



Science, evidence, experts and the new parenting culture

The CPCS *Monitoring Parents* conference in September 2011 asked why social policy is now being based on 'neurotrash'. Jennie Bristow reports.

Introduction

A century ago, phrenologists would measure people's heads in a quest to explain differences in their social position, and healthy, well-behaved families would be sent to 'eugenics camps' to breed more of their kind. Today, policymakers seek to explain everything from income equality to anti-social behaviour through the formation of toddlers' brains, and parents are instructed in the precise arts of cuddling their children and singing nursery rhymes in order to optimise synaptic development.

Why has modern society become re-enchanted with biological explanations for human behaviour - and what does that mean for social policy about the family? This was the key question explored at the [conference](#) *Monitoring Parents: Science, evidence, experts and the new parenting culture*, held at the University of Kent on 13-14 September 2011.

Papers presented at the conference by academics from across Europe, North America and Australia, explored the international trend towards gearing social policy around the principle of 'early intervention', and raised a number of important ideas and questions about where this might lead - for politics, for individuals, and for families.

The rise and rise of 'neurotrash'

In a discussion of 'parenting and the "new phrenology"', Dr Ellie Lee, director of the Centre for Parenting Culture Studies, described the extent to which social policy in Britain is increasingly informed by claims made in the language of 'brain science'. This is particularly noticeable in the high-profile documents recently produced by Labour MPs Frank Field and Graham Allen, and the work done by the 'social conservative' think-tank the Centre for Social Justice, which was established by now Work and Pensions Secretary Iain Duncan Smith.

Such policy documents take as their starting point the claim that 'research shows' that young children's brains are moulded by the way they are parented in the early years, so that such attributes as anti-social behaviour are already 'hard-wired' into children by the time they start school. Thus, the authorities are mandated by 'the evidence' to intervene more aggressively into family life in the early years; and this is justified by the claim that

early intervention will make future social problems disappear, thus saving the Treasury millions of pounds in the long run.

There are a number of problems with this policy trajectory, which were interrogated over the course of the conference. One major problem is that the 'brain science' upon which claims about early intervention are made is not science at all, but, as Lee's paper described it, 'prejudice masquerading as research'. This 'prejudice' was further debunked by the neuroscientist Stuart Derbyshire, and the physician-philosopher-polymath Raymond Tallis, who closed the conference with a presentation based on his new book *Aping Mankind: Neuromania, Darwinitis and the Misrepresentation of Mankind*.

Derbyshire began by noting how excited neuroscientists were by the development of brain imaging technology 20 years ago, believing that it would bring huge strides in understanding the major psychiatric or neurological disorders that afflict people, such as depression, schizophrenia and autism. Yet while the technology certainly has its uses, it has not achieved anything in the understanding of these disorders; and so it would be bizarre to think pictures of the brain could tell us anything about the subtle processes of child development - in the way often claimed by current social policy and neuroscience advocacy.

Derbyshire noted that many of the claims behind early intervention are based on studies conducted upon severely neglected and abused infants: largely, those confined to Romanian orphanages for the first years of their lives, in which they received neither the minimal physical care or emotional interaction that children in the modern western world - even those in relatively neglected conditions - take for granted. Claims are also based on animal studies, which study very specific aspects of brain development (for example, that of kittens deprived of vision in one eye in the early months of life) - and cannot be extrapolated to broader claims about children.

From this, Derbyshire argued that 'the extrapolation from the severe to the normal is unwarranted': 'It would be amazing if infants who spent 23+ hours in isolation *did* not have any learning and developmental problems, and it is incorrect and dishonest to argue that if severe neglect causes a problem, less severe neglect causes a lesser problem'. Yet it is precisely this claim - that children are one synaptic connection away from blinded kittens and Romanian orphans - that forms the basis of the 'brain science' behind early intervention.

Raymond Tallis focused his critique on 'biologism' - the idea that humans are essentially biological organisms - and emphasised the limitations of this approach in grasping what it is that makes us human. He challenged 'neuroscientific' claims to have uncovered the source of powerful emotions such as love, by showing which bits of the brain light up when a subject is shown a picture of his or her lover, by exploring the extensive and ambiguous range of emotions and behaviours that individuals experience through falling (and being) in love. The claim that this uniquely human experience can be reduced to some kind of impulse measured in the brain is absurdly reductionist.

Similarly, the idea that the complex layers of human interaction involved in eating a meal - from planning to shopping, cooking and conversing - can be equated with an animal's 'feeding behaviour' shows how inadequate the natural, biological sciences are in grasping the human world.

