



A REPORT BY THE ALL-PARTY PARLIAMENTARY GROUP
ON A FIT AND HEALTHY CHILDHOOD

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ADVERSE CHILDHOOD EXPERIENCES: ROADS TO RECOVERY



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The views expressed in this Report are those of the Group but not necessarily the views of each individual Group Officer or each contributor. This Report seeks to influence the views of Parliament and the performance of Government to better address issues relating to Adverse Childhood Experiences.

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THE ALL-PARTY PARLIAMENTARY GROUP AND THE WORKING GROUP

The Working Group that produced this Report is a sub-group of the All-Party Parliamentary Group on a Fit and Healthy Childhood.

The purpose of the APPG is to promote evidence-based discussion and produce reports on all aspect of childhood health and wellbeing including obesity, to inform policy decisions and public debate relating to childhood; and to enable communications between interested parties and relevant parliamentarians. Group details are recorded on the Parliamentary website at:

<https://publications.parliament.uk/pa/cm/cmallparty/190911/fit-and-healthy-childhood.htm>

The Working Group is chaired by Helen Clark, a member of the APPG secretariat. Working Group members are volunteers from the APPG membership with an interest in this subject area. Those that have contributed to the work of the Working Group are listed on the previous page.

The Report is divided into themed subject chapters with recommendations that we hope will influence active Government policy.

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ADVERSE CHILDHOOD EXPERIENCES: ROADS TO RECOVERY

A REPORT BY THE ALL PARTY PARLIAMENTARY GROUP ON A FIT AND HEALTHY CHILDHOOD

INTRODUCTION

There is a strong correlation between adverse childhood experiences (ACEs) and a range of significant negative outcomes impacting the life course. Evidence has shown that adversities rarely occur in isolation. There is a graded dose-response relationship between ACEs in childhood and unfavourable life course outcomes but it is possible to both prevent their occurrence and mitigate their impact. However, although awareness is growing, ACEs have yet to be approached as a significant public health issue in the UK; assessment of their combined impact with other adverse experiences and circumstances is at best rudimentary and at population level, there is no co-ordinated strategy that is holistic, fully-inclusive in design and practice, and preventive rather than reactive.

The chapters that follow examine ACEs from a variety of different perspectives but at the outset it is important to remember that public health policy is about people and in shaping it, there is no substitute for the lived experiences of those who have navigated the rough terrain of ACEs. MQ Mental Health Research:

<https://www.mqmentalhealth.org>

carried out a survey of its International Lived Experience Network and the responses received convey the deep-seated effects of ACEs but also the potential pathways to healing and reform.

One individual recounts the profound impact of emotional neglect, stating:

'I grew up with low social esteem following very heavy punishment and lack of emotional consideration as a child.'

Their transformation from a place of neglect to becoming *'a vibrant person'* speaks to the potential of change following supportive interventions. Physical and emotional abuse alongside witnessing domestic violence is recounted by another respondent who shares:

'Abuse fosters fear. Fear leads to cocooning oneself.'

And an individual with a background of various ACEs, including mental illness and substance misuse, illustrates the importance of addressing the intergenerational impact of trauma:

'Trauma can be transmitted through parenting behaviours and family dynamics, perpetuating a cycle of adversity.'

The respondents' voices are powerful, their experience diverse yet their message is unified: the UK Government must adopt a comprehensive, multi-faceted public health approach to ACEs. People who have suffered and are suffering from them are not just data points; they are a clarion call for change, a call that government is supremely qualified to answer. In summary therefore, ACEs, so often compartmentalised as a focus of individual and family tragedy, are ultimately a government responsibility. The 'road to recovery' will benefit us all and this report is a first step in defining what that road might be. While every ACE story is individual, the response is, and must be, collective. Their stories are *our* stories and their recovery will be *our* recovery too.

Helen Clark, Lead Author

CHAPTER ONE: ACES: IDENTIFICATION AND CLASSIFICATION: THE HISTORICAL PERSPECTIVE

Over several decades, researchers have attempted to characterise and comprehend the short and longer-term impacts of adversities faced by children in early life. The term 'adverse childhood experiences' (ACEs) derives from a study of 13,494 adults conducted by the United States Centres for Disease Control and the Kaiser Permanente health care organisation in California, Felitti VJ et al, *'Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study'*, Am J Prem Med. 1998 May; 14(4):245-58:

<https://pubmed.ncbi.nlm.nih.gov/9635069/>

A significant finding correlated ACEs with long-term outcomes; the greater the number of ACEs, the greater the impact on a child's health, education and economic future.

Felitti identified ACEs as:

- physical abuse
- sexual abuse
- psychological abuse
- physical neglect
- intimate partner violence (IPV)
- emotional neglect
- parental mental illness
- parental substance abuse
- losing a parent (through separation or death).

However, the list was expanded subsequently to embrace factors such as poverty, peer victimisation (bullying), experience of racism, living in foster care and exposure to community violence. The original framework was arguably overly-reliant upon predominantly white, middle-class participants, focusing primarily upon experiences within the home environment, Cronholm PF et al (2015) *Adverse Childhood Experiences: Expanding the Concept of Adversity*, American Journal of Preventive Medicine, 49, 3:354-361. A later study proposed adding 'adverse community environments' to the original ACE list:

'Poverty and household stressors, like unemployment, housing instability and food insecurity combine to create an environment in which a child's home, school and community are sources of stress.'

Ellis WR & Dietz WH (2017) *'A New Framework for Addressing Adverse Childhood and Community Experiences. The Building Community Resilience Model'*, Academic Pediatrics, 17.7:586-593.

Despite the case for inclusion, Asmussen A, Fischer F, Drayton E & McBride T (2020) '*Adverse Childhood Experiences: What we know, what we don't know and what should happen next*', Early Intervention Foundation, debate continues around the question of separation between concepts of poverty and ACEs because the mechanisms through which they exert effects on the life course may not completely overlap, combined with differences in appropriate policy responses.

Using a dimensional rather than cumulative risk approach to ACEs would focus upon overarching themes shared across various adversities and include threats or harm, absence of important experiences, unpredictability in a child's environment and deprivation (such as neglect). The precise timing of exposure to adversity is likely to influence the extent of its effect on the child's development and later health and wellbeing, Fox SE et al (2010) '*How the timing and quality of early experiences influences the development of brain architecture*', *Child Dev.* 2010 Jan-Feb;81(1):28-40:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846084/>

Threat seen as actual or potential harm to a child's body may occur when the child experiences or sees violence between people or undergoes traumatic events during the course of which they believe that their life or that of someone close is endangered. Studies indicate that children with experience of early life threat develop heightened sensitivity to harmful information, increased emotional reactivity and accelerated biological ageing, McLaughlin KA, Sheridan MA, Lambert HK, (2014) '*Childhood adversity and neural development: deprivation and threat as distinct dimensions of early experience*', *Neurosci biobehav Rev.* 2014 Nov;47:578-91:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4308474/>

The lack of important experiences such as receiving sufficient attention or nurturing care from care givers can be defined as neglect and associations have been made between this form of deprivation and problems with language, cognitive functioning and social understanding, McLaughlin et al (2021) '*The value of dimensional models of early experience: thinking clearly about concepts and categories*', *Perspect Psychol Sci.* 2021 Nov; 16(6):1463-1472:

<https://journals.sagepub.com/doi/10.1177/1745691621992346>

There is wide consensus around the view of the first 1000 days of life as a window of critical importance to healthy development and lifelong wellbeing and ACEs during this time could potentially have a greater impact. Recent research highlights pregnancy as a pivotal time when positive feelings towards the foetus (especially if combined with strong partner support) can promote post-birth maternal-infant bonding and have beneficial influence on a child's own social-

emotional capacity, de Waal N et al (2023) '*Maternal-infant bonding and partner support during pregnancy and postpartum: Associations with early child social-emotional development*'. *Infant Behav Dev*72:101871:

<https://pubmed.ncbi.nlm.nih.gov/37544195/>

Physical neglect encompasses a multitude of factors and complex interplay between them may mean that children globally are not attaining their full developmental potential. The phrase could be applied to malnutrition defined as stunting and under nourishment but also overweight or obesity. A study has found child overweight or obesity to be most commonly associated with sexual abuse and wasting and stunting with neglect, Martin-Martin et al (2022) '*Frequency of malnutrition in children and adolescents with child maltreatment*', *Nutr Hosp* 39(2):282-289:

<https://pubmed.ncbi.nlm.nih.gov/34886674/>

Children with disabilities are at increased risk of experiencing abuse, neglect and poverty; also reduced access to education and medical care, Scharf RJ et al (2017) '*Global Disability: Empowering Children of All Abilities*', *Pediatr Clin North Am* 64(4):769-784:

<https://pubmed.ncbi.nlm.nih.gov/28734509/>

Substance abuse is often a significant factor in all the different forms of abuse while neglect as nutritional deprivation can be an indirect form of it, Ross AH & Juarez CA (2014) '*A brief history of fatal child maltreatment and neglect*', *Forensic Sci Med Pathol* 10(3):413—22:

<https://pubmed.ncbi.nlm.nih.gov/24464796/>

The dimension of unpredictability is difficult to define and measure but evidence shows that children growing up in uncertain, unstable or uncontrollable environments are predisposed to health problems in adulthood, Maner JK et al (2023) '*The role of childhood unpredictability in adult health*', *J Behav Med.* 2023 Jun; 46(3):417-428:

<https://doi.org/10.1007/s10865-022-00373-8>

Most ACE research derives from surveys administered to cohort studies but routinely collected data stored in health records and bearing witness to multiple adversities such as parental substance misuse, adverse family environments and markers of intimate partner violence (IPV) represent an under-used opportunity to identify and support families affected by ACEs, Syed S, Gilbert R et al (2023) '*Families adversity and health characteristics associated with intimate partner violence in children and parents presenting to health care: a population-based birth cohort study in England*', *The Lancet Public Health*, 2023;8 (70:e520-e34)

It is generally agreed that the effect of adversity is exerted through '*major unrelieved stress over prolonged periods of time*', Felitti VJ & Anda RF (2014) '*The lifelong effects of adverse childhood experiences*', In: Chadwick D.L. et al.(eds) Chadwick's child maltreatment vol 2: sexual abuse and psychological maltreatment, 4th edn STM Learning, Saint Louis, pp 203-216. The developmental timing and duration of exposure to it may influence health outcomes. Nelson CA et al '*Adversity in childhood is linked to mental and physical health throughout life*', BMJ 2020; 371:m30048 and the UK Science and Technology Select Committee have identified the need to supply an evidence gap as a key priority, *Evidence-based early years intervention* (2018).

In addition, despite many and varied interpretations, there is neither a universally agreed definition of ACEs nor a uniform language to describe them.

