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How is the provision of residential care to children under the age of 12 associated with changes in children's behaviour and mental wellbeing?

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Abstract

Around 10% of children looked after in residential care in Scotland are aged 5-11. While there is a large body of evidence about the experiences of older children in residential care, little is known about the experiences of younger children in these settings. In this study we used routinely collected administrative data held by the Scottish Children's Reporter Administration to: 1) identify common features in the familial, child protection and care histories of children under the age of 12 in residential care; 2) explore how being cared for in residential care prior to age 12 is associated with children's health and socioemotional wellbeing. Case file data from 135 children subject to compulsory measures of supervisions were examined. Our analysis indicated that younger children in residential care often have complex trauma histories, long histories of service involvement, and have often experienced repeat placement breakdowns that are attributed to the socioemotional and behavioural difficulties the children exhibit in placement. Being cared for in residential care provided a period of stability for younger children, with improvements seen in their socioemotional wellbeing and mental health in the 24 months following entry into residential care. Future research should focus on understanding the mechanisms underlying these changes.

Keywords

Group care, residential care, child health, children under 12, socioemotional wellbeing, mental health, Scotland

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Introduction

The term residential care is used to describe non-family-based group living environments where children are cared for by paid staff who work on a shift basis. In Scotland, the residential care settings used to provide care to children include children's homes, residential schools, and other forms of residential care such as crisis units, assessment centres and secure care (Scottish Government, n.d.). The legal routes through which a child can become looked after in residential care include: being assessed as requiring a Compulsory Supervision Order (CSO) with a condition of residence in residential care by the Children's Hearing System; being subject to a legal order or warrant that allows emergency removal to a place of safety; being accommodated under Section 25 of the Children (Scotland) Act 1995; or being placed by a local authority which has made a permanence order under Section 80 of the Adoption and Children Act 2007 (Scottish Government, n.d.). A child may also become looked after in residential care through the granting of an interim CSO or through an interim variation of an existing order. These latter measures are usually used when a Children's Hearing is unable to reach an agreement about the interventions required to best support a child requiring urgent care and protection (Children's Hearings Scotland, 2020).

Residential care can be used to: provide periods of 'respite' care in order to support children to continue living with their parents or caregivers in the longer-term (Luksik, 2018); offer a place of safety while longer-term, family-based care is identified (Chege, 2018); help prepare children for a move into family-based care (Jedwab et al., 2019; Vacaru et al., 2018); and/or to support older children preparing to move to independent living (Gander et al., 2019). It can also be used: when suitable family-based care cannot be identified, is not available, has not been sustained, or has not been able to fulfil the needs of the child (Gayapersad et al., 2019; Grey et al., 2018; Wright et al., 2019); to provide intensive support for social, emotional, and behavioural difficulties (Boel-Studt et al., 2018; Eenshuistra et al., 2019; Hurley et al., 2017; Jedwab et al., 2019; Luksík, 2018; Schuurmans et al., 2018; Vejmelka & Sabolic, 2015); when a period of recovery and rehabilitation is needed for children who have

experienced childhood maltreatment or sexual exploitation, or who have been trafficked (Brown et al., 2018; Hickle & Roe-Sepowitz, 2018; Rafferty, 2018); and/or when children require additional care due to complex long-term physical and developmental disabilities (Llosada-Gistau et al., 2017). In Scotland, residential care is most frequently used for the purposes of recovery, rehabilitation, and the treatment of social, emotional, and behavioural issues in children and young people (Porter et al., 2020).

Each year, around 10% (cc. 1,400) of all children looked after by local authorities are cared for in residential settings (Scottish Government, 2021). Despite being a significant part of the care continuum, residential care is often considered 'a placement of last resort' (Berridge et al., 2012; Calheiros et al., 2015; Smith, 2009; Shaw, 2014; Woods, 2020). This belief has largely been driven by concerns about the safety and effectiveness of residential care, caused by: 1) historic child abuse allegations (Australian Government, 2013; Department of Children and Youth Affairs, 2009; Langeland et al., 2015; Marshall, 2014; Northern Ireland Executive, 2017; Sen et al., 2008); 2) outcome-driven research consistently demonstrating that residential care placement is associated with low educational attainment, high unemployment rates, poor physical and mental health, early pregnancy and parenthood, homelessness, criminality, and social isolation (Cahill et al., 2016; Dixon, 2008; Forrester et al., 2009; Rainer, 2007; Schofield et al., 2017; Stein & Munro, 2008).

Concerns about the safety and effectiveness of residential care led to policies prioritising the use of family-based placements for children (Bogdanova, 2017; Connelly & Milligan, 2012; Nary, 2016; Porter et al., 2020; Shaw, 2014). This preference for family-based placements was most notable for younger children, with the Skinner Report (1992) stating that residential care should 'only exceptionally' be used for children under the age of 12. In response to this recommendation some local authorities prohibited the use of residential care for children under 12 (Milligan et al., 2006).

The use of residential care as 'a placement of last resort' has been challenged on the grounds that judging residential care on outcome evidence alone may 'significantly underestimate the contribution that they can make, the stability

that they can deliver, and the high-quality care they can extend to children who have had terribly fractured lives' (Narey, 2016, p. 5). This is because much of the outcome evidence generated is based upon the experiences of adolescents and young adults who have left residential care at the end of complex journeys through the care system, and is thus likely to be confounded by the effects of: 1) the complex trauma histories that young people in these settings tend to have; and 2) the impact that multiple placement moves and types may have had upon young people's access to education and health services.

In 2009, a review commissioned by the Scottish Government concluded that the needs of children, not their age, should underscore decisions about when to use residential care. The review also concluded that residential care should be considered earlier in the care trajectories of some children, namely those who had substantial histories of neglect, serious attachment problems, complex physical and mental health needs, and increasingly challenging behaviours that were difficult to manage within family-type placements (Hill, 2009). The importance of utilising needs-driven decision making has recently been reinforced by the Independent Care Review, in which it is stated that 'residential homes and schools can be the right place for children or young people, specifically those who would find the intensity of family settings overwhelming' (Independent Care Review, 2020 p. 79). The recommendation that residential care be used earlier within the care trajectory has also led to calls for evidence to be gathered about the benefits, or detriments, of using residential care for specific groups of children, including those under the age of 12 (Hill, 2009). It was also highlighted that there was a need to measure the effect of residential care upon the educational and health outcomes of younger children (Scottish Government, 2009).

Despite these recommendations, very little has been published about the use of residential care for children under the age of 12. Those studies which have been conducted have focussed specifically upon the characteristics of younger children in residential care, concluding that children who enter residential care prior to age 12 tend to be boys who have had multiple changes of foster carers, are exhibiting significant behavioural difficulties, and require crisis care (HIQA, 2017; Milligan et al., 2006). None of the studies we identified explored the

impact of residential care on health, wellbeing, or education. As the information gathered by Milligan et al. on the use of residential care for children under 12 in Scotland is now 15 years old, the aim of this paper is to use routinely collected administrative data to address the following research questions:

- RQ1) What common features characterise the familial, child protection and care histories of children under the age of 12 in residential care?
- RQ2) How is being cared for in residential care prior to age 12 associated with children's health and socioemotional wellbeing?

Methods

Study details

The case file analysis presented is drawn from a mixed methods study being conducted by the Scottish Children's Reporter Administration (SCRA). The aims of the study are to: 1) explore temporal trends in the use of residential care for children under the age of 12; 2) explore the familial, child protection, and care histories of children who have entered residential care prior to age 12; and 3) identify the benefits and detriments of using residential care for younger children's socioemotional wellbeing, mental health, and educational engagement.

Extraction and analysis of case file data

Data were extracted from SCRA's Case Management System for 135 children who were subject to their first compulsory supervision order with residential care conditions between 01/04/2015 and 31/03/2017. SCRA's Case Management System contains all casefiles relating to children involved with the Children's Hearing System. The data held includes referrals and reports from social work, police, school, health professionals, safeguarders, etc., as well as records of all decisions made by the Children's Hearing System and any statutory measures enacted. As such we can construct a rich overview of children's lives.

Data extraction involved both authors reading and manually coding information relating to demographics, family characteristics, child trauma histories, child protection histories, risk-taking and offence-type behaviours, indicators of

mental wellbeing, and other behaviours that we had identified through piloting work as being commonly referenced in the files of children (i.e., controlling, violent and physically aggressive behaviours). Appendix 1 provides an overview of the variables extracted, including exemplars of the language that was used within statutory documents to record these variables. It should be noted that the language used within these reports does not always sit comfortably with the belief 'that all behaviour is communication' (*The Promise*, 2020, p. 85). This tension is an issue that we will address in more detail when discussing our findings.

Data were extracted between April 2020 and June 2021 and collated in a Microsoft Excel datasheet that had built-in data validation checks to reduce the potential for data entry errors. All variables were coded based upon whether there was evidence that the event had been experienced, not experienced, or was not recorded within children's case files. All outcome data were measured at three time points: 12 months preceding first entering residential care (T1); 12 months after first residential care placement (T2); and 24 months after first residential care placement (T3). Descriptive statistics and Cochran's Q test for repeated dichotomous measures were used to assess change within groups over time. Data are reported as being significantly different where $p<0.05$[1]. All tests were conducted in Microsoft Excel 2016.

Ethical approval

Approval to use data from SCRA's Data Warehouse and CMS was granted by SCRA's research ethics committee. SCRA data access policies required that both authors had criminal background checks conducted through the Protecting Vulnerable Groups Scheme run by Disclosure Scotland.

[1] The p-value is used to identify whether to accept or reject a null hypothesis, for instance that there will be no difference in the number of children displaying offence-type behaviour over time. Where $p>0.05$ we accept the null hypothesis of no difference. Where $p<0.05$ we reject the null hypothesis, and use the data available to determine if that behaviour has improved or declined.

Results

RQ1: What common features characterise the familial, child protection and care histories of children under the age of 12 who have been looked after in residential care?

Our analyses indicate that children who become subject to compulsory supervision orders with residential care conditions prior to their twelfth birthday tend to come from families that have additional health and social care needs. They also have complex trauma histories and have often experienced multiple placement moves.

Family backgrounds

Table 1 indicates that most of the children who became subject to compulsory supervision orders with residential care conditions before age 12 were male (80%) and of white ethnicity (96%). Just over half (54%) had parents who were known to have experienced financial difficulties. Around one in three (30%) of the children had parents who had separated from each other. Half (50%) of the sample were recorded by SCRA as having a known disability; however close reading of case files indicated that three quarters (70%) of the children had either a known or suspected disability. Learning and communication difficulties were the most frequently recorded disability type.

Figure 1 shows that the family backgrounds of children who are subject to compulsory supervision orders with residential care conditions before age 12 were often characterised by complex health and social care needs. For instance, many of the children in our sample had one or more parent who had: mental health difficulties (72%); misused drugs and/or alcohol (74%); a history of housing instability (53%), engaged in offending behaviour (60%); or had been imprisoned (28%). The misuse of drugs and/or alcohol, mental health difficulties and housing insecurity were more commonly seen for the mothers of younger children in residential care. Offending behaviours and imprisonment were more commonly seen for fathers.

Maltreatment and trauma histories

Figure 2 shows that the children who became subject to compulsory supervision orders with residential care conditions before age 12 had complex trauma histories, with high proportions of our sample having been sexually abused (62%), physically abused (68%), physically neglected (76%), and exposed to violence within the home or community (83%). In addition to the high levels of maltreatment observed, a third (32%) of the children had experienced the death of a parent, a sibling, or significant relative/caregiver. One in six (16%) were considered to have been disowned by at least one parent.

Looking specifically at adverse childhood events (ACEs, see Felitti et al., 1998 for further details), Figure 3 shows that the median number of ACEs experienced by children in our sample was five (range: 1-9).

Child protection histories

Figure 4 indicates that children who became subject to compulsory supervision orders with residential care conditions before age 12 often had extensive child protection histories. Overall, three quarters (75%) of the children in our sample had been known to services prior to 2.56 (median: 0.50, range: -0.30 to 9.16) years of age. A third (32%) of the children had been known to services prior to birth (data not shown). Overall, 90% of the children in our sample had been identified as requiring support from services by their fifth birthday i.e., while they were still under the care of health visiting services (data not shown; see Scottish Government, 2015 for information on the health visiting programme).

