

What About The Children?



RESEARCH SUMMARY

Cognitive and non-cognitive costs of daycare 0-2 for girls

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The number of children aged zero to two in early years education and childcare (EYECC) has increased greatly in recent years, due to the increase and needs of working parents. However, few studies have examined whether this is beneficial for children of this age, whereas early years education and childcare for the older, three to five age group, has been more extensively studied and found to be largely beneficial.

This study looked at whether high-quality early years care for 444 children aged zero to two in Italy was beneficial for cognitive and non-cognitive outcomes at ages eight to fourteen. The researchers focused on IQ and conscientiousness as long-term effects of EYECC

It was found that attending EYECC between the ages of zero and two had adverse effects for girls, compared to parental care, as it deprived them of one to one input. The researchers found each additional month in EYECC between zero and two reduced girls' IQ by around 0.5%. The effect on conscientiousness was very small however.

This paper of Fort and her team emphasised that previous widespread research in the psychological literature showed the importance of one to one interactions with an adult for optimum child development during the early years. This is particularly relevant for girls who are more mature than boys, even at this stage, and therefore gain more benefit from the cognitive stimuli generated from adult-child interaction. If day care for the zero to two age range results in fewer frequent one to one interactions with an adult than that offered by parental care, day care will have a more negative effect on girls than boys.

Looking at the effect of adult to child ratios on IQ with girls in childcare, where this ratio is 1:4 at birth to one year, and 1:6 at one and two years, under these circumstances the results showed that girls experience a reduction in IQ score of 0.7% per month, whilst the effect for boys is smaller and not statistically significant.

Within the family setting, one to one interactions with adults at home should be more beneficial when associated with richer cultural and economic resources. In more affluent families IQ loss for girls was 1.6% per month. The loss in IQ is less significant in less favourable family environments. Girls in affluent families also suffer a loss of conscientiousness if they are in day care in the early years, although the effect is small and insignificant for boys.

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Previous research has shown that day care for zero to two years is one of the inputs used when measuring specific cognitive and non-cognitive outcomes which, evidence says, exhibits malleability in the very early years of life. Research results are limited about the effects of day care on the zero to two age group, and this paper aimed to fill a gap in the evidence. The few studies that have been done looking at economical aspects for this age group show mixed results. One research study (*Felfe and Lalive 2014*) showed desirable effects of day care for cognitive and non-cognitive outcomes, particularly for girls, as well as for all children from disadvantaged families. In the same study, however, negative effects were shown for language and motor skills, with the largest effect shown for children of less well-educated mothers and those of immigrant parents.

Another study (*Drange and Havnes 2015*) found that children who started day care at 15 months were better at language and maths at seven years than those who started education and childcare at 19 months; this was particularly true for less well-educated families. A further study in Italy (*Del Boca et al 2015*) showed the benefits of day care for more disadvantaged families. Another study (*Baker et al 2008*), carried out in Quebec on children zero to four years showed negative effects on cognitive and also non-cognitive outcomes, particularly for boys, who were shown to experience worse outcomes for behaviour, social skills and health; a similar effect was also shown for the long-term.

Psychologists have produced persuasive empirical evidence that one to one interactions with adults – more so than with peers – are crucial input for optimal cognitive development in the first three years of life. This current research looked at whether gender differences, in the effect of early years education and childcare on zero to two year olds, is more evident when one to one interactions at home are complemented by the richer set of cultural and economic resources that would be offered by a more affluent family background. They looked at the role of resources at home, and separated children into two groups: those with families above the median income threshold and those below. Girls from more affluent families suffered a loss in IQ of 1.6% for every extra month spent in early years education and childcare between zero and two years and, for all children together, the loss in IQ was 1.1% for every extra month of attendance there, suggesting that early years education and childcare from zero to two years is particularly detrimental for girls from a more favourable home environment.

In the case of conscientiousness there was a consistently negative effect of time spent in early years childcare from zero to two years for girls from affluent families, although standard errors in results were large, meaning the results may have a relatively low level of statistical significance; however, a certain consistency was indicated.

In conclusion, this is the first paper that has studied the effects of time spent in childcare from zero to two years on children from advantaged households. There were found to be quantitative and statistically significant losses in IQ for girls only. These losses were even more pronounced for children with more affluent parents.

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