On the letter-word identification test (Figure 1), the calculation test (Figure 3) and the applied-problems test (Figure 4, page 48), the scores of children of women who first gave birth as teenagers in the late 1960s are not significantly different from those of children born to women who delayed childbearing. However, children of late-1960s teenage mothers score significantly lower than children of older mothers on the passage-comprehension test (Figure 2); the difference in test scores is about 16 points.

As in the data from the National Assessment of Educational Progress, there is a time trend in test scores. Table 2 shows that on the letter-word and applied-problems tests, the scores for children of mothers with a first birth in the late 1980s are significantly higher than those of children whose mothers had a first birth in earlier periods; on the calculation test, there is a marginally significant increase. Figures 1 and 4 show that the scores of the children of both early and late childbearers have risen over time.

Our analysis provides little evidence that the effect of an early birth on children’s achievement has changed over time. Only one interaction between period of first birth and teenage birth shows any link to achievement (Table 2). Compared with children whose mothers had a teenage birth in the late 1960s, children whose mothers had a teenage birth in the late 1980s have lower scores on the calculation test, but the difference is only marginally significant. As Figure 3 shows, the difference between the calculation test scores of children of teenage and non–teenage childbearers in the late 1980s is about 10 points, the largest difference between the two groups during the period studied. The scores of children of early and delayed childbearers appear to converge in the graphs for the letter-word, calculation and applied-problems tests, but this convergence may reflect differences in birth order and in the ages of children at assessment.

- **Behavior problems.** Levels of behavior problems are strongly related to the mother’s age at first birth, with children of mothers who were teenagers at first birth scoring higher (i.e., worse) on measures of total and externalizing behavior problems (differences of 0.9 and 0.8 points in model A). All three measures show significant differences once the effects of time period and its interactions are accounted for (3–8 points).

Figure 5 (page 48) indicates that, in contrast to the pattern for achievement test scores, the trend for behavior-problem scores for children of teenage mothers is curvilinear, with the lowest levels in the late 1970s. The figure also shows an eight-point gap between children of teenage and adult childbearers in the late 1960s. This large difference could reflect the inclusion of only the youngest children of teenage childbearers in the early periods. There is an interaction between having a mother with a teenage first birth and period of first birth in the effect of a teenage birth on behavior problems. Children whose mothers had a teenage first birth in the late 1970s have lower behavior-problem scores than do children of women who delayed childbearing, but children of recent early childbearers have higher scores than do children of older mothers. These effects are due primarily to differences in externalizing behavior problems.

**Implications**

From the analysis presented here, it is clear that the effect of a teenage birth depends on the years compared and on whether the level of the outcome involved is changing.

When achievement is improving, as in the letter-word test, the comparison of a birth to an adult woman in the early 1990s with a teenage birth in an earlier period exaggerates the effect of birth timing on test scores. Comparing the scores of children of mothers with an early 1980s teenage birth with the scores of children whose mothers were adults when they had their first birth in a later period would exaggerate the difference, since test scores have risen for both groups (Figure 1). When period changes are taken into account, the effect disappears.

If there is no trend in children’s test scores, the effect of a teenage birth on achievement is not likely to be affected by period changes. There are no time trends in children’s passage-comprehension scores between the early 1970s and