

SUPPLEMENTARY FILE:

Approach taken to create 'family structure' variables

Respondents were classified into family structure categories using the following question: "All families are different (for example, not everyone lives with both their parents; sometimes people live with just one parent, or they have two homes, or live with two families) and we would like to know about yours. Please answer this question for the home where you live all or most of the time and tick the ADULTS who live there".

<ul style="list-style-type: none"> • Mother 	<ul style="list-style-type: none"> • Grandparent(s) 	<ul style="list-style-type: none"> • I live in residential care or a children's home
<ul style="list-style-type: none"> • Father 	<ul style="list-style-type: none"> • Aunt(s)/Uncle(s) 	<ul style="list-style-type: none"> • I live independently (on my own or with friends or my partner)
<ul style="list-style-type: none"> • Mother's partner 	<ul style="list-style-type: none"> • Adult brother(s) or sister(s) 	<ul style="list-style-type: none"> • Someone or somewhere else
<ul style="list-style-type: none"> • Father's partner 	<ul style="list-style-type: none"> • Foster parents 	<ul style="list-style-type: none"> • I do not want to answer

Responses were then categorised into those not in care (N = 83,551) and those in 'foster care' (N = 589), 'residential care' (N = 143) and 'kinship care' (i.e. living with family members, but not mother or father; N = 1,189). For the briefing paper we categorised respondents into 'foster care' if they ticked that they lived with foster parents (even if they also ticked that they lived with other family members). We took the same approach if they ticked residential care or a children's home. Respondents were classified as living in 'kinship care' if they ticked that they lived with their grandparent(s), aunt(s)/uncle(s) or adult brother(s) or sister(s) and did not tick that they lived with their mother, father, mother's partners or father's partner. Those who ticked they lived independently, with someone or somewhere else were excluded, unless they met the criteria for another family type within reason (less than 8 living situation boxes ticked) (N = 278); n = 5,809 ticked did not want to answer and were excluded, even if they had ticked other boxes. This resulted in n = 68 respondents classified as living in 'residential care' and n = 101 respondents classified as living in 'foster care' who also ticked that they live with parents or step-parents. This may reflect complex care arrangements or may reflect differing understandings of the question.

Sensitivity analysis

In order to examine this issue further a sensitivity analysis was conducted whereby we re-analysed all of the data using a second approach to the family structure variable, which only categorised respondents as being in 'foster care' or 'residential care' if they ticked that option and did not tick living with parents or step-parents. This reduced the size of both 'foster care' ($N = 488$) and 'residential care' ($N = 75$) groups. There were no discernible differences in results between those classified as in foster care using the first and second approach, and hence estimates were robust regardless of approach used. For respondents classified as living in residential care, analyses using the more conservative approach (which excludes young people who gave potentially inconsistent responses) remained aligned with initial findings in terms of directions of differences between groups. However, analysis of the smaller group (those for whom we had greater certainty regarding their status as living in residential care) indicated poorer outcomes for this group, and larger discrepancies between those in residential care and those in other categories. Hence, this sensitivity analysis increases our confidence in the main finding that young people in residential care have worse health outcomes than other groups, but the extent of discrepancy may arguably be underestimated by the original methodology.

Implications

The classification of family structure issues due to using self-reported data mean that caution should be taken in interpreting the results. However, sensitivity analysis using a more conservative approach to classification of living arrangements revealed that results remained the same for those classified in foster care and observed differences were amplified further for those classified as living in residential care. Furthermore, results seem to fit with 'trends' shown in the type of placement plan for children in Wales, for example residential care is more often the plan for children with significant emotional and behavioural difficulties (Burch, Daru & Taylor, 2018), and previous literature comparing types of care placement (Li, Chng & Chu, 2019; Llosada-Gistau, Casas, & Montserrat, 2019). Moving forward, data linkage with social services databases may enable us to identify a young person's living arrangements more clearly, and to validate responses provided in social surveys such as HBSC/SHRN.

References

- Li, D., Chng, G. S. and Chu, C. M. (2019) 'Comparing Long-Term Placement Outcomes of Residential and Family Foster Care: A Meta-Analysis', *Trauma, Violence, & Abuse* 20(5): 653-664. <https://journals.sagepub.com/doi/full/10.1177/1524838017726427>
- Llosada-Gistau, J., Casas, F. and Montserrat, C. (2019) 'Factors Influencing the Subjective Well-Being of Adolescents in out-of-Home Care. A Mixed Method Study', *Applied Research in Quality of Life*. <https://doi.org/10.1007/s11482-019-9708-6>
- Burch, K., Daru, J. and Taylor, V. (2018) *Analysis of outcomes for children and young people 4 to 5 years after a final Care Order*. Cardiff: Welsh Government. <https://gov.wales/analysis-outcomes-children-and-young-people-4-5-years-after-final-care-order-0>