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The Impacts of Household Wealth on Child Development

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Abstract

Using data from the Panel Study of Income Dynamics, this study examines the influence of wealth relative to income across several child development outcomes. The wealth measures include net worth and whether the household has certain specific asset holdings. The child development measures cover two domains: academic achievement and socio-emotional behavior. The intent is to examine which measures of wealth have the most explanatory value with respect to child development outcomes and test whether these are distinct from income. Results show that wealth is a significant predictor of two out of three dependent variables and that these predictors have different effects across racial groups.

A portion of young people are doing well in school and don't report any high risk behaviors. Another portion report some combination of behaviors such as substance use, sexual activity, delinquency, and school underachievement that put them at varying levels of risk for not making a successful transition into adulthood. Dryfoos (1998) estimates that 40% of U.S. youth (14-year olds) fall into the low-risk category, 25% are at moderate risk and that 35% are at high risk. She also explains that where young people find themselves on this continuum is highly dependent on the resources both social and economic upon which they can draw. Those that come from households with higher economic resources are more likely to be on track academically and not engage in risky behaviors while those that come from situations of economic disadvantage are much more likely to be at higher risk.

A wide range of research and empirical findings focus on the impact of income poverty on child development outcomes (Aber, Bennett, Conley, & Li, 1997; Aber, Jones, & Cohen, 2000; Chase-Lansdale, 1999; Corcoran, 1995; Duncan & Brooks-Gunn, 1997a; Duncan, Brooks-Gunn, & Klebanov, 1994; Duncan, Yeung, Brooks-Gunn, & Smith, 1998; Guo, 1998; Guo & Harris, 2000; Hill & Sandfort, 1995; Parker, Greer, & Zuckerman, 1988). Perhaps because it is clearly defined by a federal standard, information on income poverty status is readily understood and regularly collected in most research studies. Empirical evidence suggests that the long-term economic status of a household is more important than income poverty in one particular year. Specifically, permanent income (averaged over 5 or more years) seems to be more important than the timing of income or fluctuations, even though a large drop in income (> 35%) can be harmful, especially when unexpected (Blau, 1999; Mayer, 1997; Shonkoff & Phillips, 2000; Solon, 1992).

Children seem to be particularly sensitive to the effects of income poverty in early childhood. In fact, in several models, income is a significant predictor of children's performance on measures of ability in early and middle childhood, but not in adolescence (Duncan & Brooks-Gunn, 1997b; Duncan et al., 1998; Guo, 1998). And it seems that income is a better predictor of academic achievement than it is of social and emotional development (Duncan & Brooks-Gunn, 1997a, Haveman & Wolfe, 1995).

Effects of Wealth
In contrast with studies focusing on income, much less research and empirical data focus on the impact of wealth on child development outcomes. Perhaps because data on wealth are not easily attained, there is less awareness of its importance and fewer research projects that explicitly connect wealth with child outcomes. In the last decade, however, as more attention has been given to wealth as an aspect of household economic status, there have been several empirical studies that consider the impact of household wealth on child outcomes.

There is some evidence that homeownership in particular has positive effects on children's well being, even if it is mainly a result of residential stability (Aaronson, 2000; Green & White, 1997). Children of homeowners seem to have fewer behavior problems (Scanlon & Page-Adams, 2000). There is also evidence that, even for single mothers, assets impact educational expectations for and the academic achievement of their children. Assets (measured as homeownership and savings) seem to positively impact likelihood of high school graduation and this effect is partially mediated by maternal expectations (Zhan & Sherraden, 2003). Assets also

seem to help families better deal with unemployment and recover from economic loss (Yeung & Hofferth, 1998).

Dalton Conley (1999) tests the hypothesis that most of the differences attributed to race are actually class differences defined primarily by wealth. Using PSID data to measure the adult outcomes of children born since 1962, Conley analyzes differences in net worth, high school graduation, college graduation, repeating a grade, labor force participation, wages, welfare receipt, and pre-marital childbearing (for daughters). He finds that racial differences are either no longer significant or dramatically lessen once parental wealth is added to the equation.

Conley (1999) argues that to understand the life chances of children it is necessary to take into account accumulated wealth, which would include property, assets, and net worth. While wealth is more reflective of historical inequalities and the likelihood of inheriting large gifts in the form of assets, it also has strong implications for continued racial inequality, making it seem less meritocratic than other outcomes. Tom Shapiro (2004) makes a similar case using qualitative interviews to demonstrate how parents use either personal wealth or money inherited from their parents' wealth to create transformative opportunities for children, particularly via enrollment in better schools.

