to questions about caseworker communication.

Figure 9 Average communication quality in Waves 1 and 2, by change in CBCL scores



4 Results of multivariate regression modelling

This section contains the results relating to a series of multivariate models that were analysed to confirm the results of the descriptive analysis in the sections above.

4.1 Child contact with caseworker when needed at Wave 1

A logistic regression model was run to test whether the odds of reporting contact of the child with the caseworker at Wave 1 differed by age, placement type, or cultural background for children aged seven years and older. Results presented in Table 1 indicate that the age at Wave 1 was significantly associated with contact with a caseworker. For every year increase in a child's age he odds of contact with a caseworker increased by 35% [100(1.35–1)]. Compared to FACS foster care, lower odds of contact with a caseworker were associated with FACS relative/kinship care (75% [100(1–0.25)]). No differences were found in the ability to contact the caseworker for other placement types nor was there any association between cultural background and contact with a caseworker at Wave 1.

Table 1 Logistic regression model predicting caseworker contact at Wave 1

	Coefficient	SE	p-value	OR
Age	0.30	0.06	<0.001	1.35
Placement group			<0.001	
FACS foster care (ref)				
FACS relative/kinship care	-1.38	0.36	<0.001	0.25
NGO foster care	0.14	0.39	0.713	1.15
NGO relative/kinship care	-0.75	0.47	0.112	0.47
Residential care	-0.91	0.66	0.170	0.40
Culture			0.090	
Other Australian (ref)				
Aboriginal	0.47	0.29	0.109	1.60
CALD	0.87	0.44	0.051	2.38
Intercept (Study child can contact caseworker when needed)	-2.65	0.68	<0.001	
Max-rescaled R-square	0.239			
Wald	41.6 (9) = <0.001			

Notes: n = 275, model represents children reporting no contact with caseworker at Wave 1 (intercept) vs those reporting contact at Wave 1. Age is at Wave 1. Excludes children aged under seven at time of interview and those who were under guardianship arrangements or otherwise not in statutory care.

4.2 Child contact with caseworker over time

A multinomial logistic regression model was run to test whether the odds of reporting contact with the caseworker over the three waves differed by age, type of placement

and cultural background. Children who reported never having contact with their caseworker over Waves 1 to 3 were compared to those who reported improved contact and those who reported always having contact. The intercept is the odds for Australian-born children (and others) who have been placed in FACS foster care and who are aged nine years (mean) who did not have any contact. Results presented in Table 2 show that with each additional year in age at Wave 1, the odds of having an improvement in contact over the three waves were 22% greater [100(1.22–1)], and the odds for those who always had contact over the three waves were 79% higher [100(1.79–1)] compared to those who never had contact. There were no other variables associated with improved contact, but those children placed by FACS with a relative reported lower odds of always having contact with a caseworker over the three waves (91% [100(1–0.09)]). There were no reported differences between children in other placement types and foster care placements made by FACS, nor was there any association between cultural background and contact over time (p>0.05).

Table 2 Multinomial logistic regression model predicting caseworker contact over time

	Improved contact vs no contact			Always has contact vs no contact		
	Coeff(SE)	**p-value**	**OR**	**Coeff(SE)**	**p-value**	**OR**
Age	0.20(0.09)	0.022	1.22	0.58(0.10)	<0.001	1.79
Placement group						
FACS foster care (ref)						
FACS relative/kinship care	-0.16(0.60)	0.788	0.85	-2.41(0.75)	0.001	0.09
Mixed placements	1.37(0.76)	0.069	3.95	0.77(0.77)	0.321	2.15
NGO foster care	0.49(0.62)	0.427	1.64	0.51(0.62)	0.414	1.67
NGO relative/kinship care	0.80(0.63)	0.200	2.23	-0.49(0.72)	0.498	0.62
Culture						
Other Australian(ref)						
Aboriginal	0.23(0.40)	0.565	1.26	0.46(0.47)	0.324	1.59
CALD	0.25(0.79)	0.755	1.28	0.68(0.79)	0.392	1.97
Intercept (study child can never contact caseworker)	-2.11(0.88)	0.016		-5.19(1.09)	<0. 001	
Max-rescaled R-square	0.353					
Wald	46.7 (14) = <0.001					

Notes: n = 193, model represents children reporting no contact with caseworkers over time vs improved contact and contact at each wave (always). Age is at Wave 1. Excludes children who were under guardianship arrangements or otherwise not in statutory care at any point across the three waves of the survey.

4.3 Quality of communication between children and caseworkers over time

A mixed linear regression was run to test the quality of communication between children and caseworkers by age, placement type, culture and wave. An interaction between placement type and wave was included to test whether the associations between quality of communication and placement type differed over time. Results are presented in Table 3.

The constant term in Table 3 represents the quality of communication for Australian-born/other children placed in foster care by FACS at Wave 1 for the average age of the child (nine years). The age of the child at Wave 1 was a significant predictor of the reported level of quality of communication, with every additional year in age representing an increase in the communication quality score of 0.34 (range low to high = 5 to 25). Culture was also a significant predictor of quality of communication ($p<0.01$). Compared to Australian-born/other, those from CALD backgrounds reported a higher quality score by an average of 3.10. Compared to children placed in foster care by FACS at Wave 1, children placed in foster care by an NGO reported significantly higher levels of quality in communication (β[13]$=3.40$, $p<0.05$). In contrast, children in a relative/kinship placement either by FACS or an NGO reported significantly lower levels of communication quality ($\beta=-4.34$ & -3.77, $p<0.05$) at Wave 1. For children placed in foster care by FACS there was no significant difference between the quality of communication between Waves 1 and 2, while the quality of communication significantly improved at Wave 3 compared to Wave 1. The interaction between placement type and wave indicated that for most placement types, these patterns remained, as they did not indicate a significant difference. However, children placed with a relative by an NGO reported significantly larger differences at both Wave 2 and Wave 3 compared to Wave 1 ($\beta=5.45$ & 4.77 $p<0.05$). These differences are illustrated in Figure 10 which also highlights that while levels of communication quality for FACS and NGO relative/kinship placements were similar at Wave 1, communication clearly improved more for children in kinship care supported by an NGO compared to those of children placed with a relative/kinship by FACS.

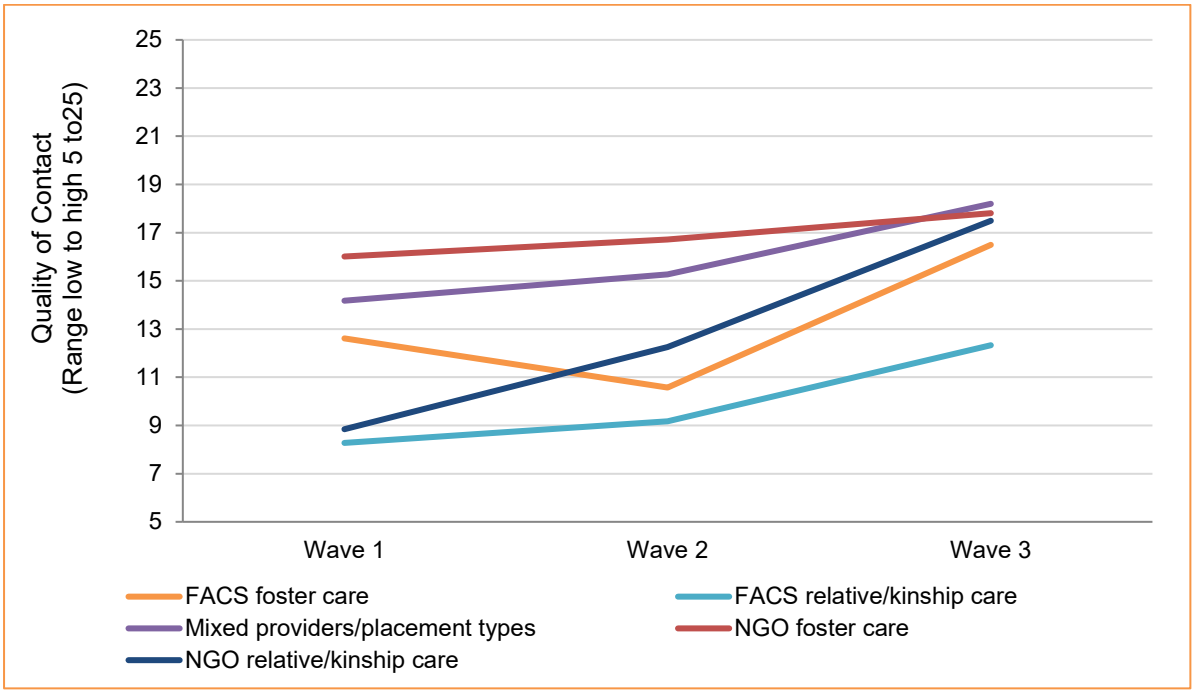
[13] The beta (β) value is a measure of how strongly each predictor variable influences the dependent variable.

