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**Intergenerational Educational
Mobility in Brazil**

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Abstract: This paper provides measures of the extent of intergenerational mobility in education in Brazil. Using data on the education of parents in the 1982 Brazilian PNAD, regressions are estimated to identify the educational advantage associated with having parents from higher educational categories. The data show large differences in educational attainment by parents' education. Men whose fathers had university education, for example, have mean schooling about 12 years higher than men whose fathers were illiterate. Although mean schooling has risen for children from all educational categories, the relative advantage associated with parents from higher educational groups shows little change over the last 40 years. There is some evidence that the disadvantage of having illiterate parents has increased, while the advantage of having university educated parents has decreased. This could be interpreted as indicating a worsening of relative educational mobility at the bottom, but an improvement in educational mobility at the top. Comparisons of mobility for men and women suggest that women in older cohorts received less return from having better educated parents than did men. The relationship between parents' education and schooling outcomes for recent cohorts are remarkably similar for men and women, however. Comparisons across regions indicate greater disadvantages associated with having poorly educated parents in the Northeast, a pattern that has persisted over four decades.

1. Introduction

The link between education and inequality has long been emphasized in Brazil. It was brought into sharp focus in the debate over trends in income inequality during the 1960's (Langoni, 1973; Fishlow, 1972). Several important features of education in Brazil are well documented. First, the average educational attainment is remarkably low even when compared to other countries with similar levels of per capita income and development. Second, there is a high degree of inequality in education in Brazil. Lam and Levison (1990), for example, estimate a variance of schooling among Brazilian males that is 70 percent higher than that estimated for males in the United States, even though mean schooling is over twice as high in the United States. The link between education and income inequality, analyzed by Langoni and Fishlow 20 years ago, has been analyzed extensively with more recent data by Reis and Barros (1991), Lam and Levison (1990, 1992), Barros and Lam (1992), and others, with the results providing a consistent picture that the distribution of schooling plays a fundamental role in explaining Brazil's overall high degree of income inequality, regional differences in inequality, and changes in inequality over time.

One of the important links between education and inequality that has been less well documented is the extent of educational mobility across generations. As shown by Barros and Lam (1992) using data on 14-year-olds, there is a high correlation between parental schooling and children's schooling attainment in Brazil. The purpose of this paper is to analyze the link between education across generations by looking at the relationship between the educational attainment of adults and the schooling of their parents. The analysis is based on the 1982 *Pesquisa Nacional por Amostra de Domicílios* (PNAD), the annual household survey conducted by the *Instituto Brasileiro de Geografia e Estatística* (IBGE). In addition to the standard set of demographic and economic variables in the PNAD, the 1982 PNAD added a supplement on education that included questions on the education of the parents of the head and spouse. There are over 160,000 observations in the sample of heads and spouses used in the analysis reported below.

Using the reports of parental schooling, the paper presents regression estimates designed to identify the effect of parental schooling on the schooling attainment of their children. Trends in these effects over time are estimated in order to examine the question of whether relative educational mobility has increased or decreased in Brazil. The paper also looks at differences in educational mobility for men and women, and across regions.

2. Measuring Educational Mobility

There is no obvious best way to measure intergenerational mobility in schooling. We may be interested in some notion of *absolute* mobility in the sense of mapping from absolute categories of parental schooling (say single years of completed schooling) into absolute categories of child's schooling. This would be analogous to matrices of occupational mobility of the type estimated for Brazil by Pastore (1982) in which categories of father's occupation are mapped into categories of son's occupation. Measured in this absolute sense we would interpret an overall rising mean as contributing to educational mobility, since children will be more likely to have higher schooling than their parents.

We may also be interested in measures of *relative* mobility. For example, we may be interested in the probability that parents from the bottom decile of the schooling distribution have children who are also in the bottom decile. This abstracts from the mean level of schooling, in the same way that measures of income inequality abstract from the mean level of income.

The potential measures of mobility in this analysis are constrained by the data. The 1982 PNAD includes reports of parental schooling in seven discrete categories, as can be seen below in Table 1. Given this constraint on the parental schooling variables, mobility will be thought of in terms of the mapping from the absolute category of parental schooling into the child's years of schooling. The regressions give a natural interpretation of relative mobility in terms of the marginal effect of increases in parental schooling on the schooling attainment of children. The gradient of the relationship between parental schooling and child schooling can then be analyzed across time, across gender, and across region as a way of analyzing changes in the degree of educational mobility.