The Distinction Between Income and Wealth
Theoretically, wealth is though to be distinct from income when considering life chances in that it represents an accumulated stock rather than a passing flow of resources. Assets are hypothesized to improve household stability, increase personal efficacy, increase political participation, create a orientation toward the future, enable focus or specialization, and provide a foundation for risk taking (Sherraden, 1991). Family assets also have attractive features such as providing economic security, not requiring a time/leisure trade-off, lighter taxation, and the possibility of being enjoyed without being consumed (Spilerman, Lewin-Epstein, & Semyonov, 1993).

There are also important distinctions between income and wealth when considering basic empirical patterns. Wealth inequality is generally more skewed than income inequality. In 1998, The top 20 percent of households received 49.2% of aggregate money income with the bottom 20 percent receiving 3.7% (U.S Census Bureau, 2000). In comparison, the top 20 percent of wealth holders owned 83.4% of marketable wealth while the bottom 60 percent owned less than 5% (Wolff, 2000a). There are many households with zero or negative net worth and even more that don't have sufficient assets to support themselves for even a few months. Even those at the median of wealth distributions have only modest assets, with most of their equity tied up in a primary residence (Wolff, 2000a).

Despite rather common assumptions in poverty research and discussions of social policy, wealth is not highly correlated to income. The correlations tends to be about .32. Also, it is important to note that wealth remains more stable across generations than does income (Diaz-Gimenez, Quadrini, & Rios-Rull, 1997; Mulligan, 1997).

In addition, racial inequality with respect to wealth is shockingly high—with African Americans having much lower levels of wealth than Whites. On a descriptive basis, the difference in net

worth may be a factor of ten or greater. Even when controlling for known class correlates such as income, occupation, and education, wealth differences by race persist (Blau & Graham, 1990; Oliver & Shapiro, 1995; Shapiro, 2004; Wolff, 2000b). Children, particularly the youngest ones (less than 6), are the age sub-group most likely to live in income poor households (U.S. Census Bureau, 2003). Households with children also are more likely to be asset poor, defined as having insufficient assets or net worth to sustain itself at a poverty-level income for three months (Haveman & Wolff, 2000). Given that both income and asset poverty may disproportionately affect children, it is important to understand whether there are any unique benefits of wealth with respect to child outcomes. The question considered in this article is how wealth measures might be included in empirical models of child well-being. Is household income or poverty status a sufficient proxy for all economic status considerations, or should wealth and income be examined independently?

Considering wealth alongside income might lead to a more nuanced understanding of how household economic situation impacts young children. Children in households with income above the poverty line but no wealth might look very different than children growing up in households with high levels of both income and wealth. Conversely, children in households with income below the poverty line yet having substantial wealth may experience more advantages than those in households low on both income and wealth distributions. Those few studies that do consider household wealth as a predictor of intergenerational outcomes, often consider consequences for adult children—examining outcomes such as high school graduation and labor force participation. This analysis will complement what is known with respect to income and early childhood outcomes by examining how specifying wealth and assets might contribute as a predictor of those outcomes.

Sample
This study takes data from the Panel Study of Income Dynamics (PSID), utilizing its relatively new 1997 Child Development Supplement (CDS) as well as bringing in family income and wealth data from the 1994-1997 waves. The PSID is a nationally representative longitudinal survey of U.S. individuals and families that began in 1968. Data on employment, income, and marital situation have been collected annually with questions on wealth added beginning in 1984. In 1997, a supplement was drawn from the PSID interviews to collect a wide range of data on parents and their young children (aged 0-12). Along with information on the cognitive, behavioral and health status of these children, there is also data on the mother's cognitive ability and overall well-being (Hill, 1992; Hofferth, Davis-Kean, Davis, & Finkelstein, 1997).

In the full sample, there are 3,563 children. The numbers are fairly evenly distributed across all ages. There are 1642 white children and 1455 black children. There are also Hispanics, Asians, Native Americans, and "other" in the sample, but the counts are much smaller. Because the PSID initially oversampled low-income families, there are a greater number of blacks than would be expected in the overall population. In some cases, data were collected on more than one child per household, but the maximum number of interviews per household was limited to two children. Whenever there were three or more eligible children less than age 13 in a household, two were randomly selected for interview (Hofferth, et al., 1997).