Our analysis indicates that three quarters (75%) of the sample had been referred to the Children's Hearings System by 5.11 (median: 2.73; range: 0.00 to 11.08, Figure 4) years of age. Nearly all of these referrals (93%, data not shown) were on care and protection grounds. Although most children were referred prior to their fifth birthday, our analysis indicates that the median age for becoming a looked after child was 5.49 (range: 0.00-11.38) years of age, while the median ages for being placed onto a compulsory supervision order (CSO) or a child protection order (CPO) were 6.07 (range: 0.02-13.41) and 6.49 (range: 0.00-11.08) years of respectively. Overall, three quarters (75%) of the

children had been subject to one or more of these legal measures by the time they were 8.77 years of age.

Finally, Figure 4 indicates that on average the children in our sample were 7.37 (range: 1.00-11.85) years old when they were first accommodated by the local authority. Overall, three quarters (75%) had been accommodated by 9.72 years of age. The median age for entry into residential care was 9.85 (range: 5.60-11.87) years old, with CSOs with residential care conditions enacted when children were 10.63 (range: 6.28-11.97) years old on average. One quarter (25%) of the children first entered residential care between 5.60 and 8.24 years of age.

Placement breakdowns

Figure 5 indicates that 83% of the children in our sample had experienced one or more placement moves prior to entering residential care. The median number of placement moves was three (range 0-12; data not shown). Looking at the type of placements that children had experienced, our data indicates that two-fifths (42%) of the sample had experienced one or more episodes of being looked after at home by their parents with support from social work services, while just under a third (29%) had experienced one or more episodes of being looked after in kinship care. Foster care was the most common placement type, with two thirds (69%) having experienced one or more fostering placements. The median number of foster care placements experienced was two (range 0-9; data not shown).

Our analysis indicates that the main reasons for placement breakdowns included: concerns about parents' and/or caregivers' ability to keep the child safe (69%); concerns about the safety of others (i.e., other children in placement and caregivers' own biological children and grandchildren) due to physically aggressive and violent behaviours from the child (47%); the needs of the child not being met by the placement (47%); and the high levels of care some children required due to: soiling; sexualised behaviour; and being overly controlling of their environments and people, dysregulated sleep etc. (40%). It was common for placement moves to be unplanned, stemming from the child being perceived as being 'in crisis'. While our data indicated that children and

their birth parents received significant levels of intervention from health and social care agencies prior to a child becoming formally looked after, foster carers received very little direct support from services, beyond routine supervision and the offer of respite care. Despite respite care being the main support offered to foster carers, only 50% of the children who had been in foster care had received respite care. Please note that the data on placement breakdowns and support are not shown in the tables.

Entry into residential care and subsequent placement moves

Table 2 indicates that half (47%) of the children in our sample entered residential care because they were placed onto a compulsory supervision order (CSO) with residential care conditions. Just under a third (31%) entered residential care because they were subject to interim or emergency measures such as an Interim CSO (ICSO), an Interim Variation of a CSO (IVCSO), or a place of safety warrant. Around one in six (16%) were accommodated under Section 25 of the Children's (Scotland) Act 1995. Half (53%) of the children were first looked after in a children's unit, while a third (31%) were first cared for in residential schools.

Table 2 shows that half (47%) of the children in our sample experienced no placement moves in the two years following their entry into residential care, while 27% experienced a single placement move, and 26% experienced 2-9 moves. Our results indicate that there were limited attempts made at returning children to family placements, with just 18% of the sample being returned to family-based care. Two in five (40%, n=25) of the children who returned to family-based care required multiple stays in residential care to facilitate successful return to family living. Looking specifically at the 109 children who remained in residential care, our results indicate that two years after becoming looked after in residential care, 38% were living in children's homes, while 47% were cared for in residential schools. The remaining 15% were cared for in other residential care establishments such as crisis care, short-term assessment centres, specialised therapeutic placements for traumatised children, small-group (2-4 children) living environments, and singleton residential placements with a team around the child.

RQ2: How is being cared for in residential care prior to age 12 associated with children's health and socioemotional wellbeing?

Our analysis indicates that placement into residential care for children under the age of 12 was associated with significant improvements in children's socio-emotional wellbeing and mental health over time, with most of the improvements occurring within the first year of being in residential care.

Risk taking and offence-type behaviours

Figure 6 highlights that very few of the children in our sample were engaged in risk-taking behaviours such as smoking tobacco (4-7%), consuming alcohol (1-5%), using drugs (1-4%), or engaging in non-concerning and age-appropriate sexual exploration such as consensual touching or kissing a child of a similar age (4-6%) at any time point. A fifth of the children (19%) were considered to have demonstrated offence-type behaviour in the 12 months preceding entry into residential care (T1). There was no significant change in the number of children demonstrating offence-type behaviours within 12-24 months of entering residential care (T2=23%, T3=21%; $p>0.05$). Looking specifically at those with offence-type behaviours, the most reported behaviours were assaults (79%), vandalism and destruction of property (54%), culpable and reckless behaviour (49%), threatening and abusive behaviour (22%), and breach of the peace[2] (17%); please note this data is not shown in the tables.

At T1 the majority (84%) of children in our sample were perceived by their caregivers as placing themselves at risk within the community. This figure had reduced to 57% within 12 months of entering residential care (T2) and 50% within 24 months of entering residential care (T3). Most of the change in perceived levels of risk occurred between T1 and T2 ($p<0.001$), with no further significant change ($p>0.05$) occurring between T2 and T3. There were no changes in children's own awareness of risk, with less than 2% of the children in

[2] In Scots law the common public order offence 'Breach of the Peace' refers to 'conduct severe enough to cause alarm to ordinary people and threaten serious disturbance to the community'. The offence may also be prosecuted as 'threatening or abusive behaviour' under Section 38 of The Criminal Justice and Licensing (Scotland) Act 2010: https://www.legislation.gov.uk/asp/2010/13/contents

our sample considered to be aware that they were at risk of harm at all time points.

Behaviours that caregivers found challenging to manage

Figure 7 provides an overview of behaviours that were frequently cited within statutory documents as being challenging to manage by caregivers, and as contributing to the breakdown of placements prior to entry into residential care. Looking first at toileting behaviours, our results indicate that there were significant reductions in reported rates of both night and day wetting in the 24 months after entry into residential care (night wetting: T1=17% vs. T3=10%, $p<0.05$; day wetting: T1=8% vs. T3=3%, $p<0.05$). The reduction in night wetting was mainly driven by a reduction in these behaviours between T2 and T3. Significant reductions in other toileting concerns such as soiling and smearing were also observed over time (T1=31% vs. T3=13%, $p<0.05$).

Moving on to look at how children interacted with others, we found that entry into residential care was associated with a reduction in the number of children who were described by their caregivers as trying to exert control over situations or the people around them (controlling situations: T1=42% vs. T3=32%, $p<0.001$; controlling people: T1=59% vs. T3=46%, $p<0.001$). There was no significant change in the proportion of children considered to be controlling of food or hygiene over time (food: T1=24% vs. T3=18%, $p>0.05$; hygiene: T1=13% vs. T3=13%, $p>0.05$). There was a significant decrease in the number of children who had demonstrated sexualised behaviours that carers considered to be age and developmentally inappropriate between T1 and T3 (T1=44% vs. T3=20%, $p<0.01$). These behaviours included young people: exposing their genitals; simulating sexual acts; using sexualised language; inserting objects into their genitals; excessive touching of, or causing harm to, their genitals; viewing pornography; inappropriately touching children and adults; lacking awareness of privacy and boundaries; and showing disinhibited behaviour towards adults.

Indicators of conduct disorder

Figure 8 specifically looks at those behaviours that are listed within the diagnostic criteria for conduct disorder (American Psychiatric Association, 2013). Our analysis indicates that 70% of the children in our sample had three or more indicators of conduct disorder recorded within statutory documentation at T1. By T3 this figure had significantly reduced to 36% ($p<0.001$). Most of this reduction occurred within the first 12 months of being in residential care ($p<0.001$). Looking specifically at the individual behaviours listed within the diagnostic criteria for conduct disorder, our analysis indicates that there was a significant reduction in the number of children who were recorded as having absconded from placement on two or more occasions (T1=47% vs. T3=27%, $p<0.01$) and having displayed offence-type behaviours such as the destruction of property, through arson (T1=13% vs. T3=4%, $p<0.001$) or other means (T1=55% vs. T3=35%, $p<0.001$).

Moving on to look at children's interactions with others, our results indicate that residential care was associated with significant reductions in the proportion of children whose behaviour was described as cruel, physically aggressive, and violent. For instance, mentions of cruelty towards people and animals both significantly fell over time (animals: T1=12%, T3=3%, $p<0.001$; people: T1=53%, T3=26%, $p<0.001$). Descriptions of children being physically aggressive and violent towards animals and people also significantly fell (animals: T1=21%, T3=4%, $p<0.001$; people: T1=88%, T3=70%, $p<0.001$). Finally, our results indicate that reports of children using weapons, including knives, to threaten or harm others significantly reduced after entry into residential care (T1=41% vs. T3=21%, $p<0.001$), with the largest reduction seen in the first 12 months.

Indicators of mental wellbeing

Figure 9 provides an overview of the mental wellbeing of children in our sample over time. Entry into residential care was associated with a significant reduction in the number of children who were self-harming (T1=34% vs. T3=16%, $p<0.001$) and frequently expressing that they wanted to die (T1=20% vs.

T3=10%, p<0.01). Placement into residential care was also associated with a reduction in the proportion of children who were considered to have anger management issues (T1=79% vs. T3=64%), low self-esteem (T1=45% vs. T3=39%), and who were described as frequently experiencing low mood or feeling sad (T1=36% vs. T3=15%, p<0.001) within statutory documents. In all cases the reductions observed were greatest in the first 12 months of being in residential care, i.e. between T1 and T2. A significant reduction was also observed for the proportion of children considered to be unusually anxious or experiencing social anxiety (T1=71% vs. T3=57%, p<0.001); however, this change took longer to occur, with the falls in anxiety largely occurring between 12 and 24 months in placement.

Finally our results show that there were significant reductions in the proportion of children who were described as being fatigued (T1=14% vs. T3=4%, p<0.001), having poor concentration (T1=23% vs. T3=10%, p<0.01), having experienced changes in appetite or weight (T1=10% vs. T3=6%, p<0.01), and experiencing sleep difficulties (T1=39% vs. T3=17%, p<0.001).

Discussion

Our results indicate that children who become subject to compulsory supervision orders with residential care conditions prior to their twelfth birthday have complex trauma histories, have experienced inconsistent and unsafe care due to the demands that parents' additional health and social care needs place upon their ability to parent, and have often experienced repeat episodes of loss due to bereavement, family breakdown and multiple changes of caregiver. Although these findings provide insight into the characteristics of younger children in residential care, they are not novel, with numerous studies demonstrating that entry into residential care during adolescence is preceded by: childhood maltreatment (Cox et al., 2017; Garcia-Quiroga et al., 2017; Hickle & Roe-Sepowitz, 2018; Wendt et al., 2019); factors such as mental ill-health, drug and alcohol dependency, incarceration and interpersonal violence adversely affecting parenting skills (Jaramillo et al., 2016; Jozefiak et al., 2017), and family-based placements repeatedly being unable to meet the emotional needs of the child (Grey et al., 2018; Milligan et al., 2006; Wright et al., 2019).

Many of the children in our sample had complex emotional and behavioural needs that could not be fully supported or contained within foster care. These needs included: demonstrating age-inappropriate sexualised behaviour; having dysregulated sleep; demonstrating risk- and offence-type behaviours within the community; being overly controlling of situations and other people; and requiring additional levels of care and support due to disability, delays in toileting, attachment difficulties, and histories of self-harm and suicidal thoughts. These findings build upon existing knowledge about the increased levels of behavioural difficulties that are present within the care histories of younger children, particularly boys, in residential care (HIQA, 2017; Milligan et al., 2006), as well as existing knowledge demonstrating that adolescents in the care system are more likely than their peers to experience mental health difficulties (Ford et al., 2007), display harmful and age-inappropriate sexual behaviours (McKibben, 2017), demonstrate offence-type behaviours, have insecure and disorganised attachment styles (Bifulco et al., 2017), and show dysregulated and maladaptive behaviours, such as smearing, hoarding, and being overly controlling of situations and people (Dejong, 2014).

