NHS Health Scotland

Tackling the attainment gap by preventing and responding to Adverse Childhood Experiences (ACEs)

The Scottish Adverse Childhood Experiences Hub

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Introduction

Pupil Equity Funding is allocated directly to schools, targeted at those children most affected by the poverty related attainment gap.* This paper builds on existing guidance and local discussions about the use of such funding for sustainable, longer-term work in schools and local authorities by:

- summarising the links between early adversity, learning and behaviour
- stating the significance of the relational elements to learning and how schools can create a supportive and inclusive environment for learning
- suggesting some questions to consider when planning action on the use of additional funding to reduce the attainment gap
- linking to further resources and forthcoming work which will contribute to informing action on reducing the attainment gap.

> 'As with health inequalities, reducing educational inequalities involves understanding the interaction between the social determinants of educational outcomes, including family background, neighbourhood and relationships with peers, as well as what goes on in schools. Indeed, evidence on the most important factors influencing educational attainment suggests that it is families, rather than schools, that have the most influence. Closer links between schools, the family, and the local community are needed.'
>
> Marmot Review, 2010
>
> www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-the-marmot-review-full-report.pdf

This paper has been produced to inform thinking about the impact of adverse childhood experiences and how to use the Pupil Equity Funding to reduce the attainment gap. It highlights key factors that play a role in children achieving their potential.

* www.gov.scot/Topics/Education/Schools/Raisingeducationalattainment/pupilequityfund

It has been developed by the multi-disciplinary **Scottish Adverse Childhood Experiences Hub**, hosted by NHS Health Scotland. Guidance has already been provided by the Scottish Government, Education Scotland and from local authorities about the use of the Pupil Equity Funding.

Universal services, including education and health, give us all the opportunity to realise our full potential. However, depending on life circumstances some people are better able to take up these opportunities than others. There is therefore a risk that services can exacerbate inequalities. The role of universal education in enabling all children to flourish and achieve their full potential can be affected by the extent to which children come to school ready to learn in a classroom.

> ‘I think it is really important. I would encourage you to see the Attainment Challenge and Fund in the broadest sense here – it’s equipping head teachers with the resources they need, not just to tackle the thing that happens in the classroom but to bring resource to bear to tackle some of the things that happen to children outside the classroom but affect how they do in the classroom.’
>
> First Minister Nicola Sturgeon MSP, The Gathering, February 2017

What are Adverse Childhood Experiences (ACEs)?

Adverse Childhood Experiences (ACEs) refer to stressful events occurring in childhood (between 0 to 18 years). These impact profoundly on the child's readiness and ability to learn and participate in school life. These experiences include:

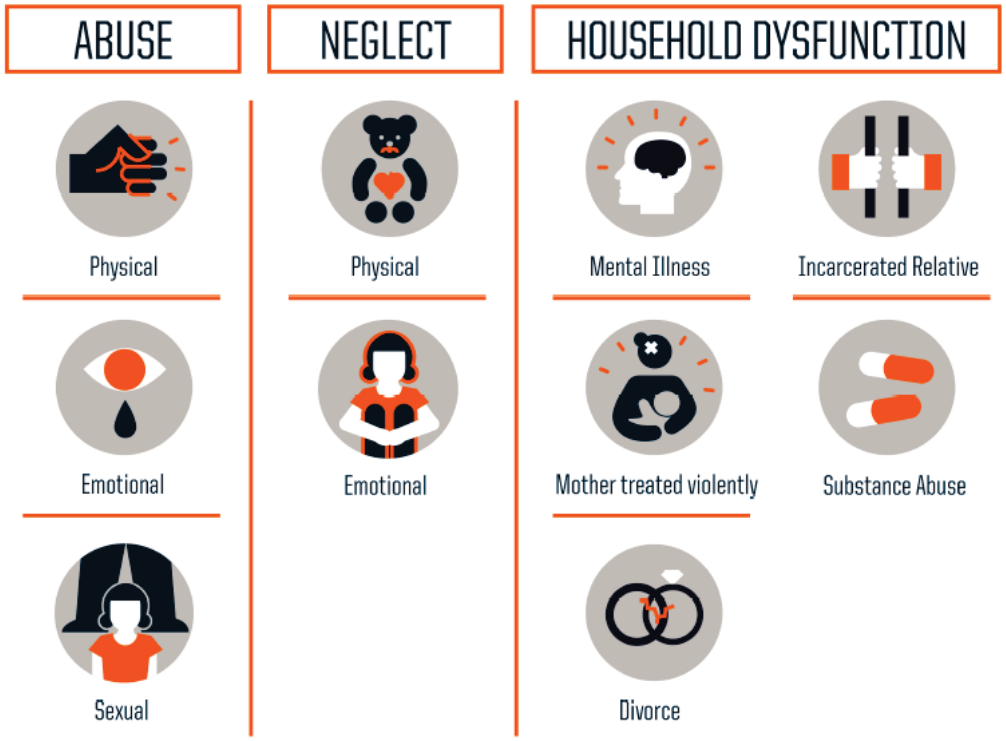

Figure 1: The truth about ACEs

Copyright 2013. Robert Wood Johnson Foundation. Used with permission from the Robert Wood Johnson Foundation. Full infographic is available at: www.rwjf.org/en/library/infographics/the-truth-about-aces.html

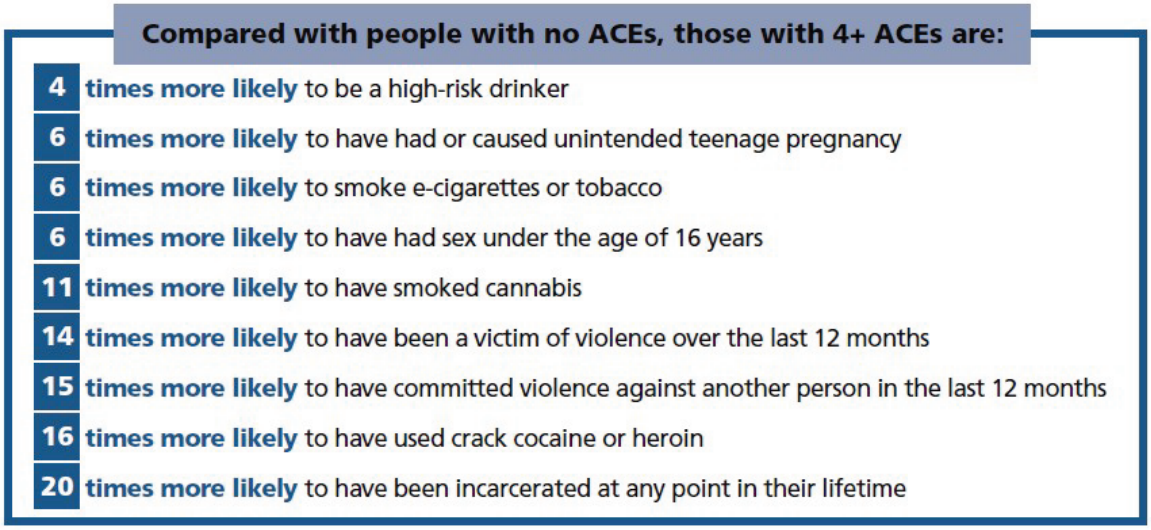

Figure 2: Infographic from an ACE study in Wales[1]

> 'Trauma in childhood can lead to reduced educational attainment, mental and physical health problems and difficulties in adult relationships, which in turn are highlighted as key factors in producing negative financial outcomes. Children who have experienced abuse and trauma will perform more poorly at school than their peers. A child living with fear and helplessness from experiences outside school cannot focus or learn to the same standard as other children. Issues at home which may affect a child's learning in school include alcohol or substance misuse, poverty, mental or physical ill-health, and children's caring responsibilities. These additional challenges can make arriving at school well-rested, fed, dressed and able to concentrate particularly difficult.'
>
> Scottish Alliance for Children's Rights, State of Children's Rights in Scotland, November 2016

Adverse childhood events can create dangerous levels of stress and derail healthy brain development, which can result in long-term effects on learning, behaviour and health. Neurobiological research indicates that the 'toxic stress' (defined as prolonged activation of stress response systems in the absence of protective relationships) associated with ACEs can lead to physical changes in the way the brain develops and propensity to experience future stress, adopt health-harming behaviours and develop mental and physical illness.[2,3] This does not mean that the

brain is fixed in this state; there is much that can be done to respond in a psychologically informed way. The role of schools, teachers and the wider support staff is therefore crucial.

