Unmet Fertility Expectations, Education, and Fertility Postponement Among U.S. Women.

Steven Martin New York University

Kelly Musick Cornell University

Abstract:

Using the National Longitudinal Surveys of Youth 1979 (NLSY79), we use mismatches between women's fertility expectations expressed in 1982 and their completed fertility in 2006 as a tool to analyze educational differences in fertility during this time period. We find very little difference across educational groups in their fertility expectations in young adulthood. We find that about 23 percent of women exceeded their fertility expectations, while a much larger percentage (about 42 percent) of women fell short of their fertility expectations. Within every educational group but especially for college graduates, women were more likely to fall short of their educational expectations than to exceed those expectations. We conclude that unmet fertility expectations had the largest effects on fertility, and on educational differences in fertility, for the NLSY79 cohort.

Postponed fertility is a plausible explanation for unmet fertility expectations, but the ubiquitous pattern of unmet fertility expectations begs the question of why so many women, and in particular women with a college degree, would be willing to risk unmet fertility expectations by postponing childbearing in the first place. The question of why college graduates are more likely to postpone childbearing than nongrads is a topic of considerable social concern in a time of rising economic inequality, given that postponed births are more likely to be marital births and are correlated with higher economic resources, greater family stability, and other advantages for children.

We conclude our analysis by looking at the intersection of unmet fertility expectations, educational attainment, and fertility timing for a possible explanation of why college graduates are more likely to postpone fertility. Although college graduates had a high probability of unmet fertility expectations, we find that probability did not increase appreciably with postponement until after women reached their late 20s. In contrast, for women with no 4-year college degree, the probability of unmet fertility expectations increased with postponement of first births starting as early as the teen years. We argue that educational differences in postponement of first births in this period are influenced not by the overall probability of unmet fertility expectations, but by the marginal change in unmet fertility expectations for each year a first birth is postponed.

Selected preliminary results are shown below.

| | All U.S. | | | | | |
|-----------|----------|---------|-----------|---------|---------|---------|
| | Women | | | | | |
| | | 4-year | No 4-year | | | |
| | | college | degree | | | |
| | | degree | - | | | |
| | | | | Some | High | No High |
| | | | | College | School | School |
| | | | | | Diploma | Diploma |
| | | | | | | |
| 0 births | 6.3 % | 7.3 % | 6.0 % | 7.0 % | 5.5 % | 5.1 % |
| 1 birth | 8.8 | 5.0 | 10.3 | 8.3 | 11.0 | 13.3 |
| 2 births | 48.4 | 48.0 | 48.6 | 48.7 | 49.8 | 41.0 |
| 3 births | 20.2 | 23.1 | 19.1 | 18.9 | 19.4 | 17.6 |
| 4 births | 9.6 | 10.3 | 9.3 | 10.2 | 7.9 | 14.2 |
| 5 or more | 6.7 | 6.3 | 6.8 | 6.9 | 6.4 | 8.9 |
| | | | | | | |
| Total: | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % |

Table 1: Fertility Expectations in 1982 for US Women Born 1957 – 1964, By Education.

Source: 1982 and 2006 Waves of the 1979 National Longitudinal Survey of Youth (NLSY79). N = 4040 unweighted.

| | | By Expected Births in 1982 | | | | | |
|----------------------------|-----------|----------------------------|---------|---------|--------|--------|----------|
| All US Women | Total | 0 | 1 | 2 | 3 | 4 | 5 or |
| | | | | | | | more |
| More births than | 22.7 % | 48.8 % | 49.4 % | 24.5 % | 12.4 % | 8.6 % | 1.5 % |
| expected | | | | | | | |
| As many births | 34.4 | 51.2 | 34.2 | 42.2 | 28.2 | 18.6 | 2.8 |
| as expected | | | | | | | |
| Fewer births | 42.9 | | 16.5 | 33.3 | 59.4 | 72.9 | 95.7 |
| than expected | 100.0/ | 100.0/ | 100.0/ | 100.0/ | 100.0/ | 100.0/ | 100.0/ |
| Total | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % |
| 4 V C - 11 | T - 4 - 1 | 0 | 1 | 2 | 2 | Λ | F |
| 4-Year College | Total | 0 | 1 | 2 | 3 | 4 | 5 or |
| Degree More births then | 1/ 8 0/ | 10 1 % | 15 2 0/ | 15 2 0/ | 670/ | 680/ | |
| expected | 14.0 /0 | 40.1 /0 | 43.3 /0 | 13.3 /0 | 0.7 70 | 0.0 /0 | 0.0 /0 |
| As many hirths | 33.3 | 59.9 | 23.3 | 42.7 | 24.8 | 14.0 | 2.2 |
| as expected | 55.5 | 57.7 | 23.5 | 72.7 | 24.0 | 14.0 | 2.2 |
| Fewer births | 51.9 | | 31.4 | 42.0 | 68.4 | 79 1 | 978 |
| than expected | 01.9 | | 51.1 | 12.0 | 00.1 | 19.1 | 51.0 |
| Total | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % |
| | | | | | | | |
| No 4-Year | Total | 0 | 1 | 2 | 3 | 4 | 5 or |
| Degree | | | | | | | more |
| More births than | 25.8 % | 52.8 % | 50.1 % | 28.0 % | 15.0 % | 9.3 % | 2.1 % |
| expected | | | | | | | |
| As many births | 34.7 | 47.2 | 36.1 | 42.0 | 29.8 | 20.4 | 2.9 |
| as expected | . | | 10.0 | • • • | | - | |
| Fewer births | 39.5 | | 13.8 | 30.0 | 55.2 | 70.3 | 95.0 |
| than expected | 100.0/ | 100.0/ | 100.0/ | 100.0/ | 100.0/ | 100.0/ | 100.0/ |
| Iotal | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % | 100 % |

Table 2: Differences Between Fertility in 2006 and Fertility Expected in 1982 for U.S. Women Born 1957 – 1964, By Education and Expected Births in 1982.

