

Demographic Comparisons of the Baltimore Study Population to Nationally Representative Samples of Teen Mothers and the Children of Teen Mothers

Baltimore Study Working Paper Series 98-1

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August 1998

Introduction

Originally designed as an evaluation of a medical and social services program aimed at pregnant teens using Sinai Hospital in Baltimore, Maryland, the Baltimore Study drew its sample from women under the age of 18 who registered for pre-natal services at Sinai Hospital with their first pregnancy in 1966 and 1967 (Furstenberg, Brooks-Gunn, and Morgan 1987). The Baltimore Study is, therefore, comprised of a hospital-based sample of women who, for the most part, came from a catchment area of Northwest Baltimore. The purpose of this working paper is to demonstrate the similarities and differences between this particular population and samples of urban African-American teen mothers taken from two nationally representative studies, the National Survey of Family Growth (NSFG) and the National Longitudinal Survey (NLS). Comparisons are also made between the Baltimore children and the children of urban African-American teen mothers from these same nationally representative samples. Both the NSFG and NLS conducted surveys at points in time close to the 1984 and 1995 Baltimore surveys.

The Baltimore sample described in this paper excludes 29 and 24 white respondents and their children in 1984 and 1995, respectively. This subgroup is excluded because it comprises a very small portion of the total Baltimore sample and is unlikely to be comparable to a nationally representative sample of white teen mothers. Thus, the results of the comparisons made in this working paper hold only for the Black participants of the Baltimore study.

Comparisons of the Baltimore Mothers to National Samples in the 1980s

The first three columns of Table 1 compare the Baltimore women to their NSFG and NLS counterparts in the early 1980s, while the last three columns repeat the comparison for the mid-1990s.

Overall, the Baltimore women appear to be similar to their national counterparts. By 1984, 72 percent of the Baltimore women had graduated from high school compared to 70 percent of the NSFG respondents, and 59 percent of the NLS respondents. The lower percentage of NLS respondents reporting high school graduation, so out of line with the Baltimore and NSFG respondents, is likely to be an underestimate.¹ The Baltimore women also achieved a similar number of years of education as the NSFG teen mothers. The three groups of women appear similar with regard to marital status, although the NLS respondents are somewhat more likely to be married. More striking, however, is the difference in the mean number of children born. While the Baltimore women averaged only 2.3 children, both the NSFG and NLS averaged 2.9 or more children. The low fertility of the Baltimore women may be partially explained by their high rate of sterilization. In 1984, 118 women (54%) had already been sterilized, with an additional 22 women reporting sterilization by 1987 (bringing the total to 65%). This fact may partially explain the difference between the Baltimore women's fertility and that of the NSFG and NLS respondents, as the percentage sterilized is considered to be rather high (Furstenberg et. al. 1987). The percentages of women currently employed and having received welfare in the past year are comparable across the three groups with approximately two-thirds of each of the groups of women being employed and about one-third having received welfare. While the 1980's income distributions also appear quite similar across the groups, two caveats must be noted. First, the income categories for the NSFG respondents are slightly different, pushing more women into the middle income group than would be true if the categories were the same as those of the Baltimore and NLS respondents.² Thus, if the income categories were corrected, the percentage of NSFG women in the middle income group would be lower while the percentage in the upper income group would be higher, thereby bringing the figures into closer alignment with those reported by the Baltimore and NLS women. The second caveat to note is the high percentage of women who refused to answer the income question in the NLS. Despite these differences, it is clear that the incomes of the Baltimore women fall within the ranges reported by the NSFG and NLS women. Generally then, the Baltimore women are similar to their national counterparts in the 1980's in terms of education, marital status, employment, and welfare use.

¹ An underestimate of high school completion is possible given that the NLS follow-up interviews were not designed to encourage full responses with regard to schooling after the initial interview (Furstenberg et. al. 1987).

² This is a result of the fact that I have adapted the NSFG data from Table 2.2 in *Adolescent Mothers in*

Their greatest difference appears in terms of the number of children ever born, with the Baltimore women averaging .6 to .8 fewer children than the NSFG and NLS women, respectively.