Table 3 Linear regression model predicting quality of communication for Waves 1 to 3

	Coefficient	SE	p-value
Age	0.34	0.09	<0.001
Placement group over time			<0.001
FACS relative/kinship care	-4.34	1.22	<0.001
Mixed providers/placement types	1.56	1.41	0.268
NGO foster care	3.40	1.26	0.007
NGO relative/kinship care	-3.77	1.46	0.010
FACS foster care (ref)			
Waves			<0.001
2	-2.04	1.30	0.116
3	3.88	1.22	0.002
1 (ref)			
Culture			0.006
Aboriginal	0.09	0.56	0.873
CALD	3.10	0.98	0.002
Other Australian (ref)			
Placement group over time by wave			0.002
FACS relative/kinship care			
Wave 2	2.94	1.74	0.091
Wave 3	0.17	1.67	0.917
Mixed providers/placement types			
Wave 2	3.13	1.95	0.109
Wave 3	0.14	1.88	0.940
NGO foster care			
Wave 2	2.74	1.70	0.107
Wave 3	-2.08	1.61	0.197
NGO relative/kinship care			
Wave 2	5.45	1.88	0.004
Wave 3	4.77	1.78	0.008
Constant	12.61	1.38	<0.001
Chi square (overall model fit)	30.56 (5) = <0.0001		

Notes: n = 415 (701 observations). Mixed REML linear regression with model-based fixed effects and Satterthwaite degrees of freedom estimator. Children in residential care excluded as there were too few for results to be reliable. Age is at Wave 1. Excludes children who were under guardianship arrangements or otherwise not in statutory care at any point across the three waves of the survey.

Figure 10 Child-reported quality in communication with caseworker, by placement type and wave



4.4 Satisfaction with caseworker

Four mixed repeated measure linear regression models were run to examine carers' satisfaction with the ability to contact their caseworker and the type of support they provided. The regressions considered the age of the child at study entry (Wave 1), the child's culture and placement type. An interaction term between placement type and wave was included in the model to test whether the associations between satisfaction with the child's caseworker and placement type differed over time. Results are presented in Table 4 and Figure 11 to Figure 14. The constant term in Table 4 represents satisfaction with the caseworker for other Australian children placed in foster care by FACS at Wave 1 for the average age of the child.

The first model considers the carer's ability to contact the caseworker (see Table 4 and Figure 11). The age of the child at Wave 1 was not associated with satisfaction with the carer's ability to contact a caseworker. There was no difference between those of Aboriginal background and other Australians. Those from a CALD background reported significantly higher satisfaction in their ability to contact a caseworker ($\beta=0.29$, $p<0.01$). Compared to carers with children placed in foster care by FACS, those with children placed in foster care by an NGO, reported significantly higher satisfaction scores on average at Wave 1 ($\beta=0.30$, $p<0.05$). There was a significant increase in the reporting of satisfaction by carers with children placed in foster care by FACS in their ability to contact caseworkers from Wave 1 to Waves 2 and 3 for those carers ($\beta=0.31$, $p<0.05$ & 0.65, $p<0.001$). Turning to the interaction

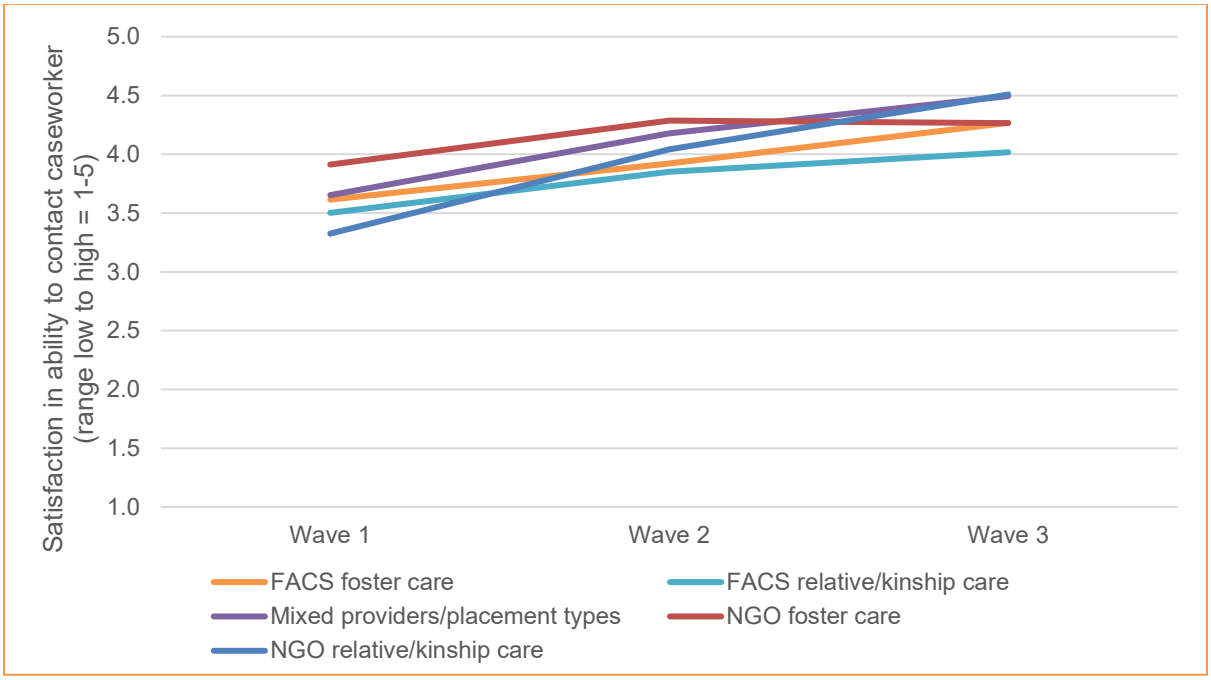
terms, the results suggest that carers with children in most placement types follow the same pattern over time as for carers with children placed by FACS foster care. The one exception was for relative/kinship carers who had children placed by an NGO. Here we find that carers reported higher levels of satisfaction at Waves 2 and 3 compared to carers of foster children placed by FACS ($\beta=0.41$, $p<0.05$ & 0.53, $p<0.01$).

