Uncovering private family law: Anxiety and depression among children and young people

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Report

This report aims to provide insight into mental health profiles of children and young people involved in private law proceedings in Wales. It summarises findings from a journal article published in BJPsych Open (Griffiths et al. 2022).

This is the fourth in a series of reports in our *Uncovering Private Family Law* series, which focuses on the families of those involved in private law proceedings in England and Wales.

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Executive summary

This is the first population-based study to examine the mental health needs of children involved in private law proceedings in Wales.¹ It provides an overview of the rates of depression and anxiety in this group over time and makes comparison to a similar group of children who were not involved in proceedings. It summarises findings from a journal article, published in BJPsych Open (Griffiths et al. 2022). The study helps to build a better understanding of the mental health vulnerabilities of children involved in private law cases.

About private law applications

In contrast to public law (or child protection) proceedings that are brought by the local authority, private law applications are triggered by the decisions of private individuals, usually a parent, rather than the state. Private law family court cases are disputes – usually between parents after relationship breakdown – about arrangements for a child's upbringing, such as where a child should live and/or who they should spend time with.

About the data

This study used anonymised administrative data supplied by Cafcass Cymru, linked with Welsh GP health data within the SAIL Databank – a highly secure, trusted research environment.

A cohort of all children (n=17,041) involved in private law proceedings in Wales between 1 January 2011 and 31 December 2018 was created. Findings were compared to a comparison group (n=680,617) selected from children in the general population of Wales who were not involved in proceedings.

Study limitations

This study only reports on problems both known to the healthcare practitioners and coded into patient records; our figures are therefore likely an underestimate of the true numbers of children with anxiety and depression.

The comparison group of children will likely include some children whose parents have separated but did not use the family courts to resolve parenting disputes, as well as many children whose parents have not separated. It is therefore not possible to draw direct conclusions about the relationship between court proceedings on children's mental health, as opposed to parental separation.

¹ By this, we mean children aged under 18 years at first recorded court application date.

Key findings

- The children involved in private law proceedings ('the private law cohort') were more likely to experience depression and anxiety than their peers in the comparison group. Rates of depression were 60% higher and rates of anxiety were 30% higher in the private law cohort.
- In both groups, incidence of depression and anxiety increased in the seven years between 2011 and 2018 – but the rate of increase was higher in the private law cohort.
- Girls were more likely to experience depression and anxiety than boys. This is in keeping with trends within the comparison group (reflecting the general population).
- Older children were more likely to experience depression and anxiety than younger children (under 10). This also reflects trends in the comparison group.
- Children involved in private law proceedings were also more likely to go on to develop depression or anxiety than children in the comparison group, suggesting that they continue to be at heightened risk of mental health problems after proceedings.

Reflection

• Given the higher rates of anxiety and depression for children involved in private law proceedings, careful thought needs to be given to how the system impacts on children already experiencing heightened vulnerability. In particular whether there is a way for the system to act as a gateway to appropriate support in situations where these issues are identified.

Other work in the private law series

This is the fourth in a series of reports in our *Uncovering Private Family Law* series. It follows:

- Cusworth, Bedston et al. (2020). Uncovering private family law: Who's coming to court in Wales? Nuffield Family Justice Observatory. https://www.nuffieldfjo.org.uk/resource/private-family-law-whos-coming-to-court-wales
- Cusworth, Bedston et al. (2021). Uncovering private family law: Who's coming to court in England? Nuffield Family Justice Observatory. https://www.nuffieldfjo.org.uk/resource/private-family-law-whos-coming-to-court-england
- Cusworth, Hargreaves et al. (2021). *Uncovering private family law: Adult characteristics and vulnerabilities (Wales)*. Nuffield Family Justice Observatory. https://www.nuffieldfjo.org.uk/resource/uncovering-private-family-law-adult-characteristics-and-vulnerabilities-wales

Introduction

In 2018, 4,530 children were involved in private family law proceedings and, over the last decade, the overall trend in the volume of private law applications has been modestly upwards (Cusworth, Bedston et al. 2020).

Children and families become involved with the family court for a wide variety of reasons. In contrast to public law (or child protection) proceedings that are brought by the local authority, private law applications are triggered by the decisions of private individuals, usually a parent, rather than the state. Private law family court cases are disputes – usually between parents after relationship breakdown – about arrangements for a child's upbringing, such as where a child should live and/or who they should spend time with. Across England and Wales, 51,658 private law cases were initiated in 2018 (Ministry of Justice 2018). The aim of these cases is to make arrangements for children that promote their welfare; yet, little is known about the health and well-being of children involved with family courts or their long-term outcomes.

The majority of children involved in private family law cases will have experienced parental separation and many will have been exposed to parental conflict. There is very robust evidence that parental conflict that is frequent, intense, poorly resolved and about the child is associated with multiple negative outcomes for children (Grych and Fincham 1990; Harold et al. 2016; Acquah et al. 2017).

We know from previous studies that about half of private law cases in England involve allegations of domestic abuse (Hunt and Macleod 2008; Harding and Newnham 2015; Cafcass/Women's Aid 2017). Recent research by the Family Justice Data Partnership – a collaboration between Lancaster University and Swansea University – has also shown that domestic abuse, substance use and parental mental ill health are all present at significantly higher rates for families involved in private law proceedings in Wales than in the general population (Cusworth, Hargreaves et al. 2021) and that families living in more deprived areas of England and Wales are overrepresented (Cusworth, Bedston et al. 2020, 2021). Children involved in these proceedings may therefore have been subject to a range of adverse experiences due to these characteristics and vulnerabilities, as well as being exposed to parental conflict. Such experiences are linked to poorer short and longer-term development and mental health (Kerker et al. 2015; Hughes et al. 2017; Harold and Sellers 2018) and with poorer social outcomes, educational achievement, and/or other serious disruptions to lives.