Emotional and behavioural difficulties adversely affect the quality of the interpersonal relationships that children in residential care form (Gwynn et al., 1988). Children in residential care frequently demonstrate social skills deficits, overaggressive and antisocial behaviours, fears of groups, distortions in reality-assessment, hyperactivity, impulsiveness, and episodes of peer-to-peer violence (Barter, 2003, 2008; Cicchetti and Toth, 2005; Greger et al., 2016; Monks et al., 2009; Tricket et al., 2011). This was something that we observed within our data, with many of the children in our sample demonstrating behaviours considered to be aggressive, controlling, bullying or manipulative towards people, most often female caregivers or other children in placement, and animals. From a psychological point of view, it is important to note that these behaviours are likely to be secondary manifestations of the maltreatment and lack of consistent care and protection that they had received (Porter et al., 2020). They may also represent maladaptive attempts by children to seek proximity to, and acceptance from, others using the only forms of affection (i.e. abuse and neglect) they have known (Crittenden, 1992; Schore, 2001).

The Independent Care Review[3] (2020, p. 85) emphasises that there is a need for caregivers to be curious about the reasons behind challenging behaviour, as 'all behaviour is communication'. Foster carers, who do not benefit in the same way as residential care staff do from being able to build a team around the child, may find it difficult to be curious about behavioural underpinnings when faced with a child in crisis and escalating levels of distress. This may be particularly true if the dysregulated behaviour being displayed includes sexualised behaviour, and/or aggression and violence towards the caregiver or other children in placement. Identifying how best to support caregivers to identify and address behaviours that they find challenging, while also acknowledging and addressing any compassion fatigue and secondary trauma that caregivers experience as a result (Browning, 2020), may be an important step towards promoting placement stability for one of the most vulnerable groups of children in the care system. Promising examples of work in this area include the evaluation of the Reflective Fostering Programme, a trauma-informed group-based psycho-educational programme that is designed to help foster carers reflect upon how they experience, respond to, and manage challenging behaviour (Midgley et al., 2021a; Midgley et al., 2021b). Helping caregivers, and the professionals who support them, to better understand how children use behaviour to communicate their unhappiness or distress would also address some of the more pathologising language that we found when examining case files.

Foster care placement instability, including the experience of multiple placement moves and episodic care, are known to significantly increase the probability of children requiring mental health service intervention (Meltzer et al., 2003; Rubin et al., 2004). In contrast, our results indicate that being cared for in residential care was associated with a reduction in the number of behavioural difficulties

[3] In October 2016 The First Minister of Scotland made a commitment to identifying 'how Scotland could love its most vulnerable children and give them the childhood they deserve'. To facilitate this the Independent Care Review, which was chaired by Fiona Duncan, compiled the views of 5,500 individuals with experience of living and working in and around the 'care system' to properly understand what needs to change in order to achieve this. The findings of the Independent Care Review and its implications for both care- and hearings-experienced children and families can be found here: **https://thepromise.scot/independent-care-review.** At the heart of these recommendations sits 'The Promise' which narrates a vision for how Scotland's statutory agencies, local authorities and third sector organisations will work together to effect change for children and families.

displayed by children, and an improvement in their mental wellbeing. One possible explanation for these improvements is that three-quarters of the children in our sample had experienced either no placement moves, or just a single placement move, within the two-year follow up period. As limiting the number of moves children in care experience is considered to offer one of the best means of improving outcomes for this group (Independent Care Review, 2020, p. 68), being able to assess whether the number of placements moves children experience after entering residential care is associated with differential outcomes is a logical next step of this research. Unfortunately, this may not be possible with our existing sample due to the small numbers of children who have experienced multiple placement moves.

In addition to understanding the impact of placement stability upon the socioemotional and mental wellbeing of the children in our sample, there is a need to understand the wider mechanisms that may underscore these changes. This research should explore: whether there are specific characteristics or groups of children whose needs are likely to be better met by being cared for in residential care settings; how differences in the types of residential care available to children and variations in practices and resources across settings are associated with variations in outcome; and the extent to which the matching of children's needs against what residential settings were able to provide affected both the outcomes observed for children and the stability they experienced within placement.

Finally, given that our results show that residential care can be a stabilising environment for children who are demonstrating dysregulated and trauma-driven behaviours, we believe that there is a need to explore in more depth what role residential care should play in providing care to younger children and when it could best be utilised. One question that we would like to see explored is whether residential care provision could be better utilised to provide children and caregivers with a period of respite where assessments of need could be conducted for both children and their caregivers, and intervention pathways developed to practically address those needs in a setting where the child could remain in placement on a longer-term basis if required. Addressing this question is particularly important given that our findings reaffirm that, beyond regular

supervision and the offer of respite services, foster carers were provided with no practical support or intervention when there were indications that placements were beginning to break down (Murray et al., 2011; Triseliotis et al., 1998). Conducting this research is particularly important given the emphasis that *The Promise* (Independent Care Review, 2020, p. 51) placed upon ensuring that children within care receive intensive support to maintain their place within their home in whatever family setting they are living in.

Strengths and limitations

The use of administrative data both limits and strengthens the findings of this study. The main limitations of the study focus mainly upon reporting bias. The data held by SCRA were not collected for research purposes and therefore are not standardised. Lack of standardised data increases the risk of information not being captured if it was not considered to be salient to the decision-making process by the individual completing the documentation. It is therefore possible that our study may underestimate both the level of risk and adversity experienced by children in our sample and the effect that residential care provision has upon behaviour and mental health outcomes over time. This risk has previously been identified in work exploring the reporting and recording of information about disability in case file data (Nixon et al., 2021).

Our findings are also limited by the exclusion of children who are in residential care but have never been subject to compulsory measures of supervision. This group, which is likely to include children with long-term physical and complex disabilities, may not share the familial and trauma histories of the children in our sample. It is also possible that the impact of residential care upon their health and wellbeing is consequently different, as well as the impact this may have upon practice. The sample size of this study also limits our ability to explore differential impacts of residential care (i.e., by gender or setting) upon the health and socioemotional wellbeing of children. Addressing these gaps through larger scale administrative linkages or via the use of qualitative methods is an obvious extension of this work as it is likely that differences in the support and education packages that can be provided to children, particularly if these include

access to bespoke therapeutic services or the ability to build a team around the child, will affect the outcomes achieved.

While there are limitations to using administrative data the strengths are as follows. Our data covers every child who was subject to compulsory measures during the specified time-period, thereby reducing the risk of bias usually associated with sampling and non-participation. The risk of attrition bias, which is frequently seen in surveys and is disproportionately experienced by socially excluded groups, is also reduced due to the need for ongoing case reviews for as long as a child is considered to require statutory measures. Finally, the use of statutory documents reduces the risk of recall and reporting bias that can be observed in self-reported data, particularly when the data that participants are asked to provide focuses upon sensitive or distressing issues that individuals may be reluctant to disclose (Connelly et al., 2016).

Conclusion

Residential care can provide a period of stability for younger children who have experienced complex trauma, inconsistent and unsafe parenting, and repeat episodes of loss due to family breakdown, bereavement, and placement instability. There is a need for future research to understand the mechanisms that underscore the improvements in socioemotional wellbeing and mental health that were observed for our sample after 12-24 months in residential care. This research should be supplemented by work to understand: 1) how to better support foster carers to understand and manage the dysregulated behaviours that they are encountering when caring for children; 2) how residential care settings might be better used to help sustain foster care placements at risk of breaking down.

Table 1: Characteristics of younger children subject to CSOs with residential care conditions

		%	n
Sex	Male	80.00	(108/135)
	Female	19.26	(26/135)
	Unknown	0.74	(1/135)
Ethnicity	White	95.56	(129/135)
	Mixed	1.48	(2/135)
	Unknown	2.96	(4/135)
Parents known to be experiencing financial difficulties	Yes	54.07	(73/135)
	No/Unknown	45.93	(62/135)
Parents have separated	Yes	29.63	(40/135)
	No/Unknown	70.37	(95/135)
Disability recorded in casefiles	Yes	49.63	(67/135)
	No	28.89	(39/135)
	Not stated	21.48	(29/135)
Has known or suspected disability	Yes	70.37	(95/135)
	No/unknown	29.63	(40/135)
Identified or suspected disability	Learning and communication difficulties	67.99	(73/95)
	Social, emotional & behavioural difficulties	16.76	(18/95)
	Neurodiversity	24.22	(26/95)
	Physical or motor impairment	9.31	(10/95)
	Audiovisual impairment	6.52	(7/95)
	Chronic physical health problems	46.57	(50/95)
No. of identified or suspected disabilities	0	29.63	(40/135)
	1	28.15	(38/135)
	2	27.41	(37/135)
	3	11.11	(15/135)
	4	3.70	(5/135)
	5	0.00	(0/135)

*Conditions included under this category include autistic spectrum disorders, sensory processing disorders and ADHD.

Figure 1: Familial characteristics of children under 12 subject to CSOs with residential care conditions

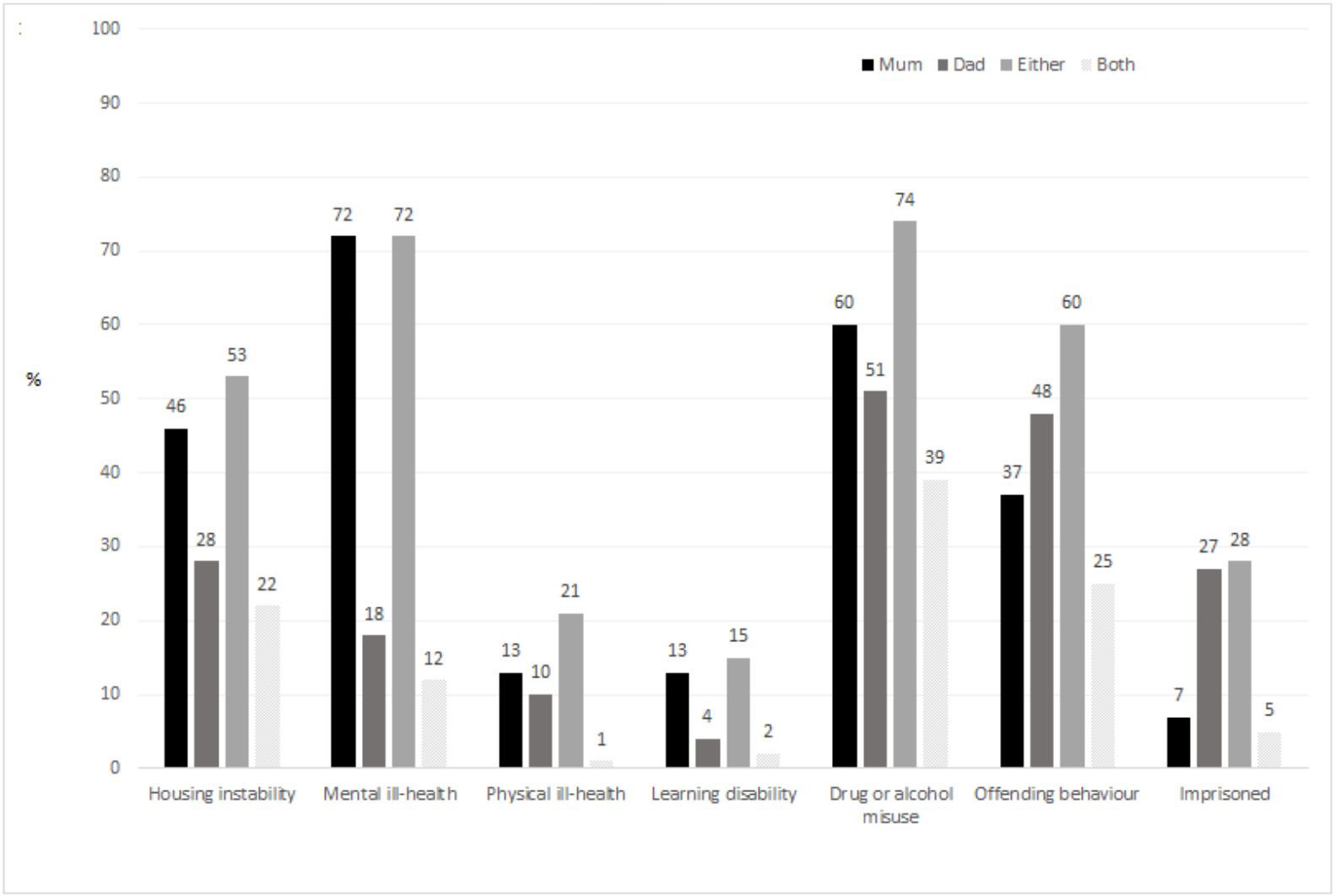


Figure 2: Trauma histories of children under 12 subject to CSOs with residential care conditions