Comparisons of the Baltimore Mothers to National Samples in the 1990s

Comparisons of the Baltimore women to their national counterparts in the mid-1990s, shown in the last 3 columns of Table 1, yield similar results. In general, the educational achievements of the Baltimore mothers are as good if not slightly better than those of the NSFG and NLS respondents. Once again, the NLS women are less likely to report having graduated high school, although they are more likely to report having graduated college. The percentages graduating high school and college, however, are practically identical for the Baltimore and NSFG samples. In terms of overall level of educational achievement, the Baltimore women attained almost one year more of education than both the NSFG and NLS respondents. Marital status remains similar across the three groups in the 1990s, although, the NLS respondents are still more likely to report being married than both the Baltimore and NSFG women. Not surprisingly, the percentages of all three groups reporting never having been married have declined somewhat from the levels reported in the early 1980s, while the percentages reporting their marital status as divorced have increased. One interesting point to note, is that the percentage of Baltimore women who have become widowed by 1995 (6 percent) falls in the middle of the range reported by the NSFG women (8 percent) and the NLS women (3 percent). Thus, the experience of the Baltimore women in this regard appears to be similar to that of their national counterparts. The mean number of children born by the 1990s is relatively the same as in the 1980s for all three groups, with the Baltimore women averaging .85 fewer children than the NSFG and NLS women.

Approximately three quarters of both the Baltimore women and the NLS women report currently working in the 1990s, while the percentage for the NSFG women remained at about two-thirds. It is unclear why the percentage of women currently employed would be lower for the NSFG women than for the NLS and Baltimore women. The discrepancy in the percentages reporting welfare use in the past year is partially the result of how the questions were asked. The percentages for both the NSFG and the NLS are based on questions about having

Later Life (Furstenberg et. al. 1987).

received food stamps in the past year, as there is no general question on welfare use in these particular survey years.³ The question for the Baltimore women, however, refers to welfare, DPA, AFDC or other public assistance. Oddly then, we would expect the percentage of Baltimore women reporting welfare use to be higher than the percentages reporting just food stamp use in the NSFG and NLS samples. Counting AFDC recipients in the NLS sample, however, does not increase the 17 percent reported here. Why the NSFG and NLS samples would yield such different results on the same question is not clear, especially given the closeness of the data in other areas. It may be that the true percentage of women having received food stamps in the past year is somewhere between the two estimates. However, it is also possible that the majority of the Baltimore women who were receiving some form of welfare were receiving only food stamps and not AFDC, since very few had small children at home by the 1990s. The comparability then between the Baltimore and NSL figures for both welfare use and current employment status suggests that the NSFG figure may be out of line. Given these discrepancies between the three samples, however, it is probably safest to conclude that the Baltimore women are less likely than their national counterparts to have received welfare in the past year.

When it comes to family income, the Baltimore women are more likely than the NSFG and NLS women to have incomes below twenty-one thousand dollars and much less likely to have incomes exceeding thirty-one thousand dollars. Thus, the Baltimore women do not appear to be doing as well financially as their national counterparts. Once again, however, the high percentage of Baltimore and NLS women who failed to supply income data confounds the comparison. If the refusals and don't knows are equally distributed among the three categories for both groups of women, the general conclusions would remain that the Baltimore women are more likely to be in the lower third of the distribution and less likely to be in the highest third and therefore, are not doing as well financially as the NSFG and NLS women.

³ The welfare questions in the NLS changed between 1982 and 1993. In 1982, the question referred to public assistance and welfare. However, by 1988 the question had been broken down into three parts which asked about AFDC, Food Stamps and SSI separately. (see the NLS Young Women User's Guide, 1997 for more information). This change in wording has certainly affected the comparability of the NLS welfare data over time.

In general, then, the Baltimore women in the 1990's are similar to their national counterparts in terms of education, marital status and current employment. They are slightly different, however, in terms of having fewer children, somewhat lower rates of welfare use as well as lower incomes. The overall picture that emerges suggests that by mid-life the Baltimore women are doing no better nor no worse than the teen mothers captured in the NSFG and NLS. We can therefore be reasonably confident that our findings from this sample will mirror national trends in broad details.

Demographic Characteristics of the Baltimore Daughters and Sons (G3s)

The demographic characteristics of the Baltimore daughters and sons are presented in Table 2 along with similar groups of women and men from the NSFG and NLSY who were also the children of teen mothers⁴. The first three columns present the data for the Baltimore daughters and women from the NSFG and NLSY, while the last two columns present the data for the Baltimore sons and men from the NLSY. I first discuss the Baltimore daughters and sons in relation to one another and then, compare them to their national counterparts.