Table 4 Linear regression models predicting carer satisfaction with caseworker

	Type of satisfaction			
	Contact with caseworker	Assistance from caseworker	Information about child	Case plan
	Coeff(SE)	Coeff(SE)	Coeff(SE)	Coeff(SE)
Age	0(0.01)	0(0.01)	0(0.01)	-0.02(0.01)***
Culture	**			
Aboriginal	-0.04(0.06)	-0.02(0.06)	-0.01(0.05)	-0.09(0.04)
CALD	0.29(0.1)**	0.19(0.1)	0.18(0.09)*	0.07(0.08)
Other Australian/unknown (ref)				
Placement group	**	***	***	
FACS relative/kinship care	-0.11(0.12)	-0.11(0.12)	0.51(0.11)***	0.12(0.12)
Mixed providers/placement types	0.04(0.17)	0.04(0.16)	0.03(0.15)	0(0.16)
NGO foster care	0.30(0.12)*	0.27(0.12)*	-0.06(0.11)	0.11(0.11)
NGO relative/kinship care	-0.29(0.15)	-0.21(0.15)	0.36(0.14)**	0.04(0.15)
FACS foster care (ref)				
Waves	***	***	***	
2	0.31(0.12)**	0.19(0.12)	0.47(0.1)***	0.12(0.11)
3	0.65(0.13)***	0.47(0.13)***	0.66(0.11)***	0.25(0.11)*
1 (ref)				
Placement group by wave	**	**		
FACS relative/kinship care				
Wave 2	0.04(0.16)	-0.01(0.16)	0.07(0.13)	-0.33(0.14)*
Wave 3	-0.14(0.18)	-0.22(0.18)	-0.14(0.15)	-0.40(0.15)**
Mixed providers/placement types				
Wave 2	0.22(0.2)	0.27(0.21)	-0.05(0.17)	-0.1(0.18)
Wave 3	0.19(0.22)	0.04(0.23)	-0.16(0.18)	-0.08(0.19)
NGO foster care				
Wave 2	0.07(0.15)	0.11(0.15)	0.08(0.12)	-0.12(0.13)
Wave 3	-0.3(0.16)	-0.26(0.16)	0(0.13)	-0.19(0.13)
NGO relative/kinship care				
Wave 2	0.41(0.18)*	0.3(0.19)	0.07(0.16)	-0.19(0.17)
Wave 3	0.53(0.2)**	0.45(0.21)*	0.04(0.17)	0.11(0.18)
Constant	3.61(0.1)***	3.58(0.1)***	3.61(0.09)***	3.36(0.1)***
N observations (subjects)	2,682 (1,127)	2,677 (1,127)	2,708 (1,127)	2,042 (1,001)
Chi square (overall model fit)	140.0 (5),p<0.001	130.5(5),p<0.001	242.1(5),p<0.001	57.54 (5),p<0.001

Notes: *p<0.05, **p<0.01, ***p<0.001, results based on mixed REML linear regression with model-based fixed effects and Satterthwaite degrees of freedom estimator. Age is child age at Wave 1, culture is child culture. Excludes children in residential care and children who were under guardianship arrangements or otherwise not in statutory care at any point across the three waves of the survey.

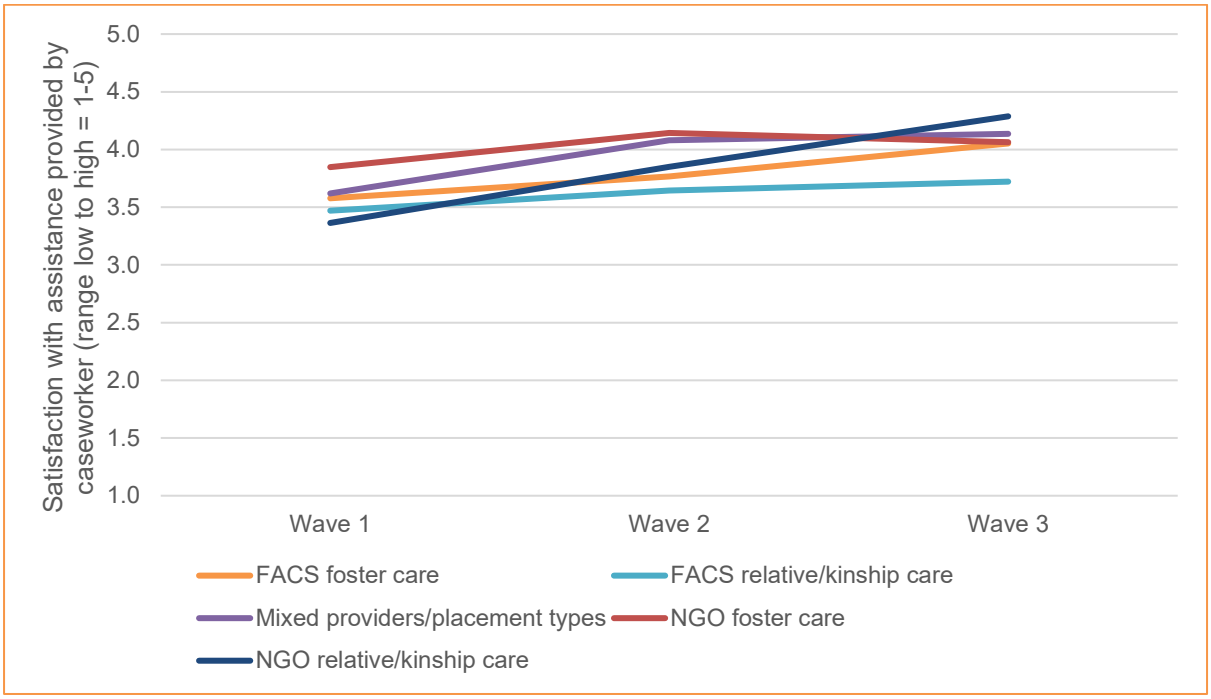
Figure 11 Satisfaction in ability of carer to contact caseworker, by wave



The second model considers the carer's satisfaction with assistance from the caseworker (see Table 4 and Figure 12). The age and cultural background of the child at Wave 1 was not associated with satisfaction with the level of assistance from their caseworker. At Wave 1 carers whose child was placed in foster care by an NGO reported significantly higher levels of satisfaction with the assistance given to them compared to those in foster care placed by FACS ($\beta=0.27$, $p<0.05$). Results also indicate that for foster carers with children placed by FACS (reference group), there was a significant improvement in the level of satisfaction with assistance from the caseworker between Waves 1 and 3 ($\beta=0.47$, $p<0.001$). As there was no significant interaction between placement type and wave[14], results indicate that there was a significant improvement in satisfaction with assistance over time for all placement types (see Table 4 and Figure 12).

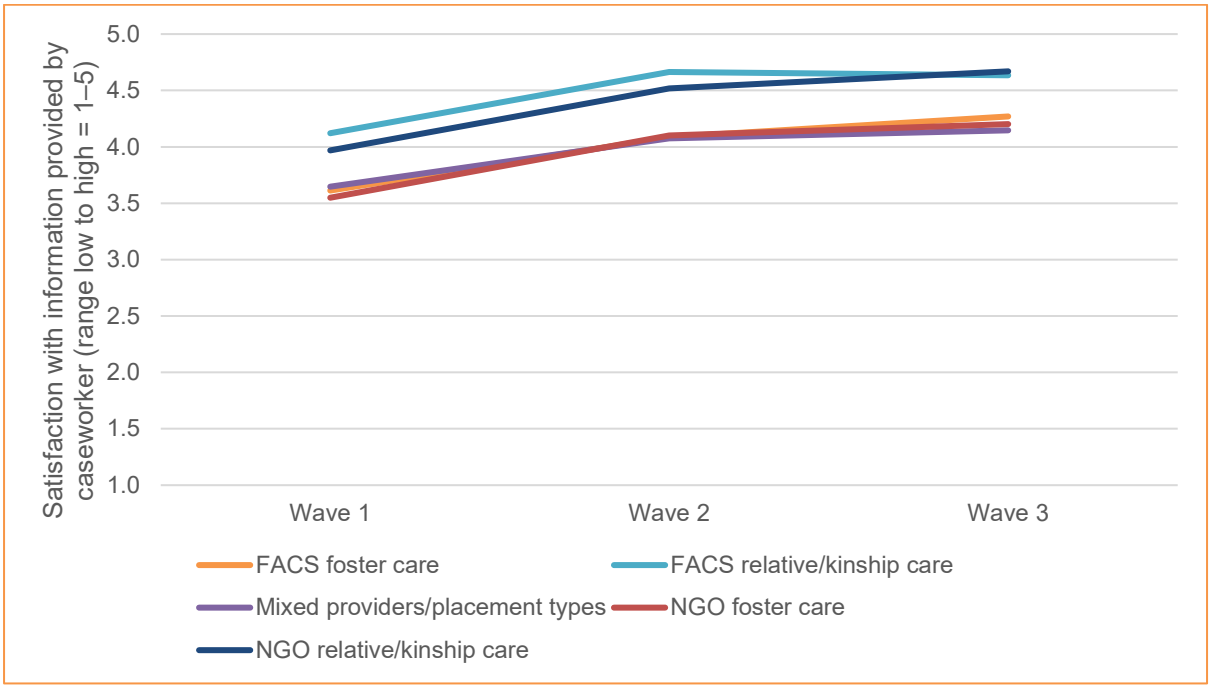
[14] Despite their being no significant interaction between placement type and wave, this was kept in the model as it was of substantive research interest.