Much remains to be done to raise the level of awareness so that prevention and remediation are both effective and consistent, Public Health Wales (2023) '*A practical handbook on Adverse Childhood Experience (ACEs). Delivering prevention, building resilience and developing trauma-informed systems*':
https://phwwhocc.co.uk/wp-content/uploads/2023/10/PHW-WHO-ACEs-Handbook-Eng-18_09_23.pdf

Approaches that are informed by available research evidence have the potential to contribute to addressing the fundamental roots of inequalities and mental ill health and studies indicate that a nurturing environment during infancy and early childhood helps to normalise crucial aspects of learning in early adolescence and decrease the likelihood of experiencing depressive symptoms in later life, Sheridan MA et al (2018) '*Early deprivation disruption of associative learning is a developmental pathway to depression and social problems*', Nature Communications, 991) 2216:
<https://doi.org/10.1038/s41467-018-04381-8>

The presence of societal conditions conducive to ACEs in childhood is not a new phenomenon as evidenced by the living conditions of impoverished Victorian children:

https://cdn.nationalarchives.gov.uk/documents/education/victorian_children.pdf

and in the 20th century by the seismic shifts and disruptions occasioned by the Second World War:

<https://www.iwm.org.uk/history/growing-up-in-the-second-world-war>

After Britain signed the Universal Declaration of Human Rights in 1948:

https://www.un.org/en/udhrbook/pdf/udhr_booklet_en_web.pdf

followed by the introduction of the National Health Service the importance of prevention gained in recognition and the case for it was strengthened in more

recent times by a Labour Government's introduction of the Sure Start programme, Cattan S et al (2021) *'The Health Impacts of Sure Start'* in 1998:

<https://www.suttontrust.com/wp-content/uploads/2018/04/StopStart-FINAL.pdf>

Sure Start's integrated health services were designed to support families from conception and pregnancy throughout the first five years of a child's life and longitudinal research showed a significant long-term cost benefit of the strategy in the reduction of hospital admissions not just in the early years of children's lives but in later years too. This was particularly marked for boys living in areas of disadvantage.

However, central funding for Sure Start centres was not maintained from 2010 onwards and local authority budgets were unable to bear the cost in addition to other funding calls. Services were steadily cut leading to eventual centre closures thereby reducing access to readily available sources of help and preventive benefit, Smith G, Sylva K et al (2018) *'Stop, Start; Survival, decline or closure?'*, Children's centres in England, 2018:

<https://www.suttontrust.com/wp-content/uploads/2018/04/StopStart-FINAL.pdf>

Approaches to the prevention and remediation of adverse childhood experiences are informed both by research evidence and the case for beneficial preventive actions such as early home visitation, Currie J & Rossin-Slater M (2015) *'Early-life origins of life-cycle well-being; research and policy implications'*, J Policy Anal Manage. 2015 Winter;34(91):208-42:

<https://doi.org/10.1002/pam.21805>

However, primary prevention of adverse childhood experiences ultimately necessitates societal changes that improve household environments and the overall quality of life.

A first and necessary step in this process should therefore be a whole scale Government-led review of existing systems.

CHAPTER TWO: PREVALENCE: THE CURRENT POSITION INCLUDING ANALYSIS OF CURRENT MEASURES AND RESEARCH NEEDS

The first UK study of ACEs published in 2014, found that almost half of England's adult population had experienced one ACE with nearly 10% experiencing four or more, Bellis M et al (2014) '*National household survey of adverse childhood experiences and their relationship with resilience to health-harming behaviours in England*', BMS Med.2, pp.12-72.

In common with much subsequent research, the survey relied upon adult recall of childhood events. Identification overall has been primarily retrospective; consequent upon the adult entering a treatment or rehabilitation programme and sometimes involving self-selected participation in studies such as 'My ACE Story': <https://www.myacestory.com/>

The NSPCC cited the difficulty in obtaining conclusive data about children who have experienced ACEs due to under-reporting, NSPCC (2023) '*Statistics on child abuse*':

<https://learning.nspcc.org.uk/statistics-child-abuse/>

ACEs rarely occur in isolation and an accurate prevalence assessment necessitates the collation of data from multiple sources before cross-referencing so that the co-concurrence of different ones can be analysed.

The Adverse Childhood Experiences (ACEs) Report UK 2023, G Knott:

<https://www.pacesconnection.com/blog/adverse-childhood-experiences-aces-report-uk-2023>

refers to findings of a 'Lived Experience' survey and a small National survey conducted by 'My ACE Story' across the UK from May-September 2023 and illustrating the devastating effect of toxic, stressful and unstable family backgrounds upon people with a high number of ACEs.

In the Lived Experience sample:

- 35% of those whose parents separated or divorced experienced neglect vs 17% whose parents stayed together
- 56% lived with a household member who misused alcohol or drugs vs 29%
- 71% lived with a household member who was depressed, mentally ill or suicidal vs 54%
- 81% saw or heard a parent in their home yelled at, insulted, humiliated or beaten vs 61%
- 34% experienced unwanted sexual contact (not necessarily in the home) vs 23%.

In the National sample:

- 23% of those whose parents separated or divorced experienced neglect vs 9% whose parents stayed together
- 45% lived with a household member who misused alcohol or drugs vs 19%
- 47% lived with a household member who was depressed, mentally ill or suicidal vs 25%
- 62% saw or heard a parent in their home yelled at, insulted, humiliated or beaten
- 13% experienced unwanted sexual contact (not necessarily in the home) vs 6%

In both surveys:

- A toxic, stressful family and home environment correlates with a high number of ACEs
- Mental health and drug issues in the household in both samples increased over time
- Physical violence against the child in both samples decreased over time
- The more ACEs, the more that certain medical conditions increased and this included a greater number of GP visits. The top conditions reported are anxiety, depression, allergies, asthma and heart conditions
- Bullying is rife regardless of sex (60% have experienced this) but more prevalent in White British populations (+ 7% to 11% vs Other Ethnicities)
- 40%-45% of Other Ethnicities (excluding White British) experienced racism.

Abuse and neglect

The most accurate assessment of child abuse and neglect will be obtained if data is collected from multiple sources including children's services records, police and coroners' records and information held by helpline charities such as Childline.

The NSPCC has estimated that 1 in 14 children are thought to have been sexually, physically or emotionally abused:

<https://learning.nspcc.org.uk/media/1042/child-abuse-neglect-uk-today-research-report.pdf>

and recent statistics from The Crime Survey for England and Wales indicate that at least 1 in 5 adults has experienced some form of abuse or neglect in childhood, Office for National Statistics (2020) '*Child abuse extent and nature, England and Wales*'.

The majority of referrals to child protection services arise from neglect and the latest data released by the Children's Commissioner suggests that although 25% of children will meet the criteria for social services referral before their 16th

birthday, only 43% of those referrals will take place, Jay M et al (2020) '*Model estimates of cumulative incidence of children in need status and referral to children's social care*':

<https://osf.io/dvgpf>

Referrals are most likely to be made by schools and the police services and of these 31% are linked to concerns about domestic violence:

<https://explore-education-statistics.service.gov.uk/data-catalogue/characteristics-of-children-in-need/2023>

Victims of childhood abuse appear more likely to experience domestic abuse as adults, Office for National Statistics 2020, as above. This experience in adulthood is often hidden and unreported to the police but the National Centre for Domestic Violence suggests that it will adversely affect 1 in 5 adults at some point in life, NCDV (2023) '*Domestic abuse statistics UK*':

<https://www.ncdv.org.uk/domestic-abuse-statistics-uk/>

Domestic abuse, substance abuse and parental mental health concerns are known as 'the toxic trio' and it is estimated that almost half a million children live in households where they co-exist, Chowdry H (2018) '*Estimating the prevalence of the 'toxic trio*':

<https://assets.childrenscommissioner.gov.uk/wpuploads/2018/07/Vulnerability-Technical-Report-2-Estimating-the-prevalence-of-the-toxic-trio.pdf>

They have been cited as contributory factors in 86% of all incidents involving a child being killed or suffering serious harm, Brandon M, Sidebotham P et al (2012) '*New learning from serious case reviews: A two year report of 2009-2011*', London Department of Education.

Loss of a parent through death, separation or incarceration

The loss of a parent via separation, death or incarceration is one of the original ACEs listed by Felitti (above). According to figures released by the Office of National Statistics, 42% of marriages end in divorce, '*Marriage and civil partnership status in England and Wales; Census 2021*':

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriage/s/marriagecohabitationandcivilpartnerships/articles/marriageandcivilpartnershipstatusenglandandwalescensus2021/2023-02-22>

The Childhood bereavement network estimates suggest that 127 children in England are newly bereaved each day while 1 in 20 lose both parents before they reach the age of 16.

There is no national data base of children with a parent in prison and no national programme of support for them, Cooper V et al (2023) '*From arrest to release*,

helping families feel less alone: An evaluation of a Worcestershire pilot support project for families affected by parental imprisonment':

<https://oro.open.ac.uk/88511/>

Additional ACEs

Community and environment-induced ACEs occur outside the home and include exposure to racism, bullying, community violence and living in foster care, 'Philadelphia ACE project':

<https://www.philadelphiaaces.org/philadelphia-ace-survey>

Research indicates that there are 83,840 looked after children in England, equivalent to 1 child in every 140, DfE (2023) 'Children looked after in England including adoptions':

<https://explore-education-statistics.service.gov.uk/find-statistics/children-looked-after-in-england-including-adoptions>

It is estimated that 40% of children and young people have experienced some form of bullying, DfE (2016) 'Longitudinal study of young people in England cohort 2: health and wellbeing at wave 2':

<https://www.gov.uk/government/publications/longitudinal-study-of-young-people-in-england-cohort-2-wave-2>

Assessing exposure to racism and community violence has been less straightforward.

A study of data relating to measures introduced to support children at risk of other adverse experiences reveals that it is predominantly disparate, riddled with gaps or non-existent. For example, there is an absence of data on the impact of support measures for children with a parent in prison because there is no national support programme, Cooper V et al (2023) 'From arrest to release, helping families feel less alone; An evaluation of a Worcestershire pilot support project for families affected by parental imprisonment':

<https://oro.open.ac.uk/88511/>

In the case of Sure Start centres, their effect on physical and mental health outcomes has been measured, but further research is necessary to examine the impact of this intervention on educational outcomes, access to social care and offending patterns, Cattan S et al (2021) 'The Health Impacts of Sure Start':

https://ifs.org.uk/sites/default/files/output_url_files/BN332-The-health-impacts-of-sure-start-1.pdf

Widening the research pathway

Addressing ACEs, reducing their occurrence and mitigating their effect now requires a more nuanced and multifaceted approach. Investigating the differential

impact of various ACEs is key to tailored interventions, McLaughlin KA (2016) *'Future directions in childhood adversity and youth psychopathology'*, Journal of Clinical Child & Adolescent Psychology, 45(3) pp361-382. Different trauma types necessitate varied approaches to care and support. The impact of physical abuse for example, may differ significantly from that of emotional neglect and require distinct intervention strategies. Interventions should be culturally sensitive and tailored to the specific needs of diverse populations including minority groups and other marginalised communities. It is imperative to explore ways in which they can be adapted to be more inclusive and effective for various demographic groups including but not limited to ethnic minorities, LGBTQ+, young people, looked-after children or those experiencing homelessness.

