Baby brain: Neuroscience, policy making, and child protection

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Abstract

This paper is concerned with the co-opting of neuroscientific findings into social work practice with infants at risk of harm. The value of neuroscience to our understanding of infants and infant care remains contested. For 'infant mental health' proponents, neuroscientific findings have become a powerful tool in arguing for the importance of nurture and care in the early years. However, critical perspectives question the selective use of neuroscientific evidence, and the impact that the 'first three years' agenda has actually had on families. In social work, much of our involvement with very young children is centred around risk. It is also concentrated on children born into families and communities experiencing multiple disadvantages. The emphasis on the vulnerability of infants and very young children has changed child protection social work in significant ways. Many of the children subject to child care and protection measures are very young, or not yet born. This paper draws upon findings from a study which followed families through the process of pre-birth child protection assessment. It is argued that it is necessary to engage critically with the 'first three years' narrative that has become dominant in Scottish policy making and with the impact this has had on child protection practice and the lives of families. This challenges the operationalisation of ACEs in Scotland to focus on community and public health, rather than on the individual and the family.

Key words: Child protection, infant removal, social work

Author Profile

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Introduction

This paper is concerned with the co-opting of neuroscientific findings into social work practice with infants at risk of harm. This phenomenon is contextualised within a broader discussion of policy-making in relation to young families and the interpretation of Adverse Childhood Experiences (ACEs) research in Scotland. Just as science is never value-neutral, neither is the way that it is operationalised in complex areas of human life. The central premise of the paper is not that the original research described is unreliable or problematic, rather that the research findings can be read to imply more than one approach in practice and policy. Disappointingly, in Scotland an individualistic reading that holds families who are already disadvantaged responsible has prevailed in relation to child welfare. This threatens to embed rather than address long-standing inequalities. There are signs of hope in more restorative forms of practice that are emerging. Nevertheless, central issues including child poverty, and a lack of community services and family support remain. When the basic needs of families are not met in their networks and communities, it is more likely that they will encounter social work services. However, as I shall illustrate through use of data, there is a risk that mothers are then expected to minimise their stress response for the benefit of their children, rather than being helped to address the causes of their difficulties.

The paper begins by considering the Scottish policy context in relation to the wellbeing of babies and very young children, including the pre-birth period. It is argued that child protection practice in Scotland has been indirectly shaped by a broader policy preoccupation with 'the first three years'. It is further argued that findings in relation to the development of the human brain, have been used to hold mothers responsible for the short and long-term health of their infants. Following a brief outline of the research methodology, data is used to illustrate what 'responsibilising' women and 'individualising' risk looks like in practice. The paper concludes that the emphasis on the risks to infants from their closest relatives that has arisen from the application of a 'first three years' doctrine has had unintended yet highly damaging consequences in child protection practice.

Infants, Health and Risk

Trends in early separation of infants from their birth families are a current concern for child protection. Increases in infant removals have been noted in countries with risk-focused child protection systems (Alrouh et al. 2019; Bilson and Bywaters, 2020; Broadhurst et al. 2018; Marsh et al. 2017; O'Donnell et al. 2016). The work of Broadhurst, Mason and colleagues in England and Wales has further demonstrated the lasting difficulties that this causes for birth mothers, and the risk of 'recurrent' care proceedings (Broadhurst et al. 2017; Broadhurst and Mason, 2020; Griffiths et al., 2020). Inequalities in rates of removal from different geographical areas of England have been noted (Bilson and Bywaters, 2020; Broadhurst et al. 2018). Furthermore, there is evidence that babies from Indigenous Aboriginal communities are more likely to be removed from their families and kin than non-Aboriginal families in both Australia (O'Donnell et al. 2019) and New Zealand (Office of the Children's Commissioner, 2020). Together, this body of research suggests that babies in more disadvantaged communities are far more likely to be 'born into care'.

Rates of child protection registration have been fairly steady in Scotland for more than a decade, a period that has by comparison seen marked rises in registration rates in England (Scottish Government, 2020). However, rates of children being 'looked after' in Scotland remain high, and increased numbers of babies under one are coming into care. Recent statistics show that 38% of the 3,824 children who became 'looked after' in 2019 were under five (Scottish Government, 2020: 8).