There is some evidence regarding the mental health of children in care (Ford et al. 2007; Baldwin et al. 2019); however, to our knowledge, no previous research in the UK has compared outcomes for children who are in or have been through private law proceedings with the general population using large-scale administrative data. Far better evidence is needed to ensure that mental health needs are understood and taken into account when making welfare-based decisions. Studies based on

population-level data are persuasive in terms of providing policy makers and practioners with robust evidence to shape service development.

In light of this, this study examined depression and anxiety in children who were the subjects of private law children cases in Wales compared to those not involved in family court proceedings.

Methodology

This research linked Cafcass Cyrmu and health data to identify mental health diagnosis and symptoms for children in private law proceedings, and for a comparison group of children who have not experienced family court proceedings.

Administrative data collected and maintained by Cafcass Cymru was acquired by the privacy-protecting SAIL Databank (Ford et al. 2009; Lyons et al. 2009; Jones et al. 2019). The SAIL Databank contains extensive anonymised health and administrative data about the population of Wales, accessible via a secure data sharing platform, all underpinned by an innovative and proportionate information governance model.

Cafcass Cymru data (described elsewhere (Johnson et al. 2020)) was used to create a cohort of children who were involved in private law proceedings in Wales between 1 January 2011 and 31 December 2018 (n=17,041 children aged under 18 years at first recorded court application date).

A general comparison group of 680,617 children not involved in family court proceedings was selected from the SAIL Databank, for the same period. From this group, we also selected a control sample of 225,650 children for the time-to-event analyses.

These records were linked to Welsh Longitudinal General Practice (WLGP) data, which contain primary care records for patients registered with a GP in Wales. For this study we examined all records (diagnoses and symptoms) of depression and anxiety.

Linkage was also made to the Welsh Demographic Service (WDS) Dataset – an administrative register of all individuals in Wales that use NHS services in Wales – in order to create our population denominator (the number of children in the population) and for demographic data.

Data analysis comprised the calculation of frequencies, proportions, incidence rates (IRs) (per 1,000 person years at risk, hereafter referred to as /1,000), and incidence rate ratios (IRRs) of primary care-recorded diagnoses and symptoms of depression and anxiety for those involved in private law proceedings, and in the comparison group.^{2,3}

 $^{^2}$ The incidence rate is a measure of the frequency with which an event occurs in any given timeframe for a group.

³ IRRs are a relative difference measure used to compare the incidence rates of events – in this instance between sexes, age and deprivation groups, and years. Our estimates were adjusted for other individual characterises – see appendix.

We also examined the impact of involvement in these proceedings on subsequent risk of depression and anxiety, which is known as 'time-to-event' analysis. Hazard ratios (HRs) were calculated to represent the risk of depression and anxiety for children following private law proceedings.

Full methodology details are available in the appendix.

Study strengths and limitations

This is the first time that population-level family law records have been linked to primary care data in Wales to examine the mental health of children involved in private law proceedings. The longitudinal nature of health records available within the SAIL Databank also permitted exploration of outcomes of newly diagnosed mental health problems following court proceedings. Better understanding of the health of these groups will provide opportunities for enhanced support. However, we acknowledge the following limitations.

- Studies based on administrative data are limited by the scope and quality of available data, which is collected primarily for administrative rather than research purposes. Limitations of the Cafcass Cymru dataset have been previously described (Johnson et al. 2020).
- This study only reports on problems known to the healthcare practitioners and coded into patient records; our figures are therefore likely an underestimate of the true number of children with anxiety and depression.
- We were unable to access information regarding interventions received following involvement with the family courts. The majority of private law applications are for child arrangements orders (Cusworth, Bedston et al. 2020) but this study has not explored the nature of these, nor profiles of those involved in single or repeat cases. Further analyses are therefore warranted to understand the impact of court involvement in greater depth. Acquisition of further datasets from the Ministry of Justice (e.g. FamilyMan) with linkage to existing data within the SAIL Databank will facilitate this future research.
- It is important to note that the comparison group of children used is likely to include some children whose parents have separated and who did not use the court (i.e. not present in the Cafcass data). It is therefore not possible to draw direct conclusions about the relationship between court proceedings, as opposed to parental separation, on children's mental health.



Summary of cohort characteristics

Over the study period, 17,041 children were involved in private law proceedings. There was an approximately even split of boys (51%) and girls (49%). Most children (92%) were under 10 years old. 54% of the children in the private law cohort resided in the two most deprived areas of Wales.

See Table A.1 in the appendix for further details.

Incidence of depression

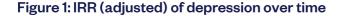
Depression - comparing private and comparison group

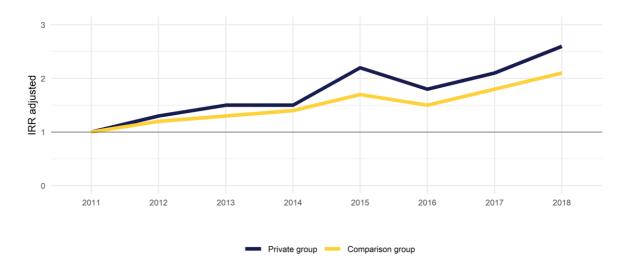
Overall, incidence of depression was lower in the private law cohort (3.5/1,000) than in the comparison group (4.6/1,000). However, following adjustment for year, gender, age and deprivation, rates of depression were 60% higher in the private law cohort (incidence rate ratio (IRR) = 1.6), compared to the comparison group.