3. Schooling Attainment and Parental Schooling

Table 1 reports the frequency distribution of parental schooling and two measures of schooling outcome for men and women aged 60-65 and 30-35 in the 1982 PNAD. The table shows very low overall levels of schooling reported for parents, with 46 percent of women aged 60-65 and 49 percent of men aged 60-65 having illiterate fathers. Another 37 percent of women and 36 percent of men report fathers with less than 4 years of schooling. For younger cohorts the percent in the bottom categories is lower, although still very high. Over 75 percent of women and men aged 30-35 reported having fathers with less than 4 years of schooling.

Table 1. Schooling of Men and Women by Schooling of Father
Brazil, 1982 PNAD

Father's Schooling	Females 60-65			Males 60-65			Females 30-35			Males 30-35		
	Pct.	Mean Educ.	Pct ≥ 4 Years	Pct.	Mean Educ.	Pct ≥ 4 Years	Pct.	Mean Educ.	Pct ≥ 4 Years	Pct.	Mean Educ.	Pct ≥ 4 Years
Illiterate	46.1	0.72	8.3	48.9	0.90	10.9	34.3	2.19	27.0	33.7	2.31	30.5
Literate	22.3	2.11	29.8	22.5	2.40	31.8	19.7	3.83	49.8	21.2	4.23	55.9
1-3 years	15.0	2.69	37.4	13.4	3.17	40.1	22.0	4.98	64.8	21.0	5.46	70.7
4 years	11.0	4.97	75.8	10.0	6.23	80.3	16.8	7.51	88.0	16.5	8.32	91.2
5-8 years	2.2	7.24	87.4	1.8	8.68	91.0	3.2	9.93	92.8	3.2	10.80	95.2
9-11 years	1.5	8.16	87.5	1.4	10.32	98.2	2.2	11.65	98.4	2.5	12.86	99.5
University	1.9	9.77	98.7	2.0	12.69	98.0	1.8	13.09	99.6	2.0	14.35	99.4
Total	100.0	2.22	29.6	100.0	2.59	30.9	100.0	4.67	55.0	100.0	5.14	59.5

Note: Estimated from 1982 PNAD using sample weights.

Table 1 also shows the high correlation between parents' schooling and their children's schooling. Men and women aged 60-65 with illiterate fathers have mean schooling of less than 1 year, compared to 9.8 years for women with university educated fathers and 12.7 years for men with university educated fathers. For the cohorts aged 30-35 the mean schooling at every level is around 2 years higher, but the differences between categories show little change. The difference between

having an illiterate father and a university educated father remains close to 12 years for men, and rises to 11 years for women for the younger cohort. The most notable change in the pattern across cohorts is the more rapid increase in schooling for women with fathers in the highest education categories, an effect we will see again in the regression analysis below.

It is important to note that overall mean schooling rose more for the total population than it did for most categories of father's schooling. According to Table 1, mean schooling for both men and women rose by around 2.5 years from the cohort aged 60–65 in 1982 to the cohort aged 30–35 in 1982. For the lowest categories of father's schooling, which contain most of the population, mean schooling increased by less than this. Since there was a gradual movement into the higher categories of father's schooling over these decades, the overall mean increased more than the means for particular schooling categories. It is important to keep in mind this distinction between trends for the total population and trends for specific categories of parental schooling in

4. Regression Results

Table 2 presents regressions with years of completed schooling as the dependent variable. Regressors include year of birth, its square, dummies for parental schooling, and the interaction of birth cohort and parental schooling. The birth cohort variable is specified so that it is equal to 0 for the 1917 birth cohort, corresponding to people aged 65 in 1982. The parental schooling variables are constructed so that the parameters can be interpreted as the *marginal* effects of having a parent in that category relative to the previous category. These simple functions of time and parental schooling have high explanatory power, with all three regressions in Table 2 explaining over 40 percent of the variance in years of completed schooling. The coefficients in these regressions can be interpreted as follows: Looking at regression 1, the intercept of .42 is the predicted years of schooling for the 1917 cohort (cohort=0) for men and women with fathers in the illiterate category. The coefficients under "Father's schooling" are the marginal effects of each category for the 1917 cohort: Having a literate father rather than an illiterate father is associated with a 1.48 year advantage in years of schooling. Having a father with incomplete primary schooling gives another .6 year increase in schooling. Having a father who completed four years is associated with an additional 2.7 years.

The overall increase in schooling over time is captured by a quadratic function of cohort, with the negative term on cohort squared indicating a slowdown in the pace of increase for more recent cohorts. The interactions of father's schooling times cohort allow the marginal effects of father's schooling to change over time. The .0058 coefficient on the interaction with father literate, for example, implies that the advantage of having a literate father rather than an illiterate father has increased by .006 years of schooling per year, implying that after 40 years the gap would have increased by .24 years. The largest of these interactions is for the 1–3 year schooling category, with the coefficient implying that the additional effect of having a father with some primary schooling increased by .72 years ($40 \times .018$) from the 1917 cohort to the 1957 cohort.