The Permanently Progressing study (Biehal et al. 2019) has specifically researched a cohort of children who became 'looked after' in Scotland before the age of five. For those children in the cohort who started a care episode away from home, almost half (46%) were under one-year old. Eighteen per cent were less than seven days old when they became 'looked after away from home' (Biehal et al. 2019). Small scale research based on Scottish Children's Reporter Administration (SCRA) data has also described increased numbers of infant removals (Woods and Henderson, 2018). When there is risk to a baby within the family, this risk is often assessed pre-birth, in order to make a decision about safe care.

A national policy agenda to inform the development of pre-birth practice in Scotland is lacking. There has, however, been an increased focus on very young children, on the vulnerabilities of infants, and on the pre-natal period in wider Scottish policy-making. This can be read in published documents including *The Early Years Framework* (2009):

> We know that high-risk behaviour such as substance misuse, smoking and poor diet during pregnancy and the early years can have a serious impact on a child's health, development and outcomes. Effective engagement with parents is an important first step in addressing problems, yet **those parents most in need are often the least likely to access services** (Scottish Government, 2009, part 1, Early Years: The Case for Action, emphasis original).

This publication was followed by national guidance entitled *Pre-Birth to Three: Positive Outcomes for Scotland's Children and Families* which emphasised 'the importance of pregnancy and the first years of life in influencing children's development and future outcomes' (Scottish Government, 2010: 9). Since then the Scottish child protection Guidance (Scottish Government, 2014) has continued to make only scant reference to pre-birth work. At time of writing a planned refresh of this Guidance had been delayed by the coronavirus pandemic. The current Guidance (Scottish Government, 2014) stipulates that a Child Protection Case Conference (CPCC) can be held to consider the risks to a baby before birth. A CPCC is a multi-disciplinary meeting to which parents are invited. At the meeting the risks to the child are considered and a decision is made about whether the child's 'name' should be placed on the child protection register.

Due to the fact that the child protection system is a non-statutory administrative system, unborn children can be considered within child protection fora despite their lack of legal personhood before birth. However, the child protection system interacts directly with the legal structures in place to protect children in Scotland, the Children's Hearing System being the primary forum for this work (Whincup, 2018: 3). Arguably the Scottish system has not 'grasped the nettle' in relation to the legal status of unborn babies considered to be at risk. Although legal action must be delayed until after the birth of the baby, as outlined above, child protection processes may be initiated pre-birth. Parental actions and choices during the pregnancy may also be taken into account in the grounds for any later legal action (McRae, 2006: 8).

The Scottish Guidance and legislation that child protection professionals rely upon in their work have not changed substantially over the past decade in relation to work with babies at risk. Over that same period, increased child welfare involvement with this population can be discerned in Scotland, as in other countries with comparable approaches to protecting children from harm. In the Scottish context, it is necessary to consult wider education and health policy documents to understand why this might be. In these documents, a strong emphasis on the 'first three years' can be found, and an inclusion of the 'pre-birth' period within wider policy making for Scotland's young families. In the

following section, I consider the basis for the emphasis on pregnancy and early life as a period that is crucial for human development and later health, wellbeing and productivity.

Child welfare: an uncertain science

The increased concentration on very young children in child protection practice must be understood in relation to wider policy shifts in Scotland. These shifts are themselves informed by what has been described as 'the first three years' movement (Macvarish et al. 2014). This movement argues for the primacy of the early years in terms of human brain development. Evidence of the harm to the physical, emotional and social development of children from less than optimal early care has been powerfully mobilised by those advocating for the 'mental health' of infants (Perry and Szalavitz 2006; Zeedyck, 2014). The dependency of human infants is a biological fact. However, the needs of human infants beyond safety, nourishment and basic care are culturally determined. Hardyment's (2007) exploration of trends in advice on infant care over the centuries traces the range of scientifically framed childcare advice that has been espoused by experts. Hardyment's analysis demonstrates that a preoccupation with infants as the key to the future health of the nation is not a 21st century phenomenon, nor is it politically neutral. Advice offered to parents and helping professionals based on scientific evidence can be framed in particular ways, in order to support the political objectives of the experts of the day, including economic and employment-based objectives for mothers (McCarthy, 2020).