See also Table A.2 in the appendix.

Depression over time

Figure 1 summarises trends over time, relative to the base year, 2011. In both groups, rates of depression increased over time, however the rate of increase was higher in the private law cohort. Rates of depression in the private law cohort were almost three times as high in 2018 (7.9/1,000), compared to 2011 (0.7/1,000) (IRR for 2018 = 2.6). For the comparison group, rates of depression were twice as high in 2018 (6.3/1,000) than in 2011 (2.9/1,000) (IRR for 2018 = 2.1).





See also Table A.3 in the appendix.

Depression - variation by sex, age and deprivation

Incidence of depression in girls in the private law cohort (4.7/1,000) was twice as high than boys (2.4/1,000) (IRR = 1.9). In the comparison group, rates in girls were also twice as high in girls than in boys (IRR = 2.4).

Older children had higher rates of depression in both the private law cohort and comparison groups. Among children in private law proceedings, the incidence rate was 0.4/1,000 for those under 10 years of age, increasing to 37.3/1,000 among 15–17-year-olds (IRR = 75.6).

Adjusted incidence rates of depression did not vary by deprivation quintile in the private law cohort, suggesting that deprivation was not a significant additional risk factor for depression, above involvement in private law proceedings. However, for the comparison group incidence was lowest in the least deprived areas at 3.9/1,000, rising to 5.4/1,000 in the most deprived areas (IRR = 1.6).

See also Table A.3 in the appendix.

Incidence of anxiety

Anxiety - comparing private and comparison group

Overall, incidence of anxiety was slightly lower in the private law cohort $(4\cdot3/1,000)$ than in the comparison group $(5\cdot0/1,000)$. However, following adjustment for year, gender, age and deprivation, rates of anxiety were 30% higher in private law cohort (IRR = 1·3).

See also Table A.2 in the appendix.

Anxiety over time

Anxiety rates increased over time in both groups and, again, the rate of increase was higher in the private law cohort (Figure 2). There was a significant increase in the incidence of anxiety between 2011 and 2018 for the private law cohort – from 0.8/1,000 cases in 2011 to 10.7/1,000 cases in 2018 (IRR = 6.0). In contrast, for the comparison group, rates of anxiety increased from 2.6/1,000 cases in 2011 to 8.4/1,000 in 2018 (IRR = 3.2).

See also Table A.4 in the appendix.

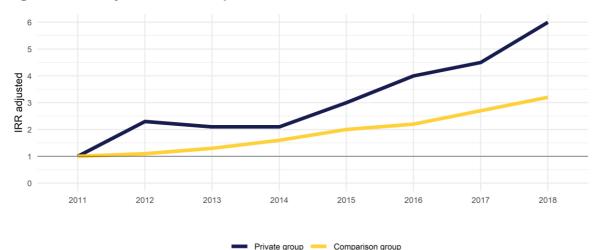


Figure 2: IRR (adjusted) of anxiety over time

Anxiety - variation by sex, age and deprivation

As for depression, girls involved in private law proceedings (5.4/1,000) had higher rates of anxiety than boys (3.3/1,000) (IRR = 1.6). In the comparison group, rates were also twice as high in girls compared to boys (IRR = 2.0).

Again, incidence of anxiety increased with increasing age across both groups. Among children in private law proceedings, the incidence rate was 1.7/1,000 for those under 10 years of age, increasing to 21.9/1,000 among 15-17-year-olds (IRR = 8.6).

The incidence of anxiety stood at around 5/1,000 across both groups, again with little difference according to deprivation quintile.

See also Table A.4 in the appendix.

Likelihood of developing depression and anxiety after court proceedings

We also explored the impact of involvement in private proceedings on risk of developing depression and anxiety in the future. Following involvement in private law proceedings, almost twice as many children experienced depression proportionally as those in the control group (hazard ratio (HR) = 1.9), and this was also evident in boys and girls separately. Similarly, they were also 40% more likely to experience anxiety (HR = 1.4).

See also Table A.5 in the appendix.

Conclusions

This research highlights the vulnerability of children in private law proceedings and the need for all the agencies they engage with to be live to this heightened vulnerability to experiencing depression and anxiety. Schools, health professionals, social and family support workers have a key role to play in identifying mental health needs and ensuring that children receive appropriate support. As previously noted, we are unable to say whether this vulnerability relates to children's experiences of court proceedings or parental separation. We do however know that parental separation can have significant and long-term implications for children's well-being (Roe 2021) and this research highlights the need for the court system engaged with those children to be particularly aware of the potential additional mental health needs of those children. It raises questions about the possible need for court proceedings to open up access routes to evidence-based support services or interventions for children.

Welsh Government has made a commitment to providing mental health support for children (National Assembly for Wales 2020). Progress is being made with schools embedding health and well-being into the curriculum, and adopting a whole-school approach to support pupils. Improving children's knowledge of mental health and reducing the stigma will help. However, the capacity of local primary mental health support services remains a significant concern, regarding both access to crisis and out-of-hours services across Wales and, more generally, due to limited support/treatment options for children who need help but do not meet the threshold for specialist mental health or neurodevelopmental services (National Assembly for Wales 2020). This research highlights the need for specific thought to be given to how and when children negatively affected by parental separation and related issues, including those in private law proceedings, might best access the support they need.