The sample for this analysis includes only children of the head of household surveyed who live with their biological or adopted mother. These restrictions assure that the child is living with at least one biological or adopted parent and eliminate heads of households who are grandparents, aunts and uncles, or other relatives. It also excludes single parent fathers and stepmothers. This reduces the possible sample size to 2936. The statistical analyses include households with children age three or older in 1997 who were asked the child development questions for which we also have wealth data in 1994. The data set was obtained from the Survey Research Center of the Institute for Social Research, University of Michigan, and downloaded from their Internet based Data Center (http://simba.isr.umich.edu).

Measures

Child well-being. In this analysis, the outcomes of interest are two cognitive achievement scores and one behavior problem score. The CDS assesses achievement through the Woodcock-Johnson Achievement Test-Revised (W-J; Woodcock & Johnson, 1989). The test measures achievement and is not an indicator if IQ. Two sub-scales were given to all children between the ages of 3 and 12: letter-word identification and applied problem. The child's externalizing and internalizing behavior problems were assessed by mother report using a version of the Behavior Problem Index utilized in the National Longitudinal Survey of Youth (BPI; Achenbach & Edelbrock, 1981, 1984; Hofferth, et al., 1997). The index contains 30 items totaled to measure the severity of child behavior.

Income is a continuous variable summing total household income from the previous tax year including all taxable income, transfer income, and Social Security income for anyone in the family unit. Because income averaged over multiple years is the best estimate of 'permanent income' (Blau, 1999; Mayer, 1997), a four-year average (1994-1997) is used when the data are available. Otherwise, the maximum number of income data points available between 1994 and 1997 are used.

Wealth measures. Wealth is a continuous variable calculating household net worth, summing separate values for a business, checking or savings, real estate, stocks, and other assets, subtracting out credit card and other debt. Data are downloaded for 1994 and include main home equity. Because the distribution is quite skewed, with extreme positive and negative values, the natural log of this measure plus a constant is used. For some analyses, wealth status will is trichotomized by separating those below the median of the wealth distribution (net worth below $17,000) from those with a net worth in the third quartile of the wealth distribution ($17,000 to $75,000) and those in the top quartile (net worth over $75,000). In addition, dichotomous measures of specific asset types are tested to consider if wealth that comes from a particular source better distinguishes child development outcomes. Before settling on these measures, multiple approaches were utilized to establish the relationship between wealth and each dependent variable.

Income poverty status and dichotomized forms of wealth are used in t-tests to consider if there is a significant difference in child outcomes between households that are income poor or asset poor and those that are not across the 3 dependent variables: letter-word identification score (standardized verbal test), applied problem score (standardized quantitative test) and the behavior problem index. As can be seen in Table 2, children in households that fall below the poverty

line, do not own homes, and have zero or negative wealth score lower on these standardized achievements tests and have more reported behavior problems.

Table 3 shows the relationship between child well-being outcomes and various measures of net worth, change in net worth, and specific asset holdings. Each measure of wealth is entered in a separate regression along with the permanent income measure to provide a sense of what aspects of wealth might be most relevant for these three child outcomes. In these simple analyses, the truncated raw measure of net worth and the wealth distribution divided into fifths or three groupings are always significant at the p=.01 level. The actual value of the change in net worth between 1994 and 1999 is never a significant predictor. Artificially truncating this value at $125,000 on the high end and -$50,000 on the low-end seems to increase predictive value, but at least for the letter-word score simply distinguishing households that had a positive change or very small change (-2,500 to -2,500) seems to have an influence. Dichotomous indicators of two specific asset holdings, cash accounts and stocks or an IRA, seem to predict higher academic achievement scores well. The only specific asset measure that seems relevant for the behavior problem index is whether the households owe money through debt or credit cards.

Demographic controls. A variety of controls are used in this study and divided into child characteristics and parental (or family) characteristics. Characteristics of the child include gender, race, ethnicity, and age of child. The analyses also control for number of children in the family, whether the head of household is female, years of completed education of the household head, a measure of mother's cognitive ability, and employment status of household head. Charts with the demographic characteristics of the sample can be found in Table 1.

Analyses. Hierarchal regressions are conducted to test how household wealth in 1994 impacts child well-being across the three outcome variables in 1997. The regressions are run across four models. The first model controls for the child-level characteristics, the second model controls for parental characteristics, the third model controls for permanent income, and then the various wealth and asset variables are added in the fourth model. These are included in a stepwise fashion to test whether assets contribute additional information to or perhaps cancel out income-related effects. The wealth measures are added at the very end after the other child, parent, and family controls, including the income measure to make this a very conservative test of an independent wealth effect.