Expectant and new parents who have significant difficulties in their lives are at high risk of being discounted as unable to provide the level of sensitive, attuned parenting that infants are understood to require under the 'first three years' paradigm. Practitioner anxieties about protecting babies (Critchley, 2020) have been heightened by what Featherstone et al. have described as 'the strong policy song' of 'infant determinism' (2018: 31). However, neuroscientific findings of the plasticity of the mammalian brain across the life-course have been much less audible in public discussions of the needs of babies and young children (Macvarish et al. 2014, Pitts-Taylor, 2016). The emphasis on the vulnerable infant brain has created a 'now or never' imperative to intervene early to prevent irreversible damage to human development. Criticisms and alternative perspectives have consistently been offered from within the academy throughout this period (Broer and Pickersgill, 2015; Featherstone et al. 2014; 2018; Wastell and White, 2012; 2017; White et al. 2020). However, neuroscientific evidence has continued to be utilised to create a perceptible shift in the state's approach to infants: putting their needs at the forefront of policy concerning children and families.

Over the last decade, explanations of very young children's vulnerability to inadequate care have shifted from pictorial representations of the impact of severe neglect on the brain (Allen 2011), to Adverse Childhood Experiences, or ACEs. ACEs are a way of representing how early childhood adversity and trauma can have lasting effects on individuals (Bellis et al. 2014; Felitti et al. 1998). Although ACEs arose from retrospective research with adults (Dube, et al. 2001; Felitti et al., 1998), the findings of the ACEs studies have been co-opted to a conversation that situates all infants as vulnerable. There is a subtle shift in emphasis supplied by Bellis et al. (2014; 89) when they write that 'too often the focus is on addressing the consequences of ACEs rather than preventing them in the first instance'. The job of preventing significant harm to individual children lies with social workers and colleagues in health, education, and policing. Within Scotland, ACEs research has been read as requiring their professional intervention, to prevent actual harm to children, largely from their own relatives. Yet Bellis and colleagues' work could equally be read as implying universal public health and welfare provisions: community based and led interventions that take a broad view on

health inequalities across the life course (Marmot, 2016). The decision to individualise ACEs and situate them in the family home relies on societal acceptance of the individualisation of risk and the responsibilisation of mothers.

Individualisation of Risk and Responsibilisation of Mothers

Featherstone et al. (2014; 2018) have explored the way in which an 'early intervention' agenda has been introduced into child protection work in the U.K., at the same time as community resources for those families most in need have reduced dramatically. The authors argue that rather than meeting the social and material needs of children and their families, the state during austerity has retreated to a moralistic position whereby individuals are held responsible for their own troubles. Recent research by Bilson and Bywaters (2020) provides further evidence for this analysis. As the authors state, whereas the highly influential *Allen report* (2011) called for investment in community resources to support the care of infants in their families, the reverse of this was enacted by U.K. government policy, 'crystallised by the decimation of funding for Sure Start children's centres' (Bilson and Bywaters 2020: 4).

The defunding of Sure Start centres has become a poignant motif for the way in which family support has been overrun by a prevailing culture of child rescue. Mothers are affected by discourses that hold disadvantaged families responsible for their struggles in particular ways, due to their perceived 'natural' role in upholding the values of 'the family'. As Hart (2001: 14-15) has suggested, drawing on Oakley (1994), in the context of pre-birth child protection there is a danger that women are proselytised around their behaviour and responsibility for foetal health, with little recognition of the multifarious competing demands on their lives. I will go on to show the impact of holding mothers to account in this way, drawing on data from a study of pre-birth child protection.

Research methodology

This article is based on data arising from a 12-month ethnography funded by the Economic and Social Research Council (ESRC). This study was given permission to proceed by the ethics committee of the School of Social and Political Science at the University of Edinburgh. Access for fieldwork was provided by one urban Scottish local authority, in accordance with their research ethics and access procedures. The fieldwork was intended to focus on social work practice with families pre-birth. The research concentrated on child protection meetings between practitioners and families during the period of the pregnancy. It was designed to explore what it was that professionals did in order to come to an assessment of the risks to the unborn baby, and how expectant parents understood this process. Research interviews with expectant parents were undertaken in order to explore their perspective and experiences. Social workers participating in the study were interviewed about their practice and views.