Tallis was scornful of the way in which the humanities is, in this essentially sociobiological view, reduced to the 'animalities', and concluded his lecture with a powerful

statement about the difference between the human and animal species. As humans, we make things explicit: 'we lead our lives rather than merely organically live them'. The marshalling of junk science to treat human beings as a form of livestock reveals the dehumanising presumptions, and consequences, of society's current 'neuromania'.

Blinded by pseudo-science

Many of the pseudo-neuroscientific claims made by advocates of early intervention were exposed as deeply flawed back in 1999, in *The Myth of the First Three Years* by the American philosopher John T. Bruer. *The Myth* is a thorough and compelling review of the literature, including the orphan and animal studies discussed by Derbyshire, which reveals the neuroscientific 'evidence base' of early intervention to be comprehensively flawed. Yet, over 10 years on, the very claims that Bruer exposed continue to be made - and indeed, have been built upon and internationalised, now informing family policy and parenting culture.

In his keynote presentation to the *Monitoring Parents* conference, Bruer examined how the myths about early intervention have evolved since the early 1990s. Throughout the 'three waves' that he identified, the core flaw of the early intervention myth - that claims about brain development are made based on the *size* of the brain - has persisted. The fact, noted Bruer is that by the age of three the brain is about 85% of its mature weight or volume - but that does not mean that it has reached 85% of its *function*.

This confusion of brain science and brain function would seem to be an elementary error. Indeed, when one reads Bruer's book, it is bewildering as to why scientists and policymakers should continue to ignore the obvious deficiencies in the brain claims. One important question raised by Joan Wolf of Texas A&M University, whose powerful book *Is Breast Best?* has examined and debunked much of the flawed science used to promote the claim that mothers who formula feed their infants will damage their health and life chances, was why scientists and academics persist in citing and publishing research that they must know is flawed. What has happened to integrity, and the spirit of open-ended intellectual enquiry?

The problematic relationship between the academy and advocacy issues was addressed both by Bruer and Derbyshire, who noted that it is often difficult to separate research (or researchers) from claims-makers in the field of brain science. 'If academic advocacy is the new reality, how might communities and academics respond?' asked Bruer, and this is indeed a very important question.

A central problem with the phrases 'research tells us' or 'evidence suggests', which now form the basis of most social policy, is that policymakers no longer have to justify why they think a policy should be introduced - they are, supposedly, just doing what the science tells them. Similarly the public - along with academics outside of the particular discipline of neuroscience - are excluded from debate about the rights and wrongs of a particular policy, on the grounds that they do not have the technical expertise to comment. Even if 'the evidence' were sound, an approach to policymaking that takes as its mission 'the science tells us' is inherently exclusionary and undemocratic.

In the case of neurotrash, the evidence upon which policy is based is entirely flawed - and this reveals a highly troubling situation. Despite academics such as Bruer doing their best to engage with the scientific claims, the dogmatism of policymaking is such that it does

not seem to care whether societies are organised around dealing with real problems, or whether it is enough to base social policy on the unsubstantiated prejudices of the elite.

In this context, it is perhaps not surprising that many of the policy documents currently appearing in the UK move effortlessly between claims that 'the evidence suggests' (when in fact it doesn't) to shrill, dystopian anecdotes about children coming to school without knowing their own names, or defecating on classroom floors. The promiscuous use of flawed evidence leads quickly to an overall disregard for the truth.

An argument in search of 'evidence'

Bruer also drew attention to the way in which the fascination with early intervention speaks to 'changing cultural values about the family' - namely, a shift away from the idea of the privacy of the family towards the notion that 'children belong to the community and are only entrusted to parents'. Many other presentations given at the *Monitoring Parents* conference examined the way that this shift has played out in various arenas of parenting culture.

For example, Stefan Ramaekers of K. U. Leuven in Belgium discussed the way that philosophical notions of parental responsibility are changing, as conceptualisations of adult identity become confused and contested. Helen Reece of the London School of Economics discussed how the orthodoxy of 'positive parenting' erodes the autonomy of both adult and child, through the assumption that parents should self-consciously adopt, or 'model', 'positive' forms of behaviour which their children will simply copy. In this regard, argued Reece, ideas about disciplining children have morphed into techniques disciplining parents, and the idea that family members should behave in a studied, artificial way towards one another has become normalised.

Almost every aspect of parenting, from feeding infants to developing children's literacy, is now backed up with pseudo-scientific claims; and the conference presentations revealed some novel insights into how these claims are taken on board by parents - or resisted. For example, it was noted how scientific discourse has quickly entered the popular vernacular in discussions of everyday life - Luc Van den Berge of K. U. Leuven in Belgium described the case of a mother reporting that 'my child has very good social interaction skills' - rather than saying the kid was popular with his friends.