The patterns implied by the coefficients in Regression 1 of Table 2 are shown graphically in Figure 1. The graph shows the predicted schooling attainment of men and women by the education

Table 2. Schooling Regressions, Brazilian Men and Women Ages 25-65, 1982

Variable	Regression 1		Regression 2		Regression 3	
	Parameter	T-stat	Parameter	T-stat	Parameter	T-stat
Constant	0.4181	(11.66) ^x	0.6245	(19.01) ^x	0.3151	(9.23) ^x
Birth Cohort (1917=0)	0.0701	(24.92) ^x	0.0760	(27.64) ^x	0.0667	(25.04) ^x
Cohort Squared	-0.0004	(-7.29) ^x	-0.0005	(-9.36) ^x	-0.0006	(-10.32) ^x
<i>Father's Schooling:</i>						
≥ Literate	1.4777	(29.91) ^x			0.8519	(16.10) ^x
≥ 1-3 Years	0.6232	(10.23) ^x			0.1951	(2.89) ^x
≥ 4 years	2.7184	(39.16) ^x			1.3213	(16.33) ^x
≥ 5-8 years	2.3655	(17.71) ^x			1.4113	(10.05) ^x
≥ 9-11 years	1.7371	(9.12) ^x			1.3744	(7.27) ^x
University	1.6827	(8.27) ^x			1.4187	(7.24) ^x
<i>Father's Schooling × Cohort</i>						
≥ Literate	0.0058	(3.25) ^x			0.0066	(3.51) ^x
≥ 1-3 Years	0.0180	(8.51) ^x			0.0146	(6.30) ^x
≥ 4 years	-0.0093	(-3.97) ^x			-0.0017	(-0.63) ^x
≥ 5-8 years	-0.0075	(-1.68) ^z			-0.0062	(-1.33)
≥ 9-11 years	0.0063	(0.99)			-0.0071	(-1.11)
University	-0.0114	(-1.63) ^z			-0.0183	(-2.71) ^x
<i>Mother's Schooling:</i>						
≥ Literate			1.7871	(33.86) ^x	1.2129	(21.31) ^x
≥ 1-3 Years			1.0078	(14.29) ^x	0.6174	(7.85) ^x
≥ 4 years			2.8669	(37.30) ^x	1.5133	(16.89) ^x
≥ 5-8 years			2.9017	(20.70) ^x	1.4654	(9.74) ^x
≥ 9-11 years			1.4173	(7.20) ^x	0.4669	(2.36) ^y
University			1.4632	(4.25) ^x	0.4762	(1.43)
<i>Mother's Schooling × Cohort</i>						
≥ Literate			0.0015	(0.78)	0.0060	(3.00) ^x
≥ 1-3 Years			0.0072	(3.00) ^x	-0.0004	(-0.13)
≥ 4 years			-0.0121	(-4.74) ^x	-0.0059	(-2.02) ^y
≥ 5-8 years			-0.0137	(-2.95) ^x	-0.0049	(-0.99)
≥ 9-11 years			0.0130	(1.99) ^y	0.0204	(3.12) ^x
University			-0.0134	(-1.22)	-0.0018	(-0.17)
<i>R</i> ²	0.4148		0.4224		0.4761	

Note: Dependent Variable: Completed Years of Schooling; Estimated from 1982 PNAD using sample weights. Superscripts denote significance: *x* = .01, *y* = .05, *z* = .10.

Omitted Categories: Parents' schooling illiterate. Sample size = 163,117.

of their father for three cohorts born 20 years apart. The levels of schooling are the *total* effect of having a father in a particular category, representing the cumulative impact of the coefficients in Table 2.

The steepness of the lines document the overall limited educational mobility in Brazil. A reduction in the slope of the lines could be interpreted as an improvement in relative educational mobility, since it would imply a decline in the educational advantage associated with having better educated parents. As the graph clearly shows, changes over time are best described as parallel upward movements of the curves. Overall educational attainment has improved, but the relative mobility across educational categories has remained remarkably constant. The only notable change over time is the increased slope of the curve at the 1–3 year category. This could be interpreted as an increase in the disadvantage of being in the bottom two categories. There is some evidence of a flattening of the curve at the very top, implying that the advantage of having a university educated father has decreased over time. A very small fraction of the sample is in the top categories, however, and the apparent decline in the effect at the top is only marginally significant.