Trauma-Informed Care (TIC) is becoming more familiar in mental health service settings, Sweeney, A et al (2016) *'A paradigm shift: Relationships in trauma-informed mental health services'*, BJ Psych Advances, 22(5) pp.319-330 but there is an urgent need to both develop and fund rehabilitative programmes within the criminal justice system focusing on addressing the trauma underlying many of the criminal behaviours linked to ACEs. New and flexible strategies are also needed to address the rapidly rising role of technology in both exacerbating and mitigating the effects of ACEs.

Technology can be harnessed to further extend the ACE knowledge base. In 2022 researchers in Tennessee developed an algorithm using administrative data to measure adverse childhood experiences (ADM-ACE) within routinely collected health insurance claims and enrolment data, Buntin M, Gonzales G & Henkhaus L (2022) *'An algorithm using administrative data to measure adverse childhood experiences'*, ADM-AC 2022. The study used diagnosis and procedure codes, prescription drug files and enrolment files to develop the ADM-ACE, to measure the occurrences of ACEs and to examine prevalence by demographic characteristics among a sample of children in the Tennessee State Care Service (TennCare).

The research found that approximately 19.3% of children in TennCare had indicators for ADM-ACEs and the prevalence was higher among children who were younger, non-Hispanic white or black (compared to Hispanic) and children residing in rural versus urban counties. UK data suggests a high prevalence of ACEs among certain populations where other issues also occur. Survey information underlines that ACEs are co-morbidities, which allows for the possibility of developing a predictive research approach to measuring them. The ADM-ACE from Tennessee could be a valuable research tool and health encounter data a worthy addition to ACE research rather than relying solely on the collection of survey reports.

There is also increased awareness of the need for advanced screening techniques so that ACEs and their impact can be identified correctly, the child's experiences assessed accurately, Finkelhor D (2017) *'Screening for adverse childhood experiences (ACEs): Cautions and suggestions'*, Child Abuse & Neglect, 85, pp174-179 and comprehensive training programmes introduced for professionals in education, healthcare and law enforcement, enabling them to recognise and respond appropriately to signs of ACEs.

However, steady advancement in ACE treatment cannot be assured unless there is a Government-led national effort to collate information about their prevalence in order to identify the precise type of support that is needed. Systems must be put in place to monitor those who are at risk of ACEs from birth together with a fully-funded national intervention strategy reviewed meticulously over time to measure the long-term impact of ACEs across a range of outcomes.

This would be a serious investment in the long-term wellbeing of future generations whereby the impacts of ACEs are recognised and affected individuals given tailored support resulting in a healthier, more prosperous and resilient society that works for everybody.

CHAPTER THREE: IMPACT THE INFLUENCE OF ACES ON THE LIFE COURSE

Adverse Childhood Experiences (ACEs) have the potential to impact individuals across the lifespan with implications in utero, early childhood, throughout adolescence and into adulthood. The numerous, various and often co-existing injurious outcomes with which they are associated include worse mental health, worse physical health, worse health-related behaviours, lower levels of education and employment and continued lifelong exposure to violence and adversity.

However, the most notable and perhaps, most worrying feature of ACEs, is the degree to which they have become normalised within a society that has in consequence, become inured to their destructive effects and therefore slow to pursue avenues of remediation and prevention. *'Routine enquiry for history of adverse childhood experiences (ACEs) in the adult patient population in a general practice setting: A pathfinder study 2018'*:

<https://www.rsph.org.uk/static/uploaded/d48f3804-b6a5-4327-a84454d3a004b562.pdf>

Parents who have suffered ACEs such as neglect and maltreatment have increased risk of exposing their children to them thus ensuring that inherited misery transcends the generations, Bellis et al (2019) *'Life course health consequences and associated annual costs of adverse childhood experiences across Europe and North America; A systematic review and meta-analysis'*, The Lancet Public Health, 4(10), e517-e528:

[https://www.thelancet.com/article/S2468-2667\(19\)30145-8/fulltext](https://www.thelancet.com/article/S2468-2667(19)30145-8/fulltext)

Maternal ACEs are linked with children's poor post-natal health including underweight, foetal alcohol syndrome and a higher incidence of disability. Prolonged, frequent exposure to ACEs and consequent toxic stress can have a detrimental impact upon foetal development, generating a chronically maladaptive stress response, altering brain architecture and increasing potential risk of psychopathy and cognitive defects, Nelson CA et al (2020) *'Adversity in childhood is linked to mental and physical health throughout life'*, BMJ (Online), 371,m3048-m3048:

<https://doi.org/10.1136/bmj.m3048>

A chronically high cortisol level may disrupt endocrine and immune functioning resulting in increased inflammation, reduced immune responses and heightened susceptibility to illness and chronic disease in adulthood, Monnat SM & Chandler RF (2015) *'Long Term Physical Consequences of Adverse Childhood Experiences'*, Sociological Quarterly, 56(4), 723-725:

<https://doi.org/10.1111/tsq.12107>

Chronic exposure to toxic stress can permeate the life course by impacting self regulation, attention span, impulse control, memory and cognitive function, Rokach A & Clayton S (2023) Chapter 10 '*Children exposed to ACE: The trauma and its aftermath*' and in Rokach A (2023) '*Adverse Childhood Experiences and their Life-Long Impact*', Academic Press, pp 2017-242:

<https://doi.org/10.1016/B978-0-323-85853-3.00019-7>

Early childhood is now widely seen as a pivotal window for developmental growth and attachment and during this time, physical and cognitive development is both rapid and crucial to success in adult life, Webster EM (2022) '*The Impact of Adverse Childhood Experiences on Health and Development in Young Children*', *Global Pediatric Health*. 2022;9.doi:10.1177/2333794X221078708. Infants who are exposed to ACEs demonstrate reduced emotional expression, negative and aggressive behaviours and insecure attachment, Rokach and Clayton as above.

Chronic stress and ACE exposure can trigger biological changes, impacting the attainment of key milestones and resulting in overall developmental delay. The injuries arising from physical abuse such as head injury can be life-changing and ACEs can also increase the likelihood of childhood somatic pain including head and stomach ache and irritable skin conditions, Bellis et al (2023), as above. Early life exposure to ACEs is also associated with reduced brain volume, higher cortisol levels and an exacerbated risk of common childhood diseases such as asthma, Nelson et al (2020), as above.

Children who have been exposed to a higher number of ACEs have less engagement with school, denoted by their lower levels of achievement and higher rates of absenteeism. Findings from the Avon Longitudinal Study of Parents and Children (ALSPAC) a birth cohort study in the South West of England, Houtpen LC et al (2020) '*Associations of adverse childhood experiences with educational attainment and adolescent health and the role of family and socioeconomic factors; A prospective cohort study in the UK*', *Plos Med*. 2020;17(3):e1003031, reveal that young people exposed to four or more ACEs were twice as likely not to attain the key educational benchmark of five or more GCSEs at grade C or above.

Those exposed to toxic stress encounter difficulty in learning and concentrating; their emotional and social intelligence is compromised as is their ability to reflect and solve problems, inhibit impulsive behaviours and regulate stress. Studies have also identified that insecure attachment; delays in social behaviours and difficulty in forming friendships are seen in children who have experienced ACEs in pre-school settings.

Links have also been found between ACEs and suicidal behaviours (both attempts and completions) in children and adolescents, McRae E. et al (2022) '*Pathways to*

Suicidal Behaviour in Children and Adolescents; Examination of Child Maltreatment and Post Traumatic Symptoms, Journal of Child and Adolescent Trauma, 15(3), 715-725:

<https://doi.org/10.1007/s40653-022-00439-4>

and combining the ways in which ACEs impact mental and physical health increases the level of risk. Experience of particular ACEs such as maltreatment (physical, sexual, emotional abuse and physical and emotional neglect) increases the chances of suicidal behaviours and early experiences can foreshadow suicide attempts at an earlier age.

Childhood trauma has been found to impact adult mental health by increasing the likelihood of an individual developing a range of mental illnesses including borderline personality disorder, bipolar disorder, anxiety, PTSD, schizophrenia, eating disorders and other addictions. ACE exposure is linked both to depression and its duration; women with experience of ACEs are likely to be affected for a longer period of time and the depression may be early onset, treatment resistant and recurrent. Sexual abuse is a recognised risk factor for major recurrent depression in women, Du Y et al (2023) *'Impact of adverse childhood experiences on life expectancy with depression in the UK population; The mitigating role of educational attainment. Child Abuse & Neglect, 144. 106383-106383.*

<https://doi.org/10.1016/j.chiabu.2015.01.011>.

Mental health can be influential in generating an increased risk of physical health problems in people who have suffered exposure to ACEs. A data analysis from a UK Biobank study of UK adults shows that those reporting the experience of child maltreatment incurred a higher likelihood of cardiovascular disease with a risk variant from 9-27% dependent upon the particular maltreatment. A significant proportion of the connection between child maltreatment and cardiovascular disease was explained by anxiety and depression, Soares AG & Howe LD et al (2022) *'How does childhood maltreatment influence cardiovascular disease? A sequential causal mediation analysis'*, Int J Epidemiol. 2022;51(2):555-66. Smoking, body mass index and inflammation further contributed to the link between ACEs and cardiovascular disease.

In adulthood, ACEs have affinity with adult chronic conditions and a reduced life expectancy, Rokach and Clayton (2023) as above. Their influence on health-related behaviours can be discerned in adolescence; those with such exposure are more likely to smoke, have harmful patterns of alcohol consumption and to use illegal drugs, Houtepen LC et al, as above and Hines LA et al (2023) *'Adverse childhood experiences and adolescent cannabis use trajectories: findings from a longitudinal UK birth cohort'*, The Lancet Public Health, 2023;8(6):e445-e52.

ACE-experienced individuals may also take poor care of their health by overeating or sexual risk taking and engage in violent and potentially criminal activity. There are a disproportionate number of individuals in the criminal justice system who have suffered ACEs, Fox BH et al (2015) '*Trauma changes everything: Examining the relationship between adverse childhood experiences and serious, violent and chronic juvenile offenders*', *Child Abuse & Neglect*, 46, 163-173:

<https://doi.org/10.1016/j.chiabu.2015.01.011>

and they have long been associated with increased antisocial behaviour and offending, Baglivio MT et al (2015) '*The Relationship between Adverse Childhood Experiences (ACE) and Juvenile Offending Trajectories in a Juvenile Offender Sample*', *Journal of Criminal Justice*, 43(3), 229-24:

<https://doi.org/10.1016/j.jcrimjus.2015.04.012>

There is a clear link between ACEs and socioeconomic status in childhood with individuals from deprived areas more likely to report experience of them and areas of high population density and high child poverty rates are similarly linked to high incidence, Lewer D & King E et al (2020) '*The ACE Index: mapping childhood adversity in England*', *Journal of Public Health Oxford, England*, 42(4), e487-e495:

<https://doi.org/10.1093/pubmed/fdz158>

Harmful health-related behaviours triggered by ACEs are known to be linked to socioeconomic and health consequences across the life course and are therefore a key mechanism through which ACEs assist the perpetuation of social and health inequalities. Mental illness in particular is costly both to the individual via earning capacity and society in terms of productivity. Individuals who have experienced ACEs incur a higher risk of poverty, unemployment and homelessness.