Further work is needed to explore the full range of mental health difficulties experienced by children involved in proceedings, and long-term impacts such as wider health issues, education and relationship outcomes. Further research is also required to understand the pathways and experiences of the full range of family members as they move through separation and the family courts to better understand how to provide effective support that might limit the potentially harmful elements of family stress and separation, and better support children.

References

Acquah, D. Sellers, R. Stock, L. Harold, G. (2017). *Interparental conflict and outcomes for children in the contexts of poverty and economic pressure*. Early Intervention Foundation,London. https://www.eif.org.uk/report/interparental-conflict-and-outcomes-for-children-in-the-contexts-of-poverty-and-economic-pressure.

Baldwin, H. Biehal, N. Cusworth, L. Wade, J. Allgar, V. Vostanis, P. (2019). Disentangling the effect of out-of-home care on child mental health. *Child abuse & neglect*, 88, pp. 189–200. https://doi.org/10.1016/j.chiabu.2018.11.011.

Bedston, S.J. Pearson, R.J. Jay, M.A. Broadhurst, K., Gilbert, R. Wijlaars, L. (2020). Data Resource: Children and Family Court Advisory and Support Service (Cafcass) public family law administrative records in England. *International Journal of Population Data Science*, 5(1), pp.1-17. https://doi.org/10.23889/ijpds.v5i1.1159.

Cafcass/Women's Aid. (2017). *Allegations of domestic abuse in child contact cases.* https://www.cafcass.gov.uk/wp-content/uploads/2017/12/Allegations-of-domestic-abuse-in-child-contact-cases-2017.pdf.

Cusworth, L. Bedston, S. Trinder, L. Broadhurst, K. Pattinson, R. Johnson, R.D. Alrouh, B. Doebler, S. Akbari, A. Lee, A. Griffiths, L. Ford, D. (2020). *Uncovering private family law: Who's coming to court in Wales*? Nuffield Family Justice Observatory, London. https://www.nuffieldfjo.org.uk/resource/private-family-law-whos-coming-to-court-wales.

Cusworth, L. Hargreaves, C. Alrouh, B. Broadhurst, K. Johnson, R.D. Griffiths, L.G. Akbari, A. Doebler, S. John, A. (2021). *Uncovering private family law: Adult characteristics and vulnerabilities (Wales)*. Nuffield Family Justice Observatory, London. https://www.nuffieldfjo.org.uk/resource/uncovering-private-family-law-adult-characteristics-and-vulnerabilities-wales.

Cusworth, L. Bedston, S. Alrouh, B. Broadhurst, K. Johnson, R.D. Akbari, A. Griffiths, L.G. (2021). *Uncovering private family law: Who's coming to court in England?* Nuffield Family Justice Observatory London.

https://www.nuffieldfjo.org.uk/resource/private-family-law-whos-coming-to-court-england.

Ford, T. Vostanis, P. Meltzer, H. Goodman, R (2007). Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households. *The British Journal of Psychiatry*, 190(4), pp. 319–325.

Ford, D. Jones, K. Verplancke, J.P. Lyons, R. John, G. Brown, G. Brooks, C. Thompson, S. Bodger, O. Couch, T. Leake, K. (2009). The SAIL Databank: building a national architecture for e-health research and evaluation. *BMC health services research*, 9(1), p. 157. https://doi.org/10.1186/1472-6963-9-157.

Griffiths, L.J. Mcgregor, J. Pouliou, T. Johnson, R.D. Broadhurst, K. Cusworth, L. North, L. Ford, D.V. John, A. (2022). Anxiety and depression among children and young people involved in family justice court proceedings: Longitudinal national data linkage study. *BJPsych Open*, 8(2), E47. doi:10.1192/bjo.2022.6

Grych, J. H. and Fincham, F. D. (1990). Marital conflict and children's adjustment: A cognitive-contextual framework. *Psychological Bulletin*, 108(2), pp. 267–290. https://doiorg/10.1037/0033-2909.108.2.267.

Harding, M. and Newnham, A. (2015). How do county courts share the care of children between parents? Coventry: University of Warwick.

Harold, G.T. Sellers, R. (2016). *What works to enhance interparental relationships and improve outcomes for children?* Early Intervention Foundation, London. https://www.eif.org.uk/report/what-works-to-enhance-interparental-relationships-and-improve-outcomes-for-children.

Harold, G. T. and Sellers, R. (2018). Annual Research Review: Interparental conflict and youth psychopathology: an evidence review and practice focused update. *Journal of Child Psychology and Psychiatry*, 59(4), pp. 374–402. https://doi.org/10.1111/JCPP.12893.

Hughes, K. Bellis, M.A. Hardcastle, K.A. Sethi, D. Butchart, A. Mikton, C. Jones, L. Dunne, M.P. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet Public Health*, 2(8), pp. e356–e366. https://doi.org/10.1016/S2468-2667(17)30118-4.

Hunt, J. and Macleod, A. (2008). Outcomes of applications to court for contact orders after parental separation or divorce. Ministry of Justice, London.

John, A. McGregor, J. Fone, D. Dunstan, F. Cornish, R. Lyons, R.A. Lloyd, K.R. (2016). Case-finding for common mental disorders of anxiety and depression in primary care: an external validation of routinely collected data. *BMC medical informatics and decision making*, 16, pp. 35. https://doi.org/10.1186/s12911-016-0274-7.

Johnson, R. Ford, D.V. Broadhurst, K. Cusworth, L. Jones, K.H. Akbari, A. Bedston, S. Alrouh, B. Doebler, S. Lee, A. Smart, J. Thompson, S. Trinder, L. Griffiths, L. J. (2020). Data Resource: Population level family justice administrative data with opportunities for data linkage. *International Journal of Population Data Science*, 5(1). https://doi.org/10.23889/ijpds.v5i1.1339.