Regression 2 in Table 1 replaces the schooling of the father with the schooling of the mother, continuing to include all men and women in the sample. Given the high correlation between mother's and father's schooling, inclusion of a single parent's characteristics presumably picks up a combination of effects and should not be interpreted as the effect of that parent's schooling alone. From Regression 2 we see that there are no dramatic differences in the effect of mother's schooling from the effect of father's schooling when each is used alone in the regression. Effects of mother's education appear to slightly larger at low levels, but slightly smaller at higher levels.

Regression 3 includes both mother's schooling and father's schooling in the same regression, allowing both effects to vary over time. Looking at these partial effects we again see evidence that the effect of mother's schooling is larger at low levels of schooling, but is substantially smaller for high school and university.

5. Differences in Educational Mobility for Men and Women

Table 3 considers the question of whether educational mobility differs for men and women. Regression 1 uses the same sample and specification as Regression 1 in Table 2, using father's schooling to predict child's schooling attainment, but allows all effects to differ for men and women. Regression 2 repeats the exercise replacing father's schooling with mother's schooling. The regressions include a dummy variable for female and interactions of the female variable with the linear cohort trend, the father's schooling dummies, and the cohort times schooling interactions. Looking at regression 1, using father's schooling, the dummy on female indicates that for the oldest cohort in the sample there is a .45 year schooling disadvantage for women compared to men for those whose fathers are illiterate (the omitted category). The negative coefficients on all of the female times father's schooling variables indicate that the educational advantage of increasing father's schooling was smaller at every step for women than for men. This might be interpreted as implying *higher* educational mobility for women, adjusting for the lower mean, since women were slightly less affected by their father's schooling.

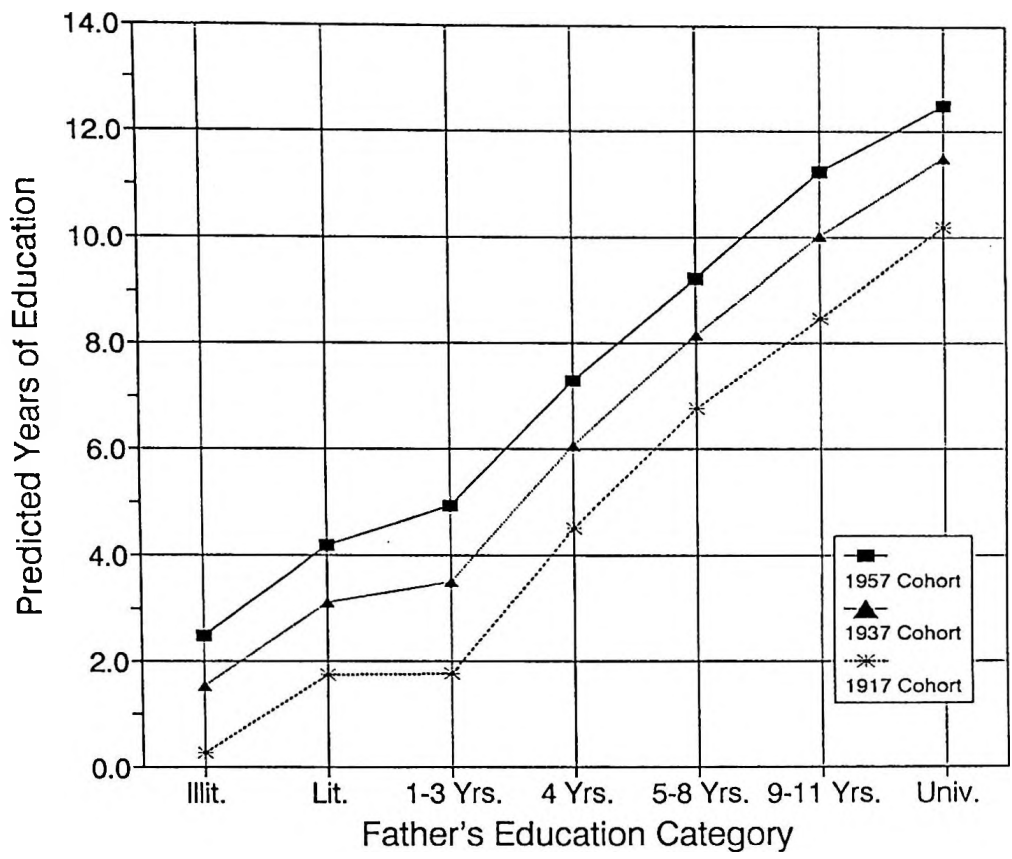


Figure 1. Predicted Schooling for Brazilian Men and Women, 1982 PNAD
By Schooling of Father and Birth Cohort.
Based on Regression 1, Table 2.