The story presented in Table 2 shows that by 1995, when the Baltimore children were in their late twenties, the daughters were faring far better than the sons on almost all accounts. Not only had a significantly greater percentage of the daughters graduated from High School or obtained a GED by 1995 (81% of the daughters vs. 61% of the sons, chi-sq significant at the $p=.002$ level), but the daughters were also more likely to have graduated from college and achieved a higher overall level of education. While more of the daughters were married in 1995 than the sons, both were about as likely to have separated or divorced. The majority of both the daughters (60%) and sons (72%), however, had never been married. The average number of children ever born is also similar, with the daughters reporting an average of 1.8 children and the sons, an average of 1.9 children. While thirty percent of the daughters had their first

⁴ Age of mother at first birth was not asked directly on the NLSY. To determine which NLSY respondents were the children of teen mothers, I took the difference between the respondents' mother's age in 1987 and the maximum age of either the respondent or the respondent's oldest sibling in 1987 to find the mother's age at first birth. Data on mother's age was missing from 12.9% of the sample of

child while still a teenager, only seven percent of the sons report a teenage birth. This difference is not surprising, however, as not all of the sons may not have known whether they had fathered a child and some may have been hesitant to report having done so (Furstenberg, Levine and Brooks-Gunn, 1990). The two are also different in terms of their employment and welfare experiences. The daughters were both more likely to be currently employed (70%) and to have received welfare in the past year (29%), than the sons (61% employed and 14% welfare use). The higher welfare use among the daughters is consistent with the fact that most welfare is tied to mothers with children. Although a large percentage of the sons (27%) failed to respond to the income question, some comparisons can still be made between the two. If the missing values were distributed equally over the three income categories for both the sons and daughters, the income distributions would be fairly similar with approximately 39 percent in the lowest category, 23 percent in the middle category and 38 percent in the highest category. Thus, the daughters, who are actually more likely to report having family incomes in excess of \$31,000 than the sons, are doing at least as well as the sons when the nonresponses are distributed equally. However, given the fact that many of the Baltimore sons had been involved in criminal activity and served time in jail by 1995, in addition to their lower likelihood of currently being employed, it is more likely that the nonresponses with regard to income are more heavily weighed in the lower categories of the income distribution. These few characteristics of the Baltimore children in adulthood clearly suggest that the daughters have made greater gains than the sons in overcoming their early life disadvantage in terms of educational achievement, employment status and reporting of family incomes in excess of \$31,000. How similar the Baltimore children are to nationally representative samples of metropolitan Blacks born to teen mothers is discussed below.

Comparisons of the Baltimore Children to National Samples

The demographic characteristics of metropolitan Black women born to teen mothers from the NSFG and NLSY are presented in columns 2 and 3, respectively, in table 2. Compared to these two nationally representative samples, the Baltimore daughters seem to have fared quite well on almost all accounts.

African-American urban respondents selected for these comparisons.

The three groups of women are all similar in terms of educational attainment, with a range of 81 percent (Baltimore) to 86 percent (NLSY) of the women graduating from high school, 9 percent (Baltimore) to 11 percent (NLSY) graduating from college, and 12.5 (Baltimore and NSFG) to 12.8 (NLSY) mean years of education. Although the Baltimore women fall in the middle of the range of percent currently married (27% compared to 19% of NSFG and 33% of NLSY), they are less likely to have separated or divorced (13% compared to 21% of NSFG and 20% of NLSY) and somewhat more likely to never have married at all (60% compared to 58% of NSFG and 45% of NLSY). Mean numbers of biological children are also similar across the three groups of women (1.8 compared to 1.9 in NSFG and 1.8 in NLSY). The percentages of women who had their first birth while still a teen are relatively close for the Baltimore (31%) and NLSY (35%) women, while the percentage for the NSFG women stands out at 50 percent. The Baltimore and NLSY women are also alike in the percentage of women currently employed (70% Vs 67%) and the percentages having received welfare in the past year (29% vs. 35%). The NSFG women, however, are less likely to be employed (66%) and more likely to have received welfare (44%) than the others.⁵ As with the G2 comparisons described above, high non-response rates hinder income comparisons, with 25 percent of the NLSY and 10 percent of the Baltimore women failing to provide income data. Under the assumption that the nonresponses are equally distributed among the three categories, we would find the distributions to be 39, 21 and 38 percent for the Baltimore women, and 45, 23 and 31 percent for the NLSY women from the lowest to highest income categories. Comparing these distributions to the NSFG, we see that the Baltimore women tend towards the higher income groups more so than the NSFG and NLSY women. Thus, the income distribution of the Baltimore women appears to be slightly outside that of their nationally representative peers and suggests that they are a little better off than the NSFG and NLS women in terms of their financial status. While the data does not provide an exact agreement among the three data sources, it does confirm that the Baltimore daughters are within the ranges provided by the NSFG and NLSY women on most accounts. Overall, they are comparable to their

⁵ Although it is unclear why the NSFG women would differ so greatly from the NLS and Baltimore samples, the data appears to be internally consistent such that we would expect higher rates of welfare use and lower rates of employment given the higher rate of teen childbearing.

national counterparts in terms of educational attainment, marital status, number of children, teen parenting, employment, and welfare use.