The study included 41 participants, connected to 12 unborn babies in total. The participants included 12 expectant mothers, 5 expectant fathers, and 24 social work practitioners. All names and identifying details of participants have been anonymised in the data presented here. Twenty observations and 31 research interviews were completed over the course of the ethnography. The study made use of 'mobile methods' (Buscher, Urry and Witchger, 2011) in order to get close to face-to-face practice as it happened (Ferguson, 2016). The intention was to observe interactions and to conduct research interviews in the sites where pre-birth assessment was taking place. These

included social work offices, but also family homes. A large volume of data from a variety of perspectives was created by the research, and was captured through audio-recording and ethnographic fieldnotes (Sanjek, 1990). A thematic approach was taken to data analysis. For further details of the research methodology and the ethical considerations relevant to the study see Critchley (2019; 2020).

Findings

Precious Vessels: Stress and Pregnancy

At the point of the fieldwork, ACEs had yet to make their entrance to the Scottish policy and practice stage. However, the science of the impact of stress in pregnancy on the developing baby was at its height. This has been another strand of the overarching argument that babies must be protected at the earliest possible moment. What has been described as 'toxic stress' (Shonkoff et al. 2012) has been understood to result when babies are exposed to maternal stress within the womb. This is considered as particularly risky to infant brain development. The idea that maternal stress affects foetal life in negative ways is not new. Waggoner describes the popularity of the doctrine of 'maternal impressions' during the 19th Century, 'a theory that specifically situated the cause of congenital malformations in the mental and emotional experiences of the mother while she was pregnant' (Waggoner, 2017; 36). In more recent years, neuroscientific evidence of the ways in which psychological stress might impact upon foetal development has been presented (Glover and O'Connor 2006; Mulder et al. 2002; O'Donnell et al. 2009).

Given the stressful nature of pre-birth child protection processes, the study found that some practitioners were pre-occupied with the potential for iatrogenic effects on the developing child through the mother's stress response to the child protection assessment itself. The concern that the stressful nature of child protection processes may be actively damaging to children in the womb, because of the pressures the mother is exposed to by child protection assessment and case conferences, is reported in previous studies of pre-birth work (Corner, 1997; Hart, 2002; Hodson, 2011) and remains prevalent. During the research, there was an emphasis on preventing stress in pregnancy, and on promoting prenatal 'bonding' between mother and baby. In this extract, Courtney, a social worker, is talking about going into a child protection meeting with an expectant mother Tracy who she advised not to be stressed, so as not to harm the unborn baby.

> I did say to her [Tracy] when she was quite anxious to go in. And I tried to sort of say to her, 'It's not good for you to be anxious with a baby inside you, here look I'll come with you and we'll try and, because it's not good for you just now, that'll affect your baby if you're feeling like that, the wee one inside will be', just to try and give her that sense, and she's like, 'Aw, I know!' … and she did take that support (Courtney, Social Worker to Tracy and Bill's unborn baby).

Although the social worker couches this conversation as 'support' for the mother, there is potential for this to be experienced as further pressure on expectant mothers going through very stressful processes. Rather than child welfare processes adapting to create a less stressful atmosphere for pregnant women, the responsibility is placed here on individual women. Tracy is expected to be a 'good mother' (Stewart, 2020) and manage her stress response to protect her unborn baby from harm. As Waggoner (2017: 20) describes, the social sciences have taken a very strong interest in 'cumulative life health and epigenetics scholarship that links life-course outcomes to the time in the womb or even to the mother's lifetime experiences'. However, this research can be operationalised

to provide pseudo-scientific support for mother blaming. Thereby further strengthening the gendered nature of child protection interventions with families (Farmer and Owen, 1998). In this way, mothers are held responsible and blamed for problems within the family (Mulkeen, 2012).

Here, the fit with the way that the ACEs research has been operationalised in policy-making can be read. Because retrospective research suggests a link between adversity in childhood, it is implied that adversities to children must be prevented at an individual level, and often through intervention with the mother. The alternative reading that raising universal health and living standards in a society so that all members of a family can be healthier is not adopted. In the same research interview, Courtney returned to the theme of maternal anxiety, but this time in relation to Tracy's anxiety about entering the local foodbank.

> And like she's [Tracy's] a really anxious woman. I mean she wouldn't even go into the foodbank herself. But within all that, how can she keep a baby safe? You know be able to prioritise a baby? (Courtney, Social Worker to Tracy and Bill's unborn baby).

