

Do parents trust how data about their family is linked together?

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Governments, including in the UK, are increasingly promoting electronic linking together and analysis of administrative records from education, health, social care and other public services (e.g., DCMS, 2020). Separate sources of information from different national and local public services, such as education, social care, health, welfare, housing, criminal justice, etc., can be shared between them, joined together, and then subject to algorithmic data analysis. These practices are championed by national and local government, and by data analytics companies, as offering powerful knowledge, timeliness and economic efficiency in public services delivery, thus improving outcomes for children (Edwards et al., 2022). Local authorities can use data linkage in an attempt to identify and predict which children are at risk of, for example, becoming NEET (not in education, employment or training) or involved in criminal behaviour. Central government initiated a Local Data Accelerator Fund for children and families (MHCLG, 2021) where local authorities bid for funding for data sharing and matching projects, with one city council combining 35 feeds of data from schools and other public services.

This across-the-board data sharing, electronic merging and analysis involves information about all children, parents

(including caregivers) and families. Yet there is no easily accessible means, such as a public register, for parents to find out what is happening to this data. Indeed, there appears to be little oversight of how data is being shared and linked between public services. Nor is there any process for obtaining parental consent to such use of their children's and family's data, which may override General Data Protection Regulation (GDPR) principles. What little public consultation there has been about sharing and merging of administrative records has usually focused on anonymised data for research purposes. This begs the question of whether or not data linkage and analytic practices are out of kilter with what parents think is acceptable and trustworthy use of information about their children and families.

Our Parental Social Licence for Data Linkage for Service Intervention project[†] aims to fill this gap, and gain a comprehensive understanding of parents' views. It focuses on social licence as the dynamics of social legitimacy and acceptance of practices that lie outside general norms, in part, sustained through trust. We commissioned a representative survey of parents of dependent children across the UK to gain a systemic overview of social licence consensus and parameters of trust (see Edwards et al., 2021), as well as conducting focus group discussions with subpopulations of parents to understand how social acceptance is articulated and negotiated, and individual interviews with parents about their experiences of family support or intervention services and use of their data. From a social licence perspective, the trust that parents may place in schools and other public services to electronically share and merge together sources of information about their children and families will relate to their assessment of the process as fair and legitimate and thus as acceptable, even if there are some apprehensions, or as suspect and discriminatory (Leonard, 2018).

In this essay we outline some of our findings about the extent to which parents from different social groups trust schools and other public services to share and electronically link

data about their children and family, relating these to the wider social licence explanatory issues of legitimacy and suspicion, as well as the implications for government efforts to bring together and use administrative records from different sources.

Do parents trust public services with their data?

A majority of the parents in our survey were aware that schools and other services collected and stored digital information about children and families (72%), but only half said that they knew that the various records could be linked together. There was overwhelming agreement that parents should be informed as to how data about their children and family were used (81%), and a strong view that they should be asked for permission for information about them from different sources to be joined together (60%). The view that parents need to give consent to whether and how schools and other services share and link information about children and families was even stronger among some groups, such as Black parents and lone parents (at 66%). Yet, while policy assertions about improving public trust in data linkage often focus on awareness-raising and transparency (e.g., DCMS, 2020), the idea that parents (and the wider public) should be asked for, and could withhold, consent to sharing and merging of public services' administrative records is not a current feature.

We asked parents about the use of data by local council education and other public services, such as early years services, children's social work teams, the police and immigration, and whether or not they trusted these services to electronically merge administrative records about children and families. Figure 1 shows the extent of parental trust. Levels of trust among all parents in how their information could be used by various public services hover around the halfway mark, or fall below it (between 55% and 35%). It is notable that trust in the way that school data about children could be used (47%) was lower than social work, early years and crime records. This may relate to parents' increasing experience of the way that schools monitor and collect data about their children, creating a culture of behaviour control (e.g., Manolev et al., 2018).

Once again, however, echoing an uneven pattern that is evident across the levels of trust in various services, there are

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differences between social groups relating to their positioning in society (see also Helland et al., 2022; Jakesch et al., 2022). For example, in our survey there are differences in the extent to which parents in higher occupation, qualification and income categories trust local education services (although still only 48%) compared to parents from more marginalised groups having less trust, especially lone parents and Black parents. Indeed, these are the parents who are more likely to experience prejudice and various interventions in whether and how they bring up their children (e.g., Bywaters et al., 2017).

We now turn to material from our group discussions and individual interviews to help explain the uneven patterns in levels of trust, viewed through the social licence lens of legitimacy and suspicion.