Johnson, R.D. Griffiths, L.J. Hollinghurst, J.P. Akbari, A. Lee, A. Thompson, D.A. Lyons, R.A. Fry, R. (2021). Deriving household composition using population-scale electronic health record data—A reproducible methodology. Edited by Ramagopalan, S.V. *PLOS ONE*. 16(3), pp. e0248195. https://doi.org/10.1371/journal.pone.0248195.

Jones, K.H. Ford, D.V.Thompson, S. Lyons, R. (2019). A Profile of the SAIL Databank on the UK Secure Research Platform. *International Journal of Population Data Science*, 4(2).

Kerker, B.D. Zhang, J. Nadeem, E. Stein, R. Hurlburt, M.S. Heneghan, A. Landsverk, J. McCue Horwitz, S. (2015). Adverse Childhood Experiences and Mental Health, Chronic Medical Conditions, and Development in Young Children. *Academic Pediatrics*, 15(5), pp. 510–517. https://doi.org/10.1016/j.acap.2015.05.005.

Lyons, R. A. Jones, K.H. John, G. Brooks, C.J. Verplancke, J.P. Ford, D.V. Brown, G. Leake, K. (2009). The SAIL databank: linking multiple health and social care datasets. *BMC Medical Informatics and Decision Making*, 9(1), p. 3. https://doi.org10.1186/1472-6947-9-3.

Ministry of Justice. (2018). *Family Court Statistics Quarterly, England and Wales, Annual 2018 including October to December 2018.* https://www.gov.uk/government/statistics/family-court-statistics-quarterly-octoberto-december-2019

National Assembly for Wales: Welsh Parliament, Children, Young People and Education Committee. (2020). *Mind over matter : Two years on.* https://senedd.wales/SeneddCYPE

Rodgers, S.E. Lyons, R.A. Dsilva, R. Jones, K.H. Brooks, C.J. Ford, D.V. John, G. Verplancke, J.P. (2009). Residential Anonymous Linking Fields (RALFs): a novel information infrastructure to study the interaction between the environment and individuals' health. *Journal of Public Health*, 31(4), pp. 582–588. https://doi.org/10.1093/pubmed/fdp041.

Roe, A. (2021). *Children's experience of private law proceedings: six key messages from research*. Nuffield Family Justice Observatory, London. <u>www.nuffieldfjo.org</u>.

Adolescent Mental Health Data Platform. *The Platform.* https://adolescentmentalhealth.uk/Platform

Stats Wales. (2014). Welsh Index of Multiple Deprivation (WIMD) 2014 - Summary: Revised. <u>https://statswales.gov.wales/Catalogue/Community-Safety-and-Social-Inclusion/Welsh-Index-of-Multiple-Deprivation/Archive/WIMD-2014</u>

Appendix

Data sources

For each data source within the SAIL Databank, including records from Cafcass Cymru, personal identifiable data has been removed and replaced with a unique identifier, otherwise known as an anonymised linkage field (ALF) or residential anonymised linkage field (RALF) (Rodgers et al. 2009; Johnson et al. 2021), for each person to enable linkage of records from different sources. SAIL anonymisation and linkage methodology is described elsewhere (Ford et al. 2009; Lyons et al. 2009; Jones et al. 2019). All data within the SAIL Databank is treated in accordance with the Data Protection Act 2018 and is compliant with the General Data Protection Regulation.

Cafcass Cymru

4

The primary source of family justice data was electronic case management data routinely produced by Cafcass Cymru, which was securely transferred to and anonymised within the SAIL Databank. Further details about Cafcass Cymru and Cafcass England data, and the Family Justice Data Partnership are available elsewhere (Johnson et al. 2020; Bedston et al. 2020). For the purpose of this study, the Cafcass Cymru data was linked to other data sources within the SAIL Databank using ALFs, including the following.

Welsh Demographic Service Dataset (WDSD)

The Welsh Demographic Service Dataset (WDSD) provides demographic characteristics of people registered with GPs in Wales – providing residents' demographic and address details (RALFs) including lower layer super output area (LSOA 2011 version), which can be linked to obtain measures of deprivation.

Welsh Longitudinal General Practice data (WLGP)

The Welsh Longitudinal General Practice (WLGP) data contains GP records for patients registered with a Welsh GP, for the approximately 80% of practices that supply data to the SAIL Databank. Each record within the data source contains key information such as the event date and 'Read codes' which are used by GPs to record patient findings and procedures.⁴

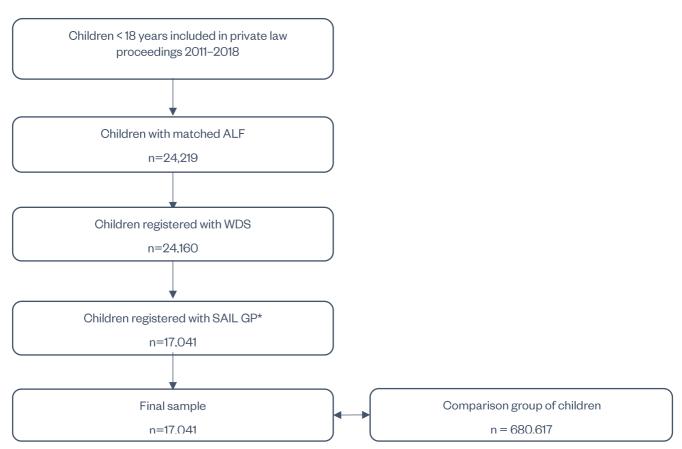
https://www.datadictionary.nhs.uk/web_site_content/supporting_information/clinical_coding/read_code d_clinical_terms.asp?shownav=1

Cohort and comparison group selection process

This study included children involved with Cafcass Cymru between 1 January 2011 and 31 December 2018, aged under 18 years at first recorded court application date. We identified 26,569 children involved in private law proceedings. Over 91% of these (24,219) were assigned an ALF, enabling linkage of their information to the other data sources within the SAIL Databank. The sample was further restricted to those that had a WDS record (n = 24,160) and were registered with a SAIL-supplying GP for the same period with at least 12 months' worth of continuous primary care data (n = 17,041). The final sample therefore consisted of 17,041 involved in private law proceedings.