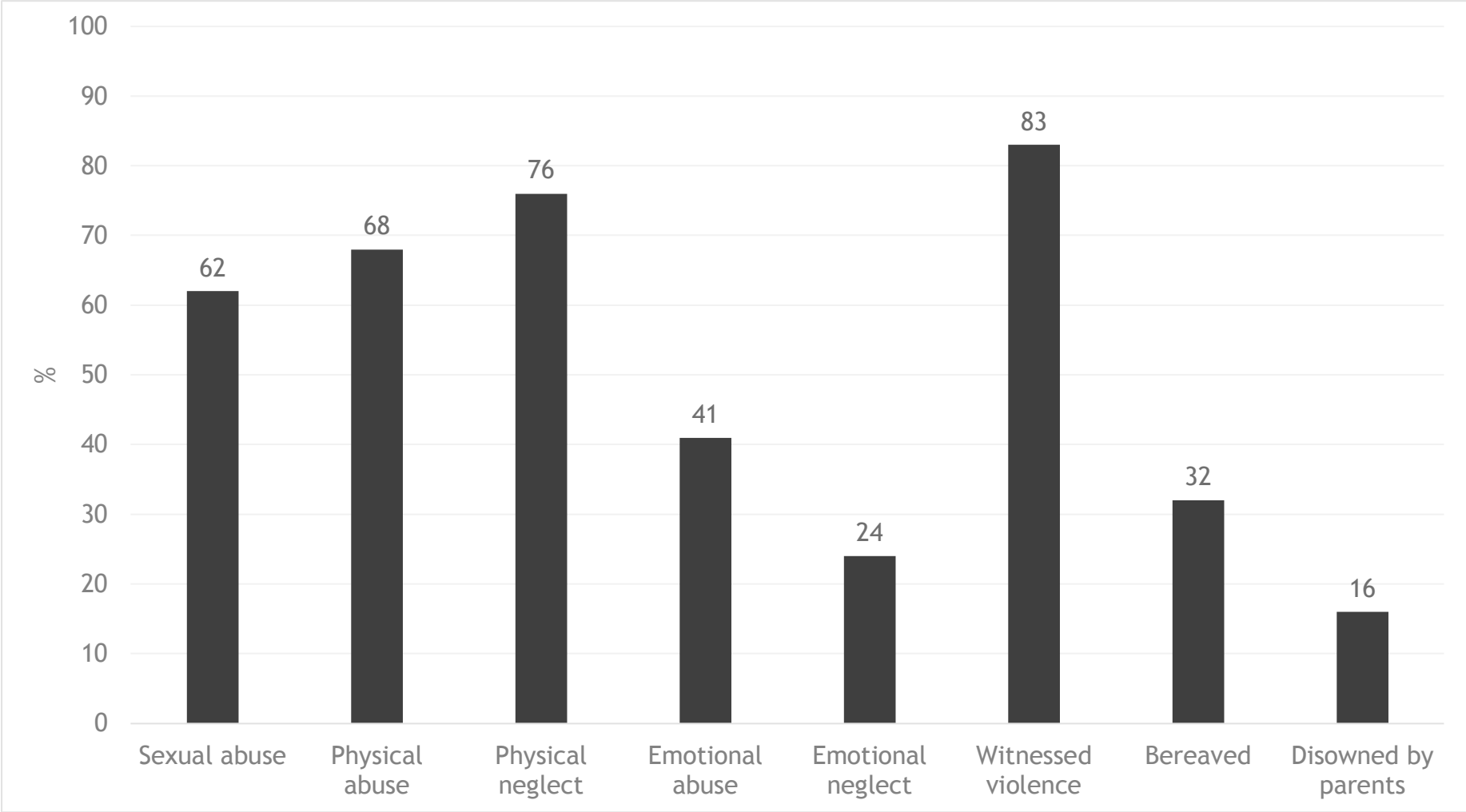
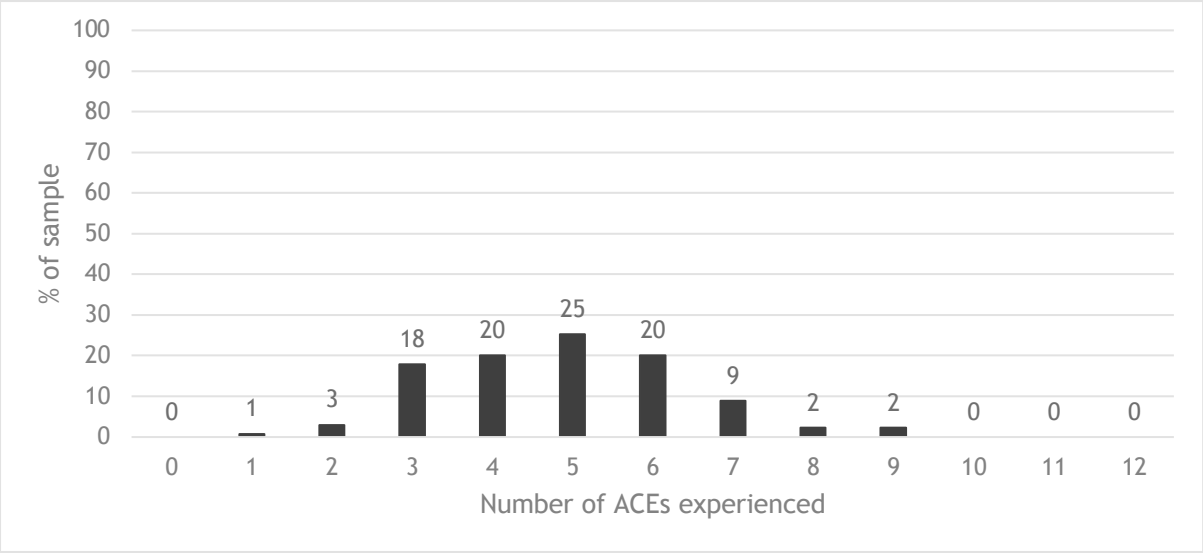
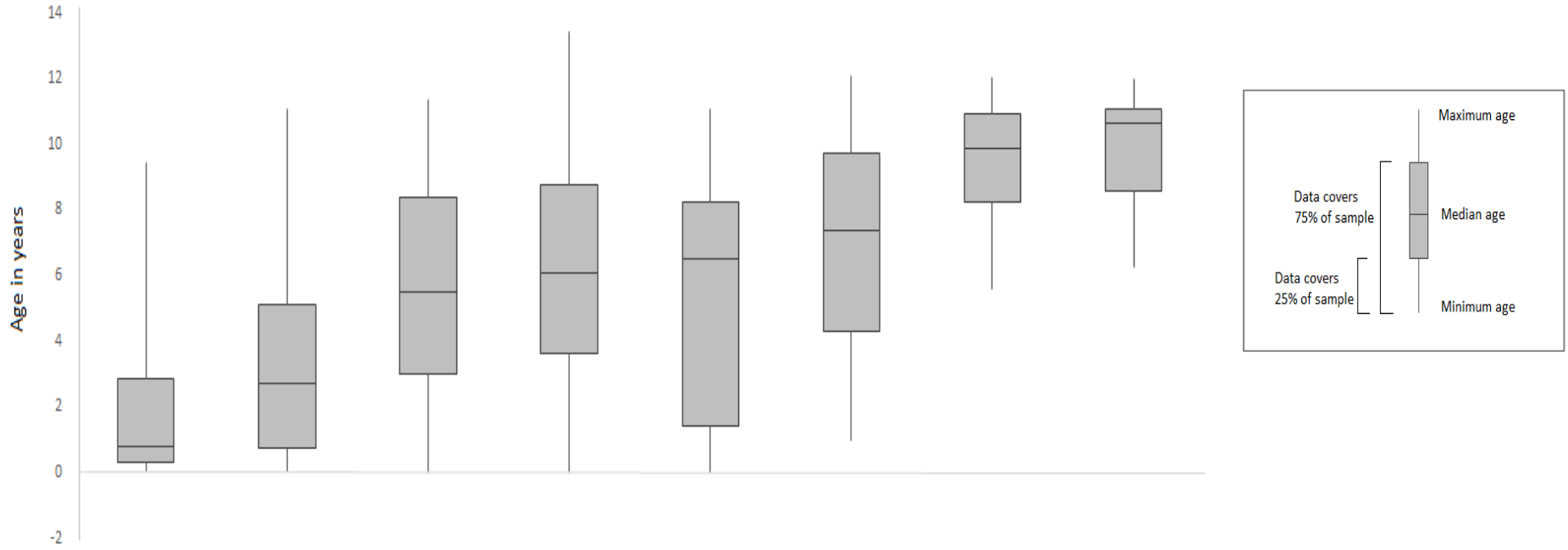


Figure 3: Distribution of adverse childhood events (ACEs)[1] experienced by children under 12 that have CSOs with residential care conditions



[1] Total ACEs were calculated by summing the number of indicators present from the following list: parental mental ill-health, parental substance misuse, parents separated, parental imprisonment, child experienced significant bereavement, child maltreatment types (sexual abuse, physical abuse, physical neglect, emotional abuse, emotional neglect), child witnessed violence in the home or community, child has been bullied, child has been removed from parental care.

Figure 4: Child protection histories of children under 12 subject to CSOs with residential care conditions[1]



	First known to services	First SCRA referral	First looked after	First CSO	First CPO	First accommodated	First enters residential	First residential CSO
Minimum	-0.30	0.00	0.00	0.02	0.00	1.00	5.60	6.28
25th percentile	0.00	0.73	3.02	3.64	1.43	4.29	8.24	8.57
Median	0.50	2.73	5.49	6.07	6.49	7.37	9.85	10.63
75th percentile	2.56	5.11	8.40	8.77	8.22	9.72	10.93	11.07
Maximum	9.16	11.08	11.38	13.41	11.08	11.85	11.87	11.97

[1] Data on the use of statutory measures that are used to ensure the care of children in residential settings is presented for CSOs alone and the combined use of CSOs, Interim CSOs/Interim Variations of CSOs, child protection orders, child assessment orders and place of safety warrants.

Figure 5: Pre-residential care placement histories of children under 12 subject to CSOs with residential care conditions