Figure 12 Carers' satisfaction with the assistance provided by caseworkers, by wave



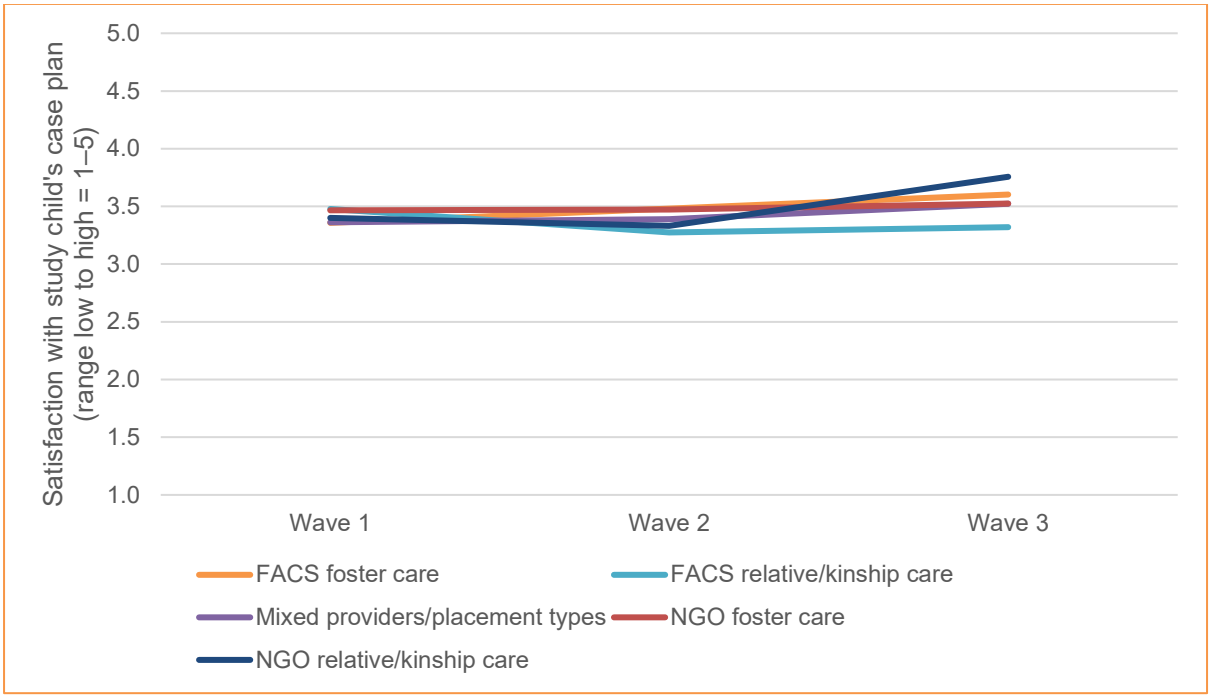
The third model (see Table 4 and Figure 13) considered satisfaction of the carer with the information provided about the child by the caseworker. The age of the child at Wave 1 was not associated with satisfaction with information provided. There was no difference between carers of children of Aboriginal background and other Australians. Those from a CALD background reported significantly higher satisfaction with the information provided ($\beta=0.18$, $p<0.05$). Compared to carers of children in foster care placed by FACS, carers of children placed with a relative by FACS ($\beta=0.51$, $p<0.001$) or an NGO ($\beta=0.36$, $p<0.01$) reported significantly higher levels of satisfaction at Wave 1. As the interaction between placement type and wave was not significant the patterns over time were similar for each of the placement types. This means that each placement type reported improved satisfaction with the information provided between Waves 1 and 3 ($\beta=0.66$, $p<0.001$).

Figure 13 Carers' satisfaction with information provided by caseworkers, by wave



The fourth linear model examined carer satisfaction with the child's case plan in its ability to meet the child's needs (see Table 4 and Figure 14). Results indicate that as the child's age at Wave 1 increases, carer satisfaction with the case plan to meet the child's needs decreased (β=-0.02, $p<0.001$). The cultural background of the child was not associated with the satisfaction with the case plan, nor was the type of placement at Wave 1. There was a significant effect for wave indicating that by Wave 3, satisfaction with the case plan had improved (β=0.25, $p<0.05$). However, FACS relative/kinship carers of children reported a decline in their level of satisfaction between Waves 1 and 2 (β=-0.33, $p<0.05$ & -0.40, $p<0.01$). Figure 14 suggests that the decline plateaus by Wave 3.

Figure 14 Carers' satisfaction with child's case plan, by wave



4.5 Carer contact by phone/email with caseworker

A multinomial logistic regression model was run to test whether the odds of reporting contact with the caseworker by email or phone differed by type of placement, cultural background or location. Carers who reported infrequent contact (less than monthly) with their caseworker were compared to those who reported contact at least monthly or weekly/fortnightly. The intercept is the odds for the carers of children who have been placed in FACS foster care, Australian or other born, and who live in metropolitan areas. Results presented in Table 5 indicate that none of the variables were significantly associated with monthly contact compared to less than monthly phone/email contact. In contrast, all three predictor variables were associated with weekly or fortnightly contact compared to less than monthly contact by phone/email contact. Compared to carers who had children placed by FACS in a foster home, carers who had children placed by FACS or an NGO with a relative reported lower odds of weekly/fortnightly contact (FACS: 58% [100(1–0.42)]; NGO 77% [100(1–0.33]). In contrast, carers of children who had been placed in a range of placement types (98% [100(1.98–1)]) or an NGO foster care placement (119% [100(2.19–1)]) reported higher odds of contact by phone/email on a weekly or fortnightly basis. Compared to carers of children who were Australian born, carers of children from CALD backgrounds reported lower odds of contact by phone/email on a weekly/fortnightly basis (44% [100(1–0.56)]). Similarly, those living in rural or remote areas also reported lower odds of weekly/fortnightly contact by phone/email compared to those in metropolitan areas (63% [100(1–0.37)]).

Table 5 Multinomial logistic regression model predicting carer's contact with caseworker by phone/email

	Monthly vs less than monthly			Weekly/fortnightly vs less than monthly		
	Coeff(SE)	p-value	OR	Coeff(SE)	p-value	OR
Placement group						
FACS foster care (ref)						
FACS relative/kinship care	-0.11(0.28)	0.704	0.90	-0.88(0.22)	<0.001	0.42
Mixed placements	0.72(0.38)	0.060	2.05	0.68(0.30)	0.021	1.98
NGO foster care	0.49(0.29)	0.093	1.63	0.78(0.21)	0.000	2.19
NGO relative/kinship care	0.31(0.31)	0.315	1.37	-1.10(0.30)	0.000	0.33
Culture						
Other Australian (ref)						
Aboriginal	-0.13(0.20)	0.520	0.88	-0.01(0.16)	0.933	0.99
CALD	-0.37(0.35)	0.292	0.69	-0.58(0.29)	0.042	0.56
Location						
Metro (ref)						
Regional/remote	-0.43(0.22)	0.051	0.65	-1.00(0.18)	<0.001	0.37
Intercept (less than monthly contact)	-0.60(0.30)	0.043		0.83(0.22)	0.000	
Max-rescaled R-square	0.152					
Wald	115.54(14) = <0.0001					