Results
Preliminary analyses were conducted with both weighted and unweighted data. For most child outcomes the results were similar, but given that the PSID initially oversampled low-income families and that the median wealth holdings of Whites are more than 11 times that of African Americans, analyses of the full sample utilize weighted data to more closely resemble nationally representative proportions. For within race analyses, unweighted data are used. See Table 4 for a detailed breakdown of all the key variables for the entire sample and by race.

Academic achievement findings. For the letter word scale, the number and age of children are consistently strong control variable predictors (See Table 5). Being African American drops out as a predictor as soon as parental control variables are added in Model II. Education of household head and the parental skills test are consistently strong predictors for this outcome

variable. Household income is also a strong predictor and remains so even when wealth measures are added in Model IV. Adding the block of wealth variables does increase R^2 by one percent but none of the measures is statistically significant individually. As can been seen in Table 6, generally the same variables seem to predict letter word score outcomes for both African Americans and Whites. The only striking difference is that permanent income seems to be a strong predictor for Whites but does not reach statistical significance at the p=.05 level for African Americans. Conversely, having stocks or an IRA seems to be a strong predictor for African Americans but not for Whites.

Every control variable with the exception of having a female head of household is a statistically significant predictor of the applied problem scale and remains so across all the models (See Table 7). The effects of being African American or Hispanic lessen as parental and economic measures are included, but continue to be associated with lower scores on this quantitative measure. Interestingly, household income does not seem to be as relevant. Once the block of wealth measures are added, the influence of income appears to wane. For this outcome variable, individual wealth measures could be most relevant. Being in the highest quartile of the wealth distribution is correlated with higher achievement scores relative to those at the lowest end of the distribution. In addition, having cash accounts seems to influence this outcome positively, while debt and credit cards seem to have a negative influence.

Across race differences are noteworthy. In terms of income and wealth measures, again having stocks or an IRA is the only statistically significant predictor of the applied problem outcome for African Americans. For Whites, household income and a range of wealth measures seem to influence this score.

There are also appear to be within race differences. White males seem to perform better on this quantitative achievement test while for African Americans, females tend to perform better. Variables were added to test this race-gender interaction in Model IV-B of Table 7 and the results are statistically significant. African American females and Hispanic females seem to do better than their male counterparts.

Behavior Problem Index findings. For this behavior indicator, none of the child-level controls seem to be very relevant except for gender—caregivers report more behavior problems for boys than girls (See Table 9). Unlike the model for academic achievement outcomes, having a female head of household and whether that head is employed seem to matter in the model for behavioral outcomes. Both household income and household wealth are correlated with the behavior problem index. Again, being in that highest quartile of the wealth distribution seems to be a protective factor for reported child behavior. Interestingly, as income and wealth are added, parental education drops out as a predictor. In addition, African Americans and Hispanics are less likely to have reported behavior problems as household economic situation is taken into account.

Turning to across race differences, this behavior outcome is the only one for which household income is a predictor for African Americans (See Table 10). For Whites, both income and wealth seem to be correlated with less reported behavior problems. However, having a female head of household only seems to predict greater behavior problems for White children. Having a

head of household that is employed appears to be a protective factor for African American children, though it does not seem to matter whether that worker is the mother.

Limitations
Except for wealth and income data, all information is taken from the 1997 survey interview, which only captures the family at one point in time. A second wave of the Child Development Supplement is being gathered, however, so in future analyses it will be possible to examine longitudinal data for child outcomes as well as parental and household variables.

Although this study finds provocative differences across racial groups, a more thorough examination of these issues by race is not possible. The Hispanic sample is too small to analyze separately and is primarily comprised of immigrant families added several decades after the original 1968 cohort. The number of Asians, Native Americans, and other ethnic groups is also of insufficient size.

Discussion
For two of the three dependent variables in this study, using a very conservative test, some measure of wealth is a statistically significant predictor of child well-being outcomes. In the regression models, even when individual measures were not clearly correlated with a given outcome measure, including a block of wealth measures improved R^2 by at least a percentage point. These findings suggest that, in studies of child well-being, including measures of wealth might contribute important information in addition to data on household income.