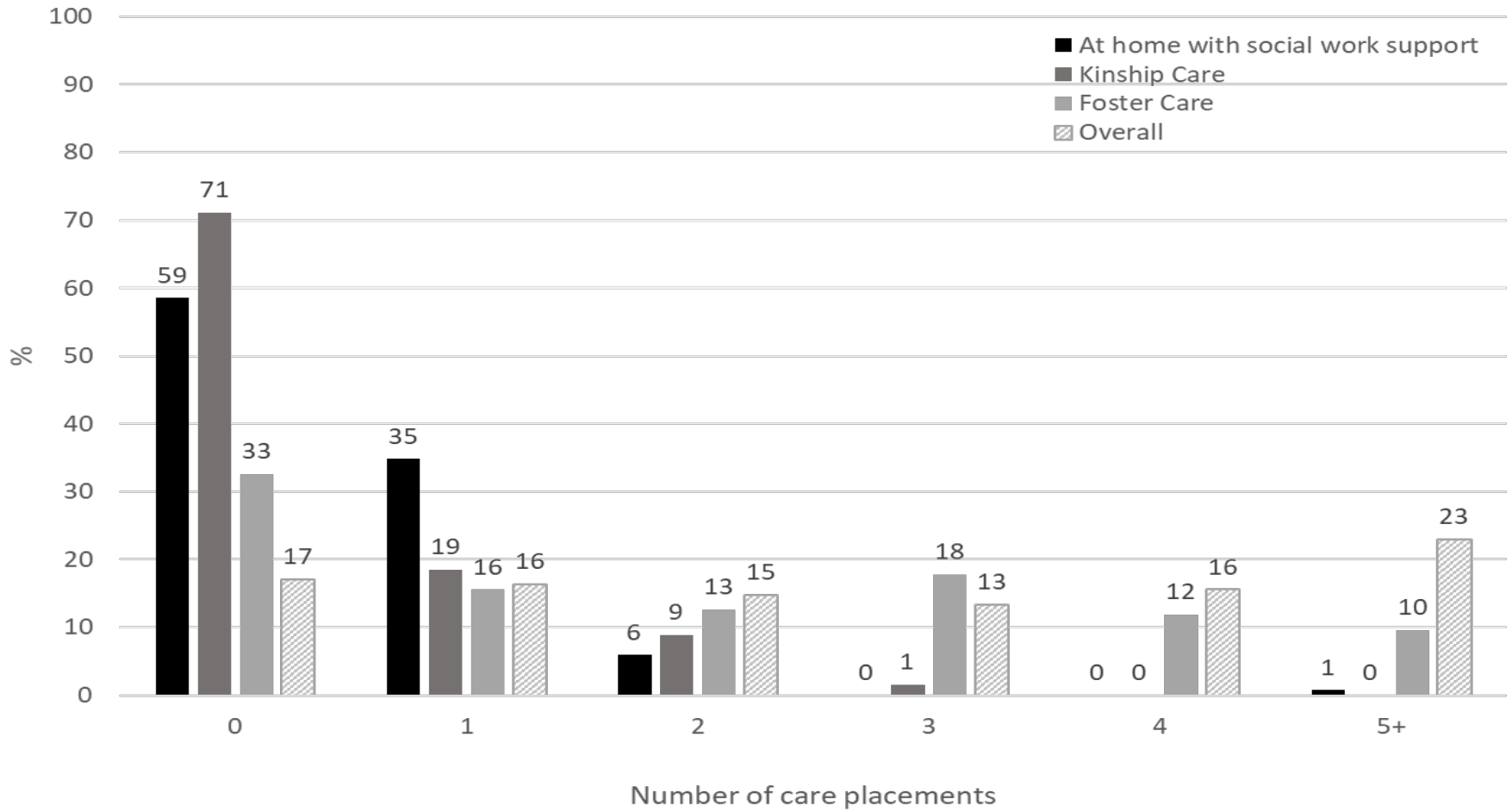
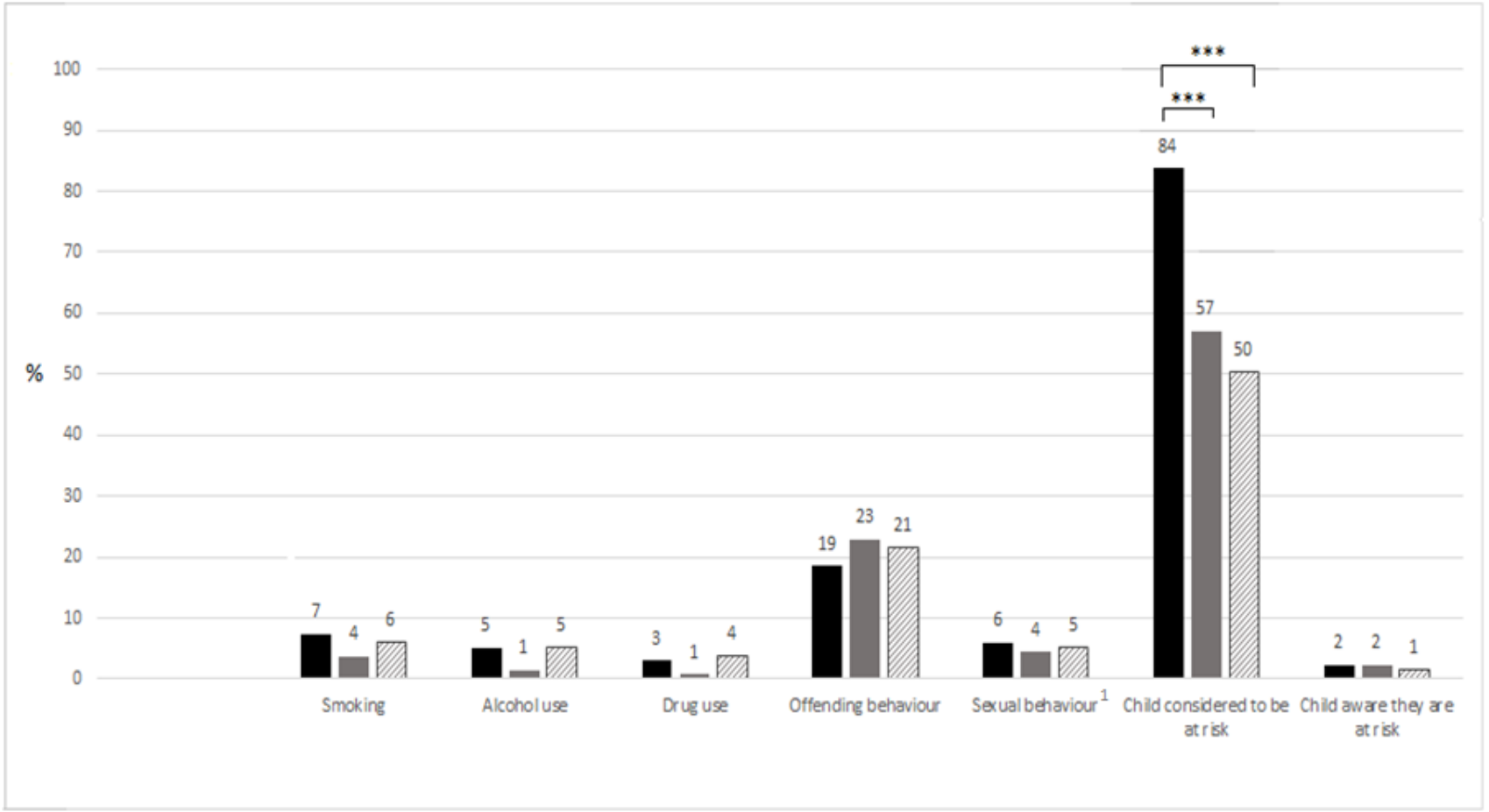


Table 2: Care trajectories in the two years after being looked after in residential care for the first time

		n	%
First residential care placement type	children's unit	52.59	(71/135)
	residential school	31.11	(42/135)
	other residential establishment[1]	16.30	(23/135)
Legal status first residential care placement	CPO	3.70	(5/135)
	CSO	46.67	(63/135)
	ICSO/IVCSO/Place of safety warrant	31.11	(42/135)
	Section 25	15.56	(21/135)
	Record not available	2.96	(4/135)
Number of placement moves within two years of entering residential care	0	46.67	(63/135)
	1	27.41	(37/135)
	2	8.89	(12/135)
	3	8.15	(11/135)
	4	2.96	(4/135)
	5-9	5.92	(8/135)
Child returned to living in a family placement within two years of entering residential care	child living in a family setting after first attempt	11.11	(15/135)
	child living in a family setting after 1+ attempts	7.41	(10/135)
	attempted but returned to residential care	10.37	(14/135)
	not attempted	71.11	(96/135)
Placement type two years after entering residential care	at home with parents	7.41	(10/135)
	in a kinship placement	3.70	(5/135)
	in foster care	7.41	(10/135)
	in a children's unit	31.11	(42/135)
	in a residential school	37.78	(51/135)
	other residential establishment	12.60	(17/135)

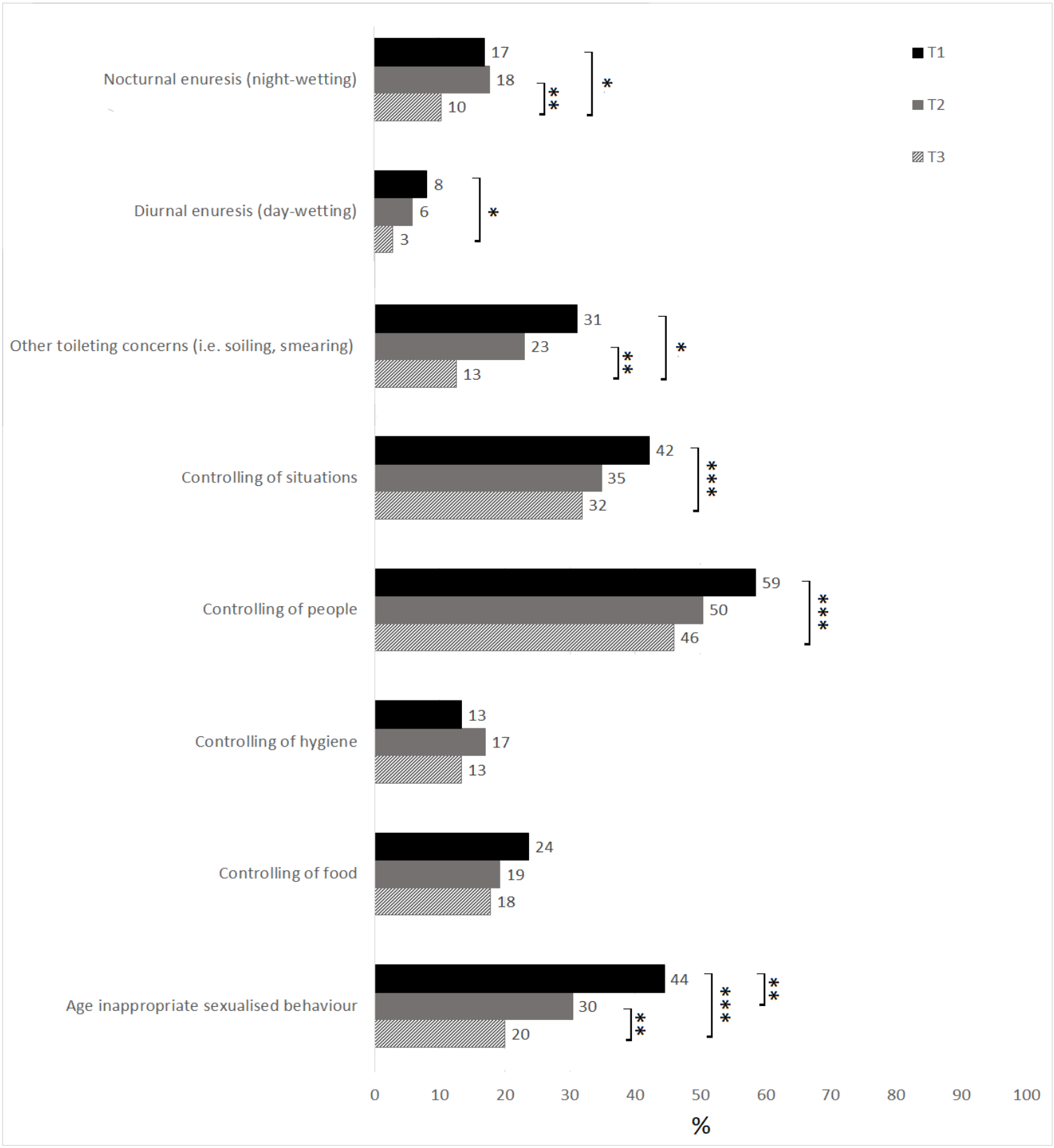
1 Other residential establishments include crisis care, short-term assessment centres, specialised therapeutic placements for traumatised children, small-group (2-4 children) living environments for children with complex health and social care needs, and singleton placements with a residential care team. Close support units and secure care are also included in this category to protect the anonymity of the small number of children requiring this level of care.