Table 3. Schooling Regressions, Brazilian Men and Women Ages 25-65, 1982
With Controls and Interactions for Gender

Variable	Father's Schooling Regression 1		Mother's Schooling Regression 2	
	Parameter	T-stat	Parameter	T-stat
Constant	0.6494	(14.34) ^x	0.8601	(21.07) ^x
Birth Cohort (1917=0)	0.0634	(21.34) ^x	0.0717	(25.02) ^x
Cohort Squared	-0.0004	(-6.95) ^x	-0.0005	(-8.96) ^x
<i>Parent's Schooling</i>				
≥ Literate	1.5484	(22.05) ^x	1.8571	(24.80) ^x
≥ 1-3 Years	0.6768	(7.76) ^x	0.8704	(8.65) ^x
≥ 4 years	3.1468	(31.30) ^x	3.5531	(32.02) ^x
≥ 5-8 years	2.5106	(12.83) ^x	3.1976	(16.20) ^x
≥ 9-11 years	2.2816	(8.25) ^x	1.8818	(6.69) ^x
University	1.5895	(5.50) ^x	0.4404	(0.93)
<i>Parent's Schooling × Cohort</i>				
≥ Literate	0.0087	(3.32) ^x	0.0007	(0.25)
≥ 1-3 Years	0.0170	(5.47) ^x	0.0118	(3.37) ^x
≥ 4 years	-0.0166	(-4.74) ^x	-0.0279	(-7.30) ^x
≥ 5-8 years	-0.0064	(-0.94)	-0.0209	(-3.10) ^x
≥ 9-11 years	-0.0161	(-1.67) ^z	-0.0028	(-0.29)
University	-0.0034	(-0.34)	0.0269	(1.70) ^z
Female	-0.4543	(-7.95) ^x	-0.4667	(-9.40) ^x
Female × Cohort	0.0118	(5.53) ^x	0.0074	(4.00) ^x
<i>Female × Parents Schooling</i>				
≥ Literate	-0.1558	(-1.58)	-0.1516	(-1.44)
≥ 1-3 Years	-0.1015	(-0.84)	0.2698	(1.92) ^y
≥ 4 years	-0.8460	(-6.10) ^x	-1.3494	(-8.79) ^x
≥ 5-8 years	-0.3001	(-1.12)	-0.7539	(-2.69) ^x
≥ 9-11 years	-1.0526	(-2.77) ^x	-0.6967	(-1.77) ^z
University	-0.0339	(-0.08)	1.5677	(2.27) ^y
<i>Female × Cohort × Parents Schooling</i>				
≥ Literate	-0.0045	(-1.26)	0.0018	(0.47)
≥ 1-3 Years	0.0022	(0.52)	-0.0086	(-1.78) ^z
≥ 4 years	0.0153	(3.25) ^x	0.0314	(6.11) ^x
≥ 5-8 years	-0.0007	(-0.07)	0.0181	(1.95) ^y
≥ 9-11 years	0.0408	(3.17) ^x	0.0239	(1.83) ^z
University	-0.0091	(-0.65)	-0.0636	(-2.37) ^x
<i>R</i> ²	0.4199		0.4264	

Note: Dependent Variable: Completed Years of Schooling; Estimated from 1982 PNAD using sample weights; Superscripts denote significance: *x* = .01, *y* = .05, *z* = .10.

Omitted Categories: Parents' schooling illiterate. Sample size = 163,117.