Turning our attention to the last two columns of table 2, we can compare the Baltimore sons to the NLSY men who were also the sons of teen mothers. Not only have the Baltimore sons not fared as well as the Baltimore daughters as demonstrated above, but here we see that they have also not done as well as their national counterparts. The Baltimore sons appear to be particularly disadvantaged in terms of their educational achievements (61% graduated high school compared to 85% of the NLSY men) and employment status (only 61% report currently being employed compared to 76% of the NLSY). They are also much less likely to be married (18% of Baltimore vs. 37% of NLSY) and, are correspondingly, more likely to never have been married (72% of Baltimore vs. 52% of NLSY). Although they report a greater mean number of children born (1.9 for Baltimore and 1.3 for NLSY), the Baltimore sons are less likely to report that they were teenage fathers (7% Vs 11% of NLSY). The percentages having received welfare in the past year are, however, quite similar (14% of Baltimore vs. 16% of the NLSY men). The income distributions for the two groups are comparable, including the percent of non-responses (27% of Baltimore and 25% of the NLSY). Financially then, the Baltimore sons are fairly similar to the NLSY men. The general picture that appears with regard to the Baltimore sons is that they are not doing as well as their national counterparts in terms of education and employment, are less likely to be married and have more children.

Table 3 presents a comparison of the Baltimore children and the NLSY sample without distinguishing by sex. The Baltimore children lag behind the NLSY children of teen mothers on all measures of education. They are less likely to have graduated from high school or college (71% Vs 85% and 6% Vs 9%) and have fewer mean years of education (12 years Vs 12.6 years). The Baltimore children are also less likely to be married (22% Vs 35%) and more likely to have never been married (66% Vs 49%). They are more similar to the NLSY children in terms of the percentage who became teen parents (20% of Baltimore Vs

24% of NLSY), the percentage currently employed (66% Vs 71%), the percentage who received welfare in the past year (22% vs. 26%) and in their income distributions.

Summary

How similar, then, is the Baltimore sample to samples of teen mothers and the children of teen mothers taken from the nationally representative NSFG and NLS(Y) studies? Although there are some differences among the samples, the demographic similarities are striking. While the Baltimore women tended to have fewer children than their national counterparts, they strongly resemble these two nationally representative samples in terms of educational attainment, marital status and current employment status in both 1984 and 1995. Although similarities in the income distributions are more difficult to gauge given certain data constraints, it does not appear that the incomes of the Baltimore women fall far outside the ranges of the NSFG and NLS women. At a minimum, the data provide no evidence that the Baltimore women are any different in terms of their income distributions in 1984, although by 1995 they do appear to be somewhat worse off financially than their national counterparts. The overall picture that emerges from these comparisons is that the Baltimore women have fared no better nor no worse than other inner city African-American teen mothers between 1984 and 1995.

Like their mothers, the daughters of the Baltimore women also bear a strong resemblance to the daughters of inner city African-American teen mothers from the NSFG and NLSY. Little difference appears between the Baltimore daughters and their national counterparts in terms of educational attainment, marital status, number of children ever born, the percentage who became teen parents, current employment status, welfare use and income distribution. The Baltimore sons, on the other hand, appear to be much more disadvantaged than their national counterparts from the NLSY in terms of educational attainment and employment status. They are also less likely to be married than the NLSY sample and have fathered more children. The differences between the Baltimore sons and the NLSY sons on key demographic characteristics are great enough to warrant caution in generalizing any results from the Baltimore sons to the larger population of sons of teen mothers. Perhaps the Baltimore males, who mostly

spent their childhood years in the inner city of Baltimore, do not fare as well as males from the National surveys who were less likely to grow up in inner-city neighborhoods.