Notes: N = 951. Culture is child culture. Excludes child age, as model tests found it to be not significant. Excludes children in residential care and children who were under guardianship arrangements or otherwise not in statutory care at any point across the three waves of the survey

4.6 Face-to-face contact of carer with caseworker

A multinomial logistic regression model was run to test whether the odds of reporting face-to-face contact with the caseworker differed by type of placement. Carers who reported infrequent contact (less than monthly) with their caseworker were compared to those who reported contact at least monthly or weekly/fortnightly. The intercept is the odds for the carers of children who have been placed in FACS foster care. Results presented in Table 6 indicate that placement type was significantly associated with monthly face-to-face contact with carers. Compared to carers of children placed in foster care by FACS, carers with children who have had mixed placements (placements supported by both FACS and NGO) (97% [100(1.97–1)]) or a child placed in foster care by an NGO (197% [100(2.97–1)]) reported significantly higher odds. These results also applied to carers who reported contact at least weekly or fortnightly (mixed placement: 100% [100(2.00–1)]; NGO foster care placement: 137% [100(2.37–1)]). Additionally, carers of children placed with a relative by an NGO reported significantly lower odds of face-to-face contact

compared to those carers with children placed in foster care by FACS (98%, 81% [100(1–0.19)]).

Table 6 Multinomial logistic regression model predicting carer's contact face-to-face with caseworker

	Monthly			Weekly/fortnightly		
	Coeff(SE)	p-value	OR	Coeff(SE)	p-value	OR
Placement group						<0.001
FACS foster care						
FACS relative/kinship care	0.06(0.26)	0.827	1.06	-0.16(0.27)	0.548	0.85
Mixed placements	0.68(0.32)	0.037	1.97	0.69(0.32)	0.030	2.00
NGO foster care	1.09(0.24)	<0.001	2.97	0.86(0.24)	0.000	2.37
NGO relative/kinship care	-0.55(0.36)	0.134	0.58	-1.68(0.55)	0.002	0.19
Intercept	-1.64(0.20)	<0.001		-1.61(0.20)	<0.001	
Max-rescaled R-square	0.0958					
Wald	74.70(16) = <0.0001					

Notes: N = 1,054. Child age, culture and location are not shown in table, as model tests found them to be not significant. Excludes children in residential care and children who were under guardianship arrangements or otherwise not in statutory care at any point across the three waves of the survey.

4.7 Communication quality and child socio-emotional outcomes

As described earlier in the report, one of the key research questions was to explore the association between caseworker communication and socio-emotional development. The descriptive results in Section 3.5 showed that there was little to no relationship between the lagged effects of communication quality in Waves 1 and 2, and change in CBCL scores over time.

The regression results below confirm that there is no significant association between these factors. The only significant result is that children in foster care managed by an NGO were more likely to have CBCL scores in the normal range across all three waves, however communication quality had no impact on this result.

Table 7 Multinomial logistic regression model predicting CBCL change over time

	Always in normal range vs always in borderline/clinical range				CBCL scores changed from borderline/clinical to normal vs always in borderline/clinical range				CBCL scores changed from normal to borderline/clinical vs always in borderline/clinical range		
	Coeff(SE)	p-value	OR		Coeff(SE)	p-value	OR		Coeff(SE)	p-value	OR
Communication quality at Wave 2	0.14	0.140	1.15		0.03	0.670	1.03		0.05	0.485	1.05
Age at Wave 1	-0.04	0.602	0.97		-0.04	0.571	0.96		-0.08	0.325	0.92
Placement group											
FACS relative/kinship care	2.29	0.242	9.89		-0.40	0.753	0.67		0.68	0.630	1.97
Mixed placements/providers	2.93	0.246	18.72		0.30	0.886	1.35		2.11	0.270	8.26
NGO foster care	5.13	0.017	169.00		1.43	0.404	4.19		1.01	0.660	2.73
NGO relative/kinship care	2.49	0.205	12.12		-0.17	0.896	0.84		-0.28	0.865	0.76
FACS foster care (ref)	0.00	.	.		0.00	.	.		0.00	.	.
Placement group by communication quality at Wave 2											
FACS relative/kinship care	-0.11	0.320	0.90		0.02	0.855	1.02		-0.05	0.568	0.95
Mixed placements/providers	-0.08	0.553	0.93		0.04	0.697	1.05		-0.03	0.797	0.97
NGO foster care	-0.20	0.069	0.82		-0.05	0.573	0.95		-0.07	0.580	0.94
NGO relative/kinship care	-0.10	0.333	0.90		0.00	0.988	1.00		0.00	0.988	1.00
FACS foster care(ref)	0.00	.	.		0.00	.	.		0.00	.	.
Intercept	-3.52	0.057	0.03		-1.06	0.324	0.35		-1.35	0.285	0.26
Max-rescaled R-square	0.148										
Wald	27.6375(30), p=0.5896										

Notes: n=219. Excludes children whose CBCL scores were mixed due to small sample size. Excludes children in residential care and children who were under guardianship arrangements or otherwise not in statutory care at any point across the three waves of the survey. The lagged effect of communication quality at Wave 1 was also analysed, but because there were fewer respondents and the results were largely the same, this model was chosen due to having a larger sample size.

5 Conclusion and practice implications

The quality of communication between children in OOHC and their caseworker was generally good, with communication quality improving over time. Quality of communication was better for older children, irrespective of the age they entered care.

Carers were generally satisfied with both their ability to reach their caseworker and the assistance provided by their caseworker. Carers reported fairly infrequent face-to-face contact with their caseworker, but phone and email contact were more frequent.

There are some indications that children's contact with caseworkers is linked to that of carers, in that both children and carers in FACS relative/kinship care appeared to have lower levels of satisfaction with caseworker contact than other groups. It may be that children in placements where the carer has positive contact with the caseworker are also likely to have positive contacts, and in placements where children did not have positive contact with caseworkers, this was not mitigated by high-quality contact with the carer. However, this was not examined directly in this study, and further research will be needed to directly examine the interaction between children's contact with caseworkers and that of their carers.

Children who were aged below seven at Wave 1 and who turned 7 during wave 2 or 3 continued to have lower levels of contact and lower satisfaction with caseworkers across all three waves. Aside from age, the largest differences relate to placement types. In general, children in relative/kinship care reported less ability to contact their caseworker and lower quality of communication compared to those in foster care, however this improved over time. Relative/kinship carers reported lower satisfaction with the ability to contact their caseworker at Wave 1; however, as with child-reported communication, contact between caseworkers and kinship carers also improved over time. This pattern was particularly strong for relative/kinship carers in the NGO sector.

The improvements in contact with caseworkers over time could be due to children and carers becoming more confident in their contact with caseworkers and/or more trusting of the caseworkers as they spend more time in care. Another explanation is that over the study years FACS policy has changed, and caseworkers now have higher levels of contact with children and carers than in the earlier waves of the POCLS. Prior to 2014, many children in OOHC were not allocated a caseworker. Since 2014 (around the time of the Wave 2 collection) a number of reforms have been implemented with the aim of reducing the number of children in OOHC and improving services for those in OOHC.

CALD children generally reported higher levels of communication quality, and their carers reported higher satisfaction with both the ability to contact their caseworker and the information about the child the caseworker provided, compared to children and carers of other cultural backgrounds. Further research will be needed to understand this finding,

but it is possible that many of these placements are supported by specialist CALD agencies or individual CALD caseworkers who provide a culturally supportive and accessible service.

There were few differences between Aboriginal and other Australian children with respect to communication quality and contact with their caseworkers.

Although the majority of children have positive experiences with their caseworkers, there are subgroups of children who report having lower quality communication and contact with their caseworkers, so the fact a child is ageing in care does not automatically mean that they feel able to ask for assistance if needed.