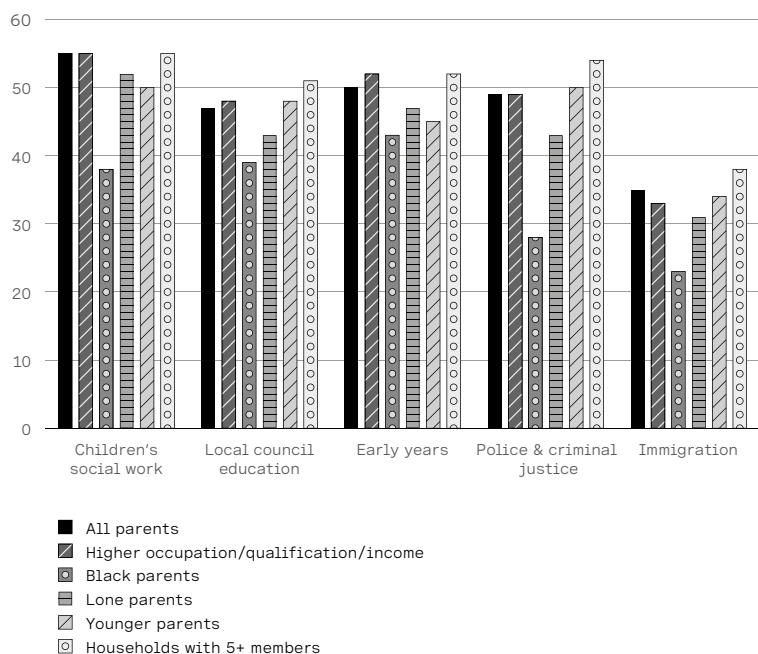


Figure 1: Parents trusting organisations to join together administrative records. Sample size: 843 parents. Source: NatCen panel survey (2020)

Legitimacy

More parents in professional occupations and from the white majority are more likely to feel that data linkage is legitimate because it will protect children in 'other' families, and to trust services undertaking the process on this basis. It is families who are in need of support or parents maltreating their children who will be the focus of electronic merging and analytics. In contrast to the families, these parents themselves have 'nothing to hide'. The interweaving of legitimate purposes and trust is evident in this exchange as part of a group discussion between parents who were working as service operation managers and coordinators in the voluntary sector, drawing on their professional experiences of working with families in need of support:

Manager: We need to have more information so that people can get the right kind of services or the right support at the right time... if we [service providers] had a central place for records, then they would all be linked and that would definitely help those services...

Coordinator 1: Yeah, because I've come from the point of view where I assumed that the system and integration was far more solidified than it actually is, you know... and there's a part of me that thinks, actually, it should've been done a long time ago and been more, sort of, coherent... on the one hand there's clear benefits for society, on the other I'm not entirely sure that we have the [data linkage] infrastructure to necessarily support it to its maximum efficacy and efficiency...

Coordinator 2: So my background was working in schools, especially, like, the working together to safeguard children and kind of, like, everyone coming together, you know, to share information and things like that... So I think it's great in one sense, definitely, to assess and see how families could benefit in certain things. But also I think it's the other side of who can get access to the information...

Coordinator 3: None of it worries me at all. I'm kind of open-minded. I suppose I'm one of them that's the old adage of if you've got nothing to hide, what's the problem.

Coordinator 2's comment about 'who can get access to the information' also indicates how some parents in professional occupations may nonetheless have data security apprehensions, despite them judging data linkage to be a legitimate practice. These concerns coalesce around illegitimate use of their own and their family's data, and of families like them, rather than those who should be identified for intervention. Other parents also had suspicions about use of administrative records, which we now discuss.

Suspicion

Parents from marginalised social groups participating in our survey were suspicious that the information collected about children and families is not always accurate, with high levels of distrust among Black parents (79%) and lone parents (63%). The rationale underpinning such suspicion about the extent and effects of inaccurate data about children and families in school and other public service records is evident from some of our individual interviews with parents who have asked for help or received interventions for their children. Parents discovered that the data recorded about their children and families, and which would be linked into other administrative records, was incorrect. Experiences of this could run from misinformation about family structure and relationships, through lapses with potentially far-reaching consequences, to suspicions of malign intent on the part of practitioners.

One mother, for example, recounted the inaccuracies in the health-related data that the school held on her child, with serious implications for her and her family. Her child's medical condition was erroneously recorded as the mother potentially abusing her child rather than the medical diagnosis that her child had received, with the possibility that her child could be removed from her care:

Mother: I've made a subject access request... And then I was just told the other information I was asking for I was not entitled to, and they wouldn't give me a reason.

Interviewer: Oh, okay, what information was that and from whom?