An alternative narrative was offered by Tracy herself. Tracy talked about having delayed the visit to the foodbank for days, but of being 'sick of eating toast'. Heavily pregnant with no access to funds she had decided to seek help. Tracy's feelings of anxiety, and perhaps shame, in accessing a foodbank are here equated with being unable to 'prioritise a baby'. Wider issues of poverty and nutrition are not remarked upon, with the focus being directly on the potentially toxic results for the baby of being exposed to maternal anxiety. Courtney's assessment of a complex situation, working with expectant parents who were angry and resistant to state involvement in their family life was led by this focus. Courtney took her focus on 'toxic stress' to be evidence-based practice. Tracy's needs, including potential malnutrition in late pregnancy, were obscured by a focus on the individual harm that her understandable anxiety may be causing to her unborn baby. Expecting her to manage that stress, to make it small and invisible, provoked more, not less, anxiety for her. Tracy's own feelings of shame are amplified by the professional response, increasing her sense of stigma (Tyler, 2020).

Since the study took place, a submission to the U.K. House of Commons Science and Technology Committee voiced concern about the way that the ACEs 'movement' has gained a monopoly on U.K. policy-making so quickly (Edwards et al., 2017). This submission questioned the promise of the ACEs approach to offer simple solutions to complex problems. Furthermore, it highlighted that it is generally not the scientific community making the grand claims reflected in policy. Academics across all disciplines tend to be far more cautious about findings, their generalisability, and their application to real-world problems. Edwards and colleagues cautioned that 'viewing social issues through the prism of ACEs may well inhibit our ability to identify and respond to human needs' (Edwards *et al.* 2017; 1). The data concerning Tracy and her family is a practice example of what can happen when 'science' obscures basic human needs, which require a compassionate response. Tracy was not unusual in feeling stressed by what she was experiencing or to feel anxious going into high-stakes meetings. Just prior to joining a Child Protection Case Conference for her four older children and her unborn baby, another expectant mother Nancy who was visibly nervous described her feelings in a research interview as follows, 'I feel like my stomach's gonna fall outta my butt'. Nancy went on to talk about how difficult she found the unborn baby's inclusion in these processes, and how stressful both she and the baby's father were both finding this.

In an observed Pre-birth Child Protection Case Conference meeting for Tracy's baby, she became too stressed and upset to remain in the small meeting room. After Tracy left, her own mother and the grandmother of the unborn baby became angry with the professionals in the room. Having observed

the full meeting, I asked Tracy and Bill about this in interview at a later date. Tracy described her mother's contribution as follows,

> She said, 'Look this is my bairn' and aye she says, 'does my bairn no' count? Of course my grand bairn counts but what about my kid tae?' And that is a good point tae, it's all about… this kid, but is my life no important as well? And I have said that loads of times eh? Of course the bairn's life is well important. Obviously when she comes it's mair important than mine. In my eyes, being mummy. But my life's equally as important as the next person's (Extract from research interview with Tracy and Bill, expectant parents).

In the data, a visceral lack of respect for Tracy can be read; a failure to treat her as a person. This feeling was not confined to Tracy's experience. and was expressed succinctly by a young expectant mother, Morven, describing her experience of pre-birth child protection processes.

> I don't feel like I've been treated even as a human (Extract from research interview with Morven, expectant mother).

Macvarish et al. (2015: 251) have questioned what happens to parents in a policy and practice discourse framed primarily in terms of 'parental emotions and their impact on infant brain development'. In this way parents become viewed as part of the infant 'environment', rather than as individuals. This way of conceptualising the child's relationship to his or her birth parents in the early years can be particularly problematic in pregnancy. Since this is a time when the mother's body is understood as the site of the baby's formation and development (Macvarish et al. 2015: 259). Richardson et al. (2014) provide a constructive model for significant caution in the application of scientific research to social policy on pregnancy. This model requires gazing beyond the maternal body, since genetic and paternal effects, and wider environmental and societal influences are crucial. Even if we accept that stress can have negative effects on human foetal life, it would be very difficult for women who find themselves subject to child protection assessment during a pregnancy to mitigate this without significant support.