There is also a disproportionately high occurrence of ACE-related harm to different ethnicities and a need for better understanding of psycho-social cultural issues in order to establish sensitive preventive interventions, Hampton-Anderson JN & Carter S et al (2021) '*Adverse childhood experiences in African Americans: Framework practice and policy*', *American Psychologist*, 76, 314-325:

<https://doi.org/10.1037/amp0000767>

The combined health care costs of diagnosing and treating mental illness, chronic disease, alcohol and drug-related illnesses and injury, crime and incarceration are deemed to be circa 1.3 trillion dollars across Europe and North America, Bellis et al (2019), as above. Interventions that support families experiencing adversity to either prevent the occurrence of ACEs or mitigate their effects would therefore have the potential to improve health and prosperity at population level. The strong link between poverty and occurrence of ACEs, and in particular, child maltreatment, suggests that alleviation of child poverty would be an effective

Government intervention to reduce the occurrence of ACEs and minimise their adverse effects on the life course.

CHAPTER FOUR: RISK FACTORS: IDENTIFICATION AND PREVENTION OF THE SOURCES AND FORMS OF ADVERSITY THAT ARE RISKS FOR AND OUTCOMES OF ACES

The onset of adverse childhood experiences (ACEs) can precede birth or conception, Hemady CL et al (2022) '*Using network analysis to illuminate the intergenerational transmission of adversity*', European Journal of Psychotraumatology, 13(2), 2101347:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9397447/>

and Querdasi FR et al (2023) '*Multigenerational adversity impacts on human gut microbiome composition and socioemotional functioning in early childhood*', Proceedings of the National Academy of Sciences, 120(30), e2213768120:

<https://doi.org/10.1073/pnas.2213768120>

and recent evidence shows transmission to be both intergenerational (from parent to child) and transgenerational (from parents to grandchildren and great grandchildren).

An individual's post-traumatic state following one or more adverse childhood experiences may influence their own parenting but new research has shown pregnant mothers' stress hormone production many years after their own adverse childhood experiences differing significantly from that of mothers with no experience of ACEs. The change may impact foetal neuroendocrine and other development, Panish LS, Murphy HR & Wu Q (2023) '*Adverse Childhood Experiences Predict Diurnal Cortisol Throughout Gestation*', Psychosomatic Medicine 85(6):p 507-516, 7/8 2023:

<https://doi.org/10.1097/psy.0000000000001218>

and be transmitted to the next generation leading in turn to adverse experiences.

Preventable lifestyle practices may also trigger genetic alterations to the egg and sperm instigating transgenerational developmental problems.

Alcohol

The alcohol consumption of both sexes can prejudice the health outcomes of children later conceived. Women have long been advised as a health precaution to curtail their consumption of it after conception if not beforehand, but the risks arising from 'paternal preconception alcohol consumption prior to copulation' (PPAC) remain largely 'under the radar', Terracina S et al (2022) '*Transgenerational Abnormalities induced by Paternal Preconception Alcohol Drinking: Findings from Humans and Animal Models*', Curr Neuropharmacol. 2022; 2096:1158-1173:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9886817/>

However, the findings of recent neurobiological studies have shown that PPAC can indeed precipitate lifelong disabilities in future offspring because the disruption to brain nerve growth causes changes to children's brain function and structure.

Adverse outcomes triggered by PPAC include hyperactivity and motor skill disorders, neurobiological disruptions, hearing loss, reduced physical growth and metabolic, hormone and immune system alterations. The UK's level of alcohol consumption per person is almost in the top 10% worldwide with 21% of adults drinking at, or above, the alcohol harm induced risk level and 29% of men exceeding recommended daily limits, WHO (2023) Alcohol, total per capita (15+0 consumption (in litres of pure alcohol) SDG indicator 3.5.2:

[https://www.who.int/data/gho/data/indicators/indicator-details/GHO/total-\(recorded-unrecorded\)-alcohol-per-capita-\(15-\)-consumption](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/total-(recorded-unrecorded)-alcohol-per-capita-(15-)-consumption)

NHS Digital (2022) 'Health Survey for England, 2021 part 1', Official statistics, National statistics, Survey. Part 3; Drinking alcohol. 15 December 2022:

<https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2021/part-3-drinking-alcohol>

Yet despite warnings from the World Health Organisation (WHO) and the Chief Medical Officer, the UK clings to the time-honoured parental custom of introducing adolescents to alcohol on the mistaken pretext of 'encouraging responsible drinking.' A robust public awareness strategy highlighting the dangers of parental preconceptual alcohol consumption could have the benefit of circumventing ACE occurrence in future generations, Sigman A (2020) 'Covid-19 and alcohol: parental drinking influences the next generation', *BMJ* 2020;369:m2525:

<https://doi.org/10.1136/bmj.m252>

<https://www.bmj.com/content/369/bmj.m2525>

Sigman A (2023) 'Paediatricians can reduce future alcohol-related morbidity and mortality', *Archives of Disease in Childhood* Nov 2023:

<https://pubmed.ncbi.nlm.nih.gov/36411065/>

Nicotine and vaping

Research into fathers' nicotine consumption and its adverse effects on children later conceived include nicotine dependence, cognitive impairments, mental health disorders and the presence of molecular changes promoting addiction-like traits and memory impairments in male offspring, Maurer JJ et al (2022) 'Paternal nicotine taking elicits heritable sex-specific phenotypes that are mediated by hippocampal *Satb2*', *Mol Psychiatry*. 2022 Sep; 27(9):3864-3874:

<https://doi.org/10.1038/s41380-022-01622-7>

Male animal fathers using nicotine have been found to possess '*neurobiological impairments in multiple subsequent generations*' similar to human neuro-developmental conditions such as ADHD and autism spectrum disorder increasing the likelihood that exposure to addictive substances or psychosocial factors may be heritable:

'Over a billion people worldwide use nicotine-containing products and the majority are men.' McCarthy, D.M., Bhid, P.G. 2021 '*Heritable consequences of paternal nicotine exposure: from phenomena to mechanisms*', Biol Reprod. 2021 Sep 14; 105(3):632-643:

<https://academic.oup.com/biolreprod/article/105/3/632/6298468>

The popularity of vaping has heralded new concerns with statistics for 2023 showing a rise of 40% in the 16-24 year age group engaging in the practice, Office for National Statistics (ONS) (5 September 2023), ONS website, statistical bulletin '*Adult smoking habits in the UK 2022*':

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/adultsmokinghabitsingreatbritain/2022#e-cigarette-use-and-vaping-prevalence-in-great-britain>) and a 30% increase in the

number of children experimenting with vaping from age 11 (*Action on Smoking and Health ASH. Use of e-cigarettes (vapes) among young people in Great Britain* <https://ash.org.uk/resources/view/use-of-e-cigarettes-among-young-people-in-great-britain>).

Nicotine is now considered to be as addictive as cocaine and heroin and adolescent users are more likely to become strongly addicted than adults, UCSF (2023) University of California San Francisco. Conditions. Nicotine Dependence: <https://www.ucsfhealth.org/conditions/nicotine-dependence#>

Reducing its prevalence would disrupt the detrimental chain of events leading to heritable ACEs. The UK Government has announced that legislation will be introduced in 2024 (subject to a free vote in Parliament) to ban disposable vapes and to phase out smoking on a gradual basis for people of all ages.

Addressing risk factors and long-term outcomes of ACEs requires a multi-faceted approach informed by research, culturally-sensitive interventions and targeted support for those most at risk. There is an urgent societal need to address this issue as shown by a 2014 UK study showing 47% of people to have experienced at least one ACE with 9% having four or more. Bellis M et al (2014) as above and a systematic review of all ACE studies completed since 1998, The Early Intervention Foundation:

<https://www.eif.org.uk/report/adverse-childhood-experiences-what-we-know-what-we-dont-know-and-what-should-happen-next>

Listed effects include:

- An increased risk of physical health problems in adulthood including cancer and heart disease
- Mental health problems such as anxiety, depression and post-traumatic stress with 1 in 3 diagnosed mental health conditions in adulthood directly linked to ACEs
- Violent behaviour and becoming a victim of violence.

Experiencing four or more ACEs in comparison to experiencing none typically:

- Doubles obesity risk, physical inactivity and diabetes
- Triples the risk of smoking, cancer, heart or respiratory disease
- Quadruples the likelihood of sexual risk-taking, problematic alcohol use and adverse mental health outcomes
- Increases the risk of problematic drug use and interpersonal and self-directed violence seven-fold.

The longer the duration and the more ACEs experienced, the greater will be the effect on development and health with negative impact upon:

- The ability to recognise and manage different emotions
- The capacity to make and sustain friendships and other relationships
- The ability to manage behaviour in school settings.

Other adverse childhood circumstances which co-vary with the 10 ACEs originally cited by Felitti have been found to predict negative outcomes; for example:

- Low birth weight leading to increased stroke risk before age 50 by 200%
- A childhood disability increasing the risk of problematic adult alcohol consumption by over 80%
- Bullying during the teenage years increasing the risk of adult mental health issues by over 50%
- Childhood experience of social discrimination increasing the risk of adult mental health issues by 200%.

A Tower Hamlets Council study has shown that overeating and obesity are often used unconsciously as protective reactions to unrecognised problems from childhood, Jan Bond (2023) '*Introduction to Adverse Childhood Experiences*', Tower Hamlets 2023:

<https://www.towerhamlets.gov.uk/Documents/Children-and-families-services/Early-Years/ACEs and social injustice DCP SW.pdf>

Key findings are that individuals with four or more ACEs are:

- x2 more likely to have a poor diet
- x3 more likely to smoke
- x5 more likely to have had sex under the age of 16
- x6 more likely to have been pregnant or got someone pregnant by accident under the age of 18
- x2 more likely to binge drink
- x7 more likely to have been involved in recent violence
- x11 more likely to have been incarcerated
- x11 more likely to have used heroin or crack.

Compared with those with no ACEs, those with 4 or more are:

- x3.1 more likely to have visited their GP in the last 12 months
- x2.2 more likely to have visited Accident & Emergency Departments in the past year
- x2.3 more likely to have had more than ten teeth removed
- x2.5 more likely to have spent a night in a hospital
- x6.6 more likely to have been diagnosed with an STD.

In addition, 64% of those in contact with substance misuse services had four or more ACEs as did 50% of homeless people. These and other 'compound' ACEs leave children and young people at a demonstrably colossal disadvantage in today's competitive world.

