THE CHILDREN OF THE 90’S

The value of over 400 million bits of data

Critical ages: creative solutions

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Overview

- Critical ages
  - Infancy
  - Childhood
  - Adolescence
- Why critical?
  - Relationships – parents, peers
  - Behaviours – risky or adaptive?
  - Development of health behaviours
- One resource to find out what's happening
  - …. And to suggest potential solutions

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The Children of the 90's: ALSPAC

www.bristol.ac.uk/alspac

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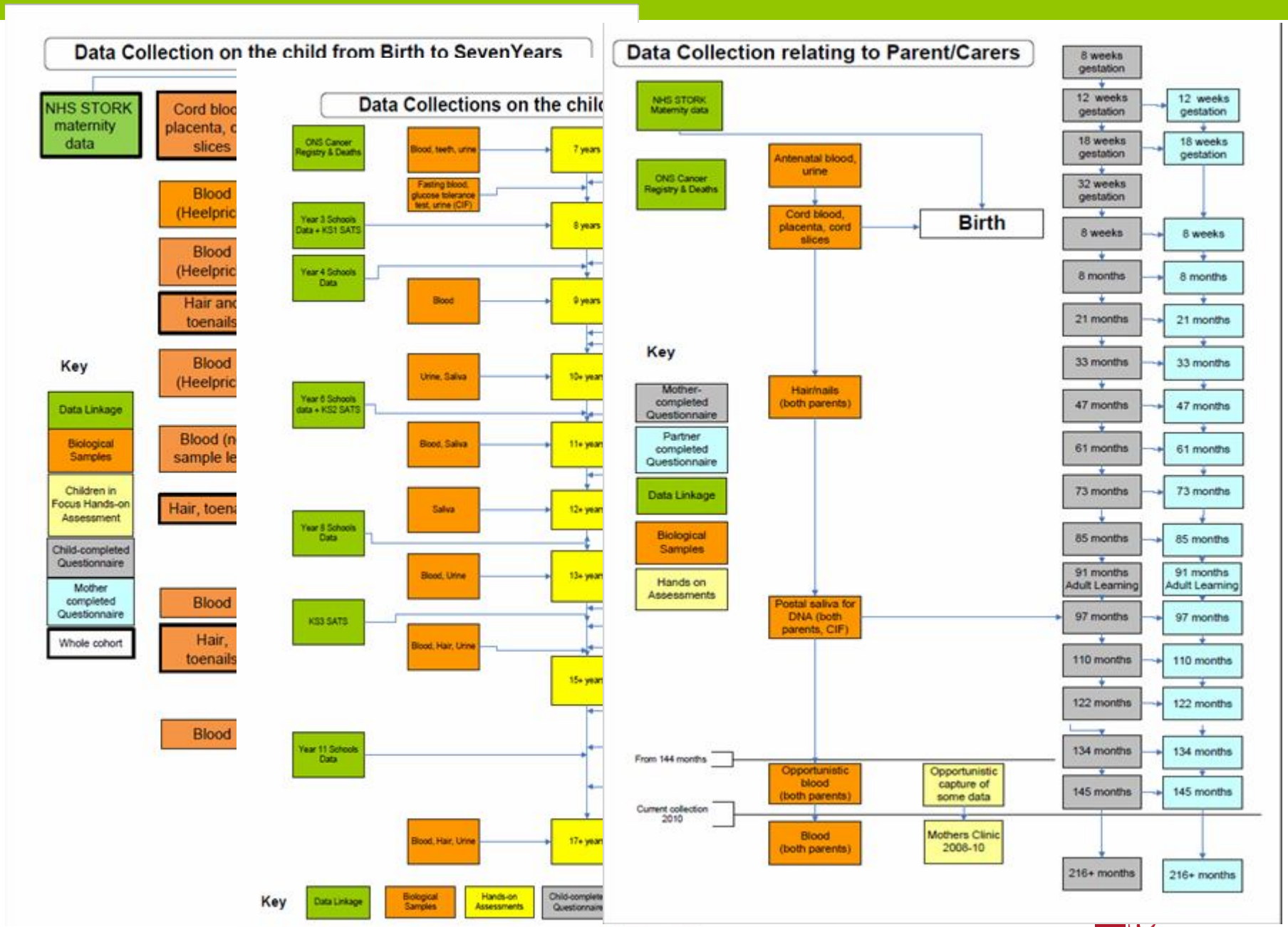