Figure 6: Risk-taking and offence-type behaviours among children under 12 subject to residential care CSOs



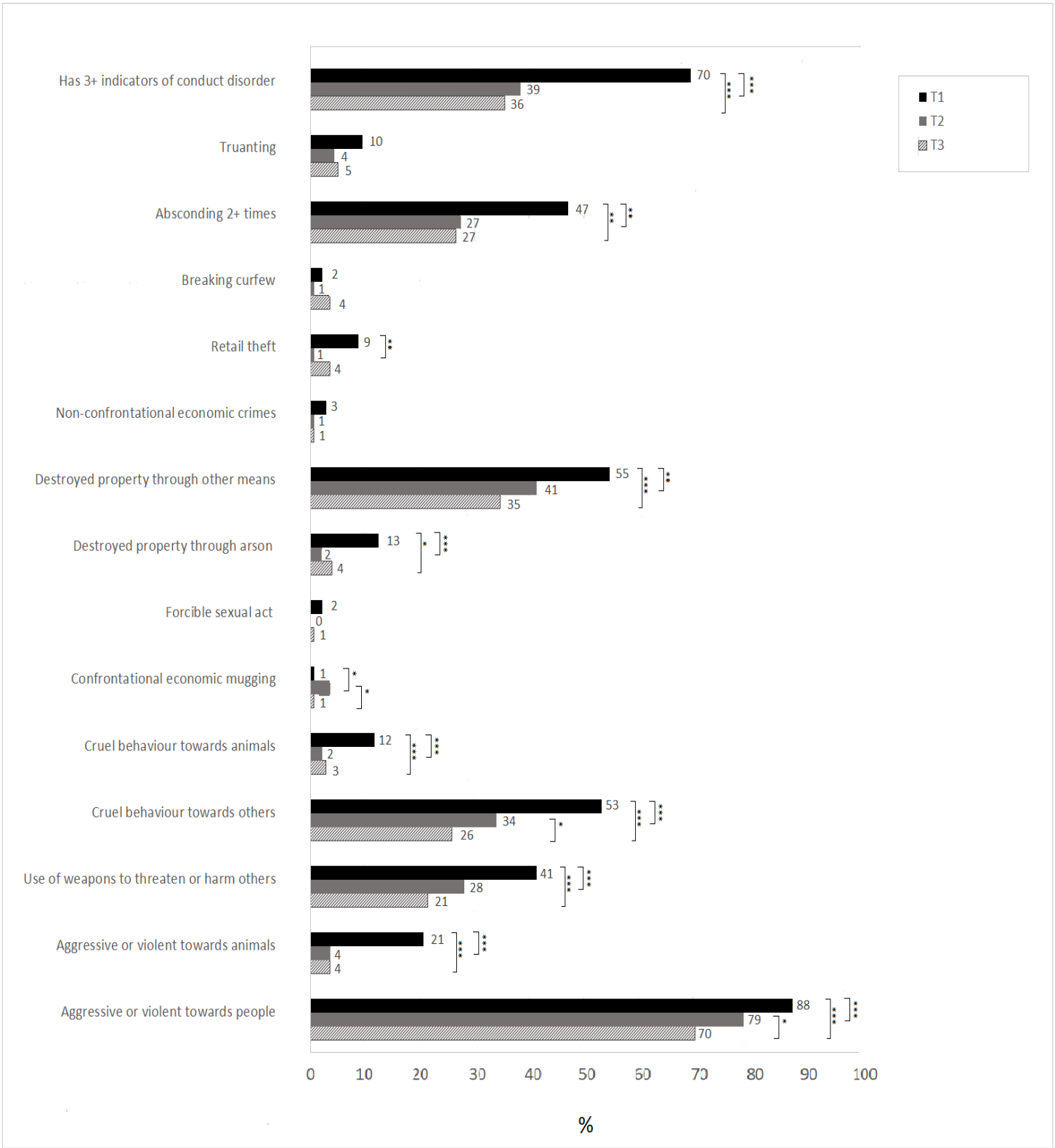
[1] Sexual behaviour recorded if case files described non-concerning, age appropriate and consensual sexual behaviour, i.e. kissing, mutual touching/exploration, bodily self-exploration. Sexual behaviour excludes all references to penetrative sex for children under the age of 13, any sexual behaviour that occurred with an age gap between participants >= 3 years, behaviours that were considered alarming, non-consensual or reminiscent of past sexual trauma (i.e. re-enactment of sexual acts) or where the child was considered to be exchanging/receiving gifts for sex or was engaged in sexual behaviour with somebody perceived to be in a position of power; Significance levels indicated by: *** p<0.001; ** p<0.01; * p<0.5

Figure 7: Prevalence of behaviours identified as challenging by foster carers among children under 12 subject to residential care CSOs



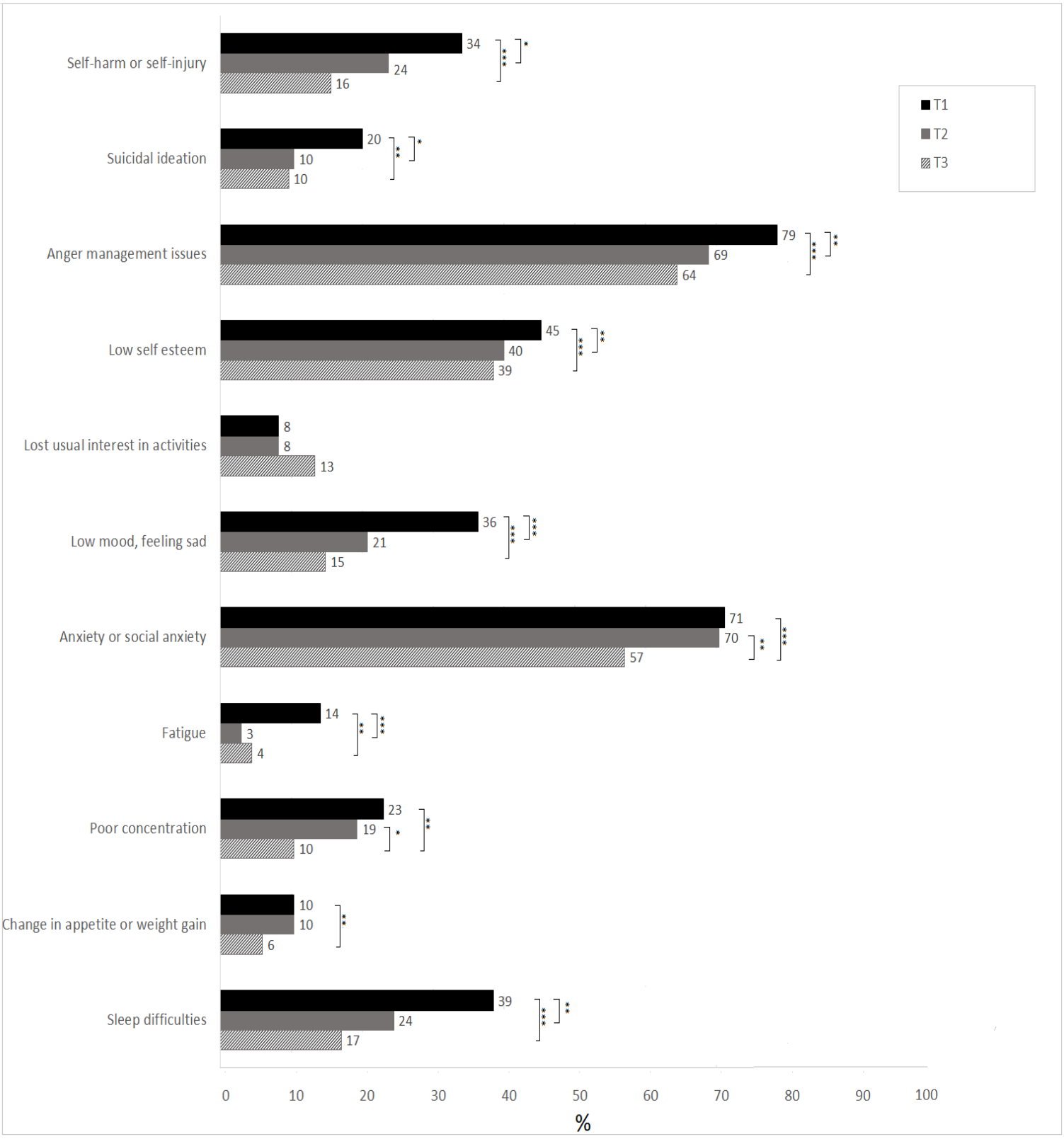
Significance levels indicated by: *** p<0.001, ** p<0.01, * p<0.05

Figure 8: Indicators of conduct disorder [1] among children under the age of 12 subject to residential care CSOs



[1] The behaviours presented are those included within the DSM-V criteria outlined for assessing conduct disorder. The presence of these behaviours in this sample do not indicate that the children have, or would even be diagnosed with, conduct disorder. They are presented more as an illustration of the complex behaviours presented by this group. Significance levels indicated by: *** p<0.001, ** p<0.01, * p<0.05

Figure 9: Mental health indicators among children under the age of 12 subject to residential care CSOs



Significance levels indicated by: *** p<0.001, ** p<0.01, * p<0.0

How is the provision of residential care to children under the age of 12 associated with changes in children's behaviour and mental wellbeing?

References

Australian Government. (2013). *Royal commission into institutional responses to child sexual abuse.* Australian Government. https://www.childabuseroyalcommission.gov.au/

Barter, C. (2003). Young people in residential care talk about peer violence. *Scottish Journal of Residential Child Care*, *2*(2), 39-50. https://www.celcis.org/application/files/9016/2324/8217/Peer_Violence.pdf

Barter, C. (2008). Prioritizing young people's concerns in residential care: Responding to peer violence. In A. Kendrick (Ed.), *Residential child care: Prospects and challenges* (pp. 137-151). London: Jessica Kingsley.

Berridge,D., Biehal, N., & Henry, L. (2012). *Living in children's residential homes.* Department for Education. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/193634/DFE-RB201.pdf

Bifulco, A., Jacobs, C., Ilan-Clarke, Y., Spence, R., & Oskis, A. (2016). Adolescent attachment style in residential care: The attachment style interview and vulnerable attachment style questionnaire. *British Journal of Social Work. 47,* 1870-1883. https://doi.org/10.1093/bjsw/bcw117

Boel-Studt, S., Schelbe, L., Hansen, M. D., & Tobia, L. (2018). Increasing youth engagement in residential group care: A mixed methods pilot study of a youth-guided incentive program. *Child & Youth Care Forum, 47*(6), 863–860. https://doi.org/10.1007/s10566-018-9465-y

Bogdanova, E. (2017). Russian SOS Children's Villages and deinstitutionalisation reform: Balancing between institutional and family care. *The Journal of Social Policy Studies, 15*(3), 395–406. https://doi.org/10.17323/727-0634-2017-15-3-395-406

Brown, T., Winter, K., & Carr, N. (2018). Residential child care workers: Relationship based practice in a culture of fear. *Child & Family Social Work, 23*(4), 657–665. https://doi.org/10.1111/cfs.12461

Browning, A. S. (2020). The impact of complex and unwanted feelings evoked in foster carers by traumatised children in long-term placements. *Adoption & Fostering, 44*(2), 185-196. https://doi.org/10.1177/0308575920920388

Cahill, O., Holt, S., & Kirwan, G. (2016). Keyworking in residential child care: Lessons from research. *Children and Youth Services Review, 65*(10) 216-223. https://doi.org/10.1016/j.childyouth.2016.04.014

Calheiros, M. M., Garrido, M. V., Lopes, D., & Patrício, J. N. (2015). Social images of residential care: How children, youth and residential care institutions

are portrayed? *Children and Youth Services Review, 55,* 159-169. https://doi.org/10.1016/j.childyouth.2015.06.004

Chege, N. (2018). Children's personal data: Discursive legitimation strategies of private residential care institutions on the Kenyan coast. *Social Sciences, 7*(7), 114. https://doi.org/10.3390/socsci7070114

Children's Hearings Scotland. (2021). *Practice and procedure manual v3.2.* Children's Hearings Scotland. https://www.chscotland.gov.uk/media/asnfzbt2/master-2020-practice-and-procedure-manual-v3-2.pdf

Cicchetti, D., & Toth, S. (2005). Child maltreatment. *Annual Review of Clinical Psychology, 1*, 409-438. https://doi.org/10.1146/annurev.clinpsy.1.102803.144029

Connelly, G., & Milligan, I. (2012). *Residential childcare: Between home and family.* Edinburgh: Dunedin Academic Press.

Connelly, R., Playford, C. J., Gayle, V., & Dibben, C. (2016). The role of administrative data in the big data revolution in social science research. *Social Science Research, 59,* 1–12. https://doi.org/10.1016/j.ssresearch.2016.04.015

Cox, R., Skouteris, H., Fuller-Tyszkiewicz, M., Watson, B., Jones, A. D., Omerogullari, S., Stanton, K., Bromfield, L., & Hardy, L. L. (2017). The healthy eating, active living (HEAL) study: outcomes, lessons learnt and future recommendations. *Child Abuse Review, 26*(3), 196– 214. https://doi.org/10.1002/car.2442

Crittenden, P. M. (1992). Quality of attachment in the preschool years. *Development and Psychopathology, 4*(2), 209-241. doi:10.1017/S0954579400000110

DeJong, M. (2010). Some reflections on the use of psychiatric diagnosis in the looked after or 'in care' child population. *Clinical Child Psychology and Psychiatry, 15*(4), 589-599. https://doi.org/10.1177/1359104510377705

Department of Children and Youth Affairs. (2009). *The report of the commission to inquire into child abuse (The Ryan Report)*. https://www.gov.ie/en/publication/3c76d0-the-report-of-the-commission-to-inquire-into-child-abuse-the-ryan-re/

Dixon, J. (2008). Young people leaving residential care: Experiences and outcomes. In A. Kendrick (Ed.), *Residential child care: Prospects and challenges* (pp. 76-92). London: Jessica Kingsley.