Mother: It was school. And also the Council because we had TAC (Team Around the Child) meetings. It was to do with my child's medical records, what had been shared with whom. And we were never told... And I've been told by the school that they've destroyed [my child's records]... because [my child] is no longer at the primary school. But I said it's such a serious allegation, it's a safeguarding file... I think the primary school still has it... I don't know what the secondary school have on [my child]... What the Education Department at the Council are holding and primary school, with that not being accurate how can they help my child?... At the moment I'm terrified. If anybody makes another referral, they just look at what records they've got at the moment and if it's not accurate, that's what worries me.

Datafied systems are inherently subject to at least some error with false positives and false negatives, but in the case of administrative data about families and children where one service's records are linked to, merged with and used by other services, inaccurate details are compounded in their reach, with potentially serious consequences (Eubanks, 2018; Henman, 2020). Article 5(1)(d) of the UK GDPR obliges accuracy, and services could be liable to penalties or enforcement if parents pursue action over misinformation – albeit the mother in the example above has been unable to gain sight of her child's records.

Black parents, whatever their occupational category, expressed extensive distrust in how information about their children and families would be understood, judged and used, based on their knowledge of racist stereotypes and prejudice. In this exchange between Black parents working in professional

occupations, the first parent raises the issue that linking of data can lead to families being labelled retrospectively with deleterious consequences, which is then picked up by the second parent to reinforce suspicion of institutional racism in how information is understood:

CEO, voluntary sector: So the issue I have is that if you have people who are then exposed to people's experiences in one agency and then another agency who's therefore supposed to be able to help them find out about certain discrepancies in the past for a family or something like that, then they could potentially make decisions about this family which could be long-lasting and impactful.

Customer services: Yeah, I agree, especially asking about the age, the financial, the culture, background, the ethnicity. I don't know in which side they're going to look at it... My worry would be to be honest more for my children than myself. Myself I grew up in Africa and I know what my background is, I know where I came from, where my culture is. But for my kids, they're born in this country and they're raised in this country... To be honest for them the racial, ethnicity or this does not really make much more sense. But behind the closed door, that [racism] is going on. So because of actually their name, how their name is spelled, how their name is called. Even in terms of their [school] grade.

Parents also expressed other suspicions of labelling and distorted views as a result of data sharing and linking. In particular, those who were in receipt of service intervention and were interviewed individually could lack trust in schools or other public services because they felt that they and their children had been or could be judged. For example, one mother was worried that her teenage son, who had been receiving social support following a difficult divorce between his parents, might be pigeonholed by the school if his information was shared:

I have a feeling sometimes it can paint a bit of a distorted view by sharing things with other agencies. So part of my ex-husband's family is a teacher and I remember her saying she actually has a list, a register, with all of those children who are being looked after or supported by social services. And if you're handed that list, then already it clouds a little bit of your judgement about that child. It's almost, like, 'Well is this child going to be difficult in class? Is this child going to need extra support?' So I think, yeah, that when [the support worker] was sharing as much information as she was with the school, I did think, 'I don't want [my son] to be labelled, to get a label', whatever that label would be, I didn't want [my son] to have that label.

A moratorium and meaningful dialogue

Parental trust in electronic linking of data held by public services about their children and families is bound up with considerations of information from schools and other public services being used in legitimate or suspect ways. Transparency about the merging of administrative records, and informed consent to the use of data about their children and families, is important for parents. Yet it is far from the case currently, where local authorities obfuscate and evade how they use and link data about children and families (Gillies et al., 2022).

The need for parents to provide consent is a stronger issue among some marginalised groups of parents, which raises alarms about the implications of electronic data linkage and analysis for their trust in schools and other services that their children might use. Indeed, there is strong suspicion of data linkage among marginalised social groups of parents, with some holding little trust in schools and other public services implementing data sharing. These are parents and children who are likely to be subject to labelling, stereotyping and discrimination. This lack of legitimacy and its implications should be a concern for policy prescriptions about sharing and linking children and families' administrative records, and any initiatives to mandate local authorities tracking and tracing

children across data bases through unique identifiers.[†]

Policymakers need to recognise that sharing and merging data about children and families, and tracking children across data systems, will be received and judged quite differently among different social groups of parents. Different social groups will see the relationship between legitimacy and trust in different ways, because they are not all positioned in the same way in society (Leonard, 2018). There are low levels of acceptability and a worrying lack of trust among marginalised groups of parents in society in linkage of data about their children and family. The issue of legitimacy seems all the more pressing when it is clear, from our discussions with parents and from other studies (e.g., Amnesty International, 2018; Vannier Ducasse, 2021), that there are errors, biases and inequalities embedded in the data sources about children and families that are being merged. This inevitably means that some parents and children's lives will be disrupted by uncalled-for scrutiny (Keddell, 2022; Leslie et al., 2020). Further, there is little evidence that data linking to identify and predict which families need intervention in order to pre-empt harm actually generates accurate knowledge (Clayton et al., 2020; Salganik et al., 2020).