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Numbers
ALSPAC

The **Avon Longitudinal Study of Parents and Children** (ALSPAC), aka Children of the 90s, is a long-term project studying the health and development of a cohort of children in the Bristol area. The vast amount of information gathered from ALSPAC families is an ever-growing resource for research scientists all over the world. **www.bristol.ac.uk/alspac**

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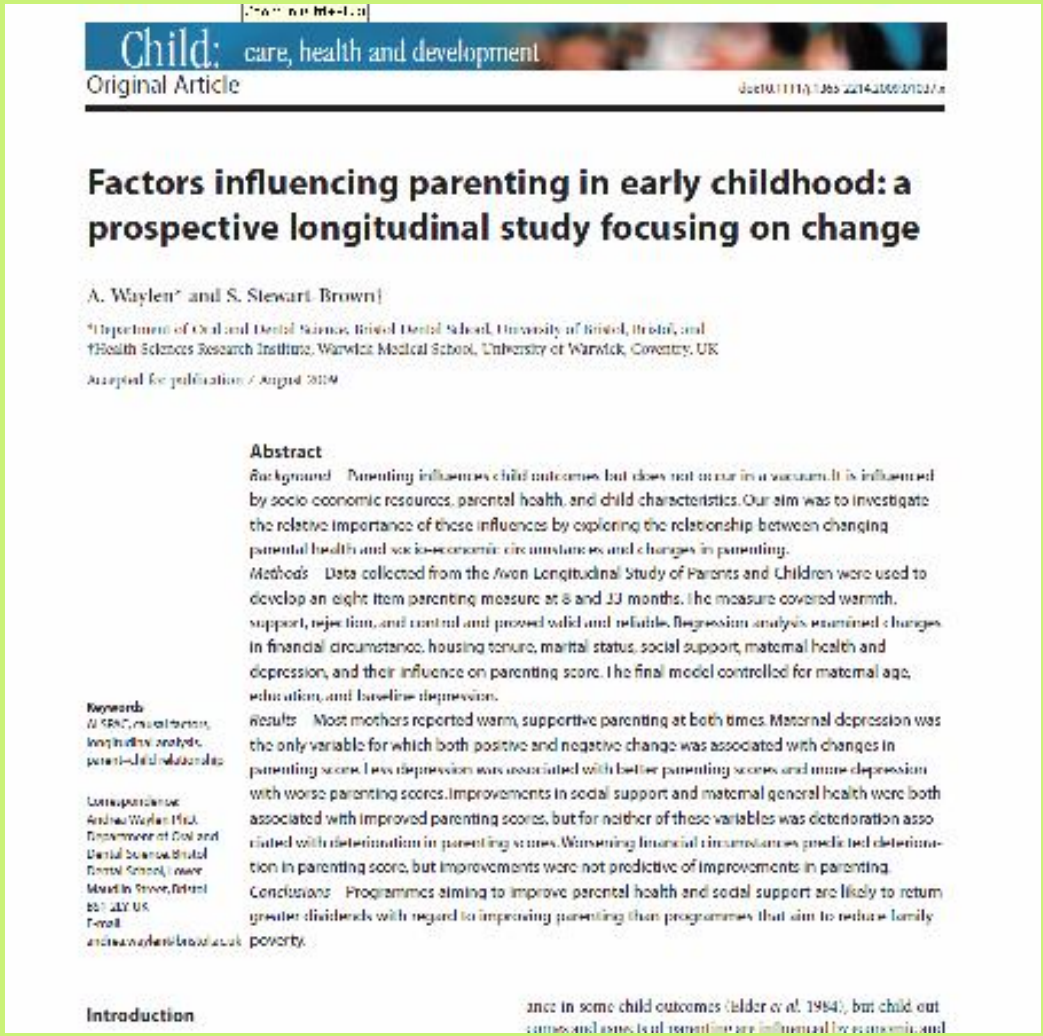
Critical ages: infancy and maternal health

- 8-33 months
- Life changes
  - finances
  - housing
  - marital status
  - social support
  - maternal mental
  - physical health
- Parenting
  - warmth
  - support
  - rejection
  - control

- **Solution – support maternal health**



Child: care, health and development
Original Article

Factors influencing parenting in early childhood: a prospective longitudinal study focusing on change

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Abstract

Background Parenting influences child outcomes but does not occur in a vacuum. It is influenced by socio economic resources, parental health, and child characteristics. Our aim was to investigate the relative importance of these influences by exploring the relationship between changing parental health and socio-economic circumstances and changes in parenting.