Duppong Hurley, K., Lambert, M. C., Gross, T. J., Thompson, R. W., & Farmer, E. M. (2017). The Role of therapeutic alliance and fidelity in predicting youth outcomes during therapeutic residential care. *Journal of Emotional and*

Behavioral Disorders, 25(1), 37-45. https://doi.org/10.1177/1063426616686756

Eenshuistra, A., Harder, A. T., & Knorth, E. J. (2019). One size does not fit all: A systematic review of training outcomes on residential youth care professionals' skills. *Children and Youth Services Review, 103,* 135-147. https://doi.org/10.1016/j.childyouth.2019.05.010

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine, 14*(4), 245-258. https://doi.org/10.1016/S0749-3797(98)00017-8

Forrester, D., Goodman, K., Cocker, C., Binnie, C., & Jensch, G. (2009). What is the impact of public care on children's welfare? A review of research findings from England and Wales and their policy implications. *Journal of Social Policy, 38*(3), 439–456. https://doi.org/10.1017/S0047279409003110

Gander, T., Boonmann, C., Fegert, J. M., Koelch, M., Schmeck, K., Di Gallo, A., Dölitzsch, C., & Schmid, M. (2019). Predictive factors for changes in quality of life among children and adolescents in youth welfare institutions. *Social Psychiatry and Psychiatric Epidemiology, 54*(12), 1575–1586. https://doi.org/10.1007/s00127-019-01724-8

Gayapersad, A., Ombok, C., Kamanda, A., Tarus, C., Ayuku, D., & Braitstein, P. (2019). The production and reproduction of kinship in charitable children's institutions in Uasin Gishu County, Kenya. *Child & Youth Care Forum, 48*(6), 797–828. https://doi.org/10.1007/s10566-019-09506-8

Greger, H. K., Myhre, A. K., Lydersen, S., & Jozefiak, T. (2016). Child maltreatment and quality of life: A study of adolescents in residential care. *Health and Quality of Life Outcomes, 14*(1), 1-17. https://doi.org/10.1186/s12955-016-0479-6

Grey, I., Mesbur, M., Lydon, H., Healy, O., & Thomas, J. (2018). An evaluation of positive behavioural support for children with challenging behaviour in community settings. *Journal of Intellectual Disabilities, 22*(4), 394–411. https://doi.org/10.1177/1744629517716545

Gwynn, C., Meyer, R., & Schaefer, C. E. (1988). The influence of the peer culture in residential treatment. In C. E. Schaefer, & A. J. Swanson (Eds.), *Children in residential care: Critical issues in treatment* (pp. 104-133). London: Van Nostrand Reinhold.

Health Information and Quality Assurance: Social Services Inspectorate. (2017). *The placement of children aged 12 and under in residential care in Ireland.* HIQA SSI. https://www.hiqa.ie/sites/default/files/2017-02/Report-12-and-Under-Inspection.pdf

Hickle, K., & Roe-Sepowitz, D. (2018). Adversity and intervention needs among girls in residential care with experiences of commercial sexual exploitation. *Children and Youth Services Review, 93,* 17-23. https://doi.org/10.1016/j.childyouth.2018.06.043

Hill, M. (2009). *Higher aspirations, brighter futures: Matching resources to needs report.* Glasgow: University of Strathclyde. https://pureportal.strath.ac.uk/en/publications/higher-aspirations-brighter-futures-matching-resources-to-needs-r

Independent Care Review (2020). *The Promise.* https://www.carereview.scot/wp-content/uploads/2020/02/The-Promise.pdf

Jaramillo, L. M. E., Orozco, B. M. A., González, Á. M. M., Tobón, C. V., González, M. N., Monsalve, M. T., Lopera, D. L., & Barros, J. A. C. (2016). Los hijos del Estado: Desventajas sociales ante una larga espera para su adopción. *Estudios de Derecho, 73*(161), 155–179. https://dialnet.unirioja.es/descarga/articulo/6766710.pdf

Jedwab, M., Xu, Y., Keyser, D., & Shaw, T. V. (2019). Children and youth in out-of-home care: What can predict an initial change in placement? *Child Abuse & Neglect, 93,* 55-65. https://doi.org/10.1016/j.chiabu.2019.04.009

Jozefiak, T., Kayed, N. S., Ranøyen, I., Greger, H. K., Wallander, J. L., & Wichstrøm, L. (2017). Quality of life among adolescents living in residential youth care: Do domain-specific self-esteem and psychopathology contribute? *Quality of Life Research, 26*(10), 2619–2631. https://doi.org/10.1007/s11136-017-1603-8

Langeland, W., Hoogendoorn, A. W., Mager, D., Smit, J. H., & Draijer, N. (2015). Childhood sexual abuse by representatives of the Roman Catholic Church: A prevalence estimate amongst the Dutch population. *Child Abuse & Neglect, 46*, 67-77. https://doi.org/10.1016/j.chiabu.2015.04.009

Llosada-Gistau, J., Casas, F., & Montserrat, C. (2016). What matters for the subjective well-being of children in care? *Child Indicators Research, 10*(3), 735–760. https://doi.org/10.1007/s12187-016-9405-z

Lukšík, I. (2018). Resilience of young people in residential care. *Journal of Social Service Research, 44*(5), 714–729. https://doi.org/10.1080/01488376.2018.1479336

Marshall, K. (2014). *Child sexual exploitation in Northern Ireland. Report of the independent inquiry.* RQIA, Northern Ireland. https://www.rqia.org.uk/RQIA/files/37/379f52ad-b99e-4559-847e-e2688e0648c6.pdf

McKibbin, G. (2017). Preventing harmful sexual behaviour and child sexual exploitation for children and young people living in residential care: A scoping

review in the Australian context. *Children and Youth Services Review, 82,* 373-382. https://doi.org/10.1016/j.childyouth.2017.10.008

Meltzer, H., Gatward, R., Corbin, T., Goodman, R., & Ford, T. (2003). *The mental health of young people looked after by local authorities in England.* The Stationery Office. https://sp.ukdataservice.ac.uk/doc/5280/mrdoc/pdf/5280userguide.pdf

Midgley, N., Irvine, K., Rider, B., Byford, S., Cirasola, A., Ganguli, P., Katangwe, T., Murdoch, J., Pond, M., Pursch, B., Redfern, S., Richards, Z., Shepstone, L., Sims, E., Smith, C., Sprecher, E., Swart, A. M., Wyatt, S., & Wellsted, D. (2021a). Study Protocol: The reflective fostering programme – improving the wellbeing of children in care through a group intervention for foster carers: a randomised controlled trial: study protocol for a randomised controlled trial. *BMC Trials, 22*(1), 1-23. https://doi.org/10.1186/s13063-021-05739-y

Midgley, N., Sprecher, E. A., Cirasola, A., Redfern, S., Pursch, B., Smith, C., Douglas, S., & Martin, P. (2021b). The reflective fostering programme: evaluating the intervention co-delivered by social work professionals and foster carers. *Journal of Children's Services, 16*(2), 159-174. https://doi.org/10.1108/JCS-11-2020-0074

Milligan, I., Hunter, L., & Kendrick, A. (2006) *Current trends in the use of residential child care in Scotland.* Scottish Institute for Residential Child Care. https://strathprints.strath.ac.uk/10661/1/Trends_in_admission_final_report_submitted.pdf

Monks, C. P., Smith, P. K., Naylor, P., Barter, C., Ireland, J. L., & Coyne, I. (2009). Bullying in different contexts: Commonalities, differences and the role of theory. *Aggression and Violent Behavior, 14*(2), 146-156. https://doi.org/10.1016/j.avb.2009.01.004

Murray, L., Tarren-Sweeney, M., & France, K. (2010). Foster carer perceptions of support and training in the context of high burden of care. *Child & Family Social Work, 16*(2), 149-158. https://doi.org/10.1111/j.1365-2206.2010.00722.x

Nary, M. (2016). *Residential Care in England.* Department for Education. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/534560/Residential-Care-in-England-Sir-Martin-Narey-July-2016.pdf

Nixon, C., McGarrol, S., Henderson, G., & Kurlus, I. (2021*). Development and piloting of a children's disability toolkit*. Scottish Children's Reporter Administration. https://www.scra.gov.uk/wp-content/uploads/2021/09/SCRA-Disability-Toolkit-Report-2021.pdf

Northern Ireland Executive. (2017). *Report of the Historical Institutional Abuse Inquiry.* The NI Executive Office. https://www.hiainquiry.org/historical-institutional-abuse-inquiry-report-chapters

Porter, R. B., Mitchell, F., & Giraldi, M. (2020). *Function, quality and outcomes of residential care: Rapid evidence review*. CELCIS https://www.sos-childrensvillages.org/getmedia/e128ca09-c55d-4aff-a0d9-2cfc0305e36b/CELCIS-and-SOS-Evidence-review-residential-care.pdf

Quiroga, M. G., Hamilton-Giachritsis, C., & Fanés, M. I. (2017). Attachment representations and socio-emotional difficulties in alternative care: A comparison between residential, foster and family based children in Chile. *Child Abuse & Neglect, 70,* 180-189. https://doi.org/10.1016/j.chiabu.2017.05.021

Rafferty, Y. (2018). Mental health services as a vital component of psychosocial recovery for victims of child trafficking for commercial sexual exploitation. *American Journal of Orthopsychiatry, 88*(3), 249. https://doi.org/10.1037/ort0000268

Rainer. (2007). *Home alone: Housing and support for young people leaving care.* https://archive.crin.org/sites/default/files/images/docs/Rainer_home_alone.pdf

Rubin, D. M., Alessandrini, E. A., Feudtner, C., Mandell, D. S., Localio, A. R., & Hadley, T. (2004). Placement stability and mental health costs for children in foster care. *Pediatrics, 113*(5), 1336-1341. https://doi.org/10.1542/peds.113.5.1336

Schofield, G., Larrson, B., & Ward, E. (2016). Risk, resilience and identity construction in the life narratives of young people leaving residential child care. *Child and Family Social Work, 22*(2), 782-791. https://doi.org/10.1111/cfs.12295

Schore, A. N. (2001). The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal, 22*(1-2), 201-269. https://doi.org/10.1002/1097-0355(200101/04)22:1<201::AID-IMHJ8>3.0.CO;2-9

Schuurmans, A. A., Nijhof, K. S., Engels, R. C. M. E., & Granic, I. (2018). Using a videogame intervention to reduce anxiety and externalizing problems among youths in residential care: An initial randomized controlled trial. *Journal of Psychopathology and Behavioral Assessment, 40(2), 344–354.* https://doi.org/10.1007/s10862-017-9638-2

Scottish Government. (n.d.). *Policy: Looked after children.* https://www.gov.scot/policies/looked-after-children/

Scottish Government. (2009). *Higher aspirations, brighter futures: Scottish Government response.* https://www.gov.scot/publications/response-report-national-residential-child-care-initiative-higher-aspirations-brighter/

Scottish Government. (2021). *Education outcomes for looked after children: 2019/2020*. https://www.gov.scot/publications/education-outcomes-looked-children-2019-20/documents/

Sen, R., Kendrick, A., Milligan, I., & Hawthorn, M. (2008). Lessons learnt? Abuse in residential child care in Scotland. *Child and Family Social Work, 13*(4), 411-422. https://doi.org/10.1111/j.1365-2206.2008.00566.x

Shaw, J. (2014). *Residential children's homes and the youth justice system: Identity, power and perceptions.* Basingstoke: Palgrave MacMillan.

Skinner, A. (1992). *Another Kind of Home: A review of residential child care.* Scottish Office.

Smith, M. (2009). *Rethinking Residential Care: Positive Perspectives*. Bristol: Policy Press.

Stein, M., & Munro, E. R. (2008). Transitions from care to adulthood: Messages from research for policy and practice. In: M. Stein & E. R. Munro (Eds.), *Young people's transitions from care to adulthood: International research and practice* (pp. 289-306). London: Jessica Kingsley.