Considering measures of wealth, different breakdowns of net worth and different forms of assets can be significant predictors of child well-being. For example, dichotomous indicators of whether the household has stock, an IRA or bank accounts also seem to matter. This suggests the potential value of thinking of assets quite broadly. If one only considers a narrow definition of wealth and assets, such as net worth or homeownership, it is possible to miss the impact of these other factors on certain child development outcomes

Another interesting result is how these predictors appear to have different effects across racial groups. For African Americans, level of income does not seem to be as good an indicator of child well-being as it is for Whites. In contrast, having stocks or an IRA or some level of assets appears to matter more for African Americans. Based on these results, it could be that the effects of economic inequality on well-being play out very differently across race. These results are magnified in that disparities in wealth are much larger than disparities in income (there is 11.4 times greater median wealth for Whites than for African Americans in this sample). Should these findings on wealth and well-being, especially in the case of African Americans, hold up in future studies, this emerging knowledge base would have major implications for public policy.

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Table 1: Demographic Characteristics: Number (Percent)

	Total (n=2261)
Gender	
Female	1102 (49.0)
Male	1159 (51.0)
Race/Ethnicity	
White	1080 (47.9)
Black	879 (38.9)
Hispanic	164 (7.3)
Asian	49 (2.2)
Native American	13 (.6)
Other	73 (3.3)
Age in 1997	
3-5	713 (31.5)
6-9	868 (38.4)
10-12	680 (30.1)
Number of children in family unit	
1	344 (15.2)
2	1051 (45.5)
3	600 (26.5)
4	163 (7.2)
5 or more	103 (4.6)
Household-type	
Male-head	1599 (70.7)
Female-head	662 (29.3)
Education Level (Head)	
Less than High school	452 (20.1)
High school	821 (36.6)
Some College	502 (22.4)
College Degree	307 (13.7)
Postgraduate Study	164 (7.3)
Passage Comprehension (Raw Score of PCG ability)	Mean (std. deviation): 31.0 (5.4), Range: 4-43
Employment Status (Head)	
Working	1894 (84)
Not Working	362 (16)

Table 2: T-tests by Income Poverty and Wealth

Variable	*Poverty Status*			*Home Ownership*			*Net Worth (with equity)*		
	Not Poor	Poor		Owners	Non-owners		Positive	Zero or Negative	
	Mean (s.d)	Mean (s.d)	t-value	Mean (s.d)	Mean (s.d)	t-value	Mean (s.d)	Mean (s.d)	t-value
Letter-Word Identification	104.9 (18)	95.8 (17)	7.94***	106.4 (18)	98.5 (17)	8.86***	105.0 (18)	97.3 (16)	7.15***
Applied Problem Score	107.3 (17)	97.5 (17)	8.51***	108.8 (17)	100.5 (17)	9.50***	107.6 (17)	99.5 (17)	7.57***
Behavior Problem Index	39.6 (7.8)	42.4 (10)	-6.1***	39.1 (7.6)	41.4 (9.1)	-6.4***	39.7 (7.9)	41.8 (10)	-4.7***

*** $p < .001$

Table 3: Test of how various measures of wealth impact dependent variables

Wealth Construct	Measure	Letter Word Score	Applied Problem Score	Behavior Problem Index
Homeownership	Non-owners (0) Owners(1)	NS	NS	NS
Net Worth: Dichotomous measure	0/neg vs pos (1)	3.65 (1.5)**	NS	NS
Trichotomous measure:				
Middle wealth (dummy+)	$17000-75000	3.33 (1.4)**	3.05 (1.5)	-1.35 (.70)
High wealth (dummy+)	> $75,000	5.22 (1.7)***	7.03 (1.5)***	-2.13 (.65)***
Quintiles (ordinal)	net worth, fifths	1.50 (.51)***	2.07 (.53)***	-.715 (.21)***
Log of net worth	natural log	NS	NS	-1.23 (.43)***
Raw Measure (truncated)	bottom code -1 top code$100,000	.54 (.19)***	.82 (.17)***	-.253 (.07)***
Change in net worth between 1994-1999	Actual change	NS	NS	NS
-With truncated values		.34 (.14)**	.29 (.12)**	-.141 (.05)***
-Dummy--positive change	>0	3.59 (1.2)***	NS	NS
-Dummy—small change	$-2500 to 2500	-4.11 (1.3)***	NS	NS
Specific Asset holdings:	Yes (1), No (0)			
Farm or Business		NS	NS	NS
Cash Accounts		5.98 (1.4)***	