Methods Data collected from the Avon Longitudinal Study of Parents and Children were used to develop an eight item parenting measure at 8 and 33 months. The measure covered warmth, support, rejection, and control and proved valid and reliable. Regression analysis examined changes in financial circumstance, housing tenure, marital status, social support, maternal health and depression, and their influence on parenting score. The final model controlled for maternal age, education, and baseline depression.

Results Most mothers reported warm, supportive parenting at both times. Maternal depression was the only variable for which both positive and negative change was associated with changes in parenting score. Less depression was associated with better parenting scores and more depression with worse parenting scores. Improvements in social support and maternal general health were both associated with improved parenting scores, but for neither of these variables was deterioration associated with deterioration in parenting scores. Worsening financial circumstances predicted deterioration in parenting score, but improvements were not predictive of improvements in parenting.

Conclusions Programmes aiming to improve parental health and social support are likely to return greater dividends with regard to improving parenting than programmes that aim to reduce family poverty.

Keywords
AVON, maternal health, longitudinal analysis, parent–child relationship

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Introduction

ance in some child outcomes (Elder et al. 1984), but child outcomes and some social mechanisms are influenced by economic and

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Critical ages: childhood and negative parenting

Waylen, A et al. (2008). Eur J Public Health **18(3): 300-305.**

Adjusted for maternal age, housing tenure, financial difficulties, sex

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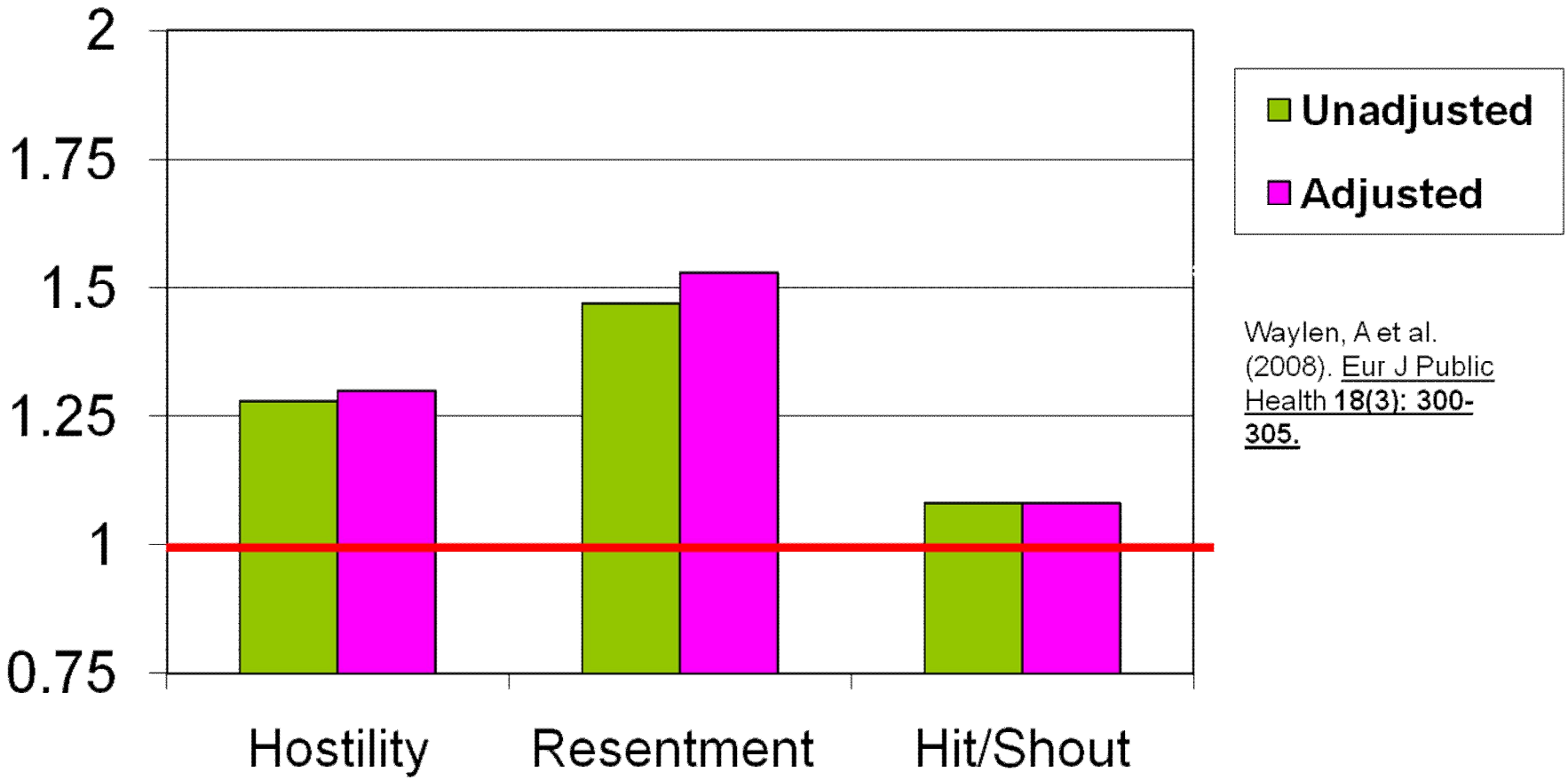
Critical ages: childhood and negative parenting