At a minimum, meaningful dialogue with parents that shapes the parameters of the curation, use, sharing and linking of data from schools and other public services is required if legitimacy and trust is to be generated and actively sustained. Government and public services need to engage in greater transparency and accountability to parents, enabling them to challenge and dissent from electronic merging of their data (Redden, 2020), but again, efforts towards informing parents are likely to be received and judged quite differently among different social groups of parents (ARI Working Group 3, 2020). More fundamentally, however, a responsible question is raised for policymakers about whether or not it should be done at all. A recent United Nations Office of the High Commissioner for Human Rights' report (2021) calls for a moratorium in the use of data sharing on the basis of concerns about individual rights to privacy. Perhaps even more significant is whether or not

data linkage and tracking of their children is likely to further disengage and alienate already marginalised parents, with wider implications for a cohesive and equal society.

[†] A recently reported suggestion from the UK Children's Commissioner for England; see Adams (2022).

- Adams, R. (2022). No one knows how many children in England, says children's commissioner. *The Guardian*, 9 March
- Amnesty International. (2018). *Trapped in the matrix: Secrecy, stigma and bias in the Met's Gangs database*
- ARI (Areas of Interest) Working Group 3. (2020). *Rebuilding a resilient Britain: Trust in public institutions*
- Bywaters, P., Kwhali, J., Brady, G., Sparks, T., & Bos, T. (2017). Out of sight, out of mind: Ethnic inequalities in child protection and out-of-home care intervention rates. *British Journal of Social Work*, 47(7), 1884-1902
- Clayton, V., Sanders, M., Schoenwald, E., Surkis, L., & Gibbons, D. (2020). *Machine learning in children's services: What works for children's social care*
- DCMS (Department for Digital, Cultural, Media & Sport). (2020). *National data strategy*
- Edwards, R., Gillies, V., & Gorin, S. (2021). Data linkage for early intervention in the UK: Parental social licence and social divisions. *Data & Policy* 3, e34
- Edwards, R., Gillies, V., & Gorin, S. (2022). Problem-solving for problem-solving: Data analytics to identify families for service intervention. *Critical Social Policy*, 42(2), 265-284
- Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police and punish the poor*. St Martin's Press
- Gillies, V., Gardner, B., Edwards, R., & Gorin, S. (2022). *Freedom of information requests on the use of data analytics in children's services: Generating transparency*
- Helland, H. S., Pedersen, S. H., & Skivenes, M. (2022). Comparing population views on state responsibility for children in vulnerable situations - The role of institutional context and socio-demographic characteristics. *Journal of Public Child Welfare*
- Henman, P. (2020). Improving public services using artificial intelligence: Possibilities, pitfalls, governance. *Asia Pacific Journal of Public Administration*, 42(2), 209-221
- Jakesch, M., Bučina, Z., Amershi, S., & Oltenanu, A. (2022). How different groups prioritize ethical values for responsible AI. [arXiv:2205.07722](https://arxiv.org/abs/2205.07722)
- Kedell, E. (2022). Mechanisms of inequality: The impact of instrumental biases in the child protection system. *Societies*, 12(3)
- Leonard, P. G. (2018). *Social licence and digital trust in data-driven applications and AI: A problem statement and possible solutions*
- Leslie, D., Holmes, L., Hitrova, C., & Ott, E. (2020). *Ethics review of machine learning in children's social care: Executive summary*
- Manolev, J., Sullivan, A., & Slee, R. (2018). The datification of discipline: ClassDojo, surveillance and a performative classroom culture. *Learning, Media and Technology*, 44, 36-51
- MHCLG (Ministry for Housing, Communities and Local Government). (2021). *Local Data Accelerator Fund for children and families: Prospectus*
- Redden, J. (2020). Predictive analytics and child welfare: toward data justice. *Canadian Journal of Communication*, 45(1), 101-111
- Salganik, M. J., Lundberg, I., Kindell, A. T., & 151 others. (2020). Measuring the predictability of life outcomes with a scientific mass collaboration. *Proceedings of the National Academy of Sciences*, 117(15), 8398-8403
- UN OHCHR (United Nations Office of the High Commissioner for Human Rights). (2021). *The right to privacy in the digital age*
- Vannier Ducasse, H. (2021). Predictive risk modelling and the mistaken equation of socio-economic disadvantage with risk of maltreatment. *British Journal of Social Work*, 51(8), 3153-3171