Trickett, P. K., Negriff, S., Ji, J., & Peckins, M. (2011). Child maltreatment and adolescent development. *Journal of Research on Adolescence, 21*(1), 3-20. https://doi.org/10.1111/j.1532-7795.2010.00711.x

Triseliotis, J., Borland, M., & Hill, M. (1998). Foster carers who cease to foster. *Adoption and fostering*, *22*(2), 54-61. https://doi.org/10.1177/030857599802200208

Vacaru, V. S., Sterkenburg, P. S., & Schuengel, C. (2018). Self-concept in institutionalized children with disturbed attachment: The mediating role of exploratory behaviours. *Child: Care, Health and Development, 44*(3), 476–484. https://doi.org/10.1111/cch.12521

Vejmelka, L., & Sabolíc, T. (2015). The potential of institutions for children without parental care: The perspective of the institutional caregivers. *Kriminologija & Socijalna Integracija, 23*(1), 99–128. https://doi.org/10.1007/s10862-017-9638-2

Wendt, G. W., Costa, A. B., Poletto, M., Cassepp-Borges, V., Dellaglio, D. D., & Koller, S. H. (2019). Stressful events, life satisfaction, and positive and negative affect in youth at risk. *Children and Youth Services Review, 102,* 34-41. https://doi.org/10.1016/j.childyouth.2019.04.028

Woods, H. Y. (2020). *Residential care, stigma and relational alienation. Exploring the lived experiences of children's homes with young people and carers – an ethnographic study* [Doctoral dissertation, University of Nottingham].

Wright, A. W., Richard, S., Sosnowski, D. W., & Kliewer, W. (2019). Predictors of better functioning among institutionalized youth: A systematic review. *Journal of Child and Family Studies, 28*(12), 3245–3267. https://doi.org/10.1007/s10826-019-01527-0

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Appendix 3: Data extracted from SCRA's CMS for younger children in residential care

The below table provides an overview of the variables extracted from the Case Management System used by the Scottish Children's Reporter Administration to collate all documents received and generated by the Children's Hearings System in order to determine whether statutory intervention is required to support children and families.

Category	Information collected on…	Search information
Child demographics	Sex	Code male, female, unknown
Child demographics	Date of birth	Enter date of birth
Child demographics	Ethnicity	Record ethnicity
Child demographics	Disability	Record whether disability is diagnosed, known or suspected; Also record information about what the known or suspected disability is and how it impacts the child.
Family characteristics	Parental health: learning disability	Record if parent recorded as having a learning disability or if description of learning and communication difficulties are provided within case files.
Family characteristics	Parental health: substance misuse	Record substance misuse, type and whether considered to be problematic. Class alcohol or drug use as misuse if case file describes frequent use and detrimental impact on health and wellbeing. Record alcohol or drug misuse as problematic if references made to individual being unable to adequately care or protect their child, hold down employment etc.
Family characteristics	Parental health: mental ill-health	Record parent as having mental health difficulties if a mental health diagnosis has been received, mental health conditions (i.e. Depression, Anxiety, PTSD, Schizophrenia, Bipolar disorder) are referenced in case files) or it is stated that parent is undergoing mental health/psychiatric treatment (i.e. sees community psychiatric nurse).
Family characteristics	Parental health: physical ill-health	Record parent as having physical ill-health if parent described as having long-term chronic, disabling or life limiting conditions that impact upon their ability to care for their child or impact their quality of living.

Category	Information collected on…	Search information
Family characteristics	Parental offending: offences	Record all references to parents having committed an offence. If offence type is listed record details. Include all references to cautions, being bailed, charged and prosecuted.
Family characteristics	Parental offending: incarceration	Record if parent ever imprisoned, along with details relating to remand and custodial sentences.
Family characteristics	Parental relationships: separated	Record if references to parents having been separated or having experienced repeat periods of separation and reconciliation are mentioned.
Family characteristics	Parental relationships: interpersonal violence	Record if episodes of interpersonal violence or coercive control are evident within the relationship between child's parents. If father is unknown or either parent is absent then code interpersonal violence as being present if the individual is considered to be the child's parent
Family characteristics	Parental experiences of childhood adversity	Record all references to care experience, including episodes of informal kinship care associated with familial stress. Record all references to sexual/physical/emotional abuse and neglect in parental past. Record bereavement if parent lost an immediate family member (i.e. parent, sibling, grandparent, child, partner) or another individual that they consider to be like a parent/sibling. Record all episodes of interpersonal violence between family members or others where it is stated that the parent was present as a child.
Family characteristics	Parental housing instability	Record all references to homelessness and housing instability, including insecure tenancies, periods in temporary accommodation and couch surfing.
Family characteristics	Siblings involved in child protection system.	Record number of full or half siblings, whether they were known to social work services, have been referred to the Children's Hearings System, have been subject to child protection orders or compulsory measures of supervision, or have been placed into care. Record grounds for referral to Children's Hearings System if known.
Child trauma histories	Maltreatment histories	Record all references to sexual, physical and emotional abuse/neglect. For sexual abuse also include concerns relating to age inappropriate and alarming sexual behaviour, i.e. viewing and watching pornography at very young age, self-mutilation and harming of genitals, object penetration by self or others at very young age, sex play that is considered to be re-enactment of behaviours rather than curiosity.

Category	Information collected on…	Search information
Child trauma histories	Exposure to violence	Record if child has witnessed interpersonal violence within the home or the community.
Child trauma histories	Unexplained injuries	Record if it is recorded that the child has had an unexplained injury at any point.
Child trauma histories	Abandonment by parents	Record child as being considered to have been abandoned by parent(s) if biological father (suspected or confirmed) refuses to acknowledge paternity of the child, or if a parent has actively chosen to no longer recognise or have contact with the child.
Child trauma histories	Significant bereavements	Record bereavement if child has lost an immediate family member (i.e. parent, sibling, grandparent, aunt/uncle/cousin) or another individual that they consider to be like a parent/sibling.
Child trauma histories	Number of adverse childhood events (ACEs)	Calculate by summing the number of indicators present from the following list: parental mental ill-health, parental substance misuse, parents separated, parental imprisonment, child experienced significant bereavement, child maltreatment types (sexual abuse, physical abuse, physical neglect, emotional abuse, emotional neglect), child witnessed violence in the home or community, child has been bullied, child has been removed from parental care.
Child trauma histories	Child protection histories	Record all information on how long the child has been known to services, applications for child protection orders, referrals to Children's Hearings System, use of voluntary and compulsory measures of supervision, when the child became formally looked after and details of any permanency proceedings undertaken. For each item record dates that legal measures were enacted, the grounds/reasons that were submitted for consideration by the Children's Hearing System and the type of measure used (i.e. a permanence order, adoption order, residency order).
Child trauma histories	Child placement histories	For each care setting that a child has lived in since becoming a looked after child, record the type of care, the dates that the child lived there, the reasons given for the child being moved from that care setting, the legal basis for the care placement and any restrictions upon contact/disclosure of information, details of any changes in the grounds given, supports provided to parents/caregivers/child and details of any contact with parents and siblings.

Category	Information collected on...	Search information
Health and wellbeing	Risk behaviours: smoking, alcohol use, drug use	For each behaviour code whether it was present or not at T1 (12 months preceding residential care entry), T2 (12 months after residential care entry) and T3 (24 months after residential care entry. For smoking include all tobacco products referenced. For alcohol and drug use record details of substances used, along with where and who consumed with.
Health and wellbeing	Risk behaviours: offending behaviours	Record that the child has offending behaviour if they have been referred to Children's Hearing System or cautioned for an offence-type behaviour. Record details of the types of offence behaviours children were engaging in. If no details of offences are present but there are references to child being referred to youth justice diversion schemes then code as engaged in offence-type behaviour. Record at T1, T2 and T3.
Health and wellbeing	Risk behaviours: sexual behaviours	Record child as engaging in sexual behaviours if they are engaged in non-concerning, age appropriate and consensual sexual behaviour, i.e. kissing, mutual touching/exploration, bodily self exploration. If penetrative sex referenced for <13s then consider this to be sexual exploitation or abuse rather than consensual behaviour if the partner is 3+ years older than the child or considered to be exchanging gifts for sex or is in a position of power. Record at T1, T2 and T3.
Health and wellbeing	Risk behaviours: child considered at risk	Record whether the child's behaviours are considered by professionals to increase the risk of harm to them at home or within the community. Also record whether the child is considered to be aware of the risks that are presented. Record at T1, T2 and T3.
Health and wellbeing	Toileting	Record whether day-wetting, night-wetting and other toileting concerns exist for the child. Record details of other toileting concerns, for instance whether child is soiling, smearing, urinating/defecating in unusual places, hiding urine/faeces/sanitary towels etc. Record at T1, T2 and T3.
Health and wellbeing	Controlling behaviours	Record whether child demonstrates any of the behaviours listed in relation to situations, people, hygiene and food. Examples of control described within case files include references to the child: always needing to be in charge of situations; trying to manipulate events so that they happen in a certain way, even if doing that fails to acknowledge needs/wants of others or any risks to doing things in that way; trying to direct the actions of others; seeking the exclusive attention of others; trying to control interactions between people; refusing to shower/bathe/dress/wash

Category	Information collected on…	Search information
Health and wellbeing	Controlling behaviours (cont.)	hair/clean teeth when asked because they want to be in control of decisions about their body; consistently being controlling around food, i.e. refusal to eat without an obvious reason or hoarding/hiding food. While some files may state that these behaviours are due to a child feeling out of control seeking control, others may refer to the behaviours seen through terms such as manipulative, coercive, "difficult", controlling etc. Record at T1, T2 and T3.
Health and wellbeing	Age-inappropriate sexual behaviour	Record whether the child demonstrates sexual behaviour that is age- and developmentally-inappropriate or considered to be harmful or 'problematic'. This may include references to children demonstrating sexually abusive behaviour towards themselves or others, re-enacting sexual behaviours that are age- and developmentally-inappropriate, groping, fondling or harming genitals or secondary sexual organs of self or others, using or viewing pornography at a very young age and using extremely sexualised language at a very young age, particularly if it is considered the language isn't being used for the purpose of shocking others. Behaviours may or not be described in the context of trauma or re-enactment of sexual abuse, but may describe engaging in sex play, particularly secretive, sex play with other children. Record at T1, T2 and T3.
Health and wellbeing	Mental health indicators	Record if there is evidence of each of the following mental health concerns being present: self-harm or self-injury, suicidal ideation (record if child has stated that they actively wish to die, have attempted or planned suicide, are preoccupied with thoughts of death, suicide or thinking that they would be better off dead), low mood or feeling sad, anxiety or social anxiety, anger management, low self-esteem, lost interest in usual activities, fatigue (record malaise, loss of energy, unable to do usual activities), poor concentration, lack of appetite or change of weight (both losses or gains) and sleep difficulties (insomnia, parasomnia, dysregulated sleep i.e. turning night into day, frequently waking etc.). Record at T1, T2 and T3.
Health and wellbeing	Conduct disorder indicators	Record if there is evidence of truanting, absconding (two or more times within the specified time period, do not record if absconding involves leaving the setting but remaining on the grounds the whole time), breaking curfew, retail theft (i.e. shoplifting), non-confrontational economic crime (i.e. breaking and entering, theft of motor vehicles), confrontational economic crime (i.e. mugging), aggressive behaviour toward others and animals, being deliberately cruel to other people or animals, use of weapons to threaten or harm others (i.e. knives or other makeshift

Category	Information collected on…	Search information
Health and wellbeing	Conduct disorder indicators (cont.)	weapons), perpetrating a forcible sexual act (i.e. performs sexual act without consent and through use of force against others; episode may be described using language of abuse), destroying property through arson or fire-raising, destroying property by other means. For all behaviours employ assessment of frequency, i.e. if child kicks out at family pet once do not code as physical aggression to animals, however if this is described as a frequent occurrence or concern then code. Descriptions of aggressive and violent behaviours may include references to physical or verbal aggression. The terms aggression/aggressive may be seen with or without descriptors of the aggression, i.e. regular taunting or name calling, verbally abusive, punching/hitting/kicking/biting. Record at T1, T2 and T3.

How is the provision of residential care to children under the age of 12 associated with changes in children's behaviour and mental wellbeing?