A general comparison group of all 680,617 children – also aged under 18 years but not involved in family court proceedings – was selected from the SAIL Databank, for the same period. From this group, we randomly selected 10 controls per case matched on age and gender, resulting in a control sample of 225,650 children for the time-to-event analyses.

Figure A.1: Flow diagram of study participants



* Children who were Welsh residents, registered to a SAIL-supplying general practice between 1 January 2011 and 31 December 2018 with at least 12 months' worth of continuous GP data.

Control sample for the survival analysis: 225,650 (calculation: 10 controls per case (matched on age and gender) and identified from the comparison group).

Measures

WLGP records were analysed for the presence of clinical codes indicating diagnoses or symptoms of depression and anxiety based on validated code lists developed by the Adolescent Mental Health Data Platform ('The Platform - Adolescent Mental Health Data Platform', no date; John et al., 2016). A new record of depression, or anxiety, was defined as an entry with no episode recorded for that condition in the previous 12 months.

Age and deprivation was based upon the onset of data collection for each year. Age was described according to categories of under 10 years, 11–14 and 15–17 years. The Welsh Index of Multiple Deprivation (WIMD) is Welsh Government's official deprivation measure; WIMD 2014 (*Welsh Index of Multiple Deprivation (WIMD) 2014 - Summary: Revised*, no date) is linked to LSOA statistical geographies and is ranked from 1 (most deprived) to 1,909 (least deprived) – derived into quintiles for this study.

Analytical process

The SAIL Databank was queried using Structured Query Language and analyses were carried out using SPSS statistical software (version 26).

Incidence measures

Annual incidence rates were calculated using person years at risk (PYAR) as a denominator. Poisson regression was undertaken to investigate the adjusted association between incidence of depression and anxiety, adjusting for sex, age, deprivation, and year of court proceeding. The confidence intervals were calculated using the two-tailed mid-p exact method, assuming Poisson distribution. Wald tests were used to assess significance of findings. Robust standard errors for the estimated incidence rate ratios (IRRs) were used to account for clustering within general practices.

Time-to-event analyses

Time-to-event analyses were conducted to explore the impact of involvement in private court proceedings on risk of depression and anxiety. We used Cox proportional hazard regression, a method that assumes the effect upon event to be constant over time, to calculate hazard ratios (HRs) with 95% confidence intervals. The HRs represent the effects of court involvement versus no court involvement on the baseline risk for either mental health condition during the follow-up period. We modelled the length of time from date at first court application (index) to the first record of depression or anxiety, or to censorship (i.e. the earliest date from: death, leaving a SAIL registered general practice, left Wales, or 18th birthday). We fitted separate univariate models for depression and anxiety, and multivariate models adjusting for deprivation (at index date) and previous history of these conditions as covariates.

Information governance approval and statistical disclosure control

The project proposal was reviewed by an independent Information Governance Review Panel (IGRP) at Swansea University. This panel ensures that work complies with information governance principles and represents an appropriate use of data in the public interest. The IGRP includes representatives of professional and regulatory bodies, data providers and the general public. Approval for the project was granted by the IGRP under SAIL project 1040. Cafcass Cymru (the data owner of the family courts data) also approved use of the data for this project. The agency considered the public interest value of the study, benefits to the agency itself, as well as general standards for safe use of administrative data.

SAIL has strict statistical disclosure processes and policies to prevent potential disclosure of any individual. This includes suppressing of information in tables where the number in any individual cell is less than five, or where geographical identifiers might disclose the identity of the individual concerned either alone or in combination with other data. Where this has been employed, it is noted within the relevant sections. For example, age bands have been expanded in certain analyses to prevent disclosure problems related to small numbers.

Tables

Table A.1: Characteristics of the private law cohort, matched control and comparison groups

	Cohort		Matched controls ^a		Comparison		
	n	%	n	%	n	%	
Total	17,041		170,410		680,617		
Sex							
Boys	8,744	51·3	87,440		348,647	51·2	
Girls	8,297	48.7	82,970		331,970	48.8	
Age group							
Under 10 years	15,702	92.1	135,300		461,182	67·8	
Ages 10-14 years	1,297	7·6	32,000		154,013	22·6	
Ages 15-17 years	42	0.2	3110		65,422	9.6	
Deprivation quintile ^b							
Least deprived	2,142	12.6	30,688	18·0	122,365	18.0	
Second least deprived	2,311	13.6	26,828	15.7	108,270	15·9	
Middle deprived	3,018	17.7	31,453	18·5	127,366	18·7	
Second most deprived	3,984	23.4	35,031	20.6	139,674	20.5	
Most deprived	5,272	30.9	41,829	24.5	164,803	24·2	

^a Matched control group (as matched on age/gender, proportion in each age and gender group same as in the cohort) for the time-to-event analyses.