5.1 Implications for practice

These results indicate that it might be useful to place more emphasis on supporting contact with caseworkers when children are entering care; younger children reported being less able to contact their caseworker (for obvious reasons) and carers reported less satisfaction at Wave 1. It is important that contact in the early part of the placement is established, and the period after entry into OOHC may be a good opportunity to identify carers who would like more support, in particular relative/kinship carers. Children who came into care at a young age (and who therefore had little direct interaction with caseworkers at that time) may feel disinclined to initiate contact with caseworkers as they get older, and caseworkers should try to ensure that children feel comfortable contacting them when they need. It may also be useful to consider methods of providing contact with younger children to ensure that any issues that children are experiencing do not have to be reported through the carer. If children feel they have issues that they cannot discuss with carers, it might be useful to have a safe and age-appropriate method of contacting a caseworker. Caseworkers may need support and training to better facilitate contact with younger children and children who have been in care for some time, but who have not yet had positive contact with caseworkers.

References

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Appendix

Detail of statistical methods

The following section provides additional detail about the statistical methods used in the regression modelling. Each model has a different sample size due to removal of records in which missing values in either the dependent or any independent variables were observed. More information about the process of deriving the datasets used to make each of the models can be obtained on request from the authors.

The sample characteristics described below relate to the regression models only. Descriptive/bivariate analysis have slightly different sample sizes because regression models exclude cases with missing information on any of the outcome or independent variables.

Child report of contact with caseworker when needed

This analysis used a binary indicator of a child report of whether they feel they can contact their caseworker when needed. Two groups of analysis were conducted, contact at Wave 1 and contact over time (change between Wave 3 and Wave 1). As with all child-reported outcome variables used in this report, children aged seven and older were asked this question. Descriptive analysis was conducted using bivariate chi-square tests with a critical p-value of <0.01.[15] Multivariate analysis of this indicator was conducted using two types of statistical models. For analysis of contact at Wave 1 (N = 275), a logistic regression model was run to test the likelihood of a child reporting that they can contact their caseworker when needed versus not being able to contact their caseworker when needed (reference group). The final model included child age at Wave 1, placement type and service provider, and child cultural background.

Prior models included child gender and location of placement (metropolitan vs rural/remote), but these items were dropped for the sake of parsimony, as they did not contribute significantly to the model. In addition, interaction terms were tested but dropped as none were significant. These included child culture by placement location and placement type by placement location. Least square mean pairwise differences for child

[15] No multiple comparison corrections were used for descriptive analysis, as the multivariate analysis results are more accurate and are preferred over descriptive statistical results. Instead, a conservative critical p-value was chosen to describe results.

culture and placement type were also computed, each with Bonferroni adjustments to account for multiple comparisons.

Table 8 Sample characteristics, contact with caseworker at Wave 1

		Descriptive analysis sample		Regression sample	
		n	%	n	%
Placement Group	FACS relative/kinship care	95	34.2	94	34.2
	NGO foster care	62	22.3	62	22.5
	NGO relative/kinship care	30	10.8	30	10.9
	Residential care	17	6.1	17	6.2
	FACS foster care	74	26.6	72	26.2
	Total	278	100.0	275	100.0
Culture	Aboriginal	103	37.1	102	37.1
	CALD	32	11.5	32	11.6
	Other Australian/unknown	143	51.4	141	51.3
	Total	278	100.0	275	100.0
Location	Metro	82	29.5	na	
	Regional/remote	196	70.5	na	
	Total	278	100.0	na	
Gender	Female	141	50.7	na	
	Male	137	49.3	na	
	Total	278	100.0	na	
Study child age at Wave 1	7 to 9	123	44.2	na	
	10 to 12	91	32.7	na	
	13 and older	64	23.0	na	
	Total	278	100.0	na	
Age	Mean(std)			10.4	2.68

Note: na = not used in final regression models.

Child report of contact with caseworker over time

The analysis of change over time consisted of a categorical variable derived by computing the reported ability to contact caseworker across Waves 1, 2 and 3. The resulting categories were: 'always able to contact caseworker', meaning the child reporting being able to contact their caseworker in each wave; 'contact improved', meaning the child reported no contact in Wave 1 and possibly Wave 2, but by Wave 3 the child reported they were able to contact their caseworker when needed; and 'never able to contact caseworker', which represents children who reported not being able to contact their caseworker in any wave.[16] A multinomial logistic regression model was run, with 'never able to contact caseworker' as the reference category. The final model included child age at Wave 1, placement type (service provider and placement category) and child culture.

Prior models included child gender and placement location, but as with the Wave 1 model, these items were dropped for the sake of parsimony, as they did not contribute significantly to the model. Least square mean pairwise differences for child culture and placement type were computed, each with Bonferroni adjustments to account for multiple comparisons.

[16] As mentioned elsewhere in this report, children with mixed contact were excluded from the regression analysis as there were too few cases in this group.

Table 9 Sample characteristics, contact with caseworker over time

		Descriptive analysis sample		Regression sample	
		n	%	n	%
Placement	FACS relative/kinship care	45	20.9	41	21.2
	Mixed placements/providers	32	14.9	30	15.5
	NGO foster care	59	27.4	50	25.9
	NGO relative/kinship care	41	19.1	36	18.7
	FACS foster care	38	17.7	36	18.7
	Total	215	100.0	193	100.0
Culture	Aboriginal	97	44.1	84	43.5
	CALD	15	6.8	15	7.8
	Other Australian/unknown	108	49.1	94	48.7
	Total	220	100.0	193	100.0
Location	Metro	52	23.6	na	
	Regional/remote	168	76.4	na	
	Total	220	100.0		
Gender	Female	111	50.5	na	
	Male	109	49.5	na	
	Total	220	100.0		
Study child age at Wave 1	Under 7	40	18.2	na	
	7 to 9	91	41.4	na	
	10 to 12	58	26.4	na	
	13 and older	31	14.1	na	
	Total	220	100.0		
Age	Mean (std)			9.0 (2.58)	

Note: na = not used in final regression models. Some placements have missing information for the service provider and/or placement type, so the total for this group is different to the other categories.

Child report of quality of communication between caseworker and child

Quality of communication was derived by summing five questions asked of children aged seven and older, with the resulting scale ranging between 5 and 25. Children with more than one item missing out of the five were excluded from analysis. This analysis consisted of a Restricted Maximum Likelihood (REML) linear mixed model fitted with a repeated measures statement to examine the change in quality between baseline (Wave 1) through Waves 2 and 3. The sample size for this model was 415 observations measured over a maximum of three waves (producing a total of 701 observations). The model precluded any listwise deletion – respondents with less than three waves of data were included in the analysis. This may occur when a child turns seven and is able to respond to the outcome items after Wave 1 or if a child did not participate in all waves. Children who exited OOHC for any reason at any wave were excluded from this analysis. The final model included wave, child age at Wave 1, placement group (placement type and service provider)[17], child cultural background and an interaction between wave and placement group. After testing a number of covariance structures, the final fitted model included an unstructured covariance structure.[18]

[17] Given that children can change placements and service providers over time, this variable was constructed such that children who changed either placements, service providers or both were categorised as having 'mixed placements/providers'. There were too few cases to include each combination of change in placement type or service provider.

[18] A number of covariance structures were tested, however unstructured produced the lowest Akaike's Information Criteria (AIC) score.

Table 10 Sample characteristics, communication quality descriptive/bivariate analysis

		Descriptive analysis sample					
		Wave 1		Wave 2		Wave 3	
		n	%	n	%	n	%
Placement	FACS relative/kinship care	61	26.0	51	21.4	45	19.7
	NGO foster care	55	23.4	67	28.2	64	28.1
	NGO relative/kinship care	31	13.2	49	20.6	54	23.7
	FACS foster care	53	22.6	38	16.0	35	15.4
	Mixed placements/providers	35	14.9	33	13.9	30	13.2
	Total	235	100.0	238	100.0	228	100.0
Culture	Aboriginal	84	35.7	98	41.2	103	45.2
	CALD	29	12.3	18	7.6	10	4.4
	Other Australian/unknown	122	51.9	122	51.3	115	50.4
	Total	235	100.0	238	100.0	228	100.0
Location	Metro	70	29.8	62	26.1	58	25.4
	Regional/remote	165	70.2	176	73.9	170	74.6
	Total	235	100.0	238	100.0	228	100.0
Gender	Female	125	53.2	120	50.4	111	48.7
	Male	110	46.8	118	49.6	117	51.3
	Total	235	100.0	238	100.0	228	100.0
Study child age at Wave 1	Under 7	0	0.0	59	24.8	102	38.1
	7 to 9	107	45.5	93	39.1	75	28.0
	10 to 12	83	35.3	59	24.8	75	28.0
	13 and older	45	19.1	27	11.3	16	6.0
	Total	235	100.0	238	100.0	268	100.0

Note: na = not used in final regression models.