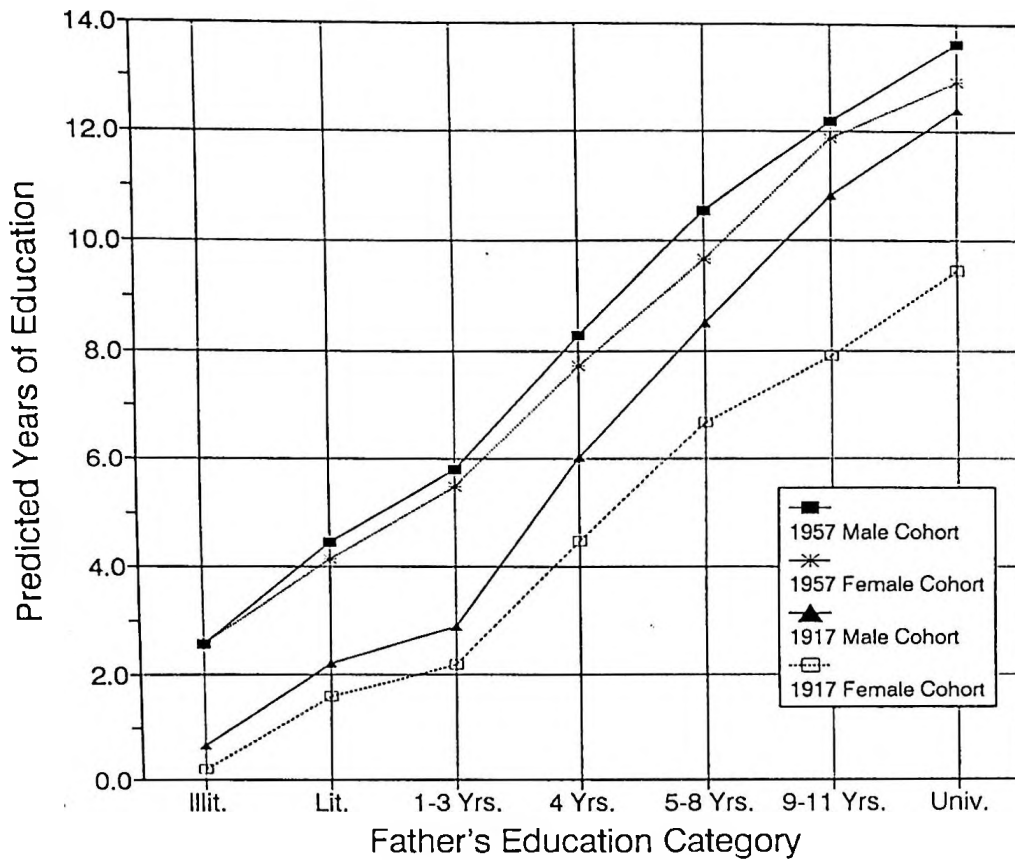


Figure 2. Predicted Schooling for Brazilian Men and Women, 1982 PNAD
 By Schooling of Father, Birth Cohort, and Gender.
 Based on Regression 1, Table 3.

The patterns implied by Regression 1 are shown graphically in Figure 2. As is easy to see in the graph, the slope of the relationship between schooling attainment and father's education was substantially steeper for men than for women for older cohorts, beginning with fathers who completed 4 years. This pattern changes significantly over time. For younger cohorts the patterns for men and women are virtually identical, with women's attainment slightly below men's at all levels of father's schooling. In addition to a vertical shift of about 2 years, the slope of the line for men has flattened somewhat over time, while the slope of the line for women has increased. This might be interpreted as an increase in relative educational mobility for men, but a decrease in relative mobility for women, as the daughters of better educated parents have come to have the same educational advantages previously experienced by sons.

6. Regional Differences in Educational Mobility

Large regional differences in the distribution of schooling and income are an important component of overall inequality in Brazil. Table 4 provides data similar to that presented for all of Brazil in Table 1. Mean education for men and women combined are presented for the same two cohorts as Table 1, those 60-65 in 1982, and those 30-35 in 1982, with separate tabulations for the state of São Paulo and the Northeast region. Not surprisingly, the Northeast has much higher percentages of fathers in the lowest schooling categories than São Paulo, with over 64 percent of Brazilians aged 60-65 in the Northeast reporting illiterate fathers. The overall mean schooling is over 2 years lower in the Northeast for the older sample, and over 3 years lower in the Northeast for the younger sample. There are also some unexpected patterns in Table 4, however. Note that the schooling attainment of 30-35 year-olds whose fathers have 1-3 years and 4 years of schooling, two relatively large groups in the schooling distribution, are almost identical in the Northeast and São Paulo. This apparent similarity across regions in schooling outcomes within parental schooling categories can be better analyzed using a regression framework similar to that used in the previous sections.

Table 4. Schooling of Men and Women by Schooling of Father
State of São Paulo and Northeast Brazil, 1982 PNAD

Father's Schooling	São Paulo 60-65		Northeast 60-65		São Paulo 30-35		Northeast 30-35	
	Pct.	Mean Educ.	Pct.	Mean Educ.	Pct.	Mean Educ.	Pct.	Mean Educ.
Illiterate	42.3	1.26	64.0	0.49	27.0	3.28	52.4	1.29
Literate	20.8	3.05	22.2	1.53	18.3	5.37	25.5	3.01
1-3 years	15.9	3.02	8.6	2.95	24.1	5.64	12.3	5.45
4 years	12.9	6.62	3.5	5.77	21.5	8.78	5.9	8.91
5-8 years	2.5	9.58	0.7	8.15	3.2	11.50	1.8	10.93
9-11 years	2.0	9.55	0.4	11.51	3.3	12.98	1.1	11.36
University	3.5	12.68	0.5	13.65	2.6	14.64	0.9	14.09
Total	100.0	3.38	100.0	1.29	100.0	6.29	100.0	3.09

Note: Estimated from 1982 PNAD using sample weights.