Source: 1982 and 2006 Waves of the 1979 National Longitudinal Survey of Youth (NLSY79). N = 4040 unweighted.

| Total | | First Birth Postponed to Age X or Later | | | |
|-----------------------|---------|---|-------------------|-------------------|-------------------|
| All US Women | | X = 20 | X = 25 | X = 30 | X = 35 |
| More births than | 22.7 % | 16.7 % | 11.3 % | 5.5 % | 1.0 % |
| expected | | | | | |
| As many births as | 34.4 | 31.1 | 26.6 | 18.0 | 4.8 |
| expected | | | | | |
| Fewer births than | 42.9 | 52.2 | 62.2 | 76.5 | 94.3 |
| expected | 100.0/ | 100.0/ | 100.0/ | 100.0/ | 100.0/ |
| lotal | 100 % | 100 % | 100 % | 100 % | 100 % |
| 4-Year College Degree | Total | X = 20 | X = 25 | X = 30 | X = 35 |
| More births than | 14.8 % | 12.2 % | 11.4 % | 7.0 % | 1.4 % |
| expected | | | | | |
| As many births as | 33.3 | 30.7 | 28.2 | 18.7 | 4.7 |
| expected | | | | | |
| Fewer births than | 51.9 | 57.2 | 60.4 | 74.4 | 93.9 |
| expected | 100.0/ | 100.0/ | 100.0/ | 100.0/ | 100.0/ |
| Total | 100 % | 100 % | 100 % | 100 % | 100 % |
| No 4 Voru Doorso | Tatal | $\mathbf{v} = 20$ | $\mathbf{V} = 25$ | $\mathbf{V} = 20$ | $\mathbf{V} = 25$ |
| No 4- Tear Degree | 10tal | A = 20 | A = 23 | A = 30 | A = 33 |
| whole births than | 23.8 70 | 19.0 % | 11.2 70 | 4.1 70 | 0.0 % |
| As many hirths as | 347 | 31.3 | 25.3 | 174 | 19 |
| expected | 54.7 | 51.5 | 23.5 | 17.4 | 4.7 |
| Fewer births than | 39.5 | 49 7 | 63.5 | 78.5 | 94 5 |
| expected | | | | | |
| Total | 100 % | 100 % | 100 % | 100 % | 100 % |

Table 3: Differences Between Fertility in 2006 and Fertility Expected in 1982 for U.S. Women Born 1957 - 1964, By Whether Women Postponed A First Birth Until Age X or Later.

Source: 1982 and 2006 Waves of the 1979 National Longitudinal Survey of Youth (NLSY79). N = 4040 unweighted.

Table 4: Marginal Decrease in Percent of Women Who Achieve Expected Fertility. By Education and Postponement of First Birth for US Women Born 1957 – 1964.

| Postponement of First Birth | Marginal Decrease in Percent of Women | | | |
|-----------------------------|---------------------------------------|----------------|--|--|
| To Age X or Later | Who Achieve Expected Fertility | | | |
| - | No 4 – year college | 4-year college | | |
| | degree | degree | | |
| (No Postponement) | | U | | |
| 18 | 2.9 % | 0.5 % | | |
| 19 | 1.8 | 0.4 | | |
| 20 | 2.9 | 0.3 | | |
| 21 | 3.0 | 0.5 | | |
| 22 | 2.5 | 0.9 | | |
| 23 | 2.5 | 0.1 | | |
| 24 | 2.8 | 0.9 | | |
| 25 | 3.0 | 0.8 | | |
| 26 | 1.7 | 1.1 | | |
| 27 | 2.6 | 2.7 | | |
| 28 | 3.2 | 4.1 | | |
| 29 | 4.8 | 2.7 | | |
| 30 | 2.6 | 3.3 | | |
| 31 | 5.3 | 4.2 | | |
| 32 | 3.0 | 4.8 | | |
| 33 | 3.8 | 4.0 | | |
| 34 | 3.3 | 4.0 | | |
| 35 | 0.6 | 2.6 | | |
| 36 | 1.8 | 2.3 | | |
| | | | | |
| Average decrease: | 2.6 % per year | 0.6 % per year | | |
| Age 18 – 26 | 1 5 | 1 5 | | |
| Average decrease: | 3.1 % per year | 3.5 % per year | | |
| Age 27 – 36 | | | | |

Figure 1: Differences Between Achieved Fertility in 2006 and Expected Births in 1982 for U.S. Women Born 1957 – 1964, By Education and Expected Births in 1982.



Source: 1982 and 2006 Waves of the 1979 National Longitudinal Survey of Youth (NLSY79). Women who expected zero births in 1982 are not included. N = 4,040.



Figure 2: Unmet Fertility Expectations for U.S. Women Born 1957-1964, by Education and Postponement of First Birth.

Source: 1982 and 2006 Waves of the 1979 National Longitudinal Survey of Youth (NLSY79). Women who expected zero births in 1982 are not included. N = 3,661.