Some specific risk factors for children and young people

Incarceration

It is estimated that 312,000 children per year are affected by parental imprisonment, itself both a risk factor and an outcome of ACEs. Most of them will have been exposed to additional trauma:

<https://www.barnardos.org.uk/get-support/support-for-parents-and-carers/children-with-a-parent-in-prison>

The lack of contact between imprisoned parents and children presages obvious difficulties when (or if) the family is eventually reunited. During sentence, children may face educational disruption and new domestic responsibilities but despite their clear safeguarding needs, channels of communication between sentencing bodies and those responsible for the wellbeing of prisoners' children are non-existent. When a parent is imprisoned, their children are neither identified, assessed nor monitored. Their difficulties are often evidenced by school refusal,

truancy and disengagement but unless outside agencies who are involved with the family choose to inform the school of a parent's imprisonment, this task is left to the child or remaining parent who may be inhibited by shame and associated stigma.

In order to mitigate the impact of parental imprisonment on a child's immediate and long-term life outcomes, their families are in need of early targeted support including referral to coordinated services for issues such as mental health, financial difficulty, education and housing.

Despite the inevitable initial trauma of a parent's incarceration, this ACE also provides a unique opportunity for early intervention and tailored support at every stage from arrest to post-release in order to minimise its impact and prevent future adversities. It is especially important to break the intergenerational cycles of crime as data suggests that 65% of the sons of prisoners (there is, tellingly perhaps, no information to date about their daughters) will go on to interact with the criminal justice system themselves:

<https://www.hampshirescp.org.uk/wp-content/uploads/2022/06/16.-Parent-in-the-Criminal-Justice-System-FINAL.pdf>

In 2012 it was estimated that up to 42% of the prison population had been excluded permanently from school, K Williamson, V Papadopoulos and Natalie Booth (2012) *'Prisoners' Childhood and Family Backgrounds; Results from Surveying Prisoner Crime Reduction (SPCR)*, Longitudinal Cohort Study of Prisoners Ministry of Justice Research Series 4/12 March 2012 ISBN 978-1-84099-544-2:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/278837/prisoners-childhood-family-backgrounds.pdf

By 2023 that figure rose to 58% of the prison population, Centre for Social Justice (2023) *'Education'*:

<https://www.centreforsocialjustice.org.uk/about/the-five-pathways/educationalfailure>

In June 2023 the UK's prison population was 85,000, Gov UK (2023) *'Prison Population Bulletin'*; Weekly 2 June 2023:

<https://www.gov.uk/government/publications/prison-population-figures-2023>

However, in the absence of systems and support in place that could change the trajectory of their lives, a key group of children remain hidden and left alone to suffer further adversity; in effect, serving sentences for crimes they did not commit.

Impact of extremist radicalisation methods

Among the most vulnerable at risk of being radicalised to extremist causes and paramilitary concerns are children and young people who have been affected by ACEs, especially those with special educational needs and disability (SEND). As found in the Prevent referrals in Britain and Northern Ireland prevention schemes such as Aspire, the characteristics of this demographic include:

- Young and impressionable
- Learning difficulties and mental health issues
- Lack of knowledge and wider understanding of political and social matters
- Those suffering social exclusion
- Those enduring poor economic issues
- Conflict with, or rejection by, peer, faith, social group or family
- Unmet aspirations or underachievement, David Lowe (2024) *'Hate Crime in Northern Ireland: The Need for Legislation and a Bespoke Version of the Prevent Strategy'*, Terrorism and Political Violence DOI:10.1080/09546553.2023.2291398, p9.

Extremists deploy various radicalisation methods to recruit susceptible individuals to their cause and the UK Government's definition of radicalisation is:

'...a process whereby certain experiences and events in a person's life cause them to become radicalised, to the extent of turning to violence to resolve perceived grievances, [which is] critical to understanding how terrorist groups recruit new members and sustain support for their activities.'

HM Government (2006)

'Countering international terrorism: the United Kingdom's strategy', Gov UK:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/272320/6888.pdf

In addition to organisations well known for using specific current and historical political issues to influence vulnerable individuals (increasingly via the use of social media) new groupings are emerging such as the far-right Football Lads Alliance formed in 2017 and aimed at supporters of various English football teams.

In November 2003, they organised a protest in London to counter the pro-Palestinian demonstration and this led to a number of arrests, Joe Middleton (2023) *'Far-right groups and football hooligans to descend on London during Palestinian march'*, The Independent:

<https://www.independent.co.uk/news/uk/home-news/far-right-groups-palestine-march-london-b2445029.html>

The radicalisation strategies of groups like these are designed to look attractive and exciting as well as offering a sense of belonging to vulnerable ACE and SEND young people.

A similar pattern was seen in relation to Northern Ireland paramilitaries when in March and September 2023, the new IRA and political wing Saoradh influenced children and young people, some as young as 8 years old, to attack Police Service of Northern Ireland vehicles in the Creggan estate in Derry, David Lowe (2024) *'Hate Crime in Northern Ireland: The Need for Legislation and a Bespoke Versions of the prevent Strategy Terrorism and Political Violence'*, DOI: 1080/09546553.2023.2291398, p.13.

The Creggan social housing estate is in a disadvantaged socioeconomic part of the city where a significant proportion of ACE/SEND children and young people reside who possess the characteristics in the demographic of those vulnerable to the attractions of extremist and paramilitary groups. It is therefore extremely important to identify those at risk and to support them with prevention programmes. There is a strong link with criminal involvement with ACE/SEND young people whereby those with special education needs are more likely to receive an immediate custodial sentence by the time they reach 24 years of age, Office for National Statistics (2023) *'The links between young people being imprisoned, pupil background and school quality'*, 27 January 23, ons.gov.uk: <https://www.ons.gov.uk/peoplepopulationandcommunity/educationandchildcare/articles/thelinksbetweenyoungpeoplebeingimprisonedpupilbackgroundandschoolquality/2023-01-27>

Environmental and socioeconomic factors

The environmental and socioeconomic factors contributing to adverse childhood experiences are complex. Most studies on adult outcomes focus on singular experiences yet the cumulative impact of multiple ACEs is profound. In this context, environmental factors such as homelessness, Herman DB et al (1997) *'Adverse childhood experiences: Are they risk factors for adult homelessness?'*, American Journal of Public Health, 87(2), pp.249-255 and socioeconomic disadvantage, Metzler M et al (2017) *'Adverse childhood experiences and life opportunities; Shifting the narrative'*, Children and Youth Services Review, 72, pp. 141-149; Nurius PS et al (2015) *'Life course pathways of adverse childhood experiences toward adult psychological well-being; A stress process analysis'*, Child Abuse & Neglect, 45, pp. 143-153, further exacerbate negative outcomes. The proliferation and interaction of these factors creates a chain of risk and casts a shadow over the life course.

It is important that strategies designed to prevent ACEs consider the breadth of the environmental and socioeconomic factors contributing to them with immediate intervention followed by tailored life-course support for individuals particularly in the areas of education and career development in order to avert later likelihood of unemployment and poverty. There is a manifest need for further research, particularly in the context of specific populations, including those in the criminal justice system, to enable a greater understanding of the relationship between ACEs and adult outcomes.

Effective prevention strategies should encompass both individual and environmental risk factors and include:

- Community-based interventions in order to mitigate the impact of socioeconomic stressors. The presence of community centres, educational programmes and access to mental health services are vital
- Parental support programmes to include parenting classes, mental health counselling and substance abuse treatment programmes
- School-based initiatives aimed at identifying children at risk of ACEs and focusing on resilience-building, counselling and the provision of safe spaces for children
- Public awareness campaigns to educate the community about ACEs and their long-term impact and strategies to reduce the stigma associated with seeking help for trauma and mental health issues.

All of the above and other initiatives will fail without coordinated policy impetus, designed and driven by the Government.

Without them, the goal of a healthier, more resilient and mutually supportive society comprised of individuals free from the long-term corrosive impact of ACEs will never be achieved.

CHAPTER FIVE: PROTECTION, INTERVENTION AND MITIGATION: A FAMILY AND COMMUNITY FOCUS

Evidenced reviews of ways in which to support those who have experienced adverse childhood experiences (ACEs) have focused predominantly upon psychological interventions and mental health outcomes with Cognitive Behavioural Therapy (CBT) a recognised component of this approach, Lorenc T & Lester S et al (2020) '*Interventions to support people exposed to adverse childhood experiences; systematic review of systematic reviews*', BMC Public Health 20, 657: <https://doi.org/10.1186/s12889-020-08789-0>

However, the Kent Public Health Observatory is one of a number of bodies now suggesting that holistic and family-based interventions at community level may be necessary to reduce the occurrence of ACEs and ensure the best health outcomes for today's children and future generations. The aim is to create and sustain safe, stable and nurturing relationships and environments by providing support from conception through the early years and beyond: <https://www.kpho.org.uk/>

The Triple P – Positive Parenting Program operates in 30+ countries and over 65% of local authority areas in England and is designed to improve the health and wellbeing of communities by strengthening and enabling the families living within them. Triple P's suite of 25+ interventions for parents of children aged 0-16 is delivered either in person by trained staff, or virtually, across local authorities, the NHS, schools, the voluntary, community and youth justice sectors in England and is implemented as a component of various policy areas in Scotland, Wales and Northern Ireland: <https://www.triplep.net/glo-en/home>

Positive outcomes of the programme include:

- Improved child emotional wellbeing
- Reduced hyperactivity
- Reduced rates of child abuse and neglect
- Improved attendance; fewer child academic problem behaviours
- Greater parental confidence and use of positive parenting
- Less parental stress, depression and anger
- Reduced parental conflict; improved parental engagement
- Improved work satisfaction and reduced work-family conflict.

The variety of programmes enables Triple P to be used at population level; delivering a preventative approach and also to provide high-intensity support to families who require it such as those in, or at, the edge of the care system.

Over the last decade there has been an emerging movement nationwide to build resilient, trauma-informed communities:

<https://researchonline.ljmu.ac.uk/id/eprint/2648/1ACE%20Report%20FINAL%20%28E%29.pdf>

Mobilizing Action for Resilient Communities (2016):

<https://marc.healthfederation.org>

and the ACEs Connection:

<https://www.acesconnection.com>

These are initiatives designed to bring together stakeholders from different community sectors, including their members, parents, policymakers, health and social service providers, funding bodies and researchers to develop co-ordinated community responses to ACEs that can promote resilience.

However, an effective roll-out of all programmes is dependent on the availability and sufficiency of funding. A 2017 report from the Social Mobility Commission 'Social mobility policies between 1997 and 2017: time for change':

<https://www.gov.uk/government/publications/social-mobility-policies-between-1997-and-2017-time-for-change>

observed that '*parenting support today is little better now than it was in 1997*' due to real-terms cuts to parenting programmes and argued for the restoration of funding for evidence-based parenting programmes, supplementing these with online services in order to achieve the desired scale of provision without sacrificing quality.