Table 5 analyzes the extent of regional differences in educational mobility in Brazil using two regions, the state of São Paulo and the Northeast region. As in the analysis for gender differences in Table 3, the specification allows both levels and trends to differ across regions by including a Northeast dummy variable and interactions of Northeast with all of the other variables included in Regression 1 of Table 2.

Figure 3 summarizes the results graphically. The curves are surprisingly similar within cohorts, especially for father's schooling levels above the literate category. This similarity appears surprising given the well-known large differentials in mean schooling between the two regions. As seen in Table 4, there is a gap between regions in mean schooling of over 2 years for older cohorts and over 3 years for younger cohorts. These patterns are consistent with large differences in mean schooling, however, since the underlying distribution of parental schooling differs substantially between regions. The percentage reporting illiterate fathers is almost twice as high in the Northeast as in São Paulo for those aged 30–35 in 1982. It is also important that the two curves for a given cohort differ for the bottom two categories, categories which contain as much as 65 or 70 percent of the population for older cohort and well over 50 percent for the younger cohort.

Looking at the slope of the relationship between schooling attainment and father's schooling in Figure 3, we do not see dramatic differences in the educational mobility for the two regions. The differences at the bottom of the distribution are noteworthy, however, although difficult to interpret in light of heavy migration flows from the Northeast to São Paulo.¹ The patterns imply that for adults currently residing in São Paulo, the disadvantage of having poorly educated parents is much lower than it is for adults residing in the Northeast. The disadvantage of having illiterate parents appears to have increased over time in the Northeast, but to have declined somewhat in São Paulo.

7. Conclusions

Using the data on the education of parents in the 1982 Brazilian PNAD, this paper documents large differences in schooling attainment of adults aged 25–65 across categories of parents' education. Men whose fathers had university education, for example, have mean schooling about 12 years higher than men whose fathers were illiterate. This apparent low degree of intergenerational mobility in education is consistent with widely held views of a high degree of intergenerational inertia in educational attainment in Brazil.

Going beyond the levels of educational mobility, this paper attempts to identify changes over time in the degree of mobility, difference between men and women, and differences across regions. Regarding changes over time, the data show that mean schooling has risen slowly but steadily for children from all educational categories. This increase in overall schooling appears to have been associated with very little change in the relative differences in schooling attainment across parental schooling categories. The gap in schooling attainment for children of illiterate parents compared to children whose parents completed primary education, for example, appears to have remained

¹ It is important to remember that the region is identified for the current location of the respondent in the PNAD, and will often not correspond to the region of the person's parents or the region in which the person attended school.

Table 5. Schooling Regressions, Brazilian Men and Women Ages 25-65, 1982
 With Controls and Interactions for Region
 São Paulo State and Northeast Region

Variable	Regression 1	
	Parameter	T-stat
Constant	0.6364	(8.34) ^x
Birth Cohort (1917=0)	0.0850	(18.25) ^x
Cohort Squared	-0.0004	(-4.13) ^x
<i>Father's Schooling</i>		
≥ Literate	1.7281	(15.15) ^x
≥ 1-3 Years	0.1531	(1.17)
≥ 4 years	2.7824	(20.57) ^x
≥ 5-8 years	2.4954	(9.10) ^x
≥ 9-11 years	1.0967	(2.92) ^x
University	2.4028	(6.22) ^x
<i>Cohort × Father's Education</i>		
≥ Literate	-0.0050	(-1.19)
≥ 1-3 Years	0.0153	(3.35) ^x
≥ 4 years	-0.0098	(-2.15) ^y
≥ 5-8 years	-0.0076	(-0.81)
≥ 9-11 years	0.0188	(1.45)
University	-0.0313	(-2.33) ^x
Northeast Region	-0.4386	(-5.15) ^x
Northeast × Cohort	-0.0346	(-10.94) ^x
<i>Northeast × Father's Schooling</i>		
≥ Literate	-0.7257	(-4.91) ^x
≥ 1-3 Years	1.0926	(5.61) ^x
≥ 4 years	0.3969	(1.54)
≥ 5-8 years	0.3421	(0.69)
≥ 9-11 years	0.5655	(0.79)
University	-2.1186	(-2.67) ^x
<i>Northeast × Cohort × Father's Schooling</i>		
≥ Literate	0.0225	(4.19) ^x
≥ 1-3 Years	0.0028	(0.42)
≥ 4 years	0.0072	(0.83)
≥ 5-8 years	-0.0171	(-1.03)
≥ 9-11 years	-0.0314	(-1.31)
University	0.0584	(2.19) ^y
<i>R</i> ²	0.4448	

Note: Dependent Variable: Completed Years of Schooling; Estimated from 1982 PNAD using sample weights. Superscripts denote significance: x = .01, y = .05, z = .10.
 Omitted Categories: Parents' schooling illiterate. Sample size = 66,750.

