

THE NUFFIELD FOUNDATION
2004 SEMINARS ON CHILDREN AND FAMILIES:
EVIDENCE AND IMPLICATIONS

Time trends in adolescent well-being

Are adolescent mental health problems on the rise in the UK? If so, is this happening everywhere, or is there something specific about the UK? What might be driving these trends? What are the policy and practice implications?



The Nuffield Foundation's aim is to advance social well-being, particularly by research and practical experiment. We try to achieve this by supporting work which will bring about improvements in society that are founded on careful reflection, and informed by objective and reliable evidence. We also support the development of research and professional capacity, especially in the sciences and the social sciences, by means of grant schemes that are targeted to meet the needs of people in the early stages of their careers.

There are a number of different ways of assessing the general well-being of adolescents as a whole. These include measures of both behavioural and social indicators such as smoking, drinking, or educational and vocational achievement, and, in some cases, measures of happiness and life satisfaction. Adolescent mental health is one of these key indicators of well-being, and forms the focus of this Briefing Paper.

The types of mental health problems that young people might experience during their adolescent years include, amongst other things, depression, anxiety, behaviour problems, and hyperactivity. Related difficulties include bullying, fighting, self-harm and stealing. Of course not all adolescents face these sorts of problems. Surveys suggest that clinically significant emotional or behavioural difficulties are restricted to a minority of around one in ten children aged 11-15 years, who show one or more of these problems at any given point in time¹. An important issue, though, is whether these types of difficulties – and also the milder problems that affect many more adolescents – are increasing.

The Institute of Psychiatry research study – Main findings

In 2001 The Nuffield Foundation funded a research team at the Institute of Psychiatry to undertake a project on time trends in adolescent mental health. Barbara Maughan, Stephan Collishaw, Robert Goodman (all from the Institute's Social, Genetic and Developmental Psychiatry Centre) and Andrew Pickles (from the University of Manchester) analysed data from national surveys undertaken in 1974, 1986 and 1999, looking at trends in the same kinds of problems in UK adolescents over the whole 25 year period. The focus of the study was 15-16 year olds at each time point. The results, reported to the Nuffield Foundation in 2003, clearly showed that the mental health of adolescents in the UK declined overall across this period. Children in their teens in the 1990s were more likely to show a range of difficulties than those in their teens in the mid 1970s. The first academic report from the study is published in November 2004².

In anticipation of the publication, the Nuffield Foundation hosted a seminar in April 2004 to discuss the findings with a high-level group of international academics, policy makers and representatives of agencies providing advice and services to young people. After a presentation by the researchers, Professor Jim Stevenson from the University of Southampton provided a 'second opinion' on what the findings meant, how robust they were, and what we could extract in the way of explanations. The remainder of the seminar addressed more speculative questions about the reasons for these trends and their policy implications.

As a result of the seminar, and to complement the academic publication, Nuffield prepared this Briefing Paper to highlight the main findings and to present some of the issues and questions that arise as a result, to facilitate discussion about the implications of this important research.

The paper incorporates aspects of the discussions that arose at the seminar.

In brief, the main findings were:

- That there were few systematic trends in adolescent **hyperactivity** over the past 25 years for either girls or boys.
- That adolescent **emotional problems** (such as depression and anxiety) have increased for both girls and boys since the mid 1980s.
- That adolescent **conduct problems** showed a continuous rise for both boys and girls over the whole 25-year study period (this seems to be an increase in non-aggressive conduct problems such as lying, stealing and disobedience rather than aggressive problems such as fighting)
- That the strength of associations between these problems and poor outcomes later in adulthood have remained similar over time, suggesting that the results are **not attributable to changes in the thresholds** for what is counted as a problem – that is, they are not the result of an increasing tendency for parents to rate teenagers as problematic, but the result of real changes in problem levels.
- That marked changes in **family type** (such as increases in the numbers of single parent families) over the period were *not* the main reason for rising trends in behaviour problems, and
- That changes in **socio-economic indicators** were *not* the main reason either, although there is now a social class gradient in emotional difficulties that was not there before.

¹ Meltzer H, Gatward R, Goodman R and Ford T (1999) *The mental health of children and adolescents in Great Britain*, 1999 survey published by the Office of National Statistics in London. Ten per cent of girls and 13 per cent of boys aged 11-15 years showed either emotional disorders, clinically significant conduct disorders, hyperactivity or other syndromes.

² Collishaw S, Maughan B, Goodman R and Pickles A (in press) Time trends in adolescent mental health. *Journal of Child Psychology and Psychiatry*, Vol 45

Notes on this seminar series

The Nuffield Foundation is an important funder of influential research on child protection and family justice. Our specialist grant-making committee in this area was established in 1994, and over the last ten years it has contributed significantly to developing evidence for policy and practice, including projects on adoption, long-term foster care, contact between adopted people and birth relatives and the outcomes of disputes over money and child contact following divorce or separation.