Table 11 Sample characteristics, communication quality over time regression analysis

		Regression sample	
		n	%
Placement	FACS relative/kinship care	101	24.3
	NGO foster care	111	26.7
	NGO relative/kinship care	69	16.6
	FACS foster care	75	18.1
	Mixed placements/providers	59	14.2
	Total	415	100.0
Culture	Aboriginal	164	39.5
	CALD	37	8.9
	Other Australian/unknown	214	51.6
	Total	415	100.0
Location	Metro	118	28.4
	Regional/remote	297	71.6
	Total	415	100.0
Age	Mean (std)	8.7	(3.23)

Note: Regression is a mixed model, so includes all respondents regardless of how many observations they have.

Carer report of satisfaction with caseworker

This model examines carer opinion of the communication between themselves and their child's caseworker. Carers were asked four questions – satisfaction with the ability to reach their child's caseworker when needed[19], satisfaction with the assistance provided, satisfaction with the information about the study child, and satisfaction with the study child's case plan. These items were analysed separately in a series of four linear mixed models.

The repeated measures regressions considered age of child at study entry (Wave 1), the child's culture and placement type. An interaction term between placement type and wave was included in the model to test whether the associations between quality of

[19] 'Reach' sample size was 1,268 distinct carers with up to three waves of responses = 3,064 observations. 'Assistance' sample size was 1,268 distinct carers with up to three waves of responses = 3,054 observations. 'Information' sample size was 1,268 carers with up to three waves of responses = 3,158 observations. 'Plan' sample size was 1,268 carers with up to three waves of responses = 2,277 observations.

communication and placement type differed over time. The estimation method for all four models was REML, and all had unstructured covariance structures. Model-based fixed effects and standard effects estimation methods were used, and the Satterthwaite method was used for degrees of freedom.

Table 12 Sample characteristics, satisfaction model A: carer satisfaction with ability to reach caseworker when needed

	Contact with caseworker		Assistance from caseworker		Information about child		Case plan	
	n	%	n	%	n	%	n	%
Culture								
Aboriginal	455	40.4	455	40.4	455	40.41	416	41.56
CALD	112	9.9	112	9.9	112	9.95	98	9.79
Other Australian/unknown	560	49.7	560	49.7	559	49.64	487	48.65
Total	1127	100.0	1127	100.0	1126	100.00	1001	100.00
Placement								
FACS foster care	232	20.6	232	20.6	232	20.60	196	19.58
FACS relative/kinship care	293	26.0	293	26.0	293	26.02	241	24.08
Mixed placements/providers	103	9.1	103	9.1	103	9.15	97	9.69
NGO foster care	368	32.7	368	32.7	367	32.59	341	34.07
NGO relative/kinship care	131	11.6	131	11.6	131	11.63	126	12.59
Total	1127	100.0	1127	100.0	1126	100.00	1001	100.00
Study child age Mean (std)	4.8 (4.1)		4.8(4.1)		4.8(4.1)		4.8(4.0)	

Note: Regression is a mixed model, so includes all respondents regardless of how many observations they have. Sample sizes are slightly different due to different numbers of carers responding to each item.

Carer report of type of contact with caseworker

The final group of statistical models related to the type and frequency of contact between the caseworker and the carer, as reported by the carer. Two multinomial logistic regression models were run, one relating to contact by email or phone and the other relating to face-to-face contact. The outcome categories represented contact on a weekly/fortnightly basis, monthly, or less than monthly basis. The final model included wave, placement, study child cultural background and placement location. In this case the responses represented average contact frequency over all waves, with the models accounting for clustered carer responses.

Child-reported caseworker communication quality and child socio-emotional development over time

This model took the results of the previous statistical model relating to communication quality and expanded the results to include an outcome variable of child socio-emotional functioning (CBCL). The sample size for this analysis was 219 children. The outcome variable was derived by taking the binary cut-off scores for the CBCL (children could either be in the normal range or in borderline/clinical range at each wave). These binary scores were then examined across each wave to create the final categorical variable representing: children in the normal range in each wave; children who moved from borderline/clinical to normal (i.e. their scores improved); children who moved from normal to borderline/clinical (i.e. their scores deteriorated); children who were classified as borderline/clinical in each wave; and those with mixed scores over time. This latter group was excluded from analysis due to small sample size. The final analysis was a multinomial logistic regression, with the change in CBCL categorical variable being the outcome. The primary independent variable was quality of contact at Wave 2. This was used because it was expected that communication quality potentially had a lagged effect on child socio-emotional outcomes. There were fewer children who completed the communication quality variable at Wave 1 due to children under seven years not being asked the questions about communication with their caseworker, so the Wave 2 quality variable was used in its place. Other independent variables in the final model included placement group, child age at Wave 1, and an interaction term between communication quality and placement group. These items were included because they were found to be associated with communication quality in previous models.

Table 13 Sample characteristics, communication quality and CBCL scores over time

	Contact with caseworker	
	n	%
Placement		
FACS Relative/Kinship care	47	21.5%
Mixed placements/providers	29	13.2%
NGO Foster Care	59	26.9%
NGO Relative/Kinship care	47	21.5%
FACS Foster Care	37	16.9%
Total	47	21.5%
Study child age **Mean (std)**	4.8 (4.1)	
Communication quality at wave 2 **Mean (std)**		

Limitations

The results are based on a subgroup of study children and do not represent all children in OOHC, nor do they represent all children entering OOHC.

There are too few cases to examine children in residential care in any detail.

The results in this report may be different to results published in other reports due to the limited sample used in this report. In particular, those wanting more detailed examination of child CBCL scores over time should look to other reports in which CBCL is the primary focus.

Supplementary tables

The following tables provide information relating to statistical testing undertaken for the descriptive analysis sections of this report, including the sample size for each test. In particular, these results are not adjusted for multiple comparisons, so only results at p<0.001 have been reported in the descriptive analysis results.

Table 14 Summary of descriptive bivariate statistics

Table	Statistic	DF	Value	Prob	n
Contact with caseworker over time					
Age group	Chi-Square	6	48.099	<.0001	196
Gender	Chi-Square	2	2.478	0.290	196
Culture	Chi-Square	4	1.333	0.856	196
Placement group⁺	Chi-Square	6	17.949	0.006	163
Location (metro vs regional/remote)	Chi-Square	2	2.187	0.335	196
Carer face-to-face contact with caseworker					
Age group	Chi-Square	4	10.477	0.031	1054
Gender	Chi-Square	2	0.705	0.703	1054
Culture	Chi-Square	4	6.319	0.176	1054
Location (metro vs regional/remote)	Chi-Square	2	5.485	0.064	1054
Placement group⁺	Chi-Square	8	82.469	<.0001	1054
Carer phone/email contact with caseworker					
Age group	Chi-Square	10	4.611	0.916	1052
Gender	Chi-Square	2	5.998	0.0498	1052
Culture	Chi-Square	4	0.992	0.911	1052
Location (metro vs regional/remote)	Chi-Square	2	23.879	<.0001	1052
Placement group⁺	Chi-Square	8	98.100	<.0001	1052
Carer satisfaction with ability to reach caseworker when needed at Wave 1					
Age group	Chi-Square	4	10.477	0.033	1052
Gender	Chi-Square	1	1.348	0.246	1052
Culture	Chi-Square	2	6.656	0.036	1052