^b Missing data for deprivation (comparison group: 18,139; private: 314).

Table A.2: Depression and anxiety for private law cohort and comparison groups

	Depress	ion		Anxiety	Anxiety			
	Events (n)	IR (95% CI)	IRR (95% CI)ª	Events (n)	IR (95% CI)	IRR (95% CI)ª		
Total	17,081			18,437				
Private law	384	3.5 (3.4–3.7)	1·6 (1·4–1·7) ^b	470	4.3 (4.2–4.5)	1·3 (1·2–1·4) ^b		
Comparison	16,485	4.6 (4.6–4.6)	1(0-0)	17,815	5 (4·9–5)	1(0–0)		

^a Adjusted for calendar year, gender, age, deprivation.

^b p-value significance: <0.001.

IR, incidence rate; IRR, incidence rate ratio; CI, confidence interval.

	Private law cohort (n=17,041)			Comparison group (n=680,617)			
	Events (n)	IR (95% CI)	IRR (95% CI)ª	Events (n)	IR (95% CI)	IRR (95% CI)ª	
Totals	384	3·5 (3·4–3·7)		16,485	4·6 (4·6–4·6)		
Sex					· · ·		
Boys	135	2·4 (2·3–2·6)	1	5,077	2·8 (2·7–2·8)	1	
Girls	249	4·7 (4·5–4·9)	1·9 (1·6−2·4) ^b	11,408	6·5 (6·5–6·6)	2·4 (2·3−2·5) ^b	
Age group							
Under 10 years	34	0·4 (0·4–0·5)	1	297	0·1 (0·1–0·2)	1	
Ages 10–14 years	195	8·6 (8·2–9·0)	19∙1 (13•1–27•7) ^ь	5,322	5·2 (5·2–5·3)	36·2 (32·1−40·7) [⊳]	
Ages 15–17 years	155	37·3 (35·3–39·4)	75⋅6 (51⋅3–111⋅4) ^ь	10,866	20·5 (20·4–20·7)	142·8 (127·1–160·5) ^b	
Deprivation quintile							
Least deprived	54	3·9 (3·6–4·3)	1	2,585	3·9 (3·8–3·9)	1	
Second least deprived	44	2·9 (2·7–3·3)	0·8 (0·5–1·2)	2,370	4·1 (4·1-4·2)	1·1 (1·O−1·2) ^ь	
Middle deprived	64	3·3 (3·0–3·6)	0·9 (0·7–1·4)	2,886	4·3 (4·3–4·4)	1·2 (1·1-1·2) [⊳]	
Second most deprived	82	3·3 (3·0–3·5)	1 (0·7–1·4)	3,646	4·9 (4·9–5·0)	1·4 (1·3–1·5)⁵	
Most deprived	133	4·0 (3·8–4·2)	1·3 (0·9–1·8)	4,644	5·4 (5·4–5·5)	1·6 (1·5–1·7)⁵	
Year							
2011	8	0·7 (0·6–0·9)	1	1,278	2·9 (2·9−3·0)	1	
2012	16	1·3 (1·1–1·5)	1·3 (0·6–3·1)	1,747	3·9 (3·8–3·9)	1·2 (1·1−1·3) ^b	
2013	23	1·7 (1·5−2·0)	1·5 (0·7–3·4)	1,927	4·3 (4·2–4·3)	1·3 (1·2−1·4) ^b	
2014	33	2·3 (2·1–2·6)	1·5 (0·7–3·4)	2,004	4·4 (4·4–4·5)	1·4 (1·3−1·5) [⊳]	
2015	57	3·9 (3·6–4·3)	2·2 (1·0−4·6)°	2,322	5·1 (5·1–5·2)	1⋅7 (1⋅5–1⋅8) ^ь	
2016	57	3·8 (3·5–4·2)	1·8 (0·8–3·8)	2,101	4·6 (4·6–4·7)	1·5 (1·4–1·6) ^b	
2017	80	5·5 (5·1–5·9)	2·1 (1·0−4·4)°	2,406	5·3 (5·2-5·4)	1·8 (1·7-1·9) ^b	
2018	110	7·9 (7·4-8·5)	2·6 (1·3-5·4)°	2,700	6·3 (6·2-6·4)	2·1 (1·9-2·2) ^b	

Table A.3: Number of events, incidence per 1,000 person years at risk (95% CI) and incidence rate ratio (95% CI) for presentation to services for depression

^a Adjusted for calendar year, gender, age and deprivation.

^b p-value significance: <0.001

° p-value significance: <0.05.

IR, incidence rate; IRR, incidence rate ratio; CI, confidence interval.