This clip from the documentary film 'Resilience' (https://vimeo.com/214183672) gives a brief overview of the impact of ACEs on neurobiology. Find out more about the film at http://kpjrfilms.co/resilience

Children who end up doing well despite adversity have usually had at least one stable committed relationship with a supportive parent, caregiver or other adult. This buffers them from development disruption and builds skills such as the ability to plan, monitor and regulate behaviour and adapt to changing circumstances.[4]

We now know that significant adults in a child's life can provide important attachments for children and this is not confined to parents or carers.[5] Teachers are key figures in a child's life and can provide very important relationships for children and young people. Positive relationships, such as those between teacher–pupil, can help repair some of the impaired ways of working (such as the expectations and beliefs that a person develops about themselves, others and the relationships that they have[6]).

Toxic stress from adverse childhood experiences affects our physiology which can undermine the ability to form relationships, regulate emotions, and can also impair cognitive functions.[7,8] This potentially has significant implications for a child's ability to engage in school and will most likely result in difficulties with processing information, ability to organise self and work, transitions, and working with others.

A national conference on Adverse Childhood Experiences was held in Edinburgh in November 2016. You can view the presentations at: www.youtube.com/playlist?list=PLdtTilZi8S78r8jf1AHOoTkrQdKHDOG0T

A short film called 'The Science of Adversity' provides a brief overview of the ACE study, the neurobiology of toxic stress and how to create resilience-building schools. You can watch it here: www.youtube.com/watch?v=SNZvMZkzg28

Pennine Care NHS Trust has provided a short briefing on difficult behaviours in the classroom, why they happen and how to handle them. You can read it at: healthyyoungmindspennine.nhs.uk/media/1042/classroom-management.pdf

Addressing adversity within and outwith the school day

Thinking about Adverse Childhood Experiences is especially important for school staff and school communities.

Schools are in a fantastic position to help support children and mitigate some of the effects that ACEs may have by recognising the factors which might affect children, building trusting relationships with them in order to support their learning and development and responding in a psychologically informed manner.[9] Building resilience in children aged 6–17 years has been shown to mitigate the negative impact of adverse childhood experiences.[10] Nurturing approaches in schools which focus on building strong relationships with children and families has been found to improve social, emotional and educational attainment.[11]

The importance of taking a holistic approach to children and young people who may have or who are currently experiencing adversity is required if relationships with teaching staff are to support effective learning in school. It requires taking account of all the factors which may be affecting a child or young person and recognising the central importance of relationships. It is proposed that such a child-centred, ACE-informed, rights-based approach, which is founded on an understanding of brain development and attachment theory, will contribute to the achievement of children and young people in schools.

Poverty

In addition to the ACEs outlined above, there are other types of childhood adversity, including growing up in poverty. Poverty is also a risk factor for experiencing the ACEs outlined above. From surveys conducted in England and Wales and other places we know that ACEs are reported across the whole population. However, having high numbers of ACEs has been found to be related to deprivation, with higher proportions of people in the most deprived areas reporting ACEs. Evidence also shows that poverty impacts on children's health and educational attainment, as well as their future health and life opportunities in adulthood.

The focus of this paper is not on direct measures to influence children's material circumstances, rather on responding to the relational and emotional impacts of childhood adversity. Such actions are required in conjunction with a focus on poverty and income inequalities. There are a wide range of other resources which outline the actions needed in relation to income and poverty. For example:

- NHS Health Scotland's e-learning module on Child Poverty, Health and Wellbeing (https://elearning.healthscotland.com)
- The cost of the school day report: http://povertyleadershippanel.org.uk/node/67
- 1 in 5: Raising awareness of child poverty, a report that showed that school costs can be significant for low-income families and can have an effect on the learning opportunities for children. (https://education.gov.scot/improvement/Documents/sacfi10b-top-tips-for-schools.pdf)

A forthcoming briefing from NHS Health Scotland and Education Scotland will cover this in more detail and is referenced below.

The importance of relationships

Children and young people arrive in the classroom as products of their experiences, the wider environmental contexts in which they live and the responses they have developed to their interactions with others.

> '…the quality of the relationships between children and the adults in their lives, along with children's levels of emotional wellbeing, will largely determine the outcomes children realise.'
>
> Children's Parliament, 'It's all about relationships'

The ability to form and experience nurturing relationships with parents, families and carers develops from our earliest years. Relying on one or various figures who make us feel loved, safe and protected, is a basic necessity of human beings.[12] Children and young people in Scotland have a number of rights (www.cypcs.org.uk/rights/uncrcarticles) to make sure they are treated fairly and are given the right to grow up safely and reach their full potential. This includes the right to health, education and a good enough standard of living. The place that children learn should help them develop their skills and personality fully to prepare them for adult life. The Children and Young People's Act seeks to strengthen children's rights by encouraging Scottish Ministers and public bodies to think about children's rights and how they relate to their work.