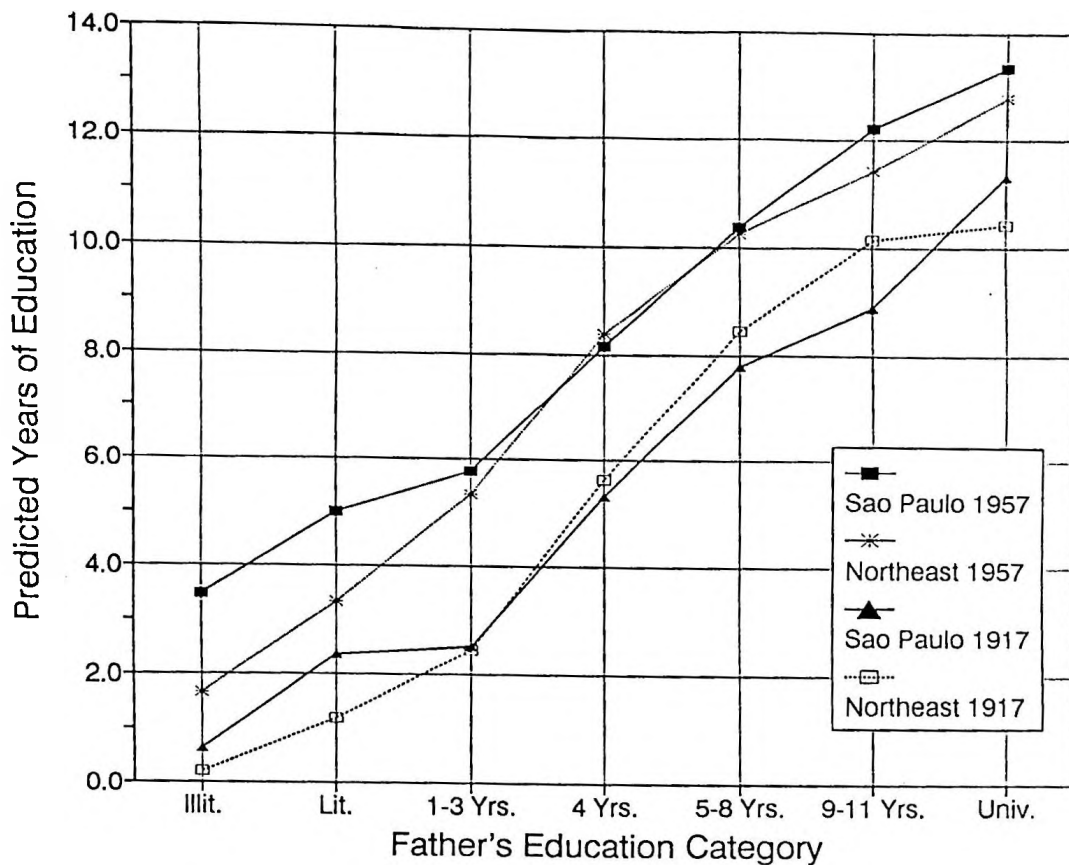


Figure 3. Predicted Schooling for Brazilian Men and Women, 1982 PNAD
 By Schooling of Father, Birth Cohort, and Region.
 São Paulo and Northeast Region
 Based on Regression 1, Table 5.

almost constant over the last 40 years. There is some evidence that the disadvantage of having illiterate parents has actually increased, a pattern somewhat offset by an apparent decline in the advantage associated with having university educated parents.

Analysis of gender differences indicate substantial differences between men and women in older cohorts, with larger effects of parental schooling for men than for women. These effects appear to have converged over time, with the relationship between schooling attainment and parental education being almost identical for men and women in younger cohorts.

Comparisons across regions indicate surprisingly similar relationships between schooling attainment and parental education at middle and higher levels of schooling. There appear to be greater disadvantages associated with having poorly educated parents in the Northeast, however. This larger disadvantage of having poorly educated parents in the Northeast appears to have persisted over four decades, and may have even increased for more recent cohorts.

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