Location (metro vs regional/remote)	Chi-Square	1	3.683	0.055	1052
Placement group+	Chi-Square	4	19.805	0.001	1052
Carer satisfaction with ability to reach caseworker when needed at Wave 3					
Age group	Chi-Square	4	4.211	0.378	734
Gender	Chi-Square	1	1.348	0.246	734
Culture	Chi-Square	2	6.656	0.036	734
Location (metro vs regional/remote)	Chi-Square	1	3.683	0.055	734
Placement group+	Chi-Square	4	19.805	0.001	734
Carer satisfaction with assistance from caseworker at Wave 1					
Age group	Chi-Square	4	19.436	0.0006	1051
Gender	Chi-Square	1	0.037	0.847	1051
Culture	Chi-Square	2	0.551	0.759	1051
Location (metro vs regional/remote)	Chi-Square	1	4.019	0.045	1051
Placement group+	Chi-Square	4	12.875	0.012	1051
Carer satisfaction with assistance from caseworker at Wave 3					
Age group	Chi-Square	4	6.308	0.177	732
Gender	Chi-Square	1	0.021	0.886	732
Culture	Chi-Square	2	2.647	0.266	732
Location (metro vs regional/remote)	Chi-Square	1	1.649	0.199	732
Placement group+	Chi-Square	4	5.937	0.204	732

Note: + placement group combines service provider and placement type as described below.

Variable definitions

This is a summary of the definitions to create variables for analysis.

Demographic characteristics

Age of child is as at Wave 1.

Gender of child is as at Wave 3 (or the latest observation for children that did not complete Wave 3) to account for any children changing their gender identification over the course of the study (fewer than five children were in this group).

Cultural background was calculated using cultural background responses across all three waves. The categories used are Aboriginal, CALD and other Australian. A small number of children belong to more than one cultural background, but not enough to make a separate combined category. Children who were indicated to be Aboriginal in any wave were counted as Aboriginal. Children who were indicated to be CALD in any wave were counted as CALD. All other children were counted as other Australians. If a child was both CALD and Aboriginal, they have been counted as being Aboriginal. If a child is both CALD and other Australian, they have been counted as CALD.

Placement characteristics

As children can change placements, there are several issues to consider when creating categories to represent placement characteristics in a longitudinal analysis. Analysis of individual waves uses the placement characteristics of that specific wave. Analysis of change over time uses a variable that represents the change in placement characteristics. The definitions of these characteristics can change over time. The variables are:

Placement location – initially DCJ district was used to analyse location, however many districts have very small numbers of responses (this is due to the analysis using a small subset of cases). In order to prevent identification from small numbers of respondents, the districts were merged into a binary indicator of placement location (Metro and Regional/Remote) using counting rules provided by DCJ. Once merged, only a small number of children (fewer than 10) had changed regions across the course of the study. As there were not enough of these children to create a separate category, the placement location at the last observation was used for these children.

Placement group (placement type and service provider) was calculated using counting rules derived by the author and supplemented by DCJ:

1. Placement must have started on or before the interview date (and ended after the interview date)
2. If there is more than one placement record at the time of the interview, take the placement with the placement purpose (PLCPURP) in this priority order – permanent care, purposes other than permanent and respite/emergency, respite/emergency care
3. If there is more than one placement record with the same placement purpose, take the placement that starts closest to the interview date
4. If there is more than one closest-starting placement with the same start date and same purpose, take the placement that finishes closest to the interview.

The interview data was merged with the DCJ placement administrative data, and priority rules were applied where children were in more than one type of placement at the same time (e.g. respite and a long-term placement) to ensure that the primary placement was counted. This resulted in being able to determine the service provider (FACS or NGO) at each wave of the study.

As placement provider and placement type are specifically of interest to this study – due to there being differences in the amount of caseworker contact between placement types within each service provider – they have been analysed together throughout the report in a variable labelled **placement group**. Separate categories were created for children who moved placements and/or service providers during the course of the study, however in many cases there are not enough children to analyse these categories separately without

a disclosure risk, so in instances where disclosure is an issue they have been combined into one mixed category or excluded from the results.

Children in **residential care** comprise a small proportion of the respondents in this study, and the numbers of these children drop substantially across the course of the study. Analysis of residential care is included where respondent numbers allow, however generally the analysis of change over time has too few residential care respondents to be included.

Carer responses have also been included in this analysis; however, all responses are linked to the study child's demographic and placement characteristics. Some carers have a household with more than one study child; in these cases, responses for both children have been included.

Outcome variables

Several outcome variables were used in this analysis. Additional information about these variables can be provided on request. All child response variables included in this report were asked of children aged seven years and older. Carer responses about caseworker contact were included to incorporate information about children of all ages.

Child ability to contact caseworker – was asked of children aged seven years and older. The question is a yes/no response asking whether the child feels they can contact their caseworker when needed. To examine change over time, children responding to this question in at least two waves were included in the analysis. A categorical variable was created to describe the change: *never able to contact caseworker* refers to children who could not contact their caseworker across any wave; *always able to contact caseworker* refers to children who could contact their caseworker in all waves; *contact improved over time* refers to children who started unable to contact their caseworker but felt able to contact their caseworker at the most recent observation; *contact decreased over time* refers to those who started able to contact their caseworker and ended with a response indicating they were unable to contact them. Children who had contact, then no contact, then contact, or children who had no contact, then contact, then no contact were categorised as having *mixed contact* over time.

Due to the small numbers of children having mixed contact and decreased contact, these categories have generally been excluded from the analysis due to issues related to potential disclosure risk. However, exclusion does not imply that these categories are not significant but instead that the small sample size means that analysis is unable to show results with accuracy.

Quality of communication between caseworker and child – this comprises five items asked of study children aged seven years and older. The questions reflect communication quality. They are reverse coded to be scaled between 1 (never) and 5

(always). The individual items are: does your caseworker talk to you, listen to you, do what they say they will do, help you, explain decisions made about you. Responses were included if at least four of the five items were completed, and responses with four items were rescaled.

Analysis of these individual items showed that there is a very high correlation between each item – most children responded with very similar scores for each item. To examine change over time, a combined communication quality variable was created comprised of a simple sum of each of the five items, so the final score ranged between 5 and 25. Low numbers indicated lower communication quality and high scores indicated higher quality.

The process of sample selection for this group is represented below (Table 15).

Table 15 Sample selection for communication quality analysis

	Wave 1 n	Wave 2 n	Wave 3 n
No filter (children aged at least 7 years with a valid communication quality score)	285	289	275
Known location (exclude unknown)	283	286	267
Parental Responsibility filter (only kids under PR to minister/DG all observed waves)	252	245	231
Combined placement group (i.e. placement and service provider across all three waves not missing, in residential care or otherwise invalid)	235	238	228

Analysis of this item includes multivariate regression modelling that examines individual change over time.

Frequency of contact between caseworker and carer – this was asked of all carers. The possible responses include weekly, fortnightly, monthly, less than monthly. Weekly and fortnightly were combined for this analysis. These categories of frequency were used in Wave 1, however from Wave 2 onwards the categories changed to include yearly contact. We have aligned the responses to the Wave 1 categories for this analysis.

Satisfaction with contact between caseworker and carer – this is a five-point scale (1, very dissatisfied to 5, very satisfied) that was combined into two groups (satisfied and unsatisfied) for this report in which satisfied was comprised of those responding as being satisfied or very satisfied, and unsatisfied was comprised of the remaining responses.

Child Behaviour Checklist (CBCL) – the school-age version of this standardised measure was used for this report, which applies to children aged from six to 18 years. Due to communication questions being asked of children seven years and older, a subset of respondents has been used in the analysis of this report. The CBCL variables with pre-calculated cut-off scores published in the Child interview dataset (version 3, 2018) were

used. This was pre-populated by the data custodians to include an indication of whether a child was in the normal, borderline or clinical range for socio-emotional functioning according to the total problems score. In this report, children with borderline and clinical responses have been combined due to restrictions imposed by the small sample size used in analysis.

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