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Adjusted for maternal age, housing tenure, financial difficulties, sex

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Critical ages: childhood and looking different

- Prospective study pre-school screening for amblyopia
- Compared bullying at 8 years
  - 50% reduction in bullying for those who were screened pre-school
- **Potential solution – screen earlier**

Amblyopia

The timing of patching treatment and a child's wellbeing

C Williams, J Horwood, K Northstone, D Herrick, A Waylen, D Wolke, ALSPAC Study Group

Bullying and eye patching

The psychological impact that patching treatment for amblyopia might have on children and their families was highlighted in an influential review of amblyopia screening.[1] A recent randomised trial investigating the efficacy of patching for amblyopia has reported that 4 year old and 5 year old children were significantly more upset by receiving patching and glasses than by receiving glasses only, as were the parents of the 4 year olds undergoing treatment, suggesting that patching treatment can be associated with some short term distress for the child and the family.[2] However, most children in the study were reported as being happy and had normal behavioural scores. We have recently reported results from a birth cohort study suggesting that longer term psychosocial sequelae may be associated with patching treatment (the Avon Longitudinal Study of Parents and Children, ALSPAC[3]). A history of patching treatment and wearing glasses were both independent risk factors for children reporting that they had been bullied in the past at age 8.[4] Repeated bullying victimisation is consistently associated with physical and emotional problems for the victims and may have long term adverse consequences.[5 6]

One argument for preschool screening is that patching treatment is more likely to have concluded before school starts, thus avoiding adverse reactions from peers. We aimed to test this hypothesis by comparing, prospectively, two groups of children: one that had been offered state provided preschool screening for amblyopia (aged 3 years and 1 month) and the other that had not. Both groups had been given a check by the school nurse in the first year of school (aged between 4–5), which if unsatisfactory resulted in a recommendation to see either an optometrist and/or a community orthoptist, after which patching was commenced if needed. The outcome measure was bullying victimisation by age 8 assessed with a structured standard interview.[4] Children were asked whether they had repeatedly (at least four times a month) been the victims of bullying.[4] We calculated the risk (odds ratio, 95% confidence interval) of reporting having been bullied for children who had been treated with patching in each group. For comparison, we calculated the same risk for children who had been given glasses at any time. We hypothesised that as the wearing of glasses usually continues once started, then preschool screening would be unlikely to reduce any risk of bullying associated with wearing glasses.

Usable data on having been bullied were available for 4473 children whose screening history was known and these are shown in table 1. There was an almost 50% reduction in children who reported having been bullied in the group that had been offered preschool screening, compared with the group who had not. By contrast, there was no difference in rates of perceived bullying for children who wore glasses, irrespective of previous screening. These results support the hypothesis that preschool vision screening may be associated with less bullying for children who need to have patching treatment. The specificity of the findings (that is, there was no such effect for children who wore glasses) argues against the results being the result of confounding factors that have not been accounted for, although as the data are observational, this possibility cannot be excluded.