The recently published report by the Children's Parliament, 'School should be a joyful place'[13], sets this out by children themselves.

Children who have not had sufficiently nurturing relationships from their parents/carers can later have difficulties in developing healthy relationships. This can sometimes be described as 'attachment difficulties'. A briefing on attachment by NHS Health Scotland is available at: www.healthscotland.com/uploads/documents/18212-A_brief_guide_to_attachment.pdf

Attachment difficulties and the experience of ACEs can manifest through social, emotional and learning difficulties. It may mean that these children have missed out on the development of crucial skills for life and learning such as social and friendships skills, and the ability to control their emotions and impulsiveness. This potentially has significant implications for a child's ability to engage and trust in new relationships, for example with teachers and school staff, and may result in difficulties with processing information; the ability to organise self and work; transitions and working with others. This may then lead to poorer educational outcomes, risky health behaviours and social problems.

Recent research has led to a greater understanding of how this early adversity affects brain development. Our brains are shaped by the relationships we have had from birth and therefore impact on our future emotional health and wellbeing. Children and young people who have experienced ACEs and who may not have received the emotional comfort for a healthy start in life will develop ways to respond and cope. This can result in children and young people being unfocused, disruptive, controlling, withdrawn, and destructive within a school setting.[14]

As a result teachers can observe some children, for example, having poor concentration, presenting disruptive behaviour, creating chaos, having difficulties coping with change and refusing help or being the class comedian.

Early disengagement from school, poor attendance, disruptive and aggressive behaviour and poor transition to secondary school are frequently seen in children and young people at risk of exclusion.[15]

Attainment and achievement are much broader than what is learned in schools. The literature indicates that youth work can also support children and young people to increase educational attainment, employability, and health and wellbeing.[16] Importantly, access to youth work offers the opportunity to form relationships with trusted adults outwith the home and school environment, which can be very important for many vulnerable children and young people. It can play a significant role in re-engaging children and young people in learning.

‘The Common Core’ (www.gov.scot/Publications/2012/06/5565), published in 2012, refers to the skills, knowledge and understanding required for all staff who work with children, young people and families. Central to this is the importance of relationships and how quality relationships underpin individuals’ ability to identify innate strengths and enhance resilience and self-esteem. This supports the national approach to Getting it Right for Every Child (GIRFEC) (www.gov.scot/Topics/People/Young-People/gettingitright).

Key questions to inform action on closing the attainment gap

1 Is the activity or intervention grounded in an understanding of child development and what we know about how early childhood adversity can impact on our biology, relationships and the ability to learn?

2 Is there a strong understanding of the impact of poverty on a child's ability to engage fully in education?

3 Is the school environment supportive to children and young people who may be experiencing adversity or have previously experienced it?

4 What could the school environment do to support family nurture and the issues affecting parents/carers that lead to adverse experiences in children?

5 Is the school a nurturing and caring learning environment with children's rights underpinning its work?

6 Are staff informed about the science of childhood adversity and the links to learning and behaviour, what they can do about it and how they can be supported to respond in an informed way?

7 Is the importance of developing trusting relationships with children and young people at the heart of learning? Is the importance of teachers and other adults as attachment figures recognised as a way to support children's readiness to learn?

8 Are partnerships in place with local youth work and other support service providers, enabling a supportive and protective environment to be created for children and young people in their local community?

9 What outcomes does the activity or intervention seek to achieve and how will these be measured?

Forthcoming work

NHS Health Scotland is currently working with Education Scotland to produce two evidence briefings in summer 2017:

- A review of how social determinants of health contribute to inequalities in educational outcomes.
- What health and wellbeing interventions work in a school setting to reduce inequalities?

NHS Education for Scotland has produced a National Trauma Framework to support training across different levels in the public sector. Information can be found at www.nes.scot.nhs.uk/education-and-training/by-discipline/psychology/multiprofessional-psychology/national-trauma-training-framework.aspx

NHS Health Scotland is also supporting a Scottish tour of the documentary 'Resilience', which covers the impact of toxic stress and what is being done to learn from ACE Studies. The tour has been led by the organisations ReAttachment and Connected Baby, running between April and July 2017. The tour has visited 25 communities, with over 2,800 people attending.

Contacts and further resources

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