A Faculty of Public Health publication

THINKING AHEAD

WHY WE NEED TO IMPROVE CHILDREN'S MENTAL HEALTH AND WELLBEING

William Bird, Elizabeth Burton,
Alan Maryon-Davis, Margaret Murphy,
Sarah Stewart-Brown,
Katherine Weare and Phil Wilson
Edited by Rachael Jolley

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FACULTY OF PUBLIC HEALTH

First published: 2011
ISBN number: 978-1-900273-39-8

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London NW1 4LB
Telephone: 020 7935 0243
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Published by: FPH
Designed and typeset by Soapbox, www.soapbox.co.uk

Acknowledgements:
Thanks to the Department of Health, Public Mental Health and Wellbeing Team, as well as the FPH mental health committee, Professor Phil Hanlon (Glasgow) and Marcus Grant (UWE), Jo Nurse (WHO), as well as all the FPH staff.

Contents

Foreword

Over the past century our public health has improved immensely. In Britain we now have clean water, far fewer mothers die in childbirth, and many contagious diseases have been eradicated. But for most of that period our health resources have been focused on cure, rather than prevention, and on physical, rather than mental, illness. Hundreds of thousands of our children are affected by mental illness, and the numbers have risen particularly fast in the past decade. That means we need to emphasise prevention of mental ill health more clearly and, in particular, we need to focus on the early years of children's lives. Spending to help children at that point can avoid social and health problems in later years. In purely economic terms, a pound spent on prevention of mental ill health in the pre-school years gives a greater return than a pound spent in the teenage years. If we want to make Britain a more equal society, where children have a better chance in life, we should look more closely at maternal and childhood health, and particularly at mental health. We need to concentrate our attention on those factors, from parenting to housing to schools to skilled interventions, that will make the greatest difference in giving our children the best life chances, and give us the best chance of preventing avoidable mental ill health in our young people.

Baroness Julia Neuberger

Introduction

How can we give our children the best start in life? What are the basics for a child's wellbeing? What are the barriers to mental health in children? What influences can threaten emotional wellbeing and how can they be tackled?

In this book we look at the key stages in childhood and influences on wellbeing, from family, parenting, schools, environment, to housing and other elements of the built environment. We ask whether enough is being done to promote mental wellbeing and tackle emotional and behavioural problems early in life, and look at the cost of not doing enough in those early years.

One in 10 children and young people suffer from a diagnosable mental disorder. Our children need a better start in life. It would be good for them, good for their life chances as well as good for society at large. This is an investment for all of us in building a stronger, healthier future, so why then is there so little investment in the early years of childhood and tackling mental health issues early. How do we build that stronger wellbeing in this country?

A good start enhances children's mental, social and emotional development as well as their educational achievements. It matters because it is good for children, but also because it makes them resilient to mental and physical illness through their lives. As we discuss in Chapter 1, economists throughout the world agree that investing in early childhood saves a great deal of expenditure later in life, far more than investing in the school years. And, of course, people with good mental wellbeing are those who are more likely to work and be active members of society, sharing their wellbeing with others.

Children's health was centre stage at the beginning of the last century when infant mortality, infectious diseases, good nutrition and physical development were the focus of many government policies. With better housing and sanitation, introduction of child health clinics, the welfare state and the National Health Service, advances in obstetric care, vaccination and antibiotics and better education many thought that child health needed little further attention. But now in the early part of the 21st century, children are back on the agenda with a rather different focus. Now it is children's mental, emotional and social health and wellbeing which is the subject of most concern. Current policy relates to the twin aims of improving mental

health and wellbeing and preventing mental illness. Recent trend data strongly suggests that children's mental health is deteriorating with increasing prevalence of mental disorders. Early intervention is crucial to good outcomes.

The Prime Minister's announcement last year that he wanted to measure the success of this country on the basis of happiness or wellbeing, not just GDP, has intensified this debate and the Office of National Statistics is now conducting a national enquiry into what should be measured. Many current indicators of children's wellbeing are quite heavily focused on the social determinants of illness such as poverty and provision of health and educational services. A good example of this approach is that taken by UNICEF in its review of child wellbeing across the countries of the OECD. This report put the UK at the bottom of the league table with regard to child wellbeing and helped to focus attention on what might be going wrong.

It is important to measure social determinants, but it is much more important to measure wellbeing itself and for that we need a degree of consensus about what wellbeing is. At present, agreement extends to understanding that wellbeing is positive and that it is holistic, covering the mental, physical and social domains of wellbeing. In this book we are particularly concerned with mental wellbeing – a term which is a relative newcomer to the children's policy literature. In the past the terminology of 'emotional and social wellbeing' has been favoured and often operationalised as the absence of emotional and behavioural problems. These problems are of grave concern to governments and society because such children are at a high risk of growing up to be citizens who cause problems – those with a tendency to crime and violence, those who leave school with no qualifications and skills and those who resort to drugs and alcohol to relieve their distress. Whilst there is a broad degree of overlap between emotional, social and mental health, focusing on the positive is a welcome departure in health policy. The fields of positive psychology, management and parenting support have all discovered that focusing on the positive is an intervention in its own right. Health and social policy has traditionally paid attention to disease and deficit and we can anticipate a sea change as a result of the change in focus.

The public health White Paper *Healthy Lives Healthy People* defines mental health as "resilience, confidence and self esteem". It makes much

of our personal responsibility for health and the latter demands that we have a sense of agency – the capacity to make a difference. But in other policy literature mental wellbeing is defined more fully. Feeling useful and engaged with life are widely accepted aspects of wellbeing as is the capacity for personal development and learning. Good relationships with others are regarded as central to social as well as mental wellbeing and underline how related these two are. A sense of optimism about the future is often included as well as is a capacity for autonomy. The ability to feel calm, happy, generous and contented is central to many definitions.

Healthy Lives Healthy People outlines the way that mental health and wellbeing is critical for future physical health and has a clear goal of narrowing the gap in health expectations between rich and poor. Redistribution of resources has long been seen to be a key solution to the latter, but Frank Field's recent review of cycles of poverty identifies the quality of nurture rather than income redistribution as the key to breaking the cycle. Sensitive, positive parenting is of course central to children's mental health and wellbeing as Chapter 2 makes clear. So the goal of promoting children's mental health and wellbeing aligns very well with the goal of reducing inequalities in health. Graham Allen's recent review has identified a small number of interventions, some supporting parenting and some providing mental health promotion in schools which have been thoroughly researched and shown to make a difference. Chapter 3 and Chapter 4 make clear that there are a much wider range of opportunities to improve parenting and school experiences than the Allen review suggests and clear principles to predict what will work and what won't.

We outline here how family and school environment are vital to a good start in life, but wider environments impinge to a considerable degree. We address some relative newcomers to the public health agenda which are fundamental to children's mental health and wellbeing: access to the natural environment, a built environment which is conducive to mental wellbeing and the impact of the media, in all its forms, on children's health. There are other areas we cannot cover in this brief contribution to the literature. Perhaps first and foremost are approaches to improving mental health across the entire population. Adults who are not happy and fulfilled in their lives do not make good parents or teachers. So we cannot divorce children's mental health

and wellbeing from that of society at large. We do not deal with sustainable development and its impact on children's mental health. Many children are now aware that the world as we know it is at risk and that the adults in charge are not taking the sort of decisions they need to take fast enough to avoid profound problems with climate change in the relatively near future. Many children are rightly anxious about this. We have not discussed the measurement of mental wellbeing in children. Whilst there are now good positive measures of mental wellbeing for adults, such measures do not exist for children less than 12 years. As the Prime Minister has realised, if we are to be serious about making changes we need to be able to track the effect of those changes with robust measures. These need urgent consideration so that it is possible to track the effects of all the proposals we make in this book.

Sarah Stewart-Brown

References

HM Government. 2011. *No Heath Without Mental Health: A Cross-Government Mental Health Outcomes Strategy for People of All Ages*. Accessed on: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_124058.pdf

HM Government. 2010. *Healthy Lives Healthy People: Our Strategy for Public Health in England*. Norwich: The Stationery Office.

Field F. 2010. *The Foundation Years: Preventing Poor Children Becoming Poor Adults: The Report of the Independent Review on Poverty and Life Chances*. Accessed on 28/02/11 at: http://povertyreview.independent.gov.uk/media/20254/poverty-report.pdf

Friedli L and Parsonage M. 2009. *Promoting Mental Health and Preventing Mental Illness: The Economic Case For Investment in Wales*. Accessed on 28/02/11 at: http://www.publicmentalhealth.org/Documents/749/Promoting%20Mental%20Health%20Report%20%28English%29.pdf

UNICEF Innocenti Research Centre. 2007. *Child Poverty in Perspective: An Overview of Child Wellbeing in Rich Countries: Innocenti Report Card*. Accessed on 28/02/11 at: http://www.unicef-irc.org/publications/pdf/rc7_eng.pdf

Allen G. 2011. *Early Intervention: The Next Steps. An Independent Report to Her Majesty's Government*. Accessed on 28/02/11 at: http://media.education.gov.uk/assets/files/pdf/g/graham%20allens%20review%20of%20early%20intervention.pdf

Tennant R, Hiller L, Fishwick R, Platt P, et al. 2007. The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation. *Health and Quality of Life Outcomes*. 5(63) doi:101186/1477-7252-5-63.

1
Why invest in the pre-school years?

Philip Wilson

Background

As Michael Marmot,[1] Frank Field,[2] Graham Allen[3] and others have argued recently, a child's experience in his or her early years lays down a foundation for the rest of their lives. Pre-school influences shape a children's social, physical and emotional development long after they start school.

Costing pre-school benefits

Spending on pre-school years gives the highest rate of return on investment in human capital.[4] But, despite this, in terms of educating individuals, most is spent on universities and least on pre-school service provision.[5] Our pattern of educational expenditure thus seems to be designed to produce the minimum return. General public expenditure on the under-threes is minimal when compared with expenditure on any other age group, with specific expenditure being largely restricted to health visiting provision and some preferential benefits payable to unemployed mothers. This pattern of low expenditure on this period of life is perhaps most exaggerated in terms of mental health provision. In most parts of the UK, mental health professionals rarely see children under three years of age, and services tend to be provided

1 *Fair Society, Healthy Lives: The Marmot Review*, Accessed on 15/01/2011, from www.marmotreview.org

2 *The Foundation Years: Preventing Poor Children Becoming Poor Adults*, Accessed on 14/01/2011, http://povertyreview.independent.gov.uk/media/20254/poverty-report.pdf

3 *Early intervention: The Next Steps*. Accessed 13/01/2011, from http://media.education.gov.uk/assets/files/pdf/g/graham allens review of early intervention.pdf

4 Heckman J, Masterov D. 2005. Skill Policies for Scotland. In: Coyle W, Alexander W, Ashcroft B, editors. *New Wealth for Old Nations: Scotland's Economic Prospects*. Princeton: Princeton University Press.

5 Alakeson V. 2005. Too Much,Too Late: Life chances and spending on education and training. London: Social Market Foundation.

by general practitioners, health visitors and paediatricians. Although some health visitors are now being trained in infant mental health, few doctors caring for young children have had such training.

Getting a good start

Many long-term studies, particularly birth cohorts,[6,7,8,9] have identified pre-school factors associated with poor mental health and violence later in life. These may be:

- genetic (e.g., vulnerability to autism, Attention Deficit/Hyperactivity Disorder[10] or anti-social personality disorder[11]),
- antenatal (e.g., maternal stress hormones, smoking and alcohol consumption),
- located in the family/upbringing (e.g., postnatal depression, harsh or inconsistent parenting, parental discord)
- located in the wider environment (e.g., relative poverty, neighbourhood problems).

These factors may interact in different ways. Sometimes the risks may simply add up, sometimes they may amplify each other, and sometimes they may apparently reduce each other's individual effects. For example, some

6 Thompson L, Kemp J, Wilson P, Pritchett R, Minnis H, Toms-Whittle L et al. 2010. What Have Birth Cohort Studies Asked About Genetic, Pre- and Peri-natal Exposures and Child and Adolescent Onset Mental Health Outcomes? A Systematic Review. *European Child & Adolescent Psychiatry*. 19:1-15.

7 Jaffee SR, Moffitt TE, Caspi A, Fombonne E, et al. 2002. Differences in early childhood risk factors for juvenile-onset and adult-onset depression. *Arch Gen Psychiatry*. 59(3):215-222.

8 Jones D, Dodge KA, Foster EM, Nix R, Conduct Problems Prevention Research Group. 2002. Early identification of children at risk for costly mental health service use. Prevention Science; 3(4):247-256.

9 Murray J, Irving B, Farrington DP, Colman I, et al. 2010. Very early predictors of conduct problems and crime: results from a national cohort study. *Journal of Child Psychology and Psychiatry*. 51(11):1198-1207.

10 ADHD: attention-deficit/hyperactivity disorder, a condition where affected children have learning difficulties because of problems with attention, memory and marked restlessness

11 Caspi A, McClay J, Moffitt TE, Mill J et al. 2002. Role of genotype in the cycle of violence in maltreated children. *Science*. 297(5582):851-854.

of the adverse effects of antenatal smoking are accounted for by the fact that mothers who smoke when pregnant are more likely to have postnatal depression.[12]

We also know about factors which increase the resilience of children's brains to adversity. Positive parent-infant interaction protects against childhood psychological problems.[13] Higher intelligence, particularly in relation to verbal abilities, is also protective.[14]

Child neglect

Policy in the UK has tended to prioritise child abuse over child neglect, partly because of its greater visibility and media impact, and partly because of the relative ease of definition and simplicity of planning care pathways.[15] Neglect is, however, a much greater social problem and probably causes more long-term psychological difficulties. For example, Kotch et al, based on a robust study from the United States,[16] concluded that "…child neglect in the first two years of life may be a more important precursor of childhood aggression than later neglect or physical abuse at any age". While the impact of neglect is likely to become apparent when children enter school, there is a compelling case for earlier identification. Making this case has proved difficult (partly because of the difficulty of research in this area)[17] but there is a great deal of indirect evidence supporting the view that we should be assertive in seeking cases of neglect in order to offer appropriate support to families and thus

12 Maughan B, Taylor A, Caspi A, Moffitt TE. 2004. Prenatal smoking and early childhood conduct problems: testing genetic and environmental explanations of the association. *Arch Gen Psychiatry*. 61(8):836-843

13 See the recent report published for the Scottish Government: *Growing Up In Scotland: Children's Social, Emotional and Behavioural Characteristics at Entry to Primary School*. Accessed on 13/01/11 from: http://www.growingupinscotland.org.uk/.

14 Emerson E, Einfeld S, Stancliffe RJ. 2010. The mental health of young children with intellectual disabilities or borderline intellectual functioning. *Social Psychiatry & Psychiatric Epidemiology*. 45(5):579-587.

15 Wilson P, Mullin A. 2010. Child neglect: what has it to do with general practice? *British Journal of General Practice*. 60: 5-7.

16 Kotch JB, Lewis T, Hussey JM, English D, Thompson R, Litrownik AJ et al. 2008. Importance of Early Neglect for Childhood Aggression. *Pediatrics*. 121(4):725-731

17 Wilson P, Minnis H, Puckering C, Gillberg C. 2009. Should We Aspire To Screen Pre-school Children for Conduct Disorder? doi:10.1136/adc.2009.158535. *Arch Dis Child*. 94:812-816.

reverse its long term effects. The fact that only a tiny fraction of children who are living with problem drug or alcohol use in the family are subject to even basic child protection procedures, is testament to the fact that we are failing to protect the most vulnerable children.

The value of early interventions

Early support to vulnerable families by nurses is highly effective, and cost-effective. For example, David Olds' landmark trials of the Nurse Family Partnership offered to vulnerable mothers in the United States have demonstrated that about 30 hours of input between mid pregnancy and the age of two years, at an approximate cost of £3500,[18] can halve criminal behaviour, substance use, smoking, running away and high risk sexual behaviour by age 15.[19] Each of these behaviours has been shown in a range of studies to be associated with future morbidity, both physical and mental. Other work has confirmed the strong association of such behaviours with mental health problems. Nurses are much more effective than paraprofessionals,[20] and continuity of care has been found to be crucial. Olds' work is unusual in that study participants were followed up meticulously for many years, and there are no other examples of such rigorous assessments of nursing interventions. There are, however, excellent evaluations of early nursery-based interventions, most notably the Carolina Abecedarian project,[21] which produced dramatic long-term benefits in terms of academic achievement and problem substance use. The Scottish Collaboration for Public Health Research

18 Olds DL, Henderson CR, Jr., Phelps C, Kitzman H, et al. 1993. Effect of prenatal and infancy nurse home visitation on government spending. *Medical Care*; 31(2):155-174.

19 Olds DL, Henderson CR, Jr., Cole R, Eckenrode J, et al. 1998. Long-term Effects of Nurse Home Visitation on Children's Criminal and Antisocial Behaviour: 15-year Follow-up of a Randomized Controlled Trial. *JAMA*. 280(14):1238-1244.

20 Olds DL, Robinson J, O'Brien R, Luckey DW, et al. 2002. Home Visiting by Paraprofessionals And By Nurses: A Randomized, Controlled Trial. *Pediatrics*. 110(3):486-496.

21 Campbell FA, Ramey CT, Pungello EP, Sparling J, Miller-Johnson S. 2002. Early Childhood Education: Young Adult Outcomes from the Abecedarian Project. *Applied Developmental Science*. 6(42):57.

and Policy has recently published an excellent summary of the impact of early interventions.[22]

It should be noted that it has not proved possible to achieve results as good as Olds' when interventions have been offered to teenagers to reduce unhealthy behaviours such as smoking, drug use and high risk sexual behaviour. Other compelling evidence suggests that violence and antisocial behaviour is best tackled in the pre-school years.[23] It seems that we "learn" how to be violent very early[24] and it is also easier to undo behaviour patterns at a young age.

There are many examples of problems where intervening early is better than intervening late, but language delay is a particularly clear example. We know that there are "critical periods"[25] in language development, and if we miss the window of opportunity a child's language will be permanently impaired. We also know that early language delay is a very powerful marker of psychological vulnerability. In a large Swedish study,[26] children aged 30 months, who could not make two-word utterances and who had fewer than 50 words, had a 70% probability of having a psychiatric diagnosis, most commonly autism spectrum problems or ADHD, at age seven years. We also know that language delay is a potential sign of neglect – most young looked-after children have such problems and language problems are extremely common in children excluded from school.[27] So language delay is a very important early warning sign, and it does not just go away. We must

22 Geddes R, Haw S, Frank J. 2010. Interventions for Promoting Early Child Development for Health. Edinburgh: Scottish Collaboration for Public Health Research and Policy. Accessed on 15/01/11 from: https://www.scphrp.ac.uk/system/files/publications/1454-scp_earlyyearsreportfinalweb.pdf

23 Wilson P, Minnis H, Puckering C, Gillberg C. 2009. Should we aspire to screen preschool children for conduct disorder? doi:10.1136/adc.2009.158535. *Arch Dis Child*. 94:812-816.

24 Tremblay RE. Understanding Development and Prevention of Chronic Physical Aggression: Towards Experimental Epigenetic Studies. *Phil Trans R Soc B*. 2008. 363:2613-2622.

25 Bailey DBJ, Bruer JT, Symons FJ, Lichtman JW, eds. 2001. *Critical Thinking About Critical Periods*. Baltimore, Maryland: Paul H Brookes Publishing.

26 Miniscalco C, Nygren G, Hagberg B, Kadesjo B, Gillberg C. 2006. Neuropsychiatric and Neurodevelopmental Outcome of Children at Age 6 and 7 years Who Screened Positive for Language Problems at 30 Months. *Dev Med Child Neurol*. 48(5):361-366.

27 Ripley K, Yuill N. 2005. Patterns of Language Impairment and Behaviour in Boys Excluded From School. *British Journal of Educational Psychology*. 75(Pt:1):1-50.

identify and assess these children quickly and carefully, and offer appropriate intervention (usually more than speech and language therapy) if we are to avoid major future problems.

Patterns of vulnerability

A pilot project was recently conducted by our research group at the University of Glasgow in which families were offered two new universal contacts with their health visitor when children reached 13 months and 30 months.

The project used structured assessment tools because this is the best way to ensure social equity; otherwise there is a high risk that interventions would be offered to those who least need them as detailed in the 'Inverse Care Law'.[28] The work was designed to assess need (including unmet need) for parenting support in the community and offer appropriate levels of service to families. We assessed parental wellbeing and the parent-child relationship[29] at 13 months; language delay through a two-question screen,[30] behaviour problems and parental stress at 30 months; and family background and demographic factors at both ages.

A great deal of previously unsuspected need was identified. For example, 8% of parents who had been assigned to the lowest risk category by health visitors had strong evidence of depression. At 30 months, 10% of children were found to have some degree of suspected language delay: 47% of these children had been assessed as being at low risk at the start of the visit.

Further work has been carried out with the Scottish Government and Glasgow City Council to develop the assessment of children's emotional and behavioural wellbeing at school entry using the Strengths and Difficulties

28 Hart JT. 1971. The Inverse Care Law. *The Lancet*. 1(7696):405-412..

29 Wilson P, Thompson L, McConnachie A, Puckering C et al. 2010. Parent-child relationships: are health visitors' judgements reliable? *Community Practitioner*. 83(5):22-25.

30 Miniscalco C, Nygren G, Hagberg B, Kadesjo B, Gillberg C. 2006. Neuropsychiatric and Neurodevelopmental Outcome of Children at Age 6 and 7 years Who Screened Positive for Language Problems at 30 Months. *Dev Med Child Neurol*. 48(5):361-366.

Questionnaire (SDQ).[31,32,33] These data have allowed us to describe the emotional and behavioural wellbeing of children entering school in Glasgow. We now have maps of the distribution of emotional problems, hyperactivity/inattention problems, conduct problems, peer relationship problems across Glasgow The prevalence of conduct and hyperactivity problems is roughly 50% higher in the most deprived parts of the city compared to the most affluent, but some of the most deprived areas appear to have excellent childhood mental health. The data will allow us to identify local and individual factors predictive of problems likely to interfere with children's school attainment and will provide a baseline for proposed comparisons in future years.

In Canada, production of maps charting the degree of school readiness (social, emotional and physical) has prompted policymakers to ask why services in their areas are failing children. The maps have proved a huge stimulus to local service development and reductions in social inequality.[34]

How should we respond in the UK?

It is important to view the great achievements of David Olds' Nurse Family Partnership in context. In the US, there is no universal health visiting service and consequently no mechanism for identifying actual need in individual families in the community. Offering the Nurse Family Partnership intervention to all families is clearly impractical, expensive and unjustified. It has to be a targeted, rather than universal, provision. Directing attention to families on the basis of predicted vulnerability (using, for example, lone parent status, teenage pregnancy, and economic adversity) without further assessment is inefficient at best: it gives resources to families who do not need them, and misses many children with substantial need who do not fall into the 'right' demographic group. Our recent evidence from Glasgow confirms this view.

31 Goodman R. 1997. The strengths and difficulties questionnaire: a research note. *Journal of Child Psychology & Psychiatry & Allied Disciplines*. 38(5):581-586.

32 Goodman R. 2001. Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry*. 40(11):1337-1345.

33 See Youth in Mind. *Information For Researchers and Professionals About The Strengths and Weaknesses Questionnaire*. Accessed on 15/01/11, from: www.sdqinfo.org

34 Hertzman C, Williams R. 2009. Making early childhood count. *Canadian Medical Association Journal*. 180:68-71.

We have the potential for an efficient and flexible use of resources through use of an 'active filtering' approach in which professionals and families together determine level of need with reference to standardised assessment tools.[35] Resources can thus be directed to those most in need. In other words we need an intelligent system for 'case-finding', an assessment of the level of child/family need and appropriate resource allocation, often called progressive universalism.

The professionals routinely in contact with all children under the age of three years are: midwives (usually until the child is 10-28 days old); general practitioners; and health visitors. Each of these professions has the advantage of universality of access and consequently contact with them is not associated with stigma. These professionals lack routine training in infant mental health, and profess a desire to learn more.[36] In recent years, a number of policy developments have tended to reduce GP and health visitor involvement with the preventative care of children to the extent that many children do not see either, except on an opportunistic basis (for example, during illness) after the age of four months. One argument for universally offered, regular, child health surveillance contact with both sets of professionals is that there is now robust evidence that vulnerability is not a static characteristic, but can become apparent at any time in a child's early years.[37] There have been some welcome recent developments both in England, where a commitment to increase health visitor numbers has been announced,[38] and in Scotland, where a new universal contact with children, focused on language and behaviour, has been mandated.

Finally, once vulnerability is established, there must be clear care pathways available to families, with almost immediate accessibility. There is

35 Wilson P, Minnis H, Puckering C, Bryce G. 2007. *Discussion Paper: A Model for Parenting Support Services in Glasgow*. Accessed on 20/02/2011 from: http://www.gla.ac.uk/media/media_183183_en.pdf

36 Scottish Needs Assessment Programme. 2003. *Needs Assessment Report on Child and Adolescent Mental Health, Final Report*. Glasgow: Public Health Institute of Scotland.

37 Wright CM, Jeffrey SK, Ross MK, Wallis L, et al. 2009. Targeting health visitor care: lessons from Starting Well. *Arch Dis Child*. 94(1):23-27.

38 Department of Health. 4,200 *New Health Visitors to Boost Young Children's and Families' Health and Wellbeing*. Accessed on 31/01/11, from: http://www.dh.gov.uk/en/MediaCentre/Pressreleases/DH_120742

no excuse for a wait-and-see policy in early childhood social and emotional development.

Conclusions

There is a large body of evidence that wise investment to improve outcomes for pre-school children can pay a rich social dividend. The evidence available[39] supports the intuitive view that we get the biggest payback from investing more in supporting those children with the biggest needs. However, as Marmot makes clear, it is also important that these targeted services should be underpinned by universal services, the need for which is less intuitive. The scale and intensity of services needs to be proportionate to the level of need. Assessing need, however, requires targeted investment in the universal services for children under three years old – health visiting and general practice.

There needs to be a commitment to training and professional supervision, to provision of universal health surveillance programmes involving direct contact with children, and to functioning information systems. In the interests of social equity, there is a strong case for universal assessments using validated tools to assess need at several stages in the pre-school years, for example, the Strengths and Difficulties Questionnaire[40] and standard language assessments. Use of such tools would have a number of benefits beyond facilitating an equitable approach to support. They could allow efficient information sharing between primary care professionals, currently beset with problems,[41,42] and provide a useful instrument for policymakers and managers wishing to evaluate how well our early years' services are performing.

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39 Geddes R, Haw S, Frank J. 2010. *Interventions for Promoting Early Child Development for Health. Edinburgh: Scottish Collaboration for Public Health Research and Policy*. Accessed on 15/01/11 from: https://www.scphrp.ac.uk/system/files/publications/1454-scp_earlyyearsreportfinalweb.pdf

40 Now validated for use, from age 2, personal communication from Professor Robert Goodman, 2011.

41 Wilson P, Mullin A. 2010. Child neglect: what has it to do with general practice? *British Journal of General Practice*. 60: 5-7.

42 Wilson P, Barbour R, Graham C, Currie M et al. 2008. Health visitors' assessments of parent-child relationships: a focus group study. *International Journal of Nursing Studies*. 45(8):1137-1147.

Professional training for health visitors should in future have a strong focus on infant and child mental health and early brain development.[43,44] Consideration could be given to universal adoption of the Solihull Approach to infant mental health,[45] which promotes effective communication between professionals about the mental wellbeing of preschool children.

Child neglect needs to be identified early and addressed wherever possible, and certainly before the child begins to display serious problems which are difficult to contain. Behavioural symptoms in pre-school children should be taken as seriously as they are in adolescents and adults. Persistent aggression and indiscriminate friendliness, for example, should provoke professional concern and detailed investigation

Once identified, there is a need to provide robust care pathways for problems such as child neglect and language delay. We are currently providing inadequate services to children with these difficulties.

Phil Wilson *is a GP and senior lecturer in infant mental health at the University of Glasgow. He trained in medicine after completing a research doctorate in neurochemistry. He became a partner in a general practice in south-east Glasgow in 1988, where he continues to work part-time. He was appointed to his research post in 1995 where his work has focused on the development and evaluation of a range of interventions in primary care. His current research deals with the role of the primary care services in improving infant mental health. He contributed to the Scottish Needs Assessment Programme on Child and Adolescent Mental Health and the HeadsUpScotland Infant Mental Health report, and has published numerous academic papers on early childhood mental health. He is currently involved in evaluating the parenting support strategy for Glasgow and in research designed to improve early identification and treatment of psychological and psychiatric problems in infancy.*

43 Ibid.

44 Wilson P, Barbour R, Furnivall J, Connelly G et al. 2008. The work of health visitors and school nurses with children with emotional, behavioural and psychological problems: findings from a Scottish Needs Assessment. *J Adv Nurs*. 61(4):445-455.

45 Blackwell PL. 2004. The Solihull Approach Resource Pack. *Infant Mental Health Journal*. Vol 25(1):24-26.

2

Family culture and its impact on childhood wellbeing

Margaret Murphy

Introduction

There is a much welcomed political and academic focus upon the importance of the early years of life. Sir Michael Marmot in his review of health inequalities recommended that ensuring every child has the best start in life should be a key priority in tackling life-long health inequalities.[1] This view is echoed in the cross-party collaboration of MPs Graham Allen and Iain Duncan Smith calling for implementation of an early intervention strategy.[2]

The recognition that childhood experiences can have effects long into adult life is not new. "Give me the child till the age of seven and I will show you the man" is attributed to St. Ignatius Loyola, founder of the Jesuits, in the 16th century. Research over the past 30 years or so has allowed us to begin to understand how experiences in childhood, particularly adverse experiences, affect development and to investigate what interventions can help reduce early adversity and alleviate the negative outcomes.

Improving the experiences, health and outcomes of children and young people whilst a worthy end in itself, also has the potential to improve health and outcomes across the life-span. Approximately 50% of all lifetime mental disorders have their onset prior to age 14.[3] The quality of family relationships in childhood, and more specifically adverse parenting experiences in childhood, have been shown to predict a range of common psychiatric

1 The Marmot Review. 2010. *Fair Society, Healthy Lives:Strategic Review of Health Inequalities in England Post 2010*. London: Marmot Review.

2 Allen G and Duncan-Smith I. 2008. *Early Intervention: Good Parents, Great Kids, Better Citizens*. London: Centre for Social Justice and Smith Institute.

3 Kessler RC, Amminger GP, Aguilar-Gaxiola S, Alonso J., et al. 2007. Age of onset of mental disorder; a review of recent literature. *Curr Opin Psychiatry*. 20(4):359-64.

disorders in adult life.[4] The Adverse Childhood Experiences (ACE) study[5,6] which was carried out on a group of mainly middle-class, white Americans, found that growing up in a household where there was violence, abuse, parental substance misuse or mental illness was associated with poor physical and mental health in adult life.

Of course, wellbeing is not simply the absence of illness or disorder. Mental wellbeing can be conceptualised not only as the absence of psychopathology but also as the development of resilience and competencies which enable the individual to successfully negotiate life transitions and cope with adversity.

This chapter focuses on some of the determinants of mental health and development in children and young people and more specifically the family context.

Effect of context on children

Children live within complex systems where they are subject to a wide range of influences and it can be difficult to tease the individual effects of these various influences. A useful model for understanding the effects of context on children is Bronfenbrenner's ecological model.[7] She argued that development occurs within embedded 'layers' of context. The first layer involves relationships in which the child takes part directly; relationships with parents, siblings, peers, etc. These 'first layer' relationships are embedded within structures which have a bearing on how such relationships develop, for example, the pattern of interactions in step-families differs from that in an intact family. In turn these 'second layer' structures are influenced by

4 Weich S, Patterson J, Shaw R and Stewart-Brown S. 2009. Family relationships in childhood and common psychiatric disorders in later life: systematic review of prospective studies. *The British Journal of Psychiatry.* 194,392-398.

5 Edwards, V, Holden G.W, Feletti VJ and Anda RF. 2003. Relationship Between Multiple Forms of Child Maltreatment and Adult Mental Health in Community Respondents: Results From the Adverse Childhood Experiences Study. *American Journal Of Psychiatry*. 160: 8,1453-1460.

6 Feletti J, Anda RF., Nordenberg MD, Williamson MS, et al. 1998. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The adverse childhood experiences study. *American Journal of Preventative Medicine*. 14, 245-258.

7 Bronfenbrenner U. 1979. Context of child rearing; problems and prospects. *American Psychologist*. 34, 844-850.

another layer, the economics and circumstances of the neighborhoods and communities in which the child lives. There is a further layer in the cultures, customs and laws within which these communities exist.

A complementary framework for considering the effects of context on children is a mediational framework[8] which identifies both direct (ie, proximal factors) and indirect (ie, distal factors) influences on development and the nature of the relationships between them.

There is an added layer of complexity in that an individual factor can have multiple effects. For example, illness in a parent in addition to resulting in anxiety or distress about the parent on the part of the child, may also lead to parental absence with disruptions in parenting, the child may assume the role of carer which can impact on academic and social opportunities, there may be financial hardship and in the case of genetically transmitted disorders a direct increased risk of developing the disorder for the child.

As addressed in Chapter 3, there is emerging evidence of gene-environment interactions, in that individuals with different genotypes may be affected by the same environmental risks in different ways.[9] Understanding how various factors influence child development and wellbeing is important in developing both policy and interventions.

Environmental influences on children's health and development

Much of what is known about influences on children's mental health and development comes from epidemiology. Since the 1960s there have been a number of population-based studies examining the rates, patterns and associations of child and adolescent mental health problems.[10,11,12]

8 Jenkins J. 2008. Psychosocial Adversity and Resilience. In: *Rutter's Child and Adolescent Psychiatry, Fifth Edition*. Oxford: Wiley and Blackwell.

9 Kim-Cohen J, and Gold A. 2009. Measured Gene-Environment Interactions and Mechanisms Promoting Resilient Development. Current Directions. In: *Psychological Science*. 18,138.

10 Green H, McGinnity A, Meltzer H, Ford T, et al. 2004. *The Mental Health of Children and Young People in Great Britain*. London: Stationery Office.

11 Offord DR, Boyle MH, Szatmari P, and Rae-Grant NI. 1987. Ontario child health study. II. Six-month prevalence of disorder and rates of service utilization. *Archives of General Psychiatry*. 44, 832-836.

12 Rutter M, Tizard J, and Whitemore K. 1970. *Education, Health and Behaviour*. London: Kriegar, FL. Longman.

The most recent of these, the Office of National Statistics (ONS) study in the UK, found that 10% of children aged 5 -15 years had a mental disorder; 5% conduct disorders, 4% emotional disorders – anxiety and depression – and 1% were hyperactive. Compared with other children, children with a mental disorder were more likely to be boys, living in a lower income household, social sector housing and in a lone parent headed household. They were less likely to be living with married parents or in social class I or II households.

It is important to understand some of the limitations of the research techniques used. Research strategies, such as that used by the ONS study, which rely on assessment of individuals at a single time point can detect correlations (ie, variables which tend to occur or vary together) but such studies cannot definitively infer causality (ie, that change in one variable leads to change in another).

A complementary research technique is a longitudinal follow-up study in which a group of individuals are assessed at different time points, enabling the researchers to explore associations between particular variables and later outcomes. An allied technique is that of growth curve modeling[13] where individual children are followed up. In this strategy circumstances which change in the children's lives (such as starting school, changes in parenting, parental divorce) can be related to any changes in the children's functioning. Although longitudinal and growth curve modeling go part way in enabling researchers to infer causality, these designs don't eliminate the risk that the association between two variables is caused by a third variable such as another environmental risk or genetic factor. Natural experiments where everything is held constant, while one thing, the causal mechanism of interest changes[14] provide an alternative to correlational designs however, such circumstances are rare.

13 Singer, JD and Willet JB. 2003. *Applied Longitudinal Data Analysis; Modelling Change and Event Occurrence*. New York: Oxford University Press.

14 Rutter M, Pickles A, Murray R, and Eaves L. 2001. Testing hypothesis on specific environmental causal effects on behaviour. *Psychological Bulletin*. 127, 291-324.

Family environment and children

The rest of this chapter focuses upon the first of Brofenbrenner's layers, the child's family environment.

Our earliest relationships are those with our care givers. During the first six months of life, infants gradually develop a repertoire of behaviours designed to attract the attention of the care giver as well as learning to discriminate between care givers. Then, between the ages of six months and two years, the infant develops more clear cut attachment behaviour. Bowlby, who developed attachment theory, defined attachment as the strong propensity of the young child to "seek proximity to and contact with a specific figure and to do so in certain situations, notably when … frightened, tired or ill. The disposition to behave in this way is an attribute of the child… which changes only slowly over time".[15] Although the capacity to form attachments is innate, infants do not automatically attach to their birth parents. In order for selective attachments to form the infant must have a significant amount of interaction on a regular basis with the caregiver and must also reach a cognitive age of 7-9 months. If there are several care givers the infant may form a number of attachment relationships although most children will have primary or main attachment figure(s).

As the capacity to form attachments to care givers is innate the infant will even form attachments to abusive or neglectful care givers although the quality of the attachment relationship which develops is influenced by the behaviour of the caregiver, particularly their responsivity and sensitivity.

By the end of the first year it is possible to assess the quality of the young child's attachment to a particular care giver. On the basis of experimental work by Ainsworth, Main and others four main patterns of attachment relationships were identified; secure, insecure avoidant, insecure ambivalent/resistant, and disorganised.[16] In the general population around 65% of children are securely attached to their main care givers, with the remaining 35% being in the insecure or disorganized groups. With the caveat that there are additional influences at work and the causal links are not yet conclusively

15 Bowlby J. 1971. *Attachment and Loss, Vol.1, Attachment.* London: Hogarth Press.

16 Prior V and Glaser D. 2006. *Understanding Attachment and Attachment Disorders: Theory, Evidence and Practice. Child and Adolescent Mental Health, RCPRTU.* London and Philadelphia: Jessica Kingsley Publishers.

established, there appear to be associations between early attachment and later functioning across a range of domains.

There is evidence of associations between early attachment patterns and peer relationships in later childhood. Secure children show less aggression and more co-operation in peer interactions[17] and more appropriate, flexible emotional attunement and behavioral responses to a range of social and environmental cues[18,19]. By contrast insecure children are more likely to show evidence of emotional dysregulation and problems in peer relationships[20,21,22]. Infants with disorganized attachments tend to show markedly disturbed relationships often characterised by a 'fight or flight' pattern of alternate aggression and withdrawal.[23,24]

Insecure attachment does not automatically result in later disturbance, nor is secure attachment an absolute guarantee against the development of later problems. Long term follow-up suggests that family relationships throughout childhood are more important for child functioning than

17 Sroufe, LA, Schork E, Motti E, Lawroski N, LaFreniere P. 1984. The Role of Affect in Social Competence. In: C. Izard, J. Kagan, & R. Zajonc (Eds). *Emotion, Cognition, and Behavior*. New York: Plenum Press.

18 Sroufe LA. 2005. Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment and Human Development*. 7, 349-367.

19 Sroufe LA, Egeland B, Carlson EA, and Collins WA. 2005. *The Development of the Person: The Minnesota Study of Risk and Adaptation from Birth to Adulthood*. New York: Guilford Press.

20 Rydell AM, Bohlin G and Thorell LB. 2005. Representations of attachment to parents and shyness as predictors of children's relationships with teachers and peer competence in pre-school. *Attachment and Human Development*. 2, 187-204.

21 Troy M, and Sroufe LA. 1987. Victimization of pre-schoolers: Role of attachment relationship history. *Journal of the American Academy of Child and Adolescent*. 26, 166-172.

22 Weinfield NS, Whaley GJL, and Egeland B. 1996. Continuity, discontinuity, and coherence in attachment from infancy to late adolescence: Sequelae of organization and disorganization. *Attachment and Human Development*. 6: 73-97.

23 Jacobvitz D, Hazen N. 1999. Developmental pathways from infant disorganization to childhood peer relationships. In: J. Solomon & C. George (Eds.), *Attachment Disorganization*. New York: Guilford Press.

24 Lyons-Ruth K, Alpern L, and Repacholi B. 1993. Disorganized infant attachment classification and maternal psychosocial problems as predictors of hostile- aggressive behavior in the pre-school classroom. *Child Development*. 64, 572-585.

attachment insecurity per se.[25] Neverthless, the disorganized attachment pattern shows links to the development of psychopathology including disruptive and aggressive behaviour in middle childhood, problems in peer and social relationships, emotional disorders in adolescence and parenting problems in adult life[26] and is linked to the most disturbed early care giver relationship.

Just how these early relationship patterns influence later development is the subject of intense research. Possible mechanisms include the development of so-called internal working models of social relationships which influence the way in which the individual responds to social relationships and by influencing social-emotional and cognitive development.[27] It has also been demonstrated that early experience has an impact on neuroendocrine function and brain development.[28] Of course, these mechanisms may not be mutually exclusive.

The quality of parenting and family environment remain important throughout childhood and there is an extensive research base of studies into parenting quality. Of importance is the work by Baumrind[29] subsequently elaborated by others (summarised here[30]) on typologies of parenting style on the basis of dimensions of warmth (versus conflict or neglect) and control strategies. The children of parents described as authoritative (high warmth, positive/assertive control, and in adolescence high expectations) were found

25 Grossman K.E, Grossman K, and Waters E. 2005. *Attachment From Infancy to Childhood; The Major Longitudinal Studies*. New York, London: Guilford Press.

26 Green J, and Goldwyn R. 2002. Annotation: Attachment disorganization and psychopathology: New findings in attachment research and their potential applications for developmental psychopathology in childhood. *Journal of Child Psychology and Psychiatry*. 43, 835-846.

27 Bretherton I, Munholland KA. 1999. Internal Working Models Revisited. In: J Cassidy and PR Shaver (Eds.). *Handbook of Attachment: Theory, Research, and Clinical Applications*. New York: Guilford Press.

28 Rutter M, and O'Connor TG.2004. Are there behavioural programmimg effects for psychological development? Findings from an early study of Romanian adoptees. *Developmental Psychology*. 40, 81-94.

29 Fox NA, and Hane AA. 2008. Studying the Biology of Human Attachment. In: Cassidy J, Shaver PR. *Handbook of Attachment: Theory, Research and Clinical Applications*. New York and London: Guilford Press.

30 Baumrind D. 1991. Effective Parenting During The Early Adolescent Transition. In: P. Cowan and E.M Hetherington (Eds). *Family Transitions*. Hillsdale, NJ. Erlbaum.

to be more pro-social, academically and socially competent and less likely to experience symptoms of mental disorder. Children whose parents were described as permissive (high warmth, low control) or disengaged (low warmth, low control) fared less well with the children of authoritarian parents (low warmth, high control, coercive or punitive attempts at control) showing the most disturbed adjustment of the four groups. Harsh parenting characterized by verbal aggression, hostility and criticism has been found to have a causal role in childhood disturbance.[31,32]

Attachment relationships and parenting are universal experiences which can act as positive or negative factors for individual development depending upon the quality. In addition to these universal influences there are a range of other family context factors which can act as risks for development.

Child maltreatment is the antithesis of what might be considered adequate care and parenting. Not only does it cause suffering at the time but also impacts on later development and carries an increased risk for a range of negative outcomes well into adult life.[33] Gaining an idea of the prevalence is difficult as it is often a hidden problem but what studies there are show that it occurs across all social classes and cultures. The World Health Organisation has identified child maltreatment as a major public health issue.[34] Recent research and policy has shifted towards a focus on understanding the underlying factors with the aim of prevention.

Conflict between parents has been shown to be associated with a wide range of emotional and disruptive behaviour problems, with the most damaging aspect being openly expressed inter-parental hostility or aggression. Unresolved parental conflict and conflict centred on the children themselves are associated with greater child distress. There is however considerable

31 Scott S. 2008. Parenting Programs. In: *Rutter's Child and Adolescent Psychiatry, Fifth Edition*. Oxford: Wiley and Blackwell.

32 Ge X, Conger RD, Cadoret RJ, et al. 1996. The developmental interface between nature and nurture: A mutual influence model of child behaviour and child anti-social behaviour and parent behaviours. *Development Psychology*. I 32, 574-589.

33 Kim KJ, Conger RD, Lorenz FO, and Elder GH. 2001. Parent-adolescent reciprocity in negative affect and its relation to early adult social development. *Developmental Psychology*. 37, 775-779.

34 Cichetti D, and Toth SL. 1995. A developmental psychology perspective on child abuse and neglect. *Journal of the American Academy of Child and Adolescent Psychiatry*. 34, 541-565.

variability in the degree to which children are affected by parental conflict with children who blame themselves for the conflict or who perceive the conflict as threatening family wellbeing being more affected. The quality of the parent-child relationship(s) may also act as a mediator.

The effects of separation and divorce are complex and have been shown to be associated with an increase risk of psychopathology. There is often a period of conflict; the children may be separated from one of the parents, usually the father; there is disruption of parenting and there may be financial hardships, all of which can exert an effect. There is some evidence that children may be more adversely affected where there was little parental conflict before the separation whereas where there was on-going conflict the separation itself may be more welcome.

Violence by one parent towards another is an important risk factor. Violence between adult partners occurs across all social classes, all ethnic groups and cultures, all ages and in heterosexual and homosexual relationships. However, the picture is often more complex than simply violence by one adult towards the other. Children in violent households are 3 to 9 times more likely to be injured or abused and in 60% of cases where the children have been abused the mother will also have been a victim.[35] Such households are also at risk for parenting problems and other adversities. Thus children growing up in such an environment are at risk from a range of adversities and there is an association with negative outcomes including emotional disorders, disruptive behaviour disorders, aggression and risk taking behaviours such as substance misuse.

Parental ill-health is also associated with a increase in a range of psychological disturbances in children. Much of the research has focused on psychiatric disorders and particularly on depression, anxiety, eating disorders and alcohol and substance misuse which are common in the child-bearing years.

Post-natal depression is perhaps the most researched area. It is common, thought to affect up to 13% of women, and is of concern because it is a source of distress for the woman and also because of the potential impact

35 Hall D and Lynch M. 1999. Violence begins at home: Domestic strife has lifelong effects on children. *British Medical Journal*. 316, 1151.

on the infant. Depression, particularly when severe, can have a significant impact on the individual's ability to perform everyday tasks. The young infant and child is completely dependent upon care givers for physical care. In addition in order for development to proceed smoothly the infant requires sensitive, responsive parenting and appropriate stimulation. A number of longitudinal studies have demonstrated associations between adverse child outcomes and maternal depression including higher rates of emotional and behavioural problems at school entry and in some, but not all studies, cognitive problems.[36] Although post-natal depression is the most commonly considered aspect of parental mental health, parental mental illness and drug and alcohol misuse (which are commonly associated) at any stage in childhood are potent determinants of mental illness in the next generation and deserve more attention than they have had in the past.

Summary

Children's development and wellbeing are influenced by the family context, which is usually protective but can be a source adversity. Of course, the family context is itself affected by a wide range of external influences not least the societal and economic context in which the family lives. In addition the characteristics of the child including the child's genetic make-up and temperament may either confer resilience or vulnerability which interact with environmental factors. There is rarely a simple deterministic relationship between risk factors and developmental outcomes which although frustrating for researchers also opens the way for intervention at different levels. The challenge for our society is to understand both how to promote the development of all children as well as both reducing and minimizing the impact of adversity.

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36 Stein A, Ramchandani P, and Murray L. 2008. Impact of Parental Psychiatric Disorder and Physical Illness. In: *Rutter's Child and Adolescent Psychiatry, Fifth Edition*. Oxford: Wiley and Blackwell.

the Royal College of Psychiatrists. She has a background in autism research. Over the years she has also become interested in public understanding of mental health speaking and writing for young people and parents. As chair of the Faculty she has been keen to lobby for better services for people with mental health problems.

3
Why parenting support matters

Sarah Stewart-Brown

Introduction

In the latter part of the last century public health professionals would have raised an eyebrow or two, or perhaps been a little more forcefully dismissive, when confronted with the idea that the quality of parent-child relationships and the way parents encourage, support and contain their children's development was a critical determinant of public health across the life course.[1] But now, a decade into the 21st century, parenting features in every major public health report and policy[2] as a critical component of giving children the best possible start in life and ensuring that their mental, emotional and social development is not supported.

Aspects of parenting which matter for children's mental health

The key aspects of parenting which have been the subject of research are covered in the *Family Culture* chapter. Researchers have to create categories or groups of like children or families in order to do their epidemiological studies. Whilst necessary, these categories can be 'blunt instruments' in research terms, ignoring the fact that almost all aspects of parenting represent continua from the (relatively unusual) optimal parenting to the very poor, abusive and neglectful parenting and gloss over many of the important subtleties. This is self evident in the literature on parent-infant attachment. Here the categories of secure and insecure attachment have been further developed by more subtle observations of parent-infant interactions and the way these are distorted in families who are not able to offer sensitive and

1 Stewart-Brown S. 2010. Child Public Health: Lessons From The Past. In: Blair M, Stewart-Brown S, Waterston T, Crowther R. *Child Public Health*. Oxford, OUP.

2 See, for example, HM Government. 2010. *Healthy Lives Healthy People: Our Strategy for Public Health* in England. London: HM Government.

attuned care. The chapter *Why Invest In The Early Years?* draws attention to the importance of neglect. What has been observed by those who have researched parenting, is that ignoring or neglecting children, while much more subtle and difficult to identify than physical abuse, can have a more devastating impact on children's emotional and social development.[3] Infants cannot survive on their own, so neglect with its sense of abandonment, is a very real threat. This important observation has been used by those developing parenting programmes to encourage parents to pay attention to the behaviour that they want from their children and ignore the negative behaviours.[4] This remarkably effective approach to managing behaviour is, of course, also well known in management circles.

Parenting literature has been added to recently by key research from the biomedical disciplines. The development of the brain is now recognised to be a 'use it or lose it' affair.[5] Patterns of relating become deeply embedded in the emotional and social brain very early in life, creating all sorts of problems later on. One of these problems is the physiological response to stress. Infants exposed to too much stress develop heightened responses, so that stimuli which luckier infants can ignore, trigger a flood of stress hormones (the fight or flight response) with their potent effects on mental and physical health as well as on social interaction.[6] Such research can beg the question: what is too much stress for infants? Answers to that question seem to depend on the quality of parenting. Parents who can 'contain' their infants' distress help them develop the neural pathways which enable children to soothe themselves and recover rapidly from stressful experiences.[5] Such children are much more resilient both in childhood and adulthood. At the other end of

3 Sroufe LA, Egeland B, Carlson EA. 1999. One Social World: The Integrated Development of Parent-Child and Peer Relationships. In: *Relationships as Developmental Concepts*. Edited by Collins et al. Mahwah: Lawrence Erlbaum Associates. 241-61.

4 Stewart-Brown S, Schrader MacMillan A. 2010. *Promoting the mental health of children and parents: evidence and outcomes for home and community based parenting support interventions*. Report of Workpackage 2 of the DATAPREV Project European Community 6th Framework Research Programme, SP5A-CT-2007-044145. Available at: http://wrap.warwick.ac.uk/3239/ 2010.

5 Gerhardt Sue. 2004. *Why Love Matters; How Affection Shapes A Baby's Brain*. London: Routledge.

6 Gunnar M, Quevedo K. 2007. The neurobiology of stress and development. *An Rev Psychol*. 58:145-73

the spectrum are the children raised in orphanages with little or no emotional contact. These children adapt to the situation by cutting off, flattening affect and losing the capacity for close relationships. Surprisingly low levels of stress can cause lasting problems in infants whose parents are: not able to help them learn 'containment'; those whose mothers are suffering postnatal depression; whose parents are anxious themselves; those with other mental disorders; and those who abuse drugs and alcohol. Patterns established in infancy can be difficult to modify in later life. One effect of this neural patterning of relationship responses in infancy is that infants grow up to parent in ways that are similar to those of their own parents. This is a potent contributor to cycles of disadvantage.

The genetic inheritance of personality traits, patterns of relating and mental disorders have been studied for many years and there can be little doubt that some of the intergenerational transmission of parenting styles is down to genes. However, another important group of biomedical studies has demonstrated epigenetic phenomena in this transmission, that is they show that the expression of genes can be modified by the environment in which children are growing up .[7,8] For example, children inheriting genes which put them at risk of antisocial behaviour or depression are particularly susceptible to positive parenting. These genes seem only to be expressed in children who are not lucky enough to be on the receiving end of positive parenting. Parenting styles and practices are also responsible for some of the intergenerational transmission of mental illness, influencing the incidence of mental illness in the children of parents with mental disorders.[9]

What can be done to improve parenting?

Researchers interested in the development of violence, criminality, educational failure and other social problems identified parenting as a key determinant several decades ago. These groups have been working on ways to enable

7 Caspi A, McClay J, Moffitt TE, Milll J, et al. 2002. Role of genotype in the cycle of violence in maltreated children. *Science*. 297(5582):851-854.

8 Caspi A, Sugden K, Moffitt TE, Taylor A, , et al. 2003. Influence of life stress on depression: moderation by a polymorphism in the 5-HTT gene. *Science*. 201(5631):386-389.

9 For example, Wamboldt MZ, Reiss D. 2006. Explorations of parenting environments in the evolution of psychiatric problems in children. *American Journal of Psychiatry*. 2006.163:951-3.

parents to do a better job and have developed parenting programmes for children of school age. These, now well developed and evidence-based programmes, form an important bedrock of parenting support.[10] The best known programmes are offered to groups of 8-12 parents for 10-12 weeks. They include: Triple P from Australia and the Incredible Years series of programmes from the US. There are also fine examples of good programmes developed in UK such as the *Family Links Nurturing Programme*, *Strengthening Families Strengthening Communities* and *Mellow Parenting*. The UK programmes have mostly been developed in the Third Sector, or in the NHS or in social services departments where access to the resources required for randomised controlled trials has until recently been very limited. As a result, in this evidence- based culture, we tend to hear more about the commercially available franchised programmes whose developers are based in academic settings. The UK developed programmes may be more appropriate in some UK settings and remain popular with practitioners and parents who see evidence of them working at the micro level (For example programmes like Strengthening Families Strengthening Communities or the Family Links Nuturing Programme). These programmes all help parents learn behaviour management approaches. They also aim to enable parents to develop appropriate expectations of their children and enhance parent-child relationships. The extent which they do the latter varies from programme to programme. A considerable body of research has been undertaken to demonstrate what it is that makes programmes successful.[11]Manualised programmes which incorporate experiential approaches (role play, home work) do much better than others. Another key starting point is a well- trained and skilled facilitator. Being able to establish an accepting and respectful relationship with all parents, to show compassion to those who are creating difficulties for their children and to respect different approaches to parenting is critical alongside the essential group work skills. Other aspects which matter are; a welcoming atmosphere in which parents physical needs are met, crèche provision, and transport being offered. Many observers have noted a gap between efficacy and effectiveness in parenting programmes. Those

10 Stewart-Brown S, Schrader MacMillan A. 2010. Op Cit.

11 Ibid.

which seem to do really well in research settings can lose their effectiveness when rolled out for general use. It is likely to be lack of attention to the above factors whichaccounts for this discrepancy. In England's Parenting Early Intervention Pathfinder project,[12] these programmes were successfully rolled out through schools to parents whose children were struggling and remained effective. All these programmes, however, were well established with carefully developed, mandatory, facilitator training programmes (Triple P and Incredible Years). Parent Support Advisers, available in every school, also supported parenting, offering advice and support on an individual family basis and signposting parents towards formal courses.

These well-known programmes tend to dominate world views of parenting programmes, but they represent only a small proportion of approaches which have been tried and tested. The well-known programmes were developed for children with behaviour problems, so started out as programmes for children of four years and up. They are useful down to about three years of age but not so much in the younger age groups where 'behaviour management' is less of an issue. The majority of the other approaches and programmes focus on the early years. Some very simple interventions such as skin-to-skin care in labour wards are now routine practice in the UK because they enhance parent-infant bonding and sensitivity. Neonatal interventions like the Brazelton Neonatal Assessment Scale in which a health professional helps parents see their infants as people who are able to communicate their needs, have been shown to be useful. A number of DVDs have now been produced for parents to help them learn about their infant's cues. There is some evidence that carrying babies in kangaroo pouches and baby massage[13] increase parental sensitivity and attunement. These are all relatively low-cost interventions which can be offered universally alongside public education programmes on the internet and television.

Philip Wilson, in Chapter 1, has drawn attention to one of the very well-researched early parenting programmes, the Family Nurse Partnership. This is suitable for targeted families, particularly those where the parents

12 Lindsay G, Davis H, Band S, Cullen MA, et al. 2008. Parenting Early Intervention Pathfinder Evaluation. In: *England's Parenting Early Intervention Pathfinder Project*. Department for Children, Schools and Families Research Report. DCSF-RW054.

13 Stewart-Brown S, Schrader MacMillan A. 2010. Op Cit.

are very young. It is a weekly home visiting programme from pregnancy to the second year of life which can be tailored to some extent to meet the needs of vulnerable families. Video interaction guidance is another effective way to enhance parent-infant communication, sensitivity and attunment. A skilled practitioner videos parents interacting with their infants and plays this back with the parent, stopping and reflecting on what was going on and how the baby or parent was feeling at each step. *Watch, Wait and Wonder* is an attachment-based programme which encourages parents to observe and follow their child's play. This can lead to radical changes in parents' views of their infants and children. The effects of post-natal depression can be ameliorated with cognitive behavioural, non-directive counselling and psychotherapeutic approaches. All three seem to be equally effective in helping mothers who have been identified. Problems still remain in that there is no very reliable method for identifying parents experiencing depression.

This theme of identifying parents who need targeted support also runs through Chapter 2. It remains a concern, since all the specific indicators of problem parenting do not appear in routine data and are often concealed from professionals. This is the reason why a universal service is an essential component of parenting support. Universal provision prevents stigma and enables families who need further support to be identified. It also raises the standards of parenting across the population and in doing so enhances population mental health and wellbeing. The same principles apply for parenting support as they do for mental health promotion in schools as shown in Chapter 4. Targeted approaches are very appealing to policy makers who have limited resources, but opting for a targeted-only approach is a mistake. Perhaps the best researched example of the successful use of universal approaches to underpin targeted parenting support is in Triple P provision in the US where this approach is one of a very small number that have been shown to be successful in reducing child abuse.[14]

Abusive parenting, alongside parenting in families where parents have a mental illness or abuse drugs or alcohol, (problems that often go together), is the most difficult to influence and demands the most skilled workforce. What

14 Ronald J, Prinz Matthew R, Sanders Cheri J, Shapiro, et al. 2009. Population-based prevention of child maltreatment: the US Triple P system population trial. *Prevention Science*. 10: 1-12.

is needed for these parents is a period of 'reparenting' when some of the problem neural pathways relating to relationship can be transformed. This is slow, intensive, long-term skilled work and there are only a small number of programmes – Parenting Under Pressure[15] and Triple P being examples – where success has been reported. Some parents are so damaged by their childhood experiences that they may never be able to reach acceptable standards of parenting. For such families care outside the home in foster and adoptive care is always going to be necessary. But many of these families can be helped. A combination of day care for infants and parenting support has, as Philip Wilson points out, been successful in the US. However, the story on daycare is controversial. Although stressful for children of even four years of age[16] and ideally limited to short days,[17] daycare is undoubtedly valuable for this age group improving language development and socialisation.[18] However, daycare is unlikely ever to be better than home care for infants, except in the highest quality provision (of which there is very little in this country) where babies are assigned to the care of a single key person with whom they can develop attachment relationships, in family groupings or rooms.[19] It is very difficult and expensive in daycare settings to provide the secure attachment relationships babies need to thrive and to develop optimally from an emotional and social point of view. Between the ages of one and three the extent to which day care is beneficial to children's development will depend very much on the quality of the care, the number of hours infants spend in care and the quality of parenting they are receiving at home.

15 Dawe S, Harnett PH, Rendalls V, Staiger P. 2003. Improving family functioning and child outcomes in Methadone maintained families; the parents under pressure programme. *Drug and Alcohol Review* 22:299-307.

16 Ahnert L, Gunnar MR, Lamb ME and Barthel M.2004. Transitions to child care: associations with infant-mother attachment, infant negative emotional and cortisol elevations . *Child Development*. 75 (3) 639-650.

17 Belsky J. 2006. Early child care and early child development: major findings of the NICHD study of early child care. *European Journal of Developmental Psychology*. 2006;3:95-110.

18 Melhuish E C, Sylva K, Sammons P, et al. 2001. The Effective Provision of Pre-school Education Project. Technical Paper 7: Socio/behavioural and Cognitive Development at 3-4 Years of Age in Relation to Family Background. London: Institute of Education, DfES.

19 Melhuish EC. 2004. A Literature Review of the Impact of Early Years Provision on Young Children with Emphasis Given to Children from Disadvantaged Backgrounds. A Report for the National Audit Office. London: NAO.

Parenting provision in UK today

The UK leads the world in policy and practice relating to parenting. The creation of a parenting commissioner in every local authority following the publication of *Every Parent Matters* in 2007 improved provision of behaviourally orientated parenting programmes through schools. The piloting of the Family Nurse Partnership approach in the NHS is proving successful and the programme is likely to be rolled out across England. Some SureStart children's centres provide a wide range of parenting support and it is envisaged that all centres will do so in future. The coalition government has committed to an increase in health visitor numbers which will expand the workforce for parenting support. However, this rosy picture needs tempering with the likely effects of cuts in service provision. Whilst parenting remains very high on the agenda of all government policy for health and social care at present, it remains to be seen how much of this provision survives the next few years. Much is at stake for the future of children's mental health.

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worked in the UK NHS, both in paediatrics and in public health, so she brings a wealth of practical experience as well as a lot of experience in research and teaching. Sarah has published extensively including a book on Child Public Health (OUP 2010). She holds a Doctor of Philosophy Degree from Bristol University and is a fellow of the Royal College of Physicians of London, the Royal College of Paediatrics and Child Health and the Faculty of Public Health.

4

Improving mental health and wellbeing through schools

Katherine Weare

Introduction

Childhood and adolescence present a vital opportunity to develop the foundations for mental health, and schools form a powerful way to deliver this. Schools are an easy access environment with direct day-to-day contact with young people and their families. Schools are where young people make friends and are influenced by a wide range of adult role models, and so have a major socializing effect on their development. They also have an important role in social and emotional development, helping to establish identity, interpersonal relationships and transferable social and emotional skills.

Schools contribute strongly to both risk and resilience factors for mental health. Low achievement in school is a known risk factor for a range of problems such as drug use, teenage pregnancy, behaviour problems and crime.[1] Conversely, poor mental health depresses educational attainment. In a recent survey of child mental health in Great Britain [2] disproportionately large numbers of children with conduct and emotional disorders were behind in their overall educational attainment, missing school and/or excluded.

The relationship can also be a virtuous circle, with schools acting as positive and protective influences for mental health and creating resilience, providing the child or young person with the inner resources to cope, to buffer negative stressors and thrive despite deficits. This is especially true for children who come from less than optimum home backgrounds and neighbourhoods where the intervention of the school can be the turning point for many

1 Rutter M, Hagel A, and Giller H. 1998. *Anti-social Behaviour and Young People*. Cambridge: Cambridge University Press.

2 Green H, Mc Ginnity A, Meltzer H, Ford and Goodman R. 2005a. *Mental Health of Children and Young People in Great Britain*. Basingstoke: Palgrave.

children with few other supports. Having a 'sense of connectedness' with school is a recognised protective factor for mental health.[3]

One of the reasons why we need a strong focus on mental health is the increasing awareness of the growing number of children and young people who experience mental health problems. These problems are a significant personal, social and economic burden on the children and young people themselves, their families and the community.[4] It would appear that around 25% of children and young people in the developed world have an identifiable mental health problem[5] of whom 10% fulfil criteria for a mental health. Antisocial behaviour, conduct disorder and oppositional defiant disorder are the most common mental health problems presenting to psychiatrists, affecting over 5% of children, particularly boys. Anxiety and depression affect 4%. Suicide is one of the three most common causes of death in youth, and the numbers of suicides among young men has risen steadily over the last two decades while attempted suicides have increased among girls.[6] Self-harm and eating disorders are a growing problem, particularly in girls.[7] Many young people suffer from multiple problems, which frequently are undetected and untreated.[8] Poor mental health impacts severely on life chances, and can increase the risk of delinquency, trouble with the police, smoking, substance use disorders, and teenage pregnancy.[9] Mental health problems in childhood are also major predictors of mental health problems

3 Catalano RF, Mazza JJ, Harachi TW, Abbott RD, Haggerty KP, and Fleming CB. 2003. Raising healthy children through enhancing social development in elementary school: Results after 1.5 Years. *Journal of School Psychology*. 41(2):143-164.

4 Zubrick S R, Silburn S R, Burton P, Blair E. 2000. Mental health disorders in children and young people: scope, cause and prevention. *Australian and New Zealand Journal of Psychiatry*. 34 570–78.

5 Harden A, Rees R, Shepherd J, Ginny B, Oliver S, and Oakley A. 2001. *Young People and Mental Health: A Systematic Review of Research on Barriers and Facilitators*. London: Institute of Education, University of London EPPI-Centre. .

6 Coleman J. and Brooks F. 2009. *Key Data on Adolescence,7th edition*. Brighton: Young People in Focus.

7 Harden et al, op cit.

8 Offord D. 1996. The State of Prevention and Early Intervention. In: R. Peters and R McMahon (Eds.), *Preventing Childhood Disorders, Substance Abuse, and Delinquency*. Sage: Thousand Oaks, California..

9 Graham H and Power C. 2003. *Childhood Disadvantage and Adult Health: A Lifecourse Framework*. London: Health Development Agency.

in adulthood: half of all lifetime mental disorders are reported as beginning before the age of 14 years.[10]

The rising prevalence of mental health problems suggests that the demand for curative services simply cannot be met and the prevention of problems and the promotion of mental health are the only economically viable solutions. In this effort, schools are naturally seen as having a strong role to play.

The impact of mental health programmes in schools

For some time, schools have been seen as a unique community resource to prevent mental health problems and promote and foster mental, emotional and social wellbeing. The past two decades have seen a significant growth of research and good practice on mental health prevention and promotion in schools across the world. Activities operate under a variety of headings, not only 'mental health' but other related terms such as 'social and emotional learning' (SEL), 'emotional literacy', 'emotional intelligence', 'resilience', 'lifeskills', "violence prevention', 'anti-bullying', and coping skills'.[11] The work is providing a rich evidence base which has been the focus of a considerable amount of evaluation.

Systematic reviews of the field are repeatedly demonstrating that the best of interventions, when well implemented, are effective, both in promoting positive mental health for all, and targeting those with problems[12,13]Well-designed and well-implemented interventions can have a very wide range of impacts, including on specific mental health problems, such as aggression and depression, reducing commonly accepted risk factors for mental

10 WHO/ WHO/HSCB Forum Task Force. 2007. *Social Cohesion for Mental Health: Well-being Among Adolescents*. Copenhagen: World Health Organisation Regional Office for Europe.

11 Weare K. 2000. *Promoting Mental, Emotional and Social Health: A Whole School Approach*. London: Routledge..

12 Adi Y, Killoran A, Janmohamed K, and Stewart-Brown S. 2007. *Systematic Review of the Effectiveness of Interventions to Promote Mental Wellbeing in Primary Schools: Universal Approaches Which Do Not Focus on Violence or Bullying*. London: National Institute for Clinical Excellence. .

13 Shucksmith J, Summerbell C, Jones S, and Whittaker V. 2007. *Mental Wellbeing of ChildrenI Primary Education (Targeted/Indicated Activities)*. London: National Institute of Clinical Excellence.

health, such as impulsiveness, and antisocial behaviour, and developing competences that promote mental health such as cooperation, resilience, a sense of optimism, empathy and a positive self concept.[14] Interventions have also been shown to help prevent and reduce early sexual experience, alcohol and drug use, violence, bullying and crime[15,16] and promote pro-social behaviour.[17] Children who receive effective, well-designed and well-implemented mental health and wellbeing interventions are more likely to do well academically, to make more effort in their school work, and to have improved attitudes to school, with fewer exclusions and absence.[18] A recent major US meta-analysis[19] summarised research on 207 social and emotional interventions and suggested that schools with effective programmes showed an 11% improvement in achievement tests, a 25% improvement in social and emotional skills, and a 10% decrease in classroom misbehaviour, anxiety and depression.

Mental health in UK schools

In the UK the emphasis of mental health work in schools since the 1980s has largely been on universal approaches. The 1980s saw the government-led 'healthy school' approach, with bullying and emotional wellbeing as major

14 Wells J, Barlow J and Stewart-Brown S. 2003. A systematic review of universal approaches to mental health promotion in schools. *Health Education*. 103(4): 197-220.

15 Caplan M, Weissberg R P, Grober J S, Sivo P J, Grady K. and Jacoby C. 1992. Social competence promotion with inner-city and suburban young adolescents: Effects on social adjustment and alcohol use. *Journal of Consulting and Clinical Psychology*. 60, 56-63.

16 Greenberg M T, Domitrovich C, and Bumbarger B. 2001. Preventing Mental Disorders in School Aged Children. *A Review of the Effectiveness of Prevention Programmes*. Prevention Research Center for the Promotion of Human Development, College of Health and Human Development, Pennsylvania State University.

17 Durlak J and Wells A. 1997. Primary prevention mental health programs for children and adolescents: a meta-analytic review. *American Journal of Community Psychology*, 25 (2), 115-152.

18 Zins J E, Weissberg R P, Wang M C and Walberg H. 2004 *Building Academic Success on Social and Emotional Learning*. Columbia: Teachers College. .

19 Durlak J A, Weissberg R P, Dymnicki A B, Taylor R D and Schellinger K. 2011. The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82, 474-501.

emphases.[20] Over the last ten years the government has developed the Social and Emotional Aspects of Learning (SEAL) programme in England,[21] focusing both on developing social and emotional skills in pupils and staff and creating environments which promote mental health and wellbeing. SEAL now runs in most primary and many secondary schools. Elsewhere in England, Wales and Scotland a wide range of SEL interventions and programmes have been running, some focusing on skills and the classroom such as Promoting Alternative Thinking Strategies (PATHS)[22] Second Step[23] and Zippy's Friends[24] and some more environmentally focused approaches, such as the work of Antidote,[25] which emphasise 'emotionally literate' schools, classrooms and relationships.

For some time targeted approaches were the province of the UK voluntary sector but the last five years have seen the addition of the government-funded Targeted Mental Health in Schools (TaMHS) programme[26] in England, which has resourced 'pathfinders' (usually local authorities) to follow an 'evidence-informed practice' to help children and families experiencing problems, and encourage all the relevant agencies to work together to deliver flexible, responsive and effective early intervention mental health services.

Principles behind effective programmes

Those who have been attempting to develop and evaluate work in this area are often struck by the fact that specific interventions can be effective but their effectiveness cannot be relied upon, and an intervention can do well in

20 DCSF/NHS. 200.9 Healthy Schools Online. Accessed on 21/01/11 from: http://www.healthyschools.gov.uk.

21 DCSF. 2009. *Social and emotional aspects of learning*.Online. Accessed on 23/01/11 from: http://nationalstrategies.standards.dcsf.gov.uk/inclusion/behaviourattendanceandseal.

22 Channing Bete. PATHS. 2009. Accessed on 23/01/11 from: http://www.channing-bete.com/prevention-programs/paths/

23 Committee for Children. 2009. Accessed on 23/01/11 from: http://www.cfchildren.org/

24 Partnerships for Children. 2009. Accessed on 23/01/11 from: www.partnershipforchildren.org.uk/zippy-s-friends

25 Antidote. 2003. *The Emotional Literacy Handbook: Promoting Whole School Strategies*. London: David Fulton.

26 DCSF. 2009. *Targeted Mental Health in Schools Project: Using the Evidence to Inform Your Approach. A Practical Guide for Headteachers and Commissioners*. Nottingham: London: DCSF publications.

one place or on one occasion but fail in another[27]. Many different types of intervention seem to work equally well, provided they are implemented with conviction.[28] In an attempt to discover what makes a difference, international attention has come to focus on the design and implementation principles that make an intervention effective. A growing large number of systematic reviews have been undertaken in a wide range of countries which attempt to extract what works, and some guidance documents have begun to emerge.[29]

A solid basis of universal work for all is an important cornerstone of mental health work in schools that needs to be retained. Universal approaches not only help promote the positive mental health of all, they also help those with mental health problems by providing a culture in which discussing mental health and wellbeing is the norm, where extra help can be provided in a non-stigmatising way, and a critical mass of colleagues with mental health skills can support those with greater needs.[30] More effective approaches focus on positive mental health, not just on problems,[31] and preventive interventions directed at risk and protective factors rather than at problem behaviours, while approaches which focus on the child's behaviour only are not as effective as those that also attempt to address attitudes, values, beliefs and feelings.[32]

However, on its own universal work is not sufficient, and there is also a demonstrated need to balance universal interventions with additional work on targeted approaches for high-risk students, with whom interventions are

27 Adi Op Cit.

28 Wilson S J and Lipsey M W. 2007. School-based interventions for aggressive and disruptive behavior: update of a meta-analysis. *American Journal of Preventive Medicine*. 33, 130-143.

29 Devaney E, Utne O'Brien M, Resnik H, Keister S. et al. 2006. *Sustainable Schoolwide Social and Emotional Learning: Implementation Guide*. CASEL: University of Illinos and Chicago, College of Liberal Arts and Sciences.

30 Wells Jm, Barlow J and Stewart-Brown S. 2003. A systematic review of universal approaches to mental health promotion in schools. *Health Education* 103(4): 197-220.

31 Green J, Howes F, Waters E, Maher, E. et al. 2005. Promoting the social and emotional health of primary school aged children: reviewing the evidence base for school based interventions. *International Journal of Mental Health Promotion*. 7 (3) 30-36.

32 Green et al 2005b,ibid.

likely to have their most dramatic impacts.[33] Well-designed and implemented interventions, provided they interface effectively with the universal work on offer, can help alleviate the early onset of emotional and behavioural symptoms and help those with established mental health problems.

There also needs to be a balance between environmentally focused and individually focused approaches. Schools are best establishing a whole school, multi-component approach which creates positive school climates and environments, and includes families and communities.[34] Such environments provide caring people for support and guidance, and help develop vital bonds between youth and adults and increased opportunities and recognition for youth participation in positive social activities.[35]

There is consistent evidence that developing skills and competence in individual pupils and staff forms a central part of any comprehensive and effective intervention to promote mental health and prevent mental health problems.[36] Specific effects include on depression and anxiety, conduct disorders, violence prevention and conflict resolution.[37] Children and young people with greater mental health needs will need more intensive, extensive and explicit skills development. A major review of targeted approaches to mental health and wellbeing undertaken for the National Institute for Clinical Excellence (NICE) suggested considerable consensus over the type of input that works. It suggested that the more complex and effective interventions, despite their different branding, offer a very similar mix of CBT and social skills training for children, training of parents in appropriate reinforcement and better methods of discipline, and training of teachers in the same, and that this mix seems to be very similar whatever the problem or diagnosis, for depression and anxiety as well as for externalising behaviours like conduct disorders.[38]

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33 Reddy L A, Newman E, DeThomas Courtney A. and Chun V. 2009. Effectiveness of school-based prevention and intervention programs for children and adolescents with emotional disturbance: a meta-analysis. *Journal of School Psychology*, Apr 2009, 47 (2). 77–99,

34 Adi et al, op cit.

35 Catalano et al op cit.,

36 Catalano et al, op cit.

37 Shucksmith, et al, ibid.

38 Shucksmith et al, ibid.

Effective skills-based work needs to be interactive, person-centred, positive and transformative. Efforts to change pupils through information or behaviour change only have been generally shown to be ineffective. Programmes to prevent depression, for example, were most effective if they impacted on attitudes, values, and feelings as well as knowledge and behaviour[39]. More effective mental health interventions use instructional methods that are active and use interactive methods, including games, simulations, one-to-one, whole class and small group work.[40]Interventions also tend to be more effective if they are positive rather than fear or problem-based and address the needs of the whole child rather than seeing him or her as a problem only.[41]

A wide variety of professionals and lay people have a role in these complex interventions. Some early interventions in mental health in schools were demonstration projects, using specialist personnel and were often very effective. However, it quickly became apparent that teachers play an essential part. Their involvement is more cost efficient and sustainable, and enables the principles to become embedded in the whole school through teachers reinforcing skills learned in the curriculum in all interactions with children.[42] This embedding process is particularly important to join the gap between mental health work and academic attainment, which only teacher involvement can achieve.[43] However, there is a danger that when interventions, especially large and complex ones, become routine they can

39 Merry SN, McDowell HH, Hetrick SE, Bir JJ, et al. 2004.Psychological and/or educational interventions for the prevention of depression in children and adolescents. *Cochrane Database of Systematic Reviews* 2004, Issue 2. Art. No.: CD003380. DOI: 0.1002/14651858. CD003380.pub2. New Zealand.

40 Browne, G, Gafni, A., Roberts, J. Byrne, C., et al. 2004. Effective/efficient mental health programs for school-age children: a synthesis of reviews. *Social Science and Medicine* 58 (7) 1367-1384.

41 Green et al 2005b, Op Cit.

42 Rones M and Hoagwood K. 2000. School-based mental health services: a research review. *Clinical Child and Family Psychological review*. 3(4):223-41.

43 Diekstra R. 2008. Effectiveness of school-based social and emotional education programmes worldwide- .part two, teaching social and emotional skills worldwide, A meta-analytic review of effectiveness. In: *Social and emotional education: an international analysis*. Santander: Fundacion Marcelino Botin.

become diluted and chaotic[44] and so rigorous teacher education is vital to ensure quality control. Training can also help teachers acquire the skills to help students and enable staff to develop their own mental health, which is essential if they are to act as role models.

There is clear evidence that the judicious involvement of peers increases the probability of sustainability and maintenance.[45] Conflict resolution, involving peer mediation can be effective, as is peer norming or peer mentoring, where children with a problem are paired with those without, with the aim of modelling alternative behaviours and ways of thinking. However, putting children with difficult behaviour together is to be avoided, as there is clear evidence that it can make problems such as bullying worse.[46] Effective interventions are also likely to involve parents, both through engaging them in interventions with the children themselves so that they can reinforce the message of the school, and to help parents develop their own parenting skills.[47]

Interventions need to take the long view. Those which happen once only have never been shown to work, and although some short interventions have been shown to be effective in some contexts and for mild problems,[48] generally interventions need time to produce benefits, at least nine months to a year.[49] They also need to start early: the most effective programmes are those that target pre-school and early primary years.[50] Interventions for older children can also be effective, and indeed violence prevention is sometimes better targeted at older children.[51] Ideally the best approach is one that

44 Durlak et al. 2011. Op Cit.

45 Shucksmith et al, Op Cit.

46 Farrington D P and Ttofi M M. 2009. *School-based programs to reduce bullying and victimization*. Campbell Systematic Reviews 2009:6 10.4073/csr p6

47 Adi, Op Cit.

48 Garrard W and Lipsey M. 2007 Conflict resolution education and anti-social behavior in US schools. A meta-analysis. *Conflict Resolution Quarterly*. 25 (1) 9-37.

49 Diekstra, Op Cit.

50 Greenberg et al, Op Cit.

51 Garrard and Lipsey, Op Cit.

spirals through the school years using a developmental approach in which learning is re-visited at key points.[52]

Finally, a key issue which emerges from most good quality reviews is the need for clarity and consistency within the implementation design and process. Two major reviews of programmes by CASEL[53,54] found that programmes that were sequenced, active, focused and explicit (summarised as 'SAFE') were consistently successful in producing multiple benefits for children and young people while those that did not use such procedures were not successful in any outcome area. Interventions are not effective if they are only based on loose guidelines and broad principles. However sound the principles, they need to be built on a sound and well explicated theoretical base, have specific and well defined goals, a clear rationale and well structured components, use an explicit protocol, be communicated effectively to leaders, be supported by sound training, specify individual responsibilities, be carefully monitored with swift feedback on programme effects, and contain plans to overcome barriers to implementation.[55]

Implications for current policy and practice

In the current political climate of cutbacks and with a strong steer to schools to contract their role away from a holistic concern for pupils' emotional and social development in favour of a regression to a view of education as purely academic and cognitive, there is a very great danger that some of the evidence-based principles outlined here will be reduced or even totally lost, at least for a time. This would be highly regrettable as it is vital that government and other agencies provide a clear lead in ensuring that the mental health of young people is increasingly prioritised, and that schools are supported to expand not contract their efforts to help students develop wellbeing and learn social and emotional skills, including in direct teaching in the classroom. Schools need to be

52 Browne G, Gafni A, Roberts J, Byrne C and Majumdar G. 2004 Effective/efficient mental health programs for school-age children: a synthesis of reviews. *Social Science and Medicine*. 58 (7) 1367-1384.

53 Durlak J A, & Weissberg R P. 2007. *The Impact of After-school Programs that Promote Personal and Social Skills*. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning.

54 Durlak et al, 2011, ibid.

55 Diekstra, ibid.

encouraged to consider the whole school environment and ethos and its impact on mental health and wellbeing, and to engage a wide range of personnel, peers and parents in the enterprise. Resources need to be put into both targeted and universal approaches, as both work best in balance. Schools need to work together across the age ranges to provide a developmental and coherent approach in which children experience consistency in messages as they mature.

The current lack of engagement or prescription by government in this whole area is worrying, particularly in the light of the evidence cited above that clear and consistent implementation is needed, and as *laissez faire* approaches are not effective. When large and complex programmes are 'rolled out' to less trained and committed staff they can become less effective, and just another 'tick box' requirement. We need more clear leadership and quality control, not less, in this field.

If leadership in mental health in schools is not forthcoming from government it is to be hoped that other agencies, for example in the voluntary sector, will work together with schools to keep a clear eye on the evidence of what works and how it may best be implemented, rather than allowing a plethora of non evidence based approaches to spring up in an uncoordinated way.

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Scottish Executive and the Welsh Assembly. She has just finished reviewing the evidence base for mental health and wellbeing for a major EU project which has created a database of effective programmes and approaches. She is a fellow of the Society of Public Health, editor of the journal Health Education and board member for Intercamhs (International Network for Child and Adolescent Mental Health and Schools).

5

Building a better environment for children's wellbeing

Elizabeth Burton

Introduction

There is growing consensus that the built environment plays a significant role in the wellbeing of children.[1] Where you live makes a difference:[2] Children living in deprived neighbourhoods are more likely to be obese and to have poor socio-emotional and learning outcomes than those living in more affluent neighbourhoods.[3] However, there is general agreement that relationships between housing and neighbourhood characteristics and children's wellbeing are complex and not well understood.[4]

There are a number of different ideas about how the built environment influences children's mental health, though the evidence is patchy and variable in quality and tends to establish associations rather than causal effects. The built environment may create 'stressors' such as noise and lack of space and daylight,[5] and may affect how safe children feel. Alternatively, it may facilitate play and creativity and promote motor skills, spatial awareness and cognitive ability. Or it may provide the opportunity to retreat or recover from stress and fatigue. Children's experience of their local built environment can lead to place attachment, which enables them to develop their personal identity and sense of belonging. Some research suggests that the built environment can help children to relate well to their peers and

1 Leventhal T, Newman S. 2010. Housing and child development. *Children and Youth Services Review*. 32, 1165-74.

2 Andrews F. 2010. Parental perceptions of residential location: impacts on children's health. *Health and Place*. 16, 252-8.

3 Greves Crow HM, Cook A, Arterburn D, Saelens B et al. 2010. Child obesity associated with social disadvantage of children's neighbourhoods. *Social Science and Medicine*. 71, 584-91.

4 McNamara J, Cassells R, Wicks P, Viddyattama Y. 2010. Children in housing disadvantage in Australia: development of a summary small area index. *Housing Studies*. 25(5), 625-46.

5 Halpern D. 1995. *Mental Health and the Built Environment*. London: Taylor and Francis

family members and to develop strong social networks. It may also influence the quality of parenting. Its influence on physical health, including healthy weight and general fitness, respiratory health, allergies, traffic accidents, and injuries in the home, has knock-on effects for mental health and wellbeing.

Children's use of space has changed in the last few decades – the space they inhabit is shrinking, as they spend more time indoors and being ferried to destinations by car. This stems from a wider risk-aversion in society, fears about crime, traffic and 'stranger danger', as well as increasing availability of home entertainment.[6] Children's favourite spaces tend to be homes and gardens, nearby streets and local open spaces, parks, playgrounds and sports fields. Older children travel further afield, and boys tend to be given more freedom to roam than girls.[7]

The sections below outline what is known or theorised in terms of how different aspects of the built environment influence children's wellbeing.

The housing environment

The built environment of the home and outdoor space immediately surrounding it is of central importance for children's wellbeing because of their prolonged exposure to it (at least 16 hours per day).[8] Further, it has been found that housing conditions during childhood may contribute to adult health status, after controlling for socio-economic status.[9]

Lack of space in the home has received considerable attention from researchers,[10,11] and has been linked to a wide range of impacts:

6 Gill T. 2008. Space-oriented children's policy: creating child-friendly communities to improve children's well-being. *Children and Society*. 22. 136-42.

7 Jack G. 2010. Place matters: the significance of place attachment for children's well-being. *The British Journal of Social Work*. 40(3), 755-771.

8 Keall M, Baker M, Howden-Chapman P, Cunningham M et al. 2010. Assessing housing quality and its impact on health, safety and sustainability. *Journal of Epidemiology and Community Health*. 64, 765-71.

9 Dedman DJ, Gunnell D, Davey Smith G, Frankel S. 2001. Childhood housing conditions and later mortality on the Boyd Orr cohort. *Journal of Epidemiology and Community Health*. 55, 10-15.

10 CABE. 2010. *Space Standards: The Benefits*. London: CABE and UCL

11 Petticrew M, Kearns A, Mason P, Hoy C. 2009. The SHARP study: a quantitative and qualitative evaluation of the short-term outcomes of housing and neighbourhood renewal. *BMC Public Health*. 9, 415.

- Poor social interaction, social withdrawal in pre-school children, and less responsive parenting[12,13,14]
- Low educational achievement and cognitive development, due in part to lack of space where children can concentrate on homework[15]
- Behaviour and socio-emotional problems, including as learned helplessness in girls[16]
- Poor respiratory health

This evidence has influenced the development of policies such as the London Housing Strategy,[17] and strengthened the case for minimum spaces standards in housing. However, it may be that the negative impacts of crowding could be overcome with better design rather than more space, particularly in terms of providing sufficient privacy in the home.

Housing quality is another important aspect of the home environment for children's wellbeing. Research has demonstrated that poor housing quality is associated with poor socio-emotional health,[18] poor mental health generally[19,20] and low self-esteem[21] among children. Increased noise levels in the home (from street traffic, neighbours, air traffic) seem to be particularly

12 Evans G, Lepore S, Shejwal BR, Palsane MN. 1998. Chronic residential crowding and children's wellbeing: an ecological perspective. *Child Development*. 69(6), 1514-23.

13 Bartlett SN. 1998. Does inadequate housing perpetuate children's poverty? *Childhood*. 5, 405-28.

14 Evans G, Maxwell L. 1999. Parental language and verbal responsiveness to children in crowded homes. *Developmental Psychology*. 35(4), 1020-3.

15 Hin LL. 2009. Built environment and children's academic performance – a Hong Kong perspective. *Habitat International*. 33, 45-51.

16 Evans G, Saltzman H, Cooperman JL. 2001. Housing quality and children's socioemotional health. *Environment and Behavior*. 33(3), 389-99.

17 Mayor of London. 2009. *Draft London Housing Design Guide*. London: Mayor of London.

18 Gifford R, Lacombe C. 2006. Housing quality and socioemotional health. *Journal of Housing and Built Environment*. 21, 177-89.

19 Suglia SF, Duarte C, Sandel M, Wright R. 2010. Social and environmental stressors in the home and childhood asthma. *Journal of Epidemiology and Community Health*. 64, 636-42.

20 Galea S, Ahern J, Rudenstine S, Wallace Z et al. 2005. Urban built environment and depression: a multilevel analysis. *Journal of Epidemiology and Community Health*. 59, 822-7.

21 Evans G. 2006. Child development and the physical environment. *Annual Review of Psychology* 57, 423-51.

problematic for children, being linked to increased cortisol levels,[22] higher blood pressure,[23] poorer general mental wellbeing[24] and poorer classroom behaviour.[25] Insufficient daylight has been found to be related to depressive symptoms[26] and lack of central heating to poor child wellbeing. Further, housing quality may affect children's physical health. A link has been shown between children's asthma/poor respiratory health and poor air quality, presence of dampness and mould and inability to keep the house warm.[27] And exposure to lead paint has been linked to neurological damage in young children, cognitive impairments in adolescence and problems with impulsivity.[28]

Housing design may affect the risk of injury among children, though the evidence is inconclusive. Recent reports identify key aspects of housing design that create risks for children:[29] stairs and steps (associated with falls); windows and balconies (entrapment and falling); pools and ponds (drowning or near drowning); and design/location of cookers, fires, radiators and other heat sources (burns and scolds).

Housing form also appears to be relevant for children's wellbeing. Research has found that children living in flats are more likely to suffer mental health problems than their counterparts in houses.[30] This may be

22 Evans G, Saltzman H, Cooperman JL. 2001. Housing quality and children's socioemotional health. *Environment and Behavior*. 33(3), 389-99.

23 Babisch W, Neuhauser H, Thamm M, Seiwert M. 2009. Blood pressure of 8-14 year old children in relation to traffic noise at home – results for the German Environment Survey for Children (GerES IV). *Science of the Total Environment*. 407, 5839-5843.

24 Guite H, Clark C, Ackrill G. 2006. The impact of the physical and urban environment on mental well-being. *Public Health*. 120, 1117-26.

25 Lercher P, Evans G, Meis M, Kofler W. 2001. Ambient neighbourhood noise and children's mental health. *Occupation and Environmental Medicine*. 59, 380-6.

26 Veitch J. 2008. Investigating and influencing how buildings affect health: interdisciplinary endeavours. *Canadian Psychology*. 45(4), 281-8.

27 Fisk WJ, Lei-Gomez Q, Mendell MJ. 2007. Meta-analyses of the associations of respiratory health effects with dampness and mold in homes. *Indoor Air*. 17, 284-96.

28 Dilworth-Bart J, Moore C. 2006. Mercy mercy me: social injustice and the prevention of environmental pollutant exposures among ethnic minority and poor children. *Child Development*. 77, 247-265.

29 WHO. 2008. *European Report on Child Injury Prevention*. WHO.

30 Evans G, Lercher P, Kofler W. 2002. Crowding and children's mental health: the role of house type. *Journal of Environmental Psychology*. 22(3), 221-31.

because flats, especially in high-rise blocks, often fail to provide adequate play opportunities, or because they are linked to depression in women, which has implications for children where these women are mothers.[31]

The neighbourhood environment

Interest in child-friendly communities has grown recently, mainly because of recognition of the importance for children of: being outdoors; unsupervised play; and physical activity, especially active travel. Pressure has come from the need to combat rising obesity, which itself is linked to mental health. The journey to school has been a major focus of study. The main features of child-friendly communities are:

- Traffic safety, eg. through pedestrian crossings, traffic-slowing devices,[32,33] and incorporation of 'home zones'[34]
- Opportunities for play, through incorporation of natural features, public art, and parks
- Connected street layouts[35]
- Attractive streets, incorporating trees[36]

31 Evans G. 2003. The built environment and mental health. *Journal of Urban Health*. 80(4), 536-55.

32 De Vries S, Hopman-Rock M, Bakker I, Hirasing R et al. 2010. Built environment correlates of walking and cycling in Dutch urban children: results from the SPACE study. *International Journal of Environmental Research and Public Health*. 7, 2309-24.

33 Jerrett M, McConnell R, Chang R, Wolch J et al. 2010. Automobile traffic around the home and attained body mass index: a longitudinal cohort study of children aged 10-18 years. *Preventive Medicine*. 50, S50-8.

34 Tranter P, Pawson E. 2001. Children's access to local environments: a case study of Christchurch, New Zealand. *Local Environment*. 6(1), 27-48.

35 Panter JR, Jones AP, van Sluijs EM, Griffin SJ. 2010. Neighborhood, route, and school environments and children's active commuting. *American Journal of Preventive Medicine*. 38, 268-78.

36 Larsen K, Lilliland J, Hess P, Tucker P et al. 2009. The influence of the physical environment and sociodemographic characteristics on children's mode of travel to and from school. *American Journal of Public Health*. 99(3), 520-6.

- Environments that are perceived to be safe, e.g. through good visual access, windows facing the street, good lighting, and an absence of vandalism and disrepair[37,38]
- Mixed land uses and presence of facilities,[39] though presence of unhealthy food outlets may have a negative effect[40]

There are mixed findings for urban density. While some researchers have found that lower residential densities are associated with more active travel[41], other studies have found the opposite[42] – it seems that context is important here. Suburban children seem to be the most active – there is little difference between rural and urban children.[43] Noise from traffic and aircraft has been associated with motivational deficits, significant delays in children's reading and speech development, and poor memory.[44] Research shows that regeneration of an urban area can have a positive impact on mental health, including that of children, but it is not clear how changes in

37 Duncan D, Johnson R, Molnar B, Azrael D. 2009. Association between neighbourhood safety and overweight status among urban adolescents. *BMC Public Health*. 9, 289-98.

38 Evenson K, Birnbaum A, Bedimo-Rung AL, Sallis J et al. 2006. Girls' perceptions of physical environmental factors and transportation: reliability and association with physical activity and active transport to school. *International Journal of Behavior, Nutrition and Physical Activity*. 3, 28.

39 Pont K, Ziviani J, Wadley D, Bennett S et al. 2009. Environmental correlates of children's active transportation: a systematic literature review. *Health and Place*. 15, 827-40.

40 Neckerman K, Bader M, Richards C, Purciel M et al. 2010. Disparities in the food environments of New York City public schools. *American Journal of Preventive Medicine*. 39(3), 195-202.

41 Xu F, Li J, Liang Y, Hong X et al. 2010. Residential density and adolescent overweight in a rapidly urbanising region of mainland China. *Journal of Epidemiology and Community Health*. 64, 1017-21.

42 Slater S, Ewing R, Powell L, Chaloupka F et al. 2010. The association between community physical activity settings and youth physical activity, obesity and body mass index. *Journal of Adolescent Health*. 47, 496-503.

43 Sandercock G, Angus C, Barton J. 2010. Physical activity levels of children living in different built environments. *Preventive Medicine*. 50, 193-8.

44 Evans G, Hygge S, Bullinger M. 1995. Chronic noise and psychological stress. *Psychological Science*. 6, 333-8.

the built environment per se contribute to this.[45] Regeneration schemes can cause unintended damage if they disrupt existing social networks.[46]

Greenery in the built environment

Research suggests that the presence of greenery in the built environment plays a key role in children's wellbeing. The benefits of greenery can stem from experiencing it in the immediate residential environment, or in play settings (playgrounds), and even by viewing it through windows.[47] Children's contact with greenery and trees in the built environment has been linked to:

- Reduced mental illness
- Reduced aggression[48]
- Alleviation of adverse effects of children's exposure to chronic stress[49]
- Stimulation of creative play, social interaction and physical activity[50] – the use of natural features such as logs, water, vegetation, mud, sand and rocks in play areas is thought to promote more imaginative play, to prevent the dominance of a hierarchy based on physical strength, and to develop better motor skills[51]
- Better concentration and self-discipline[52]
- Reduced symptoms in children with ADHD[53]

45 Bridge C, Flatau P, Whelan S, Wood G et al. 2007. How does housing assistance affect employment, health and social cohesion? *Australian Housing and Urban Research Institute Research and Policy Bulletin*.Issue 87, March

46 Evans G, Wells N, Moch A. 2003. Housing and mental health: a review of the evidence and a methodological and conceptual critique. *Journal of Social Issues*. 59(3), 475-500.

47 Kaplan R. 2001. The nature of the view from the home: psychological benefits. *Environment and Behavior*. 33, 507-42.

48 Kuo FE, Sullivan WC. 2001. Environment and crime in the inner city: does vegetation reduce crime? *Environment and Behavior*. 33, 343-67.

49 Wells N and Evans G. 2003. Nearby nature: a buffer of life stress among rural children. *Environment and Behavior*. 35, 311-30.

50 CABE Space. 2008. Public Space Lessons: Designing and Planning for Play. London: CABE.

51 Bird W. 2007. *Natural Thinking: Investigating the Links Between the Natural Environment, Biodiversity and Mental Health*. London: RSPB.

52 Heerwagen J. 2000. Green buildings, organizational success, and occupant productivity. *Building Research and Information*. 28(5), 353-67.

53 Taylor AF, Kuo F, Sullivan W. 2001. Coping with ADD: the surprising connection to green play settings. *Environment and Behavior*. 33(1), 54-77.

- Speedier recovery from operations and increased pain tolerance[54]
- Reduced noise and air pollution in urban areas, with knock-on effects for asthma and stress in children[55]

Parks and playgrounds

As covered in the natural environment chapter, urban parks provide many opportunities for children and young people: free play, exploration of nature, physical activity, improvement of motor and coordination skills, and interaction with other children. Proximity and accessibility of green open spaces to residential areas has been found to be positively associated with increased overall levels of physical activity across age groups,[56,57] and the National Institute for Clinical Excellence now recommends the incorporation of green spaces in urban development to encourage physical activity (PH8, 2007; PH17, 2009). However, there is evidence that children are not using public parks.[58]

School design

The design of specific buildings used by children can have an impact on their wellbeing. School environments, in particular, are important because of the length of time children spend there. School design can affect pupil performance and behaviour.[59] Good design alone may not be enough, but poor design can impact the quality of teaching and aspirations of pupils.[60] Spatial configurations, noise, heat, cold, light and air quality, all appear

54 Ulrich R, Simons R, Losito, Fiorito E et al. 1991. Stress recovery during exposure to natural and urban environments. *Journal of Environmental Psychology*. 11, 201-30.

55 Department of Health. 2008. *The Heatwave Plan for England*. London: The Stationery Office

56 Boone-Heinonen J, Casanova K, Richarson A, Goron-Larsen P. 2010. Where can they play? Outdoor spaces and physical activity among adolescents in U.S. urbanized areas. *Preventive Medicine*. 51, 295-8.

57 Cooper R et al. 2008. *Mental Capital and Wellbeing: Making the Most of Ourselves in the 21st century. State of Science Review: SR-DR2. The Effect of the Physical Environment on Mental Wellbeing*. GO Science/Foresight.

58 Loukaitou-Sideris A, Sideris A. 2010. What brings children to the park? *Journal of the American Planning Association*. 76(1), 89-107.

59 CABE. 2010. Creating Excellent Primary Schools: A Guide for Clients. London: CABE

60 Gislason N. 2010. Architectural design and the learning environment: a framework for school design research. *Learning Environment Research*. 13, 127-45.

to have a bearing on students' and teachers' ability to perform. Outdoor spaces attached to schools have received some attention. Sensory gardens, for example, may support educational development and social interaction for children with special needs.[61] There is also interest in ensuring school environments are inclusive – ie, encourage the participation of children with disabilities.

Conclusions

Looking across all the research to date, evidence suggests that to support children's wellbeing the best built environment would have the following characteristics:

- Homes that have sufficient space and good arrangement of space to provide well for privacy
- Buildings with adequate noise and heat insulation, while allowing sufficient ventilation and daylight
- Housing which faces the street and includes small transitional spaces between front doors and footways
- Residential areas that have connected street layouts, incorporating trees and greenery, with features that reduce the speed of cars
- Mixed land uses with plenty of local facilities and parks
- Play areas that use natural features in an imaginative way

However, children also need to be allowed more opportunities to roam free and play outside without interference from adults (and this can facilitated by good neighbourhood design). Children whose lives are too controlled may not have the chance to learn some key life skills that are best acquired through self-directed experiences, and may find it increasingly difficult to cope as they grow up.[62] A recent UNICEF review found that countries where children enjoy comparatively high levels of everyday freedom prior to adolescence

61 Hussein H. 2010. Using the sensory garden as a tool to enhance the educational development and social interaction of children with special needs. *Support for Learning*. 25(1), 25-31.

62 Gill T. 2008. Space-oriented children's policy: creating child-friendly communities to improve children's well-being. *Children and Society*. 22. 136-42.

showed the highest levels of wellbeing and best outcomes for family and peer relationships.[63] The lives of UK children may now be so constrained that when as adolescents they eventually gain a degree of freedom, they struggle to cope with the responsibility.

Without a doubt, more research is needed. We do not yet know and understand fully the mechanisms by which the many different features of the built environment affect the many aspects of children's wellbeing. Part of the problem is the challenge presented by carrying out research in this field. It is extremely difficult to conduct trials and longitudinal research, which limits the possibility of proving causal effects. Much research, though informative, cannot be applied to practice. However, there seems to be consensus that the built environment makes a difference. With enough knowledge there is the potential to actively promote the mental health and wellbeing of children, by providing built environments that support their development, help them reach their potential, teach them creativity and problem-solving skills, encourage them to be active and fit, enable them to have good relationships and strong social networks – ultimately laying the foundations for a happy, successful life.

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63 UNICEF. 2007. *Child Poverty in Perspective: An Overview of Child Well-being in Rich Countries*. Florence: UNICEF Innocenti Research Centre.

environment. Elizabeth is now seeking to promote design for wellbeing in the built environment through the development of new cross-disciplinary courses.

6

The natural environment and its impact on children's mental wellbeing

William Bird

Introduction

Exploring the natural physical environment is an important part of child development which helps to develop resilience that lays down the foundation for good adult health.This chapter proposes that a child's frequent contact with the natural world helps to build a foundation of good mental health. There is increasing evidence that supports this hypothesis and, therefore, considerable concern that children are developing a default position that limits activities to the indoors.

Around 82% of the public think that families do not spend enough time outdoors and 92% think that they played outdoors more as a child than children do today.[1] However, society creates the perception of the outdoors as a risk rather than a benefit. Concerns about accidents and assault from strangers have led to parents driving their children around to structured activities usually in a safe, formal environment.[2] Yet children have an instinctive fascination with nature that provides an opportunity to take risks, to explore boundaries and to develop an independence from adults. Without this vital part of development, children emerge as a stranger to the world in which they live, unsure of their place in this world and less able to cope with the challenges.

Reduction in stress

Although this area of work requires more understanding and research, the reduction in chronic stress appears to open up the positive mental

1 Future Foundation Report.2010. *The Rise of the Interactive Naturalist*. London. Future Foundation.

2 S Lester; M Maudsley. 2006. *Play Naturally: A Review of Children's Natural Play*. London: Children's Play Council.

health benefits by increasing resilience to the frequent stresses that a child encounters.

Contact with nature can help build resilience in children who have repeated contact with stress. The more stress a child is exposed to, the greater the chance that they will have mental health problems both in childhood and as an adult. In a study[3] in New York state, 337 children participated in a trial that showed that the increase in contact with nature near to where they lived helped to offset the constant stresses that decreased their self worth and psychological distress (see Fig 1).

Nature moderate effects on stressful life events on psychological distress (p<0.05)

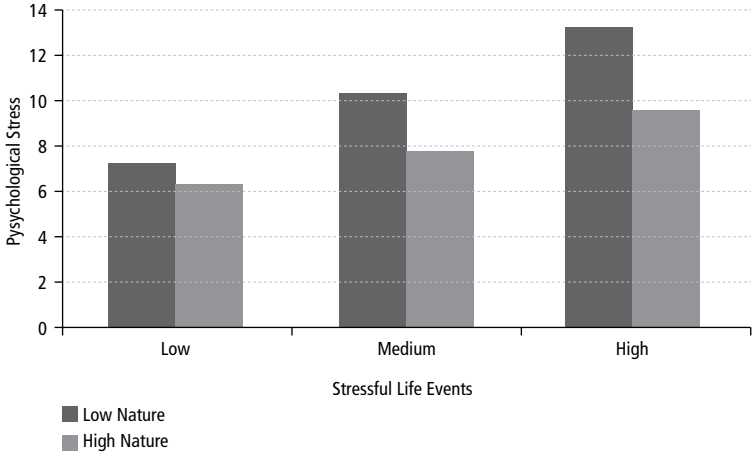

Figure 1 Showing how increased contact with nature can moderate the negative effect of stressful events on the overall stress of the child.
Source: Wells NM; Evans GW (2003) Nearby Nature; A Buffer of Life Stress among Rural Children.

However, it was the children which experienced the greatest number of stressful events that benefited the most. Children's mental wellbeing is also influenced by the coping mechanisms of their parents. In a separate

3 *Wells NM; Evans GW. 2003. Nearby nature; a buffer of life stress among rural children. Environment and Behaviour*. Vol 35, No 3 311-330.

study[4] single mothers, who lived in flats in a housing estate with trees and grass, coped better with issues better than mothers living in flats in barren surroundings, see Fig 2.

Surrounding natural vegetation and the ability of single mothers to cope with major life issues

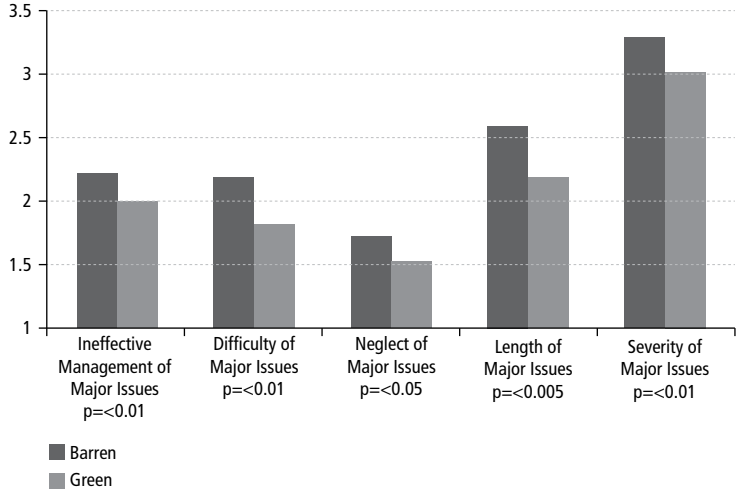

Figure 2: Shows the results of a study in which regular contact with nature can help improve coping mechanisms in single mothers living in poverty in Chicago.
Source: Kuo F (2001) Coping with Poverty: Impacts of Environment and Attention in the Inner City.

Concentration and behaviour

There is evidence that contact with nature can also increase concentration, possibly as part of the moderation of stress. In a small study children who had been moved from sub-standard accommodation to new apartments by a local council in the US, were followed up and assessed for inattention and hyperactivity before and after the move. Each apartment was also assessed for the amount of nature viewed from the window. The results showed that the amount of nature accounted for 19% of the improvement of the

4 Kuo F. 2001. Coping with poverty: impacts of environment and attention in the inner city. *Environment and Behaviour*. Vol 33(1).

attention score, compared to only 4% that could be attributed to improved housing quality.[5]

In a larger study, involving 169 children, the aim was to discover if nature could reduce negative characteristics such as poor concentration, impulsive behaviour and delayed gratification. All these factors contributed towards academic achievement, destructive behaviour and even violence. In girls all three aspects of self discipline showed a positive and significant relationship with the greenness of the immediate vicinity and the view from the flat accounting for 20% of the variation.[6]

Contact with nature increases levels of concentration and reduces stress. Two studies compared students looking at pictures of urban and nature views. Stress, as measured by muscle tension and blood pressure, was reduced within minutes of contact with nature, or even a view of nature, and concentration improved in the same way.[7,8]

It would, therefore, seem logical that children with ADHD may benefit from contact with nature more than other children. A study published in the *American Journal of Public Health* showed that children with ADHD playing outside in a green environment had significantly less negative symptoms, compared with those playing in an outdoor environment without significant levels of greenery or those playing indoors (which made symptoms worse if in a group)[9]. Interestingly, the background of the child and whether he or she was from an urban or rural setting were not significant contributing factors.

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5 Taylor AF, Kuo FE, Sullivan WC. 2001. Views of nature and self-discipline: evidence from inner city children. JEVP. 2001; 21. Supp.

6 NM Wells. 2000. At Home with Nature. Effects of Greenness on Children's Cognitive functioning. *Environment and Behaviour*. Vol 32, No 6, Nov 2000; 775-795.

7 *Laumann, K; Gärling, Tand, Stormark, K. 2003*. Selective attention and heart rate responses to natural and urban environments *Journal of Environmental Psychology*. Volume 23, Issue 2, June 2003, pp125-134. References and further reading may be available for this article. To view references and further reading you must purchase this article.

8 Ulrich RS, Simons RF, Losito E, Fiorito E, et al. Stress recovery during exposure to Natural and Urban environments. *J Environmental Psychology*. 11, 201-230

9 Kuo,FE; Faber Taylor,A. 2004. A potential natural treatment for Attention-Deficit Hyperactivity disorder: Evidence from a national study. *American J Public Health*. 2004; 94 9, pp1580-1586.

Natural play and bullying

Natural environments have advantages over purpose-built playgrounds (with climbing apparatus, for example) because they stimulate more diverse and creative play.[10] According to the National Environmental Education and Training Foundation in the US, when schools make a concerted effort to integrate natural environments into their education (using local areas or their own school grounds) academic performance improves across the curriculum.[11]

The ways in which children relate to each other can also be strongly influenced by the types of natural elements in play environments. A US study[12], noted that when children played in a man-made environment dominated by play structures, they established a social hierarchy by means of physical competence. The tough and physical children took the lead. However, after an open grassy area was planted with shrubs, children played very differently in these "vegetative spaces." Fantasy play and socialisation developed.

More importantly, the social hierarchy became based less on physical prowess and more on a "child's command of language and their creativity and inventiveness in imagining what the space might be. Children who were dominant in the equipment-based play yard were not always the dominant children in the yards with the new plantings".

This is supported in a study that looked at the design of playgrounds and associated play.[13] The most bullying occurred in plain tarmac play areas, particularly where space was limited. The school with the least bullying was a Steiner school where children were encouraged to relate to nature and playtime was an extension of learning and exploration in a

10 Fjortoft I and Sageie J. 2000. The natural environment as a playground for children landscape description and analyses of a natural landscape. *Landscape and Urban Planning*. 48,1/2: 83-97.

11 The National Environmental Education and Training Foundation. 2000. Environment – based Education: Creating High Performance Schools and Students. Washington, DC: The National Environmental Education and Training Foundation.

12 Herrington S and Studtmann K. 1998. Landscape interventions: new directions for the design of children's outdoor play environments. *Landscape and Urban Planning*. 42(2-4): 191-205.

13 Malone K, Tranter P. 2003. Children's environmental learning and the use, design and management of school grounds. *Children, Youth and Environments*. 13(2).

natural environment, often resulting in the children getting dirty. This highly interactive and engaging environment was thought to help reduce bullying and led the authors to conclude along with others working in this field that a highly structured environment may contribute to negative behaviour because of boredom:

Addressing inequalities

The benefits of local green space for those most vulnerable was identified in a *Lancet* study.[14] This demonstrated that all adults benefit from living near nature, but those in the poorest quintile benefit the most. London Mayor Boris Johnson has announced a commitment to "raise awareness of the health benefits of access to nature and green spaces and extend these benefits to all Londoners" in his health inequalities strategy.[15] Michael Marmot's report on health inequalities *Fair Society, Healthy Lives* argues that the more deprived the community is, the worse the environment in which people live. This "environmental injustice" is similar to the inverse care law first cited by Dr Julian Tudor-Hart in 1971 when he was describing how more the most affluent communities have the greatest number of doctors. This states that "the availability of good medical care tends to vary inversely with the need for it in the population served". One could replace the words "good medical care" with "a healthy environment" as in both cases those with greatest need are the least provided for. Data from *The Lancet* study shows the most deprived group are seven times less likely to live in the greenest areas. Similarly about one third of the most deprived populations have at least two environmental problems (eg. poor air quality, green space, poor housing condition) compared to only 4% of the most affluent.[16] In the Netherlands a large study, of more than 250,000 people, published in the *Journal of Epidemiology and Community Health*, found that those living with large areas of green space within 1 km were more likely to have greater perception of good health. The positive benefits of green space were

14 Mitchell R, Popham F. 2008. Effect of exposure to natural environment on health inequalities: an observational population study. *The Lancet*. 372 (9650): pp 1655-1660.

15 London Health Inequalties Strategy. Accessed on 29/01/11 from: http://www.london.gov.uk/sites/default/files/LondonHealthInequalitiesStrategy.pdf

16 DEFRA. 2009. National Indicator 60: Environmental Equality.

significantly greater for those in the lower socio-economic groups, the elderly and children, compared to other groups.[17]

Opportunities to engage with green space

As we have seen there is compelling evidence that children's mental health can improve with regular contact with green space. There are several ways that regular contact can be be achieved:

- Increasing the amount of green space
- Improving the quality of green space
- Increasing engagement with green space.

Increasing amounts of green space

Various definitions have assessed the minimum amount, per fixed population, of green space, such as parks or commons, that are necessary to get children to use them regularly. The Accessible Natural Green Space Standard (ANGSt) is based on three principles of improving access, "naturalness" and connectivity. The access standards set by Natural England[18] are:

- At least two hectares in size no more than 300 metres or five minutes walk from home.
- At least one accessible 20 hectare site within 2km of home.
- One accessible 100 hectare site within 5km
- One accessible 500 hectare site within 10km

These standards are based on observational studies of parents, the majority of whom are unwilling to allow their children to be unaccompanied more than 300m from home. Although local circumstances may lead to variations on this distance, adopting this standard would ensure that the majority of children do have a natural space near their home, which they are able to use

17 Jolanda Maas, Robert A Verheij, Peter P Groenewegen, Sjerp de Vries, et al. 2006. Green space, urbanity, and health: how strong is the relation?*J Epidemiol Community Health*. 60:587-592 doi:10.1136/jech.2005.043125.

18 Natural England. Green Space Standards. Accessed on 29/01/11 from http://www.naturalengland.org.uk/ourwork/enjoying/places/greenspace/greenspacestandards.aspx.

freely. The 300 metre and 2km standards are valuable standards to apply to new housing developments and growth areas.

Improving quality of green space

Improving the quality of parks, commons, and play areas is important. Although children will explore any green space, they are as keen as adults for it to be clean and well-maintained. The presence of wildlife can create a richer experience for the child. Larger green space areas, such as woodlands and rivers, can provide much more suitable outdoor recreation for older children. These lightly managed spaces are more appealing to children than designed playgrounds.[19]

Increasing engagement

Building green space in the hope that children will visit is often unrealistic. Many children have no experience of being near nature, even if it is on their doorstep. At a seminar organised by the Peninsula Medical School in Plymouth, the headteacher from a large secondary school in Truro explained how some 16 year olds had never been to the beach despite having lived within three miles of it all their life. The housing estate where the school was based, created the boundary for many children at this school. Schools have reduced outdoor activities because of safety concerns. Co-ordinating events and activities for children, as well as their families, can pay dividends. However, there are organisations encouraging children to connect with nature. The RSPB have more than 170,000 children participating in engaging with nature, BTCV have developed the Green Gym in schools to encourage children to participate in conservation work and the National Trust are working with Arla Foods in a campaign called *Kids Closer to Nature* to redesign local green space for children.

Summary

The natural world offers a place where children can explore their place in the world, develop their identity and socialise away from the structured adult-

19 Fjortoft I and Sageie J. 2000. The natural environment as a playground for children: landscape description and analyses of a natural landscape. *Landscape and Urban Planning*. 48 1/2: 83-97.

led environment. Engaging with the natural environment can help a child develop a mental resilience that will help them cope with the challenges and stress in the future. The requirement for contact with green space can best be sustained if it can take place within walking distance from home. So although larger wild but more distant green spaces serve a role for occasional visits, local green space will provide greater mental health benefit benefits, particularly for those children living in deprived areas.

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Author of several research papers which have influenced current thinking on the benefits of outdoor physical activity, William currently advises the UK Government through the Department of Health and Defra (Department for Environment, Food and Rural Affairs) on the financial and health benefits of exercising in the natural environment.

7

The impact of the media and advertising on children and their mental health

Alan Maryon-Davis

Introduction

Young minds are incredibly receptive – constantly absorbing impressions and information from all around them. A child's world is shaped by many influences – family, friends, surroundings, school – and increasingly by the media. The cumulative effects may be protective or hazardous – increasing a child's self-esteem, life skills, healthy behaviour and resilience – or damaging their self-regard, undermining their social skills and ability to learn, and creating the conditions for mental and physical ill-health.[1]

Television is the predominant media influence in most children's lives: cartoons, soaps, game-shows, reality-TV, music channels, and the advertisements in between. But many other media can play a part. Teen magazines are keenly devoured, especially by girls (so too are the magazines their mothers read). Videogames are massively popular – the more violent and destructive variants being preferred by boys. Social networking sites like Facebook and Twitter are a-buzz with children's chatter. Smartphones with countless 'apps' are the new teen must-haves.

Children and young people are big business and are increasingly being targeted by advertisers and encouraged to spend their pocket money and exert their 'pester power.' Their view of themselves and how they fit into the world around them is being modelled and manipulated as never before. Newer techniques include viral marketing, 'advergaming' (product placement in computer games), peer-to-peer marketing and behavioural targeting using social networking media. Advertisers now spend more on the internet than

1 Department of Health. 2010. *Our Health and Wellbeing Today*. London: Department of Health.

on traditional media[2] . The new approaches are often more personalised and participatory, but also raise concerns.

What effect is all this having on children's mental health and wellbeing? How do the many influences impact on their self-esteem and self-confidence, prevailing attitudes and moods, preoccupations and habits? What are the links with dysfunctional behaviour and mental illness? And how can the media be a power for good mental health for children?

Sex and violence

The earliest concerns about the impact of the media and advertising on children's mental health and wellbeing were around sexual explicitness, violence and aggression and the effects on so-called 'loss of childhood.'[3] The constant barrage of sexual imagery and innuendo can lead to earlier sexual experimentation, reinforce exaggerated sexual stereotyping, and create feelings of inadequacy among adolescents. According to researchers Bragg and Buckingham, two-thirds of young people turn to the media for ideas and information about sex – the same percentage who ask their parents for information and advice.[4] Much media coverage is positive, with reliable and useful advice, particularly in teen magazines – but the overall climate is of a sexual free-for-all in which sexual attractiveness, good looks and performance are everything, creating anxiety as well as anticipation among older children and early teens.

A recent report by the Home Office has highlighted the issue of sex in the media and its effects on children.[5] It points out that children's use of the internet and social networking has made it much harder for parents to moderate and safeguard their children's exposure to inappropriate or disturbing influences. The report also cites the growth of soft-porn lads' mags

2 Buckingham D et al. 2009. *The Impact of the Commercial World on Children's Wellbeing: Report of an Independent Assessment*. London: Department of Children, Schools & Families and the Department of Culture, Media & Sport.

3 Villani S. 2001. Impact of media on children and adolescents: A 10-year review of the research. *J American Academy of Child and Adolescent Psychiatry*. 40: 392-401.

4 Bragg S, Buckingham D. 2003. *Young People, Sex and the Media: The Facts of Life?* Basingstoke: Palgrave Macmillan.

5 BBC. Children Over-Exposed to Sexual Imagery. Accessed 18/12/10 from: http://news.bbc.co.uk/1/hi/uk/8537734.stm.

and apps for smart phones, and 'hot' sexual imagery to advertise anything from fragrances to underwear targeted at young teenagers. The risk is of distorting young people's perceptions of themselves, encouraging boys to be present themselves as ultra-male and girls as malleable and permissive.

Many commentators have expressed concern, and many organisations have sprung up to put pressure on broadcasters, publishers and regulatory bodies to curb what are seen as the worst excesses of sexualisation of children, with potentially harmful effects on their emotional health and wellbeing. A recent survey for the Mothers' Union in the UK, for example, found that two-thirds of parents believe that children are exposed to inappropriate content on television before the 9pm watershed, and 80% feel videogames and films with violent or sexual content are too easily available.[6]

Violence and aggression in films, TV and increasingly in videogames and the internet continues to cause concern. An analysis of six studies from North America[7] found that young children who watched violent films, TV and videogames showed more aggressive play and behaviour. This effect was more pronounced in boys, especially those aged 10-15 and those from more violent families, and the effect was there whatever the children's social circumstances or intelligence. In a famous large US meta-analysis, Paik and Comstock[8] found a highly significant association between exposure to television violence in childhood and subsequent aggressive or antisocial behaviour. Overall, boys were more susceptible to violence than girls, and younger children more than older children. Cartoons and fantasy had the strongest subsequent effect for younger children, and violence with erotica for adolescents. Evidence from the UK has been more equivocal, with attention being drawn to the lack of evidence indicating that observed associations are causal.[9]

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6 BBC. *Children Exposed to Inappropriate TV, Parents Believe*. Accessed 18/12/10 from: http://www.bbc.co.uk/news/uk-11288844?print=true

7 Browne KD, Hamilton-Giachritsis C. 2005. The influence of violent media on children and adolescents: a public-health approach. *The Lancet.* 365;702-710.

8 Paik H, Comstock G. 1994. The effects of television violence on antisocial behavior: A meta-analysis. *Commun Res*. 21:516–546.

9 Browne KD, Hamilton-Giachritsis C. 2005. Op cit.

A further concern is the cumulative effect of repeated sensationalist media portrayal of teenagers as irresponsible and antisocial louts. Studies have shown this to weigh heavily on young people's self-perception and to have a negative influence on their interactions with adults.[10,11] Media research undertaken for the UK organisation Children & Young People Now in 2007 found that 'demonisation' of teenagers was still widespread, with 87.5% of TV and radio coverage being negative in its portrayal.[12] The organisation's *Positive Images* campaign calls for a code of practice for media professionals to present a more balanced view of Britain's youth and to give more voice to young people themselves.

Alcohol, drugs and rock-and-roll

For many young people it is cool to be wild, gross or extreme, to push the boundaries, to take risks. The media lose no opportunity to reflect this and often to encourage and exploit it in subtle, or not so subtle, ways. Links between the music scene and substance misuse are well documented – often covertly fostered by the music industry and youth media, mostly involving adolescents and young adults. In the UK there are now stringent rules about tobacco advertising and marketing, and voluntary restrictions for alcohol advertising, especially regarding exposure of children to the images and messages. There are similar restrictions in terms of the portrayal of smoking, drinking and drug-taking on television and in other media.

Nevertheless, industry often finds ways around legislation or voluntary codes – and the links between sex, success, glamour and celebrity and particular brands of drink or cigarette are still being expounded, often through social networking, and are picked up by children. Alcohol provides a clear example of how commercial interests working through stylish advertising and clever marketing can alter children's perceptions, recruit new users and

10 Andersson, G., and Lundstrom, T. 2007. Teenagers as victims in the press. *Children & Society* Vol.21, no.3, May:175-188.

11 Clark C, Ghosh A, Green E et al. 2009. *Media Portrayal of Young People – Impact and Influences. National Children's Bureau Research Reports*. London: NCB.

12 Young People Now. *Analysis - Practice: Positive Images - Media Still Disrespects the Young*. Accessed 31/01/11, from: http://www.cypnow.co.uk/Archive/762503/Analysis---Practice-Positive-Images---Media-disrespects-young/

change the entire youth culture. In a comprehensive review Anderson and his colleagues found that longitudinal studies consistently suggest that exposure to media and commercial communications on alcohol is associated with the likelihood that adolescents will start to drink alcohol, with increased drinking amongst those who have already started.[13]

Body image problems

A more recent concern has been issues around body image. Media influences are crucial in shaping adolescents' views and attitudes to their own and their peers' shape, size and looks. There is increasing evidence that ubiquitous junk-food marketing combined with idolisation of 'size zero' supermodels leads to deep dissatisfaction and self-hate among many young teenage girls. Studies suggest a link between media exposure to ultra-slim celebrities and the risk of developing an eating disorder.[14,15] Other consequences include depression and self-harm.

Cognitive development and attention disorders

A number of studies have looked at the effects of early TV viewing and cognitive development in young children. A recent study by Tomopoulos et al investigated whether duration and content of media exposure in six-month-old infants are associated with development at age 14 months and found a positive correlation between the amount of TV viewing and lower cognitive and language development.[16] The researchers concluded that this provided strong evidence to support the American Academy of Pediatrics recommendations of no media exposure prior to age of two years.[17] Similar

13 Anderson P, de Bruijn A, Angus K, Gordon R, Hastings G. 2009. Impact of Alcohol Advertising and Media Exposure on Adolescent Alcohol Use: A Systematic Review of Longitudinal Studies. *Alcohol and Alcoholism*. 44(3): 229-243.

14 Hogan MJ, Strasburger VC. 2008. Body image, eating disorders, and the media. Adolesc Med State Art Rev. 19(3):521-46, x-xi.

15 Papadopoulos L. 2010. The Sexualisation of Young People: A Review. London: Home Office.

16 Tomopoulos S, Dreyer BP, Berkule S et al. 2010. Infant media exposure and toddler development. *Arch Pediatr Adolesc Med*. 2010;164(12):1105-1111. doi:10.1001/archpediatrics. 2010.235.

17 American Academy of Pediatrics Committee on Public Education. 2001. Children, adolescents, and television. *Pediatrics*. 107(2):423-426.

recommendations have been put forward by the Australian and French governments.

There is conflicting evidence on whether excessive TV viewing in early childhood triggers or exacerbates attention deficit disorder or hyperactivity (ADHD). Some researchers have found a positive correlation[18] - others no meaningful relationship.[19] One issue is whether any observed association is causative – excessive TV exposure might simply be permitted by a harassed parent to keep an ADHD child quiet and occupied. Further research is needed to elucidate this aspect.

Positive impacts of the media on children's mental health

Today's media provide a vast array of inputs and influences on young minds, playing a key part in child development. The media also shape parental knowledge, attitudes and behaviours in ways that may impact on their children's health and wellbeing. Many of these influences are beneficial. The amount of accessible advice and information is seemingly limitless – through magazines, newspapers, TV and radio, and increasingly through the internet. Not all of this is reliable and unbiased – but responsible journalists, programme makers and website authors are providing a hugely important public service. The easy accessibility, even for those with poor reading skills, is helping to reduce social inequalities, including inequalities in the health and wellbeing of children.

An important contributor in this respect is the plethora of articles and documentaries on mental ill-health in children. TV programmes and magazine stories about families coping with such problems as childhood depression, severe conduct disorders, bullying, ADHD, anorexia and bulimia, child drinkers, self-harm, learning disorders and many others give an in-depth insight into the realities of living with these conditions, which improves awareness and understanding and helps to remove the social stigma that so often adds to the burden of mental ill-health.[20]

18 Christakis DA, Zimmerman FJ, DiGiuseppe DL, McCarty CA. 2004. Early television exposure and subsequent attentional problems in children. *Pediatrics*.113(4):708-13

19 Stevens T, Mulsow M. 2006. There is no meaningful relationship between television exposure and symptoms of attention-deficit/hyperactivity disorder. *Pediatrics*. 117(3):665-72.

20 Royal College of Psychiatrists. 2010. *No Health Without Public Mental Health – The Case for Action. PS4*. London: Royal College of Psychiatrists.

The media, particularly the new social networking media such as Facebook and Twitter, can be an important contributor to social capital and hence wellbeing. Social capital has been described as the collective value of a person's social networks, which are a key aspect of mental well-being and of stronger, healthier, connected communities.[21] Social networks may prevent mental health problems and promote a sense of belonging and well-being.[22] This is particularly important in maintaining resilience at times of adversity.[23] Active participation in social networks is also associated with wellbeing and life satisfaction.[24] For children and young people such networks are increasingly likely to include virtual groups and communities.

The sophisticated marketing skills of the advertising industry can be harnessed to help improve families' and young people's sense of wellbeing. Social marketing initiatives, such as the current *Change4Life* campaign, can convey positive messages about healthy eating, physical activity and family life, helping to improve physical as well as mental health, build resilience to emotional disorders and avoid the unhappiness that often accompanies childhood obesity.

Tackling the negative impacts of the media and advertising on children

How can the negative impacts of advertising and the media be controlled and minimised? The most promising approaches so far have been through regulating media providers, educating children in media literacy and working with parents to control exposure to TV viewing and inappropriate online material .

21 Department of Health. 2010. *New Horizons: Confident Communities, Brighter Futures – A Framework for Developing Well-being*. London: Department of Health.

22 Melzer D, Fryers T, Jenkins R. 2004. *Social Inequalities and the Distribution of Common Mental Disorders*. London: Maudsley Monographs Hove, Psychology Press.

23 Bartley M (Ed.) 2006. *Capability and resilience: Beating the odds*. London: University College London, Department of Epidemiology and Public Health.

24 Huppert FA. 2008. *Psychological wellbeing: Evidence regarding its causes and consequences. Foresight State-of-Science Review: SR-X2*. London: Government Office for Science.

Media regulation

In the UK, concerns have existed since the earliest days of the cinema, leading to mandatory regulation through age-band ratings by the British Board of Film Classification (BBFC). More recently attention has focused on TV, videos, videogames and the new digital media. Many countries have introduced mandatory ratings for TV and videos. In the UK, regulation of broadcast and digital media is through the independent regulator Ofcom which covers TV, radio, fixed line telecoms and mobiles, plus the airwaves over which wireless devices operate. There are, for example, rigorous restrictions on what content can be broadcast before the 9pm 'watershed.' Children's easy access to downloadable films and videos is another issue. The BBFC has set up a voluntary online classification scheme based on the same criteria it applies to films displayed in cinemas.[25]

Regulation of advertising is through the Advertising Standards Authority (ASA), which is extending its remit to cover online marketing and adverts. The ASA will also have the power to ban marketing statements on social networks such as Facebook and Twitter. At the heart of current advertising codes of practice is the protection of children and vulnerable people from physical, mental or social harm.

Media literacy

In a recent assessment for the government departments of Children, Schools and Families and Culture, Media and Sport, Buckingham and colleagues found that children are not the naive or incompetent consumers they are frequently assumed to be. They use a range of critical skills and perspectives when interpreting sexual content; this develops both with age and with their experience of media.[26] The implications of such evidence is that children and young people can be taught media literacy – skills in interpreting, framing and critically evaluating what they see, hear and read through the various media. This can lead to better understanding and raised self-confidence in facing a wide range of issues and challenges.

25 BBFC. *Introducing BBFC.online*. Accessed on 31/01/11, from: http://www.pbbfc.co.uk/downloads.asp.

26 Buckingham D et al. 2009. Op cit.

A good example is *Media Smart*, a media literacy programme for six to 11 year olds, which focuses on advertising, including new media and online marketing. Funded by the UK advertising industry and supported by the UK and EU governments, it provides free teaching materials for primary schools, helping children to think critically about advertising in the context of their daily lives.[27]

There is no shortage of advice and guidelines to help parents manage their child's viewing habits and control their use of online websites, social networking and downloads. For example, the American Academy of Pediatrics has produced its *Smart Parents' Guide to Kids' TV*[28] and similar guidelines have been issued by the Australian government. In the UK we have no 'official' guidelines on children's TV viewing apart from the 9pm watershed mentioned above, but plenty of guidance from parents' organisations.[29]

Conclusion

The media is an integral part of family life and children's experience and interaction with the world around them. So too is the use of the media for advertising and selling commercial products. There are many potential threats to a child's mental health and wellbeing – but also benefits. Those of us involved in mental public health, or in preventing and managing mental illness in children and young people, should ensure that we understand how these influences work and have the skills either to moderate the negative impacts or to make best use of the media's huge potential for good.

In terms of policy, it is important to monitor and, where necessary, tighten up current mandatory and voluntary codes of practice with regard to media content and advertising aimed at children and young people. In the UK consideration should be given to the issuing of official guidelines for parents and childminders concerning children's viewing. Media professionals, particularly news reporters and editors, should attempt to portray children

27 Media Smart. Accessed 31/01/11 from: http://www.mediasmart.org.uk.

28 American Academy of Paeditrics. *Smart Guide to Kid's TV*. Accessed 31/01/11 from: http://www.aap.org/family/smarttv.htm.

29 Parent Channel TV. *Too Much Technology?* Accessed 31/01/11 from:http://parentchannel.tv/video/too-much-technology .

and teenagers in a less negative way and provide more opportunities for young people to express their thoughts, views and feelings.

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Further related reading

Great Outdoors: How Our Natural Health Service Uses Green Space to Improve Wellbeing
http://www.fph.org.uk/uploads/r_great_outdoors.pdf

Department of Health mental health strategy and related reading:
http://www.dh.gov.uk/en/Healthcare/Mentalhealth/MentalHealthStrategy/index.htm

Confident Communities, Brighter Futures.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_114774

No Public Health Without Public Mental Health.
http://www.rcpsych.ac.uk/policy/policyandparliamentary/parliamentandpublicaffairs/neilspages/publicmentalhealth.aspx#

Influencing Public Behaviour to Improve Health and Wellbeing
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_111696

Local Wellbeing Project
http://www.youngfoundation.org/our-work/networks-and-collaboratives/the-local-wellbeing-project/local-wellbeing-project

Useful organisations

Natural England
www.naturalengland.org.uk

Department of Health
www.dh.gov.uk

Chartered Institute of Environmental Healthcare
www.cieh.org

Young Minds
www.youngminds.org.uk

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