	Private law cohort (n=17,041)			Comparison group (n=68,0617)			
	Events (n)	IR (95% CI)	IRR (95% CI)ª	Events (n)	IR (95% CI)	IRR (95% CI) ^a	
Totals	470	4·3 (4·2–4·5)		17,815	5 (4·9–5)		
Sex							
Boys	185	3·3 (3·1–3·5)	1	6,238	3·4 (3·4–3·4)	1	
Girls	285	5·4 (5·2–5·6)	1·6 (1·3–1·9)⁵	11,577	6·6 (6·6–6·7)	2 (1·9−2) ^ь	
Age group							
Under 10 years	141	1·7 (1·6–1·8)	1	2,197	1·1 (1·1–1·1)	1	
Ages 10–14 years	238	10·4 (10–10·9)	4⋅8 (3⋅9–6) ^b	7,314	7·1 (7·1–7·2)	6·7 (6·4−7) [⊳]	
Ages 15–17 years	91	21·9 (20·4–23·5)	8·6 (6·5−11·4) ^b	8,304	15·7 (15·6–15·8)	14·7 (14–15·4) ^b	
Deprivation quintile							
Least deprived	71	5·2 (4·8–5·6)	1	3,445	5·2 (5·1–5·2)	1	
Second least deprived	72	4·8 (4·5–5·2)	1 (0·7–1·3)	2,860	5 (4·9–5·1)	1 (0·9–1)	
Middle deprived	89	4·6 (4·3–4·9)	0·9 (0·7–1·3)	3,375	5 (5-5·1)	1 (1–1·1)	
Second most deprived	112	4·5 (4·2–4·7)	0·9 (0·7–1·3)	3,625	4·9 (4·9–5)	1 (1–1·1)	
Most deprived	110	3·3 (3·1–3·5)	0·7 (0·5−1)°	4,110	4·8 (4·7–4·8)	1 (1–1·1)	
Year							
2011	9	0·8 (0·7−1)	1	1,130	2·6 (2·5−2·6)	1	
2012	25	2 (1·8–2·3)	2·3 (1·1−4·9)°	1,362	3 (3-3·1)	1·1 (1−1·2)°	
2013	27	2 (1·8–2·3)	2·1 (1-4·5)	1,622	3·6 (3·5–3·7)	1·3 (1·2−1·4) ^ь	
2014	33	2·3 (2·1–2·6)	2·1 (1-4·4)	1,978	4·4 (4·3–4·4)	1·6 (1·5−1·8) ^ь	
2015	53	3·6 (3·3−4)	3 (1·5−6·1)°	2,336	5·2 (5·1– 5·2)	2 (1·8–2·1) ^ь	
2016	80	5·4 (5–5·8)	4 (2−8·1) ^b	2,593	5·7 (5·6–5·8)	2·2 (2·1–2·4) ^b	
2017	95	6·5 (6·1–7)	4·5 (2·2–8·9) ^b	3,181	7 (6·9–7·1)	2·7 (2·5–2·9) ^k	
2018	148	10·7 (10·1–11·3)	6 (3·1–11·9) ^b	3,613	8·4 (8·3–8·5)	3·2 (3−3·4) ^b	

Table A.4: Number of events, incidence per 1,000 person years at risk (95% CI) and incidence rate ratio (95% CI) for presentation to services for anxiety

^a Adjusted for calendar year, gender, age and deprivation.

^bp-value significance: * <0.001 ° p-value significance: ** <0.05

IR, incidence rate; IRR, incidence rate ratio; CI, confidence interval.

Table A.5: Counts, percentage of risk of anxiety/depression following and previously to court (private) and hazard ratios for the time-to-event analyses

	Anxiety						Depression				
	Children (n)	Events n (%)	History of anxiety [.] n (%)ª	Unadjusted HR (95% CI) ^b	Adjusted HR (95% Cl)	Events n (%)	History of depression n (%)°	Unadjusted HR (95% CI)	Adjusted HR (95% CI) ^d		
All	17,041	384 (2·3)	13 (3.4)	1·4 (1·2–1·5) ^e	1·4 (1·2−1·6) ^e	328 (1.9)	15 (4.6)	2·0 (1·7−2·2) ^e	1·9 (1·7−2·1) ^e		
Boys	8,744	148 (1·7)		1·4 (1·2–1·7) ^e	1·4 (1·2–1·7)°	113 (1·3)		2·1 (1·7−2·5) °	2·0 (1·7−2·5)°		
Girls	8,297	236 (2·8)		1·4 (1·2–1·6) ^e	1·6 (1·2–1·6) ^e	215 (2.6)		1·9 (1·6−2·2) ^e	1⋅8 (1⋅6–2⋅1) ^e		

^a History of anxiety in those with a diagnosis following court.

^b Adjusted for previous history (ever) of anxiety and deprivation.

° History of depression in those with a diagnosis following court. Numbers not provided for boys and girls separately due to small numbers (disclosure risk).

^d Adjusted for previous history (ever) of depression and deprivation.

^ep-value significance: <0.001

HR, hazard ratio; Cl, confidence interval.

Nuffield Family Justice Observatory

Nuffield Family Justice Observatory (Nuffield FJO) aims to support the best possible decisions for children by improving the use of data and research evidence in the family justice system in England and Wales. Covering both public and private law, Nuffield FJO provides accessible analysis and research for professionals working in the family courts.

Nuffield FJO was established by the Nuffield Foundation, an independent charitable trust with a mission to advance social well-being. The Foundation funds research that informs social policy, primarily in education, welfare, and justice. It also funds student programmes for young people to develop skills and confidence in quantitative and scientific methods. The Nuffield Foundation is the founder and co-funder of the Ada Lovelace Institute and the Nuffield Council on Bioethics.

Family Justice Data Partnership

The Family Justice Data Partnership is a collaboration between Lancaster University and Swansea University, with Cafcass and Cafcass Cymru as integral stakeholders. It is funded by Nuffield Family Justice Observatory.

SAIL Databank

Cafcass Cymru data used in this study is available from the Secure Anonymised Information Linkage (SAIL) Databank at Swansea University, Swansea, UK, which is part of the national e-health records research infrastructure for Wales. All proposals to use this data are subject to review and approval by the SAIL Information Governance Review Panel (IGRP). When access has been granted, it is gained through a privacyprotecting safe-haven and remote access system, referred to as the SAIL Gateway. Anyone wishing to access data should follow the application process guidelines available at: www.saildatabank.com/application-process

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