References

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Table 1: Demographic Characteristics of the Baltimore Women
(1984 and 1995)
and Their National Counterparts in the 1980's and 1990's

	Baltimore ¹ (1984)	NSFG ² (1982)	NLS ⁴ (1982)	Baltimore ³ (1995)	NSFG ⁴ (1995)	NLS ⁴ (1993)
Age at 1st Birth	14-19	14-19	14-19	14-19	14-19	14-19
Age (Mean)	32.7	32.3	32.7	44.9	42.8 ⁵	44.4
Education						
<i>HS Grad (%)</i>	72	70	59	78	77	68
<i>College Grad (%)</i>	5	5	3	9	8	12
<i>Mean Years</i>	12.1	12.0	11.4	12.5	11.8	11.8
Marital Status (%)						
<i>Married</i>	30	32	38	31	33	43
<i>Separated</i>	24	26	20	16	14	14
<i>Divorced</i>	20	15	20	30	24	27
<i>Widowed</i>	2	3	1	6	8	3
<i>Never Married</i>	24	25	21	17	22	13
Biological Children (Mean)	2.3	2.9	3.1	2.3	3.1	3.2
Currently Employed (%)	68	64	62	77	68	75
Welfare Past Year (%)	29	28	36	16	31	17
Family Income (in 1996 Dollars)						
<i>Less than \$21,000</i>	51	38	46	42	39	26
<i>\$21,000 - \$31,000</i>	13	17	13	20	16	13
<i>Greater than \$31,000</i>	33	25	24	28	45	47
<i>Refused/DK</i>	3	21	17	10	-	14
Number (Unweighted)	258	289	249	197	116	127

¹ 29 White respondents excluded

² Adapted from Table 2.2 in *Adolescent Mothers in Later Life*, Furstenberg, Brooks-Gunn and Morgan, 1987.; African-american respondents residing in metropolitan areas only. Figures were weighted to represent national population

³ 24 White respondents excluded

⁴ African-american respondents residing in metropolitan areas only. Figures were weighted to represent national population

⁵ Highest age of respondents is 45

⁶ NSFG(1982) categories are equivalent to 1) less than \$24,000; 2) \$24,000 - \$40,000; and 3) greater than \$40,000 in 1996 dollars. These categories will be adjusted once I have the actual 1982 data set.

Table 2: Demographic Characteristics of the Baltimore Children (1995)
and Their Counterparts in Two National Samples

	Baltimore ¹ Daughters (1995)	NSFG ² Women (1995)	NLSY ² Women (1992)	Baltimore ³ Sons (1995)
Mean Age	27.5	28.3	28.7	27.7
Education				
HS Graduate (%)	81	84	86	61
College Grad (%)	9	10	11	3
Mean Years	12.5	12.5	12.8	11.6
Marital Status (%)				
Married	27	19	33	18
Separated	4	11	9	9
Divorced	9	10	11	1
Widowed	-	2	2	-
Never Married	60	58	45	72
Biological Children (Mean)	1.8	1.9	1.8	1.9
Teen Parents (%)	31	50	35	7
Currently Employed (%)	70	66	67	61
Welfare Past Year (%)	29	44	35	14
Family Income (in 1996 dollars)				
<i>Less than \$21,000</i>	37	54	37	30
<i>\$21,000 - 31,000</i>	18	19	15	15
<i>Greater than \$31,000</i>	35	27	23	28
<i>Refused/ DK</i>	10	0	25	27
Number (Unweighted)	104	172	205	96

¹ Excludes 10 White female respondents

² Metropolitan Black Children of Teenage Mothers, weighted to represent national population

³ Excludes 14 White male respondents

Table 3: Demographic Characteristics of the Baltimore Children (1995)
and Their Counterparts in The NLSY (1992)

	Baltimore ¹ (1995)	NLSY ² (1992)
Mean Age	27.6	28.7
Education		
HS Graduate (%)	71	85
College Grad (%)	6	9
Mean Years	12.0	12.6
Marital Status (%)		
Married	22	35
Separated	7	8
Divorced	5	7
Widowed	-	1
Never Married	66	49
Biological Children (Mean)	1.9	2.1
Teen Parents (%)	20	24
Currently Employed (%)	66	71
Welfare Past Year (%)	22	26
Family Income (in 1996 dollars)		
<i>Less than \$21,000</i>	33	35
<i>\$21,000 - 31,000</i>	17	14
<i>Greater than \$31,000</i>	32	26
<i>Refused/ DK</i>	18	25
Number (Unweighted)	200	402

¹ Excludes 24 White respondents

² Metropolitan Black Children of Teenage Mothers, weighted to represent national population