A similar absorption of formal, clinical language by parents - and by advertisements placed by a growing industry engaged in the production of neuro-developmental activities or toys - was reported in other presentations. This reveals the extent to which neurotrash is not just a claim peddled by policymakers, but has insinuated itself deeply into parenting culture.

Given that the impact of neurotrash cannot be attributed to sound science, it makes more sense to understand it in terms of 'evidence' that is brought in to support a pre-existing argument. In this regard, it is very similar to the pseudo-science of maternal-infant bonding, or attachment - which retains a high status in parenting culture and policy, despite the fact that the studies upon which this claim is based have been firmly discredited.

The notion that the most important factor in an infant's life was the degree to which it was attached to its mother came to the fore in the 1970s, originally spurred by child psychiatrist John Bowlby's work on 'maternal deprivation' in the 1950s. This, as with modern neurotrash, was based on a study of severely deprived infants in orphanages; Bowlby's claim

about the importance of a constant maternal presence was followed by animal studies conducted by other researchers.

In the 1970s, the term 'Bowlbyism' was sometimes employed, in recognition that Bowlby's theories were popular with policymakers because they fitted with a broader anxiety about maternal employment. Thanks to Bowlby, 'science said' that mothers should stay at home with their children, providing policymakers with the 'evidence' for their concerns: the fact that the science actually said no such thing was not enough to counteract the prejudice that allowed bonding theory to take hold.

Neurotrash can similarly be seen to serve this function, of providing evidence to support a pre-existing argument. Today, 'science says' that it is very important for parents to rear their children 'intensively' - that is, to be preoccupied with the minutiae of their child's development. But science also 'says' that child-rearing is so difficult that parents cannot be left alone to do it. The argument is that if the first three years of life is indeed a 'critical period' for brain development, to which all future personal and social outcomes are pegged, it is imperative that experts engage with the early years to ensure that parents are doing everything right.

In this way, neurotrash provides the bonding theory for the 21st century, for a time when 'maternal attachment' is no longer considered to be enough. This theory situates experts right in the heart of the family home, with the authorities positioned to insist on the use of external expertise by parents who are unwilling to comply.

Just a new form of state intervention?

Some presentations at the *Monitoring Parents* conference, including those by Janet Golden of Rutgers University, USA, and Rosalind Edwards (Southampton University) and Val Gillies (London South Bank University), situated the problem of parenting expertise historically, by showing the different ways in which the state has sought to manipulate and intervene in family life over the past century and highlighting what is novel about the processes we are witnessing now.

This historical perspective is crucial in understanding that there was no 'Golden Age' of family freedom - the modern state has always been suspicious of parents, and sought to shape their behaviour - but that the past couple of decades has brought a radical shift in how the relationship between the family and the state is understood.

In the British context, Karen Clarke of the University of Manchester has usefully theorised this as a shift from 'implicit' to 'explicit' family policy. The New Labour government, following many of the ideas and policies developed in the USA, for the first time situated 'parenting' as an explicit arena of policy intervention. Under the Coalition government, the explicit focus on parenting has gained pace, not least because it coincides with a broader agenda of cuts to other state services. As the possibility of social solutions to social problems recedes even further, the notion that policymakers must look to the family as the source and solution to all problems has become more firmly entrenched.

Frank Furedi of the University of Kent suggested that the policy dynamic around early intervention can be understood in terms of the broader crisis of the welfare state. As the classical welfare state has disintegrated, the state has reoriented itself around the institutions and practices of the private sphere, which were previously considered to be a

no-go arena. One outcome of this is the disorganisation of relationships within the family: the authority of the parent-child relationship is disrupted by the insertion of 'competing authorities' into everyday family life (in this instance, experts waving their neuroscientific credentials). This represents a qualitative shift in the historical relationship between the family and the state.

While the state has always sought to regulate family life, it did so based on an understanding that the relationship between the authorities and children was mediated through the family, an institution that required a degree of respect and autonomy in order for parents to maintain their authority over children. Today - as is clearly expressed in phrases such as 'early intervention' - the relationship between the authorities and the child is seen to be a direct one, in which parents play the role of mouthpieces of official advice.

Concepts such as 'early intervention' ratify the process of bypassing parental authority with official expertise, based upon a deterministic assumption that how children turn out is a direct product of what particular parenting techniques are 'put in'.

This development raises a number of important questions about the privacy of the family, the autonomy of adults, and the role of social policy at a time when the 'social' has given way to the merely 'behavioural'. Science cannot give us the answers to these broader questions - indeed, it currently plays the role of shutting down even the ability to ask them. Fortunately, there is still a wide enough constituency of people who are concerned enough with the truth to interrogate the claims of policymakers, and to speak up when the emperor has no clothes.

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