The 2020 British Medical Association (BMA) report:

<https://www.bma.org.uk/media/2059/bma-report-supporting-a-healthy-childhood-feb-2020.pdf>

addressed financial resources and observed that there is:

'Insufficient investment in England across a range of services to support a healthy childhood, with funding for a number of different services being cut in recent years. This lack of resource is likely to have an adverse impact on child health in England.'

In 2023, the Government introduced the Family Hubs and Start for Life Programme:

<https://www.gov.uk/government/collections/family-hubs-and-start-for-life-programme>

targeted at 75 'eligible' local authorities with programmes designed to:

- Provide support to parents and carers so that they are able to nurture their babies and children; thus improving health and educational outcomes for all

- Contribute to a reduction in inequalities in health and education outcomes for babies, children and families across England by ensuring that support provided is communicated to all parents and carers, including those who are hardest to reach and/or most in need of it
- Build the evidence base for what works when attempting to improve health and education outcomes for babies, children and families in different delivery contexts.

However, the targeting model of Family Hubs means that they may be associated with stigma and a new strategy could develop them by introducing the universal community service capacity of the former Sure Start scheme whilst avoiding its perceived flaws such as the lack of a significant focus on the acquisition of cognitive and socio-emotional skills.

Targeted services could then operate alongside Family Hubs such as Mother and Baby units (specialist inpatient provision for women who have undergone severe mental illness during pregnancy and post birth that has made them vulnerable to ACEs).

A community level strategy involving the nursing profession, counselling services, play therapy and involvement with special needs children might also include the adoption of a Person-Centred Approach when interacting with children and families. Using a PCA focuses on three core conditions; working empathically, having unconditional positive regard and being honest through interactions when offering support in settings and in the community. This is one way of developing community relationships and approaching a potential cycle of ACE from a preventive model as adults embark on their journey as new parents.

Counselling and psychotherapy play an important role in mitigating the effects of ACEs, devising programmes of prevention and supporting the mental and emotional needs of those involved. Talking therapy offers a safe space for children in which to process traumatic experiences; therefore allowing them to develop healthy coping mechanisms and become more resilient.

The therapeutic relationship itself also gives children a consistent, stable, trusted person with whom they can express themselves and create a secure attachment (a vital component of healthy development that could be missing from the lives of many children and young people who are ACE-experienced). Parental emotional and mental health is a critical foundation of family dynamics and by providing therapeutic support to parents, the likelihood of ACEs occurring within the family can be significantly reduced.

Enabling parents' access to appropriate therapies can help them to acquire the skills and awareness needed to foster a nurturing home whilst developing their own resilience and coping strategies. This in turn is likely to reduce the number of potential ACEs that stem from home and family life and provide a safer home space from where to process any other adverse experiences that may occur in school or the wider community.

Barnardo's has devised a comprehensive structure for mental health support within schools, building on the framework of Mental Health Support Teams (MHST):

<https://www.barnados.org.uk/research/its-hard-talk-expanding-mental-health-support-teams-education>

The model relies on early identification and intervention for children either experiencing or at risk of ACEs and proposes a more integrated approach to mental health support.

Key features are:

- Collaboration between schools and external mental health services
- Enhanced training for educators
- Resources to identify and respond to signs of mental distress in students
- Teams embedded in schools
- Direct access for children to mental health professionals who can recognise signs of trauma and provide immediate support
- Every MHST to have a member who is a qualified counsellor as CBT does not work for all children; particularly the youngest and most complex individuals.

The ETHOS study conducted by the University of Roehampton:

<https://www.roehampton.ac.uk/research-centres/centre-for-research-in-psychological-wellbeing/research-projects/ethos/>

contains strong evidence for the success of school-based humanistic counselling (SBHC) and its effectiveness in addressing the emotional and mental health of children and adolescents within educational settings, especially for those affected by ACEs.

Such an approach would likely have important benefits for preventing ACEs in the next generation. Boys and girls are sometimes purported to have little interest in future parenthood, but Lord Field of Birkenhead found exactly the opposite in talking with young students:

'Some time ago, I asked to meet a group of 15 year old pupils in one of Birkenhead's most challenged schools... I asked each of them to list for me which six outcomes they most wanted to gain for themselves from attending school.'

Their replies both shocked and delighted me. Without exception, all of these young citizens stated that they wanted their school to be a safe place, to help teach them what was involved in building long-term friendships and to equip them with the necessary skills to gain a good job. Most surprisingly, all of the pupils listed as one of their remaining requests the wish to be taught how to be good parents.'

Field F (2010). *The foundation years: preventing poor children becoming poor adults. The report of the Independent Review on Poverty and Life Chances* London: TSO.

Counselling and psychotherapy (ideally free at the point of use and available via the NHS and local wellbeing hubs) can benefit adults directly and avert some ACEs for their own children and children within their communities. Mentally and emotionally healthy adults are more likely to provide supportive parenting as well as positive interactions with all those with whom they come into contact; thereby reducing the risk of emotional neglect, abuse and other forms of household and social dysfunction that contribute to ACEs.

Effective community wellbeing hubs facilitate support networks to promote healthy and dynamic family and community relationships. This not only helps to mitigate the direct occurrences of ACEs but also contributes to the emergence of strong, resilient communities that protect children from various adverse experiences and help them to heal.

CHAPTER SIX: SOCIAL AND ECONOMIC INEQUALITY: BREAKING THE CYCLE OF ADVERSITY

There is a clear correlation between adversity experienced as a child and negative outcomes later in life. Such outcomes include going to prison, poor physical and mental health and developing personal abusive and health-harming behaviours. Evidence shows that ACEs rarely occur in isolation and that if a child experiences one, their likelihood of experiencing another increases:

<https://www.ncbi.nlm.nih.gov/pmc/?term=6220625>

It is possible and highly desirable to mitigate initial risks through early intervention but the reality for a vast number of children (particularly those facing socioeconomic disadvantage) is that this often does not happen and they go on to experience further adversity. After experiencing 4+ ACEs, the risk of negative outcomes increases substantially:

<https://pubmed.ncbi.nlm.nih.gov/29253477/>

Those who have experienced ACEs individually or as a family are often from lower-income households which can of itself, precipitate a cycle of adversity. In its 2024 report *'Two Nations: The State of Poverty in the UK'*:

<https://www.centreforsocialjustice.org.uk/library/two-nations>

The Centre for Social Justice says:

'The UK is in danger of sliding back into the 'Two Nations' of the Victorian era marked by a widening gulf between mainstream society and a depressed and poverty-stricken underclass.'

The report reveals:

- A widening gap between those who are managing and those *'stuck at the bottom'*, a gap exacerbated by the impact of successive pandemic lockdowns
- Family breakdown as a root cause of various societal issues, affecting the poorest families the hardest and impacting children with disrupted attachment, developmental delays and increased vulnerability to mental health issues
- Housing emerging as a critical problem with poor quality, expensive and insecure housing affecting the most deprived disproportionately.

A report from The Royal College of Paediatrics and Child Health:

<https://www.rcpch.ac.uk/resources/child-health-inequalities-position-statement>

suggests that poverty brings in its wake the disadvantage of exclusion across a number of fields. Parents in poverty are less able to afford healthy foods; children may not be able to pay to attend social events, join sports clubs, take holidays or go on school trips.

The Equality Trust (2023):

<https://equalitytrust.org.uk/childhood> stated that the Home Learning Environment (HLE):

'.....has the strongest single effect on outcomes for children at age 10.'

and while a good home learning environment is considered to be one of the key factors in ensuring successful child development a poor one is associated with an adverse combination of larger families, a low level of a maternal education and living in areas of higher deprivation; all of which contribute to the inheritability of inequality.

For children growing up in the care system, their outlook and that of the children they may go on to have remains bleak:

'Young people who grew up in the care system are around 2.5 times more likely to become pregnant compared with other teenagers. These young people face the challenge of transitioning to independent living, while also having to ensure the needs of their child are met.'

<https://www.barnardos.org.uk/research/care-experienced-parents-unite-change>

The Health Foundation further acknowledges the cycle of disadvantage by linking poor mental health with unemployment:

'Good mental health is a key influence on employability, finding a job and remaining in that job. Unemployment causes stress, which ultimately has long term physiological health effects and can have negative consequences for people's mental health, including depression, anxiety and lower self-esteem.'

<https://www.health.org.uk>

In 2020, University College London studied the clustering of multiple ACEs and the potential relationship between this and poverty. The research findings showed that poverty was strongly associated with increased odds of every type of adversity (except the death of a family member). There were particularly clear links between poverty and sexual abuse, maternal mental health problems and paternal separation:

<https://www.ucl.ac.uk/news/2020/jul/children-poverty-greater-risk-childhood-traumas>

Sexual assault, a highly traumatic form of sexual abuse can have long-lasting psychological, emotional and physical effects that cause extreme difficulty in everyday life and common outcomes include:

- Withdrawing from close relationships
- Developing intimacy disorders
- Turning to substance abuse, eating disorders or high-risk sexual behaviours
- Developing depression, anxiety or other mental health illnesses:
<https://footprintstorecovery.com/blog/sexual-assault-and-addiction>

Given the devastating impact of ACEs on the life course, the relatively new emphasis on the efficacy of prevention and early intervention has been encouraging and the Governments in Scotland and Wales have taken a lead in practice and policy:

<https://www.gov.wales/review-adverse-childhood-experiences-ace-policy-report.html>

<https://www.gov.scot/publications/adverse-childhood-experiences-aces/pages/aces-research>

The UK Department of Health and Social Care and the Select Committee on Health and Social Care have also stressed the importance of embedding ACE awareness within practice:

<https://publications.parliament.uk/pa/cm201719/cmselect/cmsctech/506/50609.htm>

However, a truly successful prevention strategy must give prominence to the role played by socioeconomic inequality and more specifically, poverty. Failure to do so will continue to perpetuate the generational cycles in which adversity thrives.

From 1998–2003, the eradication of child poverty was a key UK Governmental aim and the number of children living in poverty decreased by 600,000:

<https://cpag.org.uk/child-poverty/child-poverty-facts-and-figures>

When the obligation to meet the 2020 target was abolished in 2015 by the then Work and Pensions Secretary Iain Duncan Smith that progress slowed:

'Worklessness measures will identify the proportion of children living in workless households and the proportion of children in long-term workless households.'

<https://www.theguardian.com/society/2015/jul/01/government-scrap-legal-requirements-child-poverty>

Now, over a quarter of a century after the original commitment to eradicate child poverty, Action for Children reports that 4.2 million children are living in poverty and this number is expected to rise:

<https://www.actionforchildren.org.uk/blog/where-is-child-poverty-increasing-in-the-uk/>

The 4.2 million (in all likelihood a considerable under-estimate) is the number at significantly higher risk of premature death, suffering a range of mental and physical illnesses and going to prison.

The continued political focus on tackling unemployment as a tool with which to combat poverty has produced a sustained rise in employment especially for lone parents and mothers in functioning couples. However, when juxtaposed with a similarly sustained rise in child poverty, there is a need to consider contributory factors outside of employment. This can be illustrated by the National Children's Bureau reporting that 71% of children living in poverty have at least one employed parent:

<https://www.ncb.org.uk/about-us/media-centre/news-opinion/number-children-poverty-living-working-households-rise>

Until the economic disadvantage faced by these families is addressed and adequate support provided, generational cycles of adversity will follow.

The 2024 report (as above) of the Centre for Social Justice, co-founded in 2004 by Iain Duncan Smith and Tim Montgomerie explains the conundrum of increasing employment and child poverty:

'The economic vulnerability of the most deprived is highlighted, with work often proving financially unrewarding due to poor-quality, insecure jobs and stagnant wages. The welfare system ends up topping up the incomes of over two million people, creating a scenario where being economically inactive due to sickness becomes a more viable option for many.'

In response to the increased economic hardship faced by families, the Treasury announced a substantial increase to the living wage; however, the full benefit of the 1.02 per hour increase will not be felt by the recipients as every extra pound earned reduces their Universal Credit entitlement by 55 pence.

Structural inequality and a benefit system in desperate need of reform leave families struggling to provide for their children's basic needs. According to recent data, 7 in 10 families are going without essentials, 4 in 10 are spending less on food for their children and around 6 in 10 are trying to cut back on heating their homes:

<https://www.theguardian.com/society/2022/may/09/more-than-2m-adults-in-uk-cannot-afford-to-eat-every-day-survey-finds>

The relationship between levels of child poverty and ethnicity is in urgent need of study and gaps in data have inhibited a detailed and up-to-date analysis:

<https://wbg.org.uk/analysis/inequalities-amplified-the-alarming-rise-of-child-poverty-in-the-uk/>

Yet in every region of the UK:

- Black and ethnic minority children face a greater risk of poverty
- Black children are more likely to live in lone parent households and in social housing
- Black and minority ethnic people are more likely to be in low paid and insecure work.

As stated earlier, debate will no doubt continue as to whether or not poverty in itself constitutes or does not constitute an Adverse Life Experience alongside the original 'list of 10' ACEs compiled by Felitti. However, what cannot be denied is that it provides an ideal breeding ground for ACEs to cluster and blight the lives of successive generations.

In 2010, the introduction of the Child Poverty Act made the UK the first European country to legislate on child poverty. Recommitting to the eradication of child poverty would be a statement that in today's United Kingdom, no child should be born with the likelihood of experiencing a lifetime of adversity.

CHAPTER SEVEN: CASE STUDIES: LOCAL, NATIONAL AND INTERNATIONAL POLICY AND PRACTICE

In the UK and the USA, local and state authorities have attempted to limit the worst effects of ACEs on their communities by encouraging initiative and partnership working at local level.

The Alaska Resilience Initiative

The Alaska Resilience Initiative formed in 2012 is designed to raise the profile of ACEs and foster a healthy and supportive culture for children and families. With the involvement of professionals in mental health and human services, universities and foundations, the First Alaskans Institute and the Alaska Native Tribal Health Consortium, the Initiative is delivered by specialist trainers who educate different audiences about brain architecture, ACEs and resilience.

In 2013, Alaska first used their Behavioural Risk Factor Surveillance System (BRFSS) to collect ACE data; allowing the prevalence of ACEs (including child abuse and neglect) in the state to be investigated. Alaska stressed that ACE prevention and the inclusion of the ACE module in the BRFSS would have significant economic outcomes and would benefit prevention work across health topics.

Alaska's strong case has encouraged work in other areas such as drug and alcohol abuse; inspiring grassroots efforts to widen the knowledge of ACEs and place them at the forefront of activity to improve health across the Alaskan community, Centre for Disease Control and Prevention, '*Case Study: Learning from Alaska's Adverse Childhood Experiences (ACE) Story*'.

The Strengthening Families Programme (SFP): South Carolina

The SFP has been implemented in South Carolina since 2015 through various funding streams and the largest non-profit provider in South Carolina, The Children's Trust. This nationally and internationally recognised programme focuses on individual coaching, is evidence-based and has a two-generation strategy working separately and together on parallel activities for:

- Children aged 6-11
- Their parents/caregivers.

The structured components of the scheme are parent skills training, children's skills training and family relationship skills training in groups of seven/nine families from each county. A standard 'booster' session is held after the

programme's completion with an annual participant reunion including those from previous cycles.

Sessions are run by trained Group Leaders who are supported themselves by annual training and virtual meetings with peer trainers. Partnership working is paramount and plays the predominant role in identifying the families; therefore the South Carolina Children's Trust works with the South Carolina Department of Alcohol and Other Drug Abuse Services (DAODAS) to recruit families to the programme. Referrals are also made throughout the child welfare department, faith-based communities, schools, the housing authority, community-based organisations and former graduates of the programme.

In South Carolina Department of Health and Environmental Control (DHEC) counties outcomes show that:

- Between 80-87% of enrolled families complete the programme every year
- 100% of families (taken from survey results) recommend the programme
- 86% found it helpful
- 86% expressed interest in returning for a refresher call or family reunion (booster)
- 71% said that the programme had helped their parenting and had also helped their children.

Participants in the South Carolina Strengthening Families Programme reported that they had experienced positive changes within their families including an improved ability to cope with stress and better communication with their children, Centre for Disease Control and Prevention's '*Case Studies; Adverse Childhood Experiences*', pp.11-15).

Birmingham: preventative commissioning

'ACEs Birmingham' was developed by the UK Birmingham Health and Wellbeing Board with the aim of introducing a routine enquiry about adverse childhood experiences into frontline specialist practice in services supporting adults, children, young people and families.

Its principles and framework aim to alter the history of ACE impact in three ways:

- Tertiary prevention: using routine enquiry to identify past or present experiences and encouraging people to make changes with the aim of improving future therapeutic responses and outcomes
- Secondary prevention: using routine enquiry earlier in the development of the impacts on health and wellbeing/emotional health, mood or behaviour

predominantly of children and young people in school. The responses of adults in school settings to concerning behaviours can reinforce adverse impacts. The development of an emotional health early-help system for school students, families and staff is intended to facilitate access to early help before impacts escalate or embed

- Primary preventions extend the principles and understanding to the physical, policy, disciplinary and cultural environment of the whole school. The intention is to engineer a space that will reduce the impact of previous experiences before impacts become explicit and to enable a safe space in which to practice ways to enhance all individuals' resilience.

The scheme is administered by Birmingham City Council but partnership working impels it. The new approach has not been in place long enough to evaluate its impact on the Birmingham area, Local Government Association '*Case Study; Adverse Experiences in Childhood – Birmingham*', pp.2-5, but partners include:

- Adult and children's mental health services
- Adult and children's substance misuse services
- Birmingham Children's Trust
- Schools and the Birmingham Education Partnership
- NHS Commissioning
- Charities and other local partners.

Despite operating in different countries under very different circumstances, the initiatives above show that data is imperative when implementing early intervention and prevention schemes and in understanding the impact of ACES upon an area.

Partnership working has the best chance of increasing individual and family resilience and extending the shelf life of schemes prior to comprehensive evaluation. Outcomes will be most auspicious if data sharing is prioritised and organisations work collaboratively in the interest of the children and families in their care and the wider communities of which they are a part.

The use and purpose of play therapy

Play therapy is one of the most effective forms of support for young children with the benefit of not always requiring children to vocalise their feelings so that they can play out their trauma and ACEs within the therapy session. PTUK - Play Therapy UK-registered play therapists have completed training to postgraduate diploma level, are trained in neuro science and play-based psychotherapy and are registered with the Professional Standards Authority as well as being listed on the PTUK Register of Play and Creative Arts Therapists:

<https://www.playtherapy.org.uk>

Claire Baits, a PTUK registered play therapist testifies to the effectiveness of play therapy when used as an intervention to help children suffering from ACE trauma. She gives an example of her work with 'Leo' (a pseudonym) whose traumatic birth experience was followed by both witnessing and experiencing emotional, physical and domestic abuse for the first 22 months of his life.

When referred by his teacher to professional play therapy services, his conditions included sensory-seeking behaviours, general and separation anxiety, relationship and sleep difficulties, a fear of his world environs, self-harming behaviours and difficulties with speech and language. He had been diagnosed with type 1A Charcot Marie-tooth disease (a progressive weakening and atrophy of the lower leg muscles) and was receiving help for hyper-mobility. To support his mobility, he slept with leg splints and wore specialised boots during the day.

Leo's mother had witnessed parental emotional abuse as a child and later entered into her own emotionally abusive and violent relationship. Claire Baits considers the case within the context of likely links to intergenerational transmission of trauma as earlier discussed.

Leo attended 13 consecutive 45-minute weekly play therapy sessions during the course of which he completed a 'body story' (a technique utilising expressive arts and a body outline) and non-directive therapy consisting of role play and non-directive play. At the end of the therapy, Leo's responses recorded a reduction of symptoms including a lessening of aggression, an increase in verbalisation and some improvement in pro-social scores. There is scope for parents to be involved in play-based therapeutic approaches as part of a wider family approach.

However, within the UK state-school system, play therapy carries no certainty of funding and time and classroom space is also restricted making it likely that a cap upon the numbers of children to be supported and no time or capacity for assessment will mean that staff will select for therapy, only those whose outward behaviour is difficult or demanding in clear and obvious ways.

Cathy Baker, Sunflower Play Therapy, has worked as a play therapist in two local Shropshire schools and now in private practice. She is concerned that many parents are unable to access the highly-qualified support that their children need of due to a lack of funding:

'Their children are receiving no mental health support due to long CAMHS waiting lists and battles with GPs to receive referrals. Schools have little time and not

enough quality training in ACEs to support parents or even signpost them where to go.':

<https://www.sunflowertherapy.uk>

Cathy Baker mentions that a local charity has stepped in with sufficient funding to support five children with twelve play therapy sessions but makes the point that:

'Some of these children have suffered such a level of ACEs that they need years of therapy. Their parents are completely reliant on the charity to fund their therapy which realistically is not sustainable.'

She says that despite consensus around the efficacy of early intervention, access to help with such proven benefit as play therapy is denied:

'It cannot be right or ethical that children who are of a lower socioeconomic background are ...left to struggle to access lower-level mental health support...It also cannot be right or ethical, that much of the support for these children is left to schools – who do not have the time or funding to be able to provide adequate training for staff to support children with such a high level of need.'

Use of the ACE study in SEND educational settings

In the UK and elsewhere, the ACE study (arising from the work of Felitti) has been used to gauge and measure child trauma. The linked questionnaire assesses the impact of trauma on disadvantaged and vulnerable children by generating a score that is used to inform decisions about what interventions should be provided in each case.

Emily Baty has described personal experience with the ACE study from her perspective as a Special Educational and Disabilities Needs Co-ordinator (SENDCO) in a mainstream education setting.

She found her initial introduction to the study (at a university-hosted SENDCO conference) to be insensitive, consisting as it did of the participants completing the questionnaire about themselves in the midst of a group of strangers:

'I signed up to look at the 'science of hope' and left wishing that I did not possess this new knowledge, and that I had not just sat amongst strangers, applying the damning questionnaire to my own life and the lives of those around me.'

There was no pre or post-questionnaire support put in place either by her own organisation or the organisers of the conference and she found that *'the format for sharing knowledge and up-skilling others was lacking in care.'*

Emily Baty's next encounter with the ACE study was as a school leader within a specialist setting for learners with Social Emotional and Mental Health (SEMH) difficulties. The daily practice of the staff body for which she was responsible was not trauma-informed and in an attempt to remedy this, she arranged for specific staff team training by the local educational psychology service and worked to ensure that staff were better prepared both before their encounter with the study and afterwards than she had been.

During the Covid pandemic, the staff team led by Emily interacted more directly and intensively with the ACE questionnaire; however:

'I became increasingly perplexed by the merits of the use of the questionnaire. Operating in the higher concentration levels of adversity that we found ourselves in, the questionnaire proved a flawed tool.'

Emily Baty has concluded from her experiences of applying the ACE study in an educational context that:

- Pre and post-study support, advice and guidance are essential. Human nature will have participants applying the questionnaire to their own lived experiences. Applying the newly acquired understanding of the impact of these lived experiences whilst illuminating, can also be damaging to individuals
- Applying the questionnaire in practice, can be flawed, feel clinical to those administering it, and users find it lacks the flex within it to consider the impact of 'other' lived experiences
- Information obtained to inform scoring is either unreliable, given a non-reporting bias, or takes a significant amount of time investment to gather a dataset that can be considered viable.

ACEs are complex and multifaceted in every respect as will be the methods to identify, address and prevent them. The examples above can therefore only represent ways in which rather than *the* way those aims might be achieved.

CHAPTER EIGHT: THE WAY FORWARD: ROADS TO RECOVERY AND THE ROLE OF GOVERNMENT

Recognising ACEs as a significant public health concern necessitates a strategic and coordinated response at all levels of policymaking. The interwoven strands of personal adversity and societal responsibility require a Government-led approach that is both preventative and inclusive.

National ACEs Strategy

Formulating a comprehensive national strategy should necessitate a public health approach in local communities with decision-making on a population rather than target interest group level. ACEs have a devastating ripple effect upon communities and contribute to a higher level of mental illnesses, social disintegration and cycles of violence and substance abuse. Here, social and economic priorities must unite. Nationwide initiatives should prevent spending and policy choices from diminishing the living standards of families below the necessary threshold for maintaining a healthy life as well as from exacerbating existing inequalities.

Recommitting the Government to a goal of eradicating child poverty would require economic policy choices to consider the effect on families; addressing low wages, poor housing and inadequate benefits in the interest of mitigating health disparities and promoting more equitable conditions for childhood wellbeing, Institute of Health Equity (2015) *'The impact of adverse childhood experiences in the home on the health of children and young people'*:

<https://www.instituteofhealthequity.org/resources-reports/the-impact-of-adverse-experiences-in-the-home-on-children-and-young-people/impact-of-adverse-experiences-in-the-home.pdf>

A useful model for a population level approach is the Welsh Government's Wellbeing of Future Generations Act which aims to ensure that future generations have at least the same quality of life as current generations:

<https://www.gov.wales/well-being-future-generations>

The Act supplies a framework for better public policy making. All public bodies must take account of the long-term; help to prevent problems in the first instance, or from worsening; take an integrated, collaborative approach and consider and involve people of all ages and diversity in the policy making process, *'Welsh Government. Well-being of Future Generations Act'*, as above.

Play is enshrined within the United Nations Convention on the Rights of the Child (UNRC) and embedded within Article 31 which states:

'Every child has the right to rest, relax, play and to take part in cultural and creative activities.'

Unicef (2019)

'The United Nations Convention on the Rights of the Child- the Children's Version':

<https://www.unicef.org/media/56661/file>

The importance of play was demonstrated most recently when many children were deprived of outdoor play during the pandemic to the detriment of their mental and physical health.

'The provision of play opportunities as a universal service for all children and young people must be embedded in political and fiscal agendas as a primary means of promoting positive health and mitigating adversity.'

Tonkin A (2023) *'What is health?'*

In: Whitaker J and Tonkin A, Eds Play and Health in Childhood; A rights-based Approach. Oxon; Routledge: 32-47.

Enhanced Data Collection and Research

An evidence-based approach is central to furthering the understanding of ACEs. Improved data collection and longitudinal research are necessary to inform tailored interventions and measure long-term effectiveness. Schools for example, should routinely collect data on pupil wellbeing and work with the NHS so that this information can be put to best use locally and nationally in order to gain a clearer understanding of mental health needs. In addition, a commitment to deliver an expansion of digital access evidence-based parenting programmes will encourage parents (who may have concerns about perceived stigma) to take an initial step of reaching out for parenting support online prior to contacting professional services in person.

Strengthening Early Intervention and Prevention

Early childhood education and family support services must be prioritised. Professionals need high-level training to identify and respond to ACEs and resources must be channelled to support at-risk families. A robust preconception and inter-conception care strategy is essential to safeguard maternal and infant health and continued support including home visits by healthcare professionals during the first 1000 days of a child's life are crucial in any ACEs prevention strategy in order to enable early identification of, and intervention for, parents struggling with mental health or at risk of domestic violence, Sama-Miller E & Akers L et al (2017) *'Home visiting evidence of effectiveness review: Executive summary'*:

https://www.acf.hhs.gov/sites/default/files/documents/opre/HomVEE_Executive%20Summary%20August%202017.pdf

High-quality early childhood education and care (ECEC) is a cornerstone of early intervention and the prevention of ACEs, National Centre for Injury Prevention and Control (US) Division of Violence Prevention (2019) '*Preventing adverse childhood experiences (ACEs). Leveraging the best available evidence*': <https://www.cdc.gov/violenceprevention/aces/fastfact.html>

Settings offering ECEC outside the home can provide necessary respite from toxic environments for children or adults under stress in addition to reducing the risk of children suffering abuse or neglect. They may also benefit parents who are struggling with their own addiction problems as well as supporting the parents of children with additional needs who have been shown to have an increased susceptibility to stress, anxiety and depression, '*A population-based investigation of behavioural and emotional problems and maternal mental health: associations with autism spectrum disorder and intellectual disability*', The Journal of Child Psychology and Psychiatry, 52:1 2011, pp.91-99 doi: 10/1111/j.1469-7610.2010.02295. Early childhood education and care must be fully-funded and integrated services established nationwide.

Integrating ACEs into Education Policy

Schools are pivotal in supporting children with ACEs. Integrating emotional and social learning into the curriculum and providing mental health services within educational settings can offer both a safety net and a lifeline for affected children. Children are required to attend school from the term after their fifth birthday but absenteeism is now at record levels. In the academic Year from September 2021 to July 2022, 94,900 children were either not enrolled or not attending an educational setting at some point in the year and 25% of the school-aged population are persistently absent with those from disadvantaged backgrounds disproportionately represented in this figure, Education Committee (2023) '*Persistent absence and support for disadvantaged pupils*': <https://committees.parliament.uk/work/7179/persistent-absence-and-support-for-disadvantaged-pupils/>

Absenteeism is higher among children with mental health disorders, Children's Commissioner (2022) '*A Head Start: Early Support for Children's Mental Health*': <https://assets.childrenscommissioner.gov.uk/wpuploads/2022/07/cc-a-head-start-early-support-for-childrens-mental-health.pdf>

many of whom will have been exposed to ACEs making their reasons for absenteeism complex and multi-faceted. Rather than focusing upon punitive action for the parents of absentee pupils, a productive approach would be to

understand the barriers that the children are facing, Centre for Social Justice (2023) *'Lost and not Found'*:

<https://www.centreforsocialjustice.org.uk/library/lost-and-not-found>

and to also review and revise the National Curriculum to prioritise mental health and wellbeing, personal, social and emotional education. Schools should receive sufficient funding and resources to enable the adoption of a 'whole school' approach to pupil wellbeing with an ethos that is fully committed to building resilience and the emotional strength of all school members.

Rather than being forced to adjust to new and unfamiliar demands, staff should be equipped with knowledge and understanding of mental health and wellbeing via Initial Teacher Training (ITT) and Continuous Professional Development (CPD) or in other training programmes such as Senior Mental Health leads.

Mental health support should be available in every school and accessible to every pupil embedded through a school-based counsellor, registered play therapist or mental health practitioner. Schools should ensure that young people with Special Educational Needs and their families are involved actively in shaping individual pupil Education Health and Care Plans (EHP) but Alternative Provision (AP) should be treated as a last resort for pupils who will then receive the mental health support that they need in order to return to a mainstream education setting.

Support for Families

In addition to a commitment to nationwide preconception and inter-conception care and professional and community support during the first 1000 days of life, parents and carers should be given appropriate support to build positive relationships with their children. This would require Government long-term commitment to invest in childcare provision, early years services, a strengthened Health Visiting workforce, community hubs and mental health services. In

The whole school philosophy as above should encompass partnership working with parents and families and joined-up services for care-experienced children and young people should encompass education, employment, training, social work and mental health, forming a comprehensive pathway of care. It is essential to increase access to counselling and support services especially for those families grappling with substance and also alcohol abuse, mental illness and domestic violence. All support should be readily available and free of stigma.

Cross-Sector Collaboration

A collaborative approach between national and local government, non-profit organisations and community organisations is necessary to address the multifaceted nature of ACEs in a holistic way.

Public Awareness Campaigns

While ACEs and their effects continue to be either largely ignored or shrouded in stigma, they cannot be addressed in any way that will be of lasting benefit to individuals, families or wider communities. Government action is needed to lead evidence-based awareness campaigns devoid of stigma and supported by science so that the impacts of ACEs can be thoroughly understood by all sections of society. In this way, it will be possible to create strong and accessible support systems that will instil confidence and foster resilience.

Conclusion

The roadmap laid out in this chapter is a call to action – a promise of resilience and recovery that a UK Government can deliver to its future generations. It is a testament to the strength of collective voices and a reflection of the pressing need for a society where the spectre of ACEs does not dictate and divert an individual's destiny. The role of the Government therefore extends beyond mere intervention – it is about crafting a legacy of care, support and proactive protection for every child and family touched by the shadow of adverse experiences.

The approach is one that unites social justice with economic efficiency because the UK works best when it can harness the talents and abilities of all of its citizens.

An ACE Roadmap

- National ACE strategy
- Enhanced Data Collection and Research
- Strengthening Early Intervention and Prevention
- Integrating ACEs into Education Policy
- Support for Families
- Cross-Sector Collaboration
- Public Awareness Campaigns.