'It's just too much stress the now': Wider stressors in the lives of women in the study

Research into the lives of babies in the care of the state in their early lives (Ward et al. 2006; 2012) and studies that have considered the lives of mothers (Broadhurst et al, 2017; Morriss, 2018), demonstrate that this is a population whose lives are characterised by multiple adversities. Within the research this was evidenced in real time as I 'followed' women for a short period in their pregnancies. Chloe was a young mother who had one child living in a kinship care arrangement. She was expecting her second child, with a new partner who was not the father of the expected baby. I interviewed Chloe on the way to the local Sheriff Court to give evidence against a family member who had assaulted her, causing lasting scarring. Chloe was heavily pregnant at the time of the interview and had just moved from temporary accommodation into a high rise council flat. She was trying to get services, carpets, decoration and furniture in place prior to the baby's arrival. As Chloe said repeatedly, 'It's just too much stress the now'. Furthermore, the dynamics in Chloe's family were difficult, and she was under pressure not to give evidence against the family member who had assaulted her. In the research interview Chloe described her childhood as follows.

> 'Well my mum was an alcoholic and for, and practically since I was a baby, and then my dad used to batter her and stuff. So it wasn't the best. And she was

never really there so I always had to turn to my dad. And then she left [when I was] 13, so that made me worse'

(Extract from research interview with Chloe, expectant mother).

Chloe had suffered multiple adversities in her own early life. It was too late for 'early intervention' to prevent this. When she met the child protection system as a parent she was held responsible for the difficulties in her life. Rather than being met with compassion, much of what she experienced led her to feel more worried and 'stressed'. Hannah, the social worker involved with Chloe acknowledged that the assessment created stress for Chloe, as it did for other families. In Chloe's case, as she put it, 'Well, my life seems to be looking up. Because I'm not getting the baby or that took off me'. However, as Hannah mentioned in interview, and I have shown in relation to Tracy's experiences, it would have been possible to build an argument for removing Chloe's baby that was partly grounded in how she managed the 'stress' in her pregnancy.

ACEs research shows how difficulties in early life can have lasting impact on health and wellbeing for individuals. When adverse experiences are contextualised in terms of poverty, poor housing, and limited access to education, an even more difficult story emerges. Using neuroscientific findings in order to require women who have had a background like those of the mothers in the study to overcome the stresses that surrounded their pregnancies feels a cruel trick, particularly within a set of child welfare processes that are potentially highly distressing for parents. Edwards et al. (2015) have suggested that rather than giving a hopeful message for overcoming difficult beginnings that brain science exponents claim, in practice these policies serve to embed inequalities through the 'responsibilisation of poor mothers' (2015: 184). Finding from this Scottish study tend to support this thesis. There are grounds for real optimism that Scotland is taking a more restorative and family-focused approach to child welfare (Recognition Matters, 2020), and a public health approach to child adversity (Hetherington, 2020). However, further work is required to ensure that all families where there is risk are met with a nuanced and ecological understanding of the application of 'the science' to individual lives.

Conclusion

The many research studies and body of expert opinion that have been grouped together to inform policy around 'early intervention' and childhood adversity in Scotland could be used to tell numerous stories. Debate around the Scottish application of the ACEs model demonstrates both the positive and negative applications that research can be put to in policy-making and practice. This paper has taken a practice-focused approach, considering what findings from a study of pre-birth child protection might demonstrate about the application of neuroscientific findings concerning stress in pregnancy. In this way I have explored how findings presented as offering neuroscientific certainty can be operationalised in practice, and with what impact on the lives of individuals. There are positive possibilities for the use of research findings of the long-term impacts of early adversity. As yet, these are largely unrealised in social work with infants. Continuing individualisation and mal-appropriation of science creates opportunities for oppression of parents, and particularly mothers. In this way, the blaming and stigmatisation of mothers is supported and sustained by 'the science'.

The increased incidence of infant removal is a significant concern for social work at this time. Providing families with greater opportunities to care for their babies within their own homes, communities and cultures is a pressing priority in terms of the state's settlement with families. Urgent re-evaluation is required in order to support families to care for their children whenever

possible, and if this outcome cannot be safely achieved, to promote the dignity and recovery of parents, and the lifelong identity needs of children. In order to achieve this, significant investment in community resources for young families is necessary, along with a compassionate and skilled child protection response. Research which demonstrates the lifelong impact of childhood adversity does not imply that parents, and particularly mothers, of children born into adversity should be held individually responsible. It does imply that strong investment in community and public health is vital for health and wellbeing of us all; from the beginning of life to the end. It remains to be seen whether this is a path that Scottish policy-makers are committed to pursuing in order to achieve the aim of making Scotland the best place to grow up.

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