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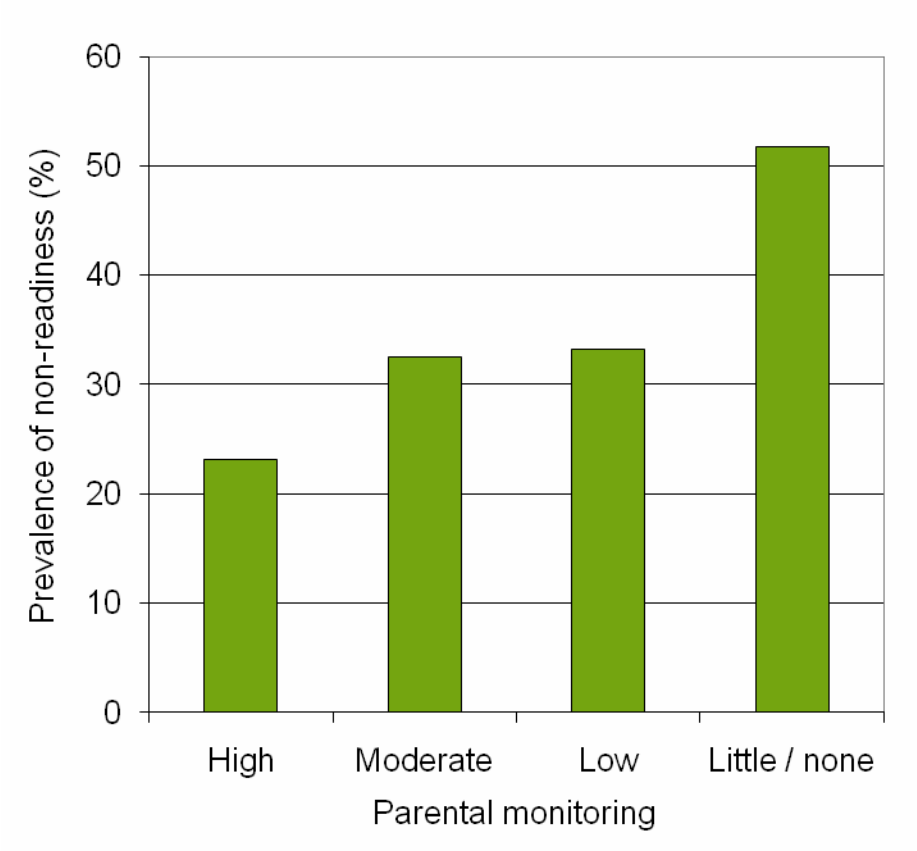
Critical ages: adolescence and early sex



	OR [95% CI]
Highest	1.00
	1.60 [0.96, 2.66]
	1.65 [1.05, 2.60]
Lowest	3.57 [2.26, 5.62]
	p<0.001

Potential solution: talk to your children

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Bullying, arson and smoking

Throughout the film there are scenes of young people smoking, bullying and committing acts of arson. However this is not portrayed in a particularly negative light, as it is shown through the eyes of the pretentious lead, who finds these acts fun and tried to justify them throughout the film by saying it doesn't matter if it is only every now and again.

Near the start of the film we see an overweight girl get bullied out of school by the leads; in response to this the main character writes her a letter advising her on "how not to get bullied." This is ironic as the lead himself is a victim of bullying and he is alienated from his classmates. The film also portrays gang bullying, in which the girl gets called a "slut" and the boy gets called "gay." This is something that happens in many films portraying the working class, such as "Fish Tank."

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ALSPAC data: creative solutions

- Prospective data set
  - 14,000 pregnant mothers recruited in 1990-1991
  - Data collected at least annually since then
- Enormous range of data
  - Questionnaires – demographic and clinical data
  - Clinical measures and samples
  - Data from mothers, ?fathers / partners?, children
  - Data about parents, children, grandparents, friends
- Data linked to various other data sources
  - STORK maternity data
  - Schools data: KS1 –KS3, Y11 data
  - Cancer registry

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THANK YOU FOR LISTENING!

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