In addition to funding research, Nuffield has an equally strong commitment to promoting discussion about research that we and others have funded. The aim is to create 'committed awareness' among researchers, policy-makers and practitioners of some of the key findings and their implications for policy and practice.

Over the course of 2004 the Foundation organised a series of high level, invitation-only, one-day seminars on key issues in child and family research. This briefing paper relates to the first of these seminars on 20 April 2004.

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For further details about the Nuffield Foundation, visit www.nuffieldfoundation.org

The graph below gives a clear picture of these trends for three different types of problems, for both sexes:

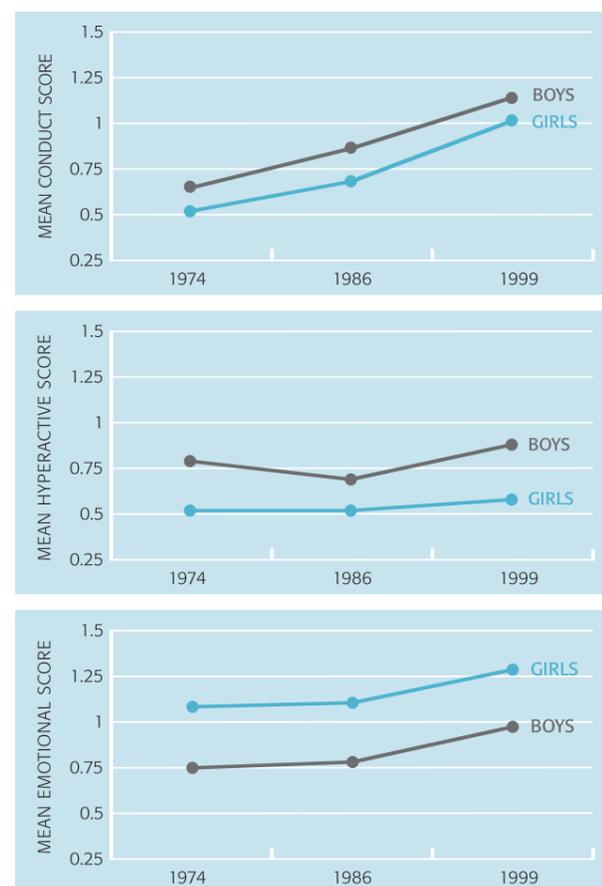


Figure 1: UK 1974-1999: Time trends in scales of parent-rated hyperactivity, emotional and conduct problems by gender (means)³

Back in 1995, Michael Rutter and David Smith led an international study group on what was known at that time about time trends in psychosocial disorders in young people, and they concluded "... the enterprise of formulating and testing hypotheses has scarcely begun" (1995, p782⁴). The analyses undertaken by the Maughan team begin to provide a clearer picture of what may be happening. However, it does not seem that more fractured family lives are solely to blame. The suggestion that there may be some links with socio-economic differentials is intriguing, but again this does not seem to be the full explanation. The possibility remains that broader social changes are also implicated – changing educational and occupational expectations; changes in youth culture and differences in peer group dynamics; perhaps even changes in how we parent younger children that only show up in early adolescence.

Trends around the world

The international perspective is crucial to understanding what is going on. The Rutter and Smith study group showed that rises in adolescent mental health problems in the mid to late 20th century were "surprising and troubling" (p782) and occurred in nearly all developed countries. What we are beginning to see with these new data, however, is perhaps some divergence in more recent years. While the trend has continued upwards in the UK, studies from, for example, the Netherlands and the US have shown either no increase, or even recent decreases in levels of psychosocial difficulties.

Cross-country comparisons: Recent trends in the Netherlands and US

Netherlands: Professor Frank Verhulst and his team at Erasmus University in Rotterdam explored ten-year trends in adolescent problem behaviour between 1983 and 1993. Using information from over 2,000 children aged 4-16 years they found no notable differences in problems reported by parents or teacher over this period. Where there were differences, they were so small as to be negligible. The team wrote that "Taking these findings together, we must conclude that they do not support the notion of a dramatic increase in behavioural/emotional problems in children and adolescents"⁵ (p 12).

United States: Thomas Achenbach is one of the best known American researchers on problem behaviours, and author of one of the most widely used measures for testing for antisocial behaviour. A team from Vermont and Pennsylvania looked at scores on this measure (the Child Behaviour Checklist) in 1976, 1989 and 1999 for groups of several hundred 7-16 year olds each year. They concluded "Changes in item and scale scores from 1976 to 1989 reflected increasing problems and decreasing competencies, but these trends were reversed from 1989 to 1999"⁶.

These are individual studies from just two countries and while the results are intriguing, we cannot be definite about what the comparisons with the UK trends might mean. However, a cross sectional survey of 35 countries and regions in the World Health Organisation European Region and North America was published in June 2004⁷. Looking at physical, emotional and psychological aspects of health, and the influences of the family, schools and peers on over 162,000 young people aged 11, 13 and 15 years old, this confirmed some worryingly high levels of risky behaviour among the UK teenagers in the survey.

Some aspects of the well-being of UK adolescents seem to be worse than for their peers in some other countries. Why might this be? What is different about the experiences of UK teenagers that might account for the cross-cultural differences in trends?

Possible causes

There is a wide range of possible causes for changes to the well-being of adolescents, and while few if any have been properly researched, most have been raised somewhere in the research literature, albeit in a rather tentative way at this stage. These have included:

- Issues relating to **education and educational expectations**. The transition to secondary school might be becoming more demanding, or there may be other issues with the ways in which expectations for academic achievement have risen, yet opportunities for those who struggle with the usual academic tests have been restricted. While more children stay on at school, this is partly for lack of alternatives. What does this do for groups of young people with no real hope of gaining proper currency in the skills market of 18 year olds?
- Beyond education, is it something to do with **non-school time**? Is the balance right in terms of structured and unstructured outside school activities? Has something changed about peer group interactions and non-family socialisation?
- Does **employment** play a role, in a world where both (a) a significant proportion of children work during their school years, yet (b) far fewer than before have any sort of full-time work at the end of compulsory education? What sort of economic role do young people have now compared with a quarter century ago, and how does this affect how they see themselves and their contribution? In what ways have society's expectations changed for them and the role we think they should play?
- What is the role of issues relating to the **family context**? As discussed above, changes in family structure only made a modest contribution to changes in adolescent well-being in the Maughan et al study, but the possibility remains that there are other aspects of family context that may be important, such as the amount of time family members spend together, the clarity with which parents give guidance or set rules or limits. Do we parent differently from families in other countries, or differently from the 1970s in this country?
- Issues relating to the **changing social situation** particularly for young men, including increasing numbers remaining single or divorcing, high unemployment rates, increasing risk of imprisonment, increasing availability and use of drugs and alcohol? Again, the recent WHO report is interesting in this regard.

Most of these hypotheses remain exactly that – untested hypotheses. They are also very general, leaving the question of mechanisms wide open. At this early stage in thinking about what may or may not be real causes of recent trends, we do not know whether there will turn out to be risks that are specific to trends in particular mental health problems, rather than just in overall levels of all problems. However, the fact that in the US, 81% of the increase in the overall rate of suicide among 15-19 year olds between 1980 & 1992 was due to increasing availability of firearms⁸ reminds us that we may need to think very specifically about what may be causing larger social time trends in adolescent well-being.

What is striking is that, in a counter-intuitive way, rises in mental health problems seem to be associated with improvements in economic conditions and physical health. Explaining why this is the case is essential. Even so, divergent trends exist in nations with similar economic trajectories.

Why is it important to promote adolescent well-being?

In the short term:

Interrupting poor mental health as soon as possible in the childhood and adolescent years will reap instant rewards for young people. Those who are supported and have more positive mental health can learn better and are more likely to fulfil their social, academic and training potential. It is likely that intervening more effectively and imaginatively could significantly reduce adolescent mortality (through reducing suicide rates) and improve life experiences. If we can accurately assess mental health problems, and we know both how to intervene and also that intervention may work, then there is an ethical imperative to do something as soon as we can.

In the longer-term:

Enhancing health and educational outcomes will benefit young people in the shorter term, but will of course benefit all of us in the longer term as well. A significant proportion of young people with mental health problems will go on to be adults with not just ongoing mental health problems, but also range of other poor outcomes as well – difficulties with relationships, unstable employment histories, involvement in crime, and social exclusion. Research has shown that by age 28, people with continuing high levels of antisocial behaviour have cost society up to 10 times more than those with no problems – these are the costs of public services such as extra educational provision, foster and residential care, and unemployment benefits, quite apart from the personal costs to the individual.⁹

³From Collishaw S, Maughan B, Goodman R and Pickles A (2004 forthcoming) Time trends in adolescent mental health. *Journal of Child Psychology and Psychiatry*, Vol 45, (November)

⁴Rutter M and Smith DJ (1995). See list of references at the end for all remaining citations not listed in full in the footnotes.

⁵Verhulst FC, van der Ende J, Rietbergen A (1997)

⁶Achenbach TM, Dumenci L and Rescorla LA (2002)

⁷Currie C, Roberts C, Morgan A, Smith R, Settertobulte W, Samdal O and Barnekow Rasmussen V (2004)

⁸Journal of the American Medical Association (1995)

⁹Scott, Knapp, Henderson and Maughan (2001), see references list at end. See also Cohen MA (1998) The monetary value of saving a high risk youth. *Journal of Quantitative Criminology*, 14, 5-33

Other questions that remain

The sophisticated design of the Institute of Psychiatry study was able to parcel out the effect of changes in family patterns and generally socioeconomic trends, and showed that the rising difficulties continued even after these social changes were controlled for. However, quite apart from the questions about what is then driving the changes, there are others that arise including:

- **To what extent do overall levels of mental health problems really reflect the general state of 'well-being' of the adolescent population?** There is evidence in some studies for increases in positive features such as competence, as well as negative ones such as mental health problems. Are adolescents getting more extreme, rather than getting worse overall? That is, are some doing much better while others are doing much worse? The work funded by Nuffield only addressed problem behaviour, and it could be argued that this is not a real measure of 'well-being'. Further analysis of trends in both negative and positive behaviours and experiences needs to be undertaken.
- **Is this a real adolescent problem, or is it a reflection of a problem that occurred earlier but is being 'seen' in adolescence?** In the Maughan et al study the problems were measured at age 15 years, but if we look back at primary school age children over the same period, do we see the differences emerging there too? The Foundation is funding further analyses addressing these issues. So we might want to consider rather different types of causes depending on whether this is really an adolescent problem or a problem of earlier childhood that just expresses itself in adolescence. Problems that originate in earlier childhood might point more firmly to parenting issues and early socialisation, whereas problems that arise only in adolescence may be a result either of parenting or of issues arising in adolescence (like school or peer group transitions) or of some interaction between them. Are adolescents more vulnerable to societal changes than younger children perhaps?
- Can we **limit the impact** of some of the risk factors, and is this easier than reducing the overall risk exposure¹⁰? This might be a particularly important if the very causes turn out to be otherwise positive for society. This is a question of enhancing resilience rather than reducing the problem in the first place.
- **Can we get better at prevention and intervention?** With respect to, for example, suicide and self harm, the US Centre for Disease Control says we need: better identification (by school & community leaders); better education of young people about suicide; better screening & referral programs; better peer-support programmes; suicide crisis centers and hotlines; intervention after suicide with others influenced by it (in JAMA 1995). Do we think

these kinds of interventions will really make a difference or are more fundamental changes necessary to the way we 'fit' adolescents into society?

- **Are we just witnessing the same trends as other countries but a bit later?** Perhaps we're just a decade or so behind the US, as we have been in other trends such as the adoption of new drugs in teenage risk behaviour – if so, we could perhaps witness our own falling trends in this current decade. Perhaps the problem has peaked?
- If the Maughan et al findings are as robust as they appear, **what kinds of studies might we need** to begin to be confident about **why** these changes have happened? As part of the extended funding, the Institute of Psychiatry team will continue with the project so that a fourth time point can be added to the three already analysed. This will answer some of the questions about whether the trend is set to continue. The team will also be looking in more detail at some of the questions about the age at which the behaviour problems are really starting. However, further research, with different designs and a wider range of potential explanatory variables, will also be needed to look at mechanisms and causal processes.

Conclusions

As this Briefing Paper was originally being written, a new UK inquiry was launched at the House of Commons (30 March 2004) to investigate rising levels of deliberate self-harm among young people. This developed in part from a National Institute of Clinical Excellence (NICE) consultation document on this issue¹¹. Andrew McCulloch, Chief Executive of the Mental Health Foundation, said on the day of the launch, "The increase in self-harm is one of a number of indicators in the mental health field that show something is wrong. It may be visible evidence of growing problems facing our young people, or of a growing inability to respond to those problems". There are thus several indicators – from policy and practice as well as from research – that some young people are struggling to meet the challenges of everyday adolescent life. The Maughan study funded by the Nuffield Foundation helps us to begin to address the real nature of these trends and their underlying causes, and as a result we can begin to form the important next-questions.

The situation is very complex, both in causes and in solutions. The approach to improving adolescent mental health, as a result, to require a complicated and collective effort. We have deliberately set this research study within the broader field of 'well-being' to indicate that it is a part of a much bigger picture that should draw in promotion of positive health as well as measurement of symptoms. In order to change the direction of the tide we are likely to want to invest as much in promoting strength and resilience as in meeting existing needs. Mental health problems are not just the remit of child and adolescent mental health care, they require commitment, input and investment from everyone involved in delivery of services to adolescents.

Further reading

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¹⁰ Fombonne (1998)

¹¹ National Institute of Clinical Excellence (2004) *Self-harm: the short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care*. NICE Guideline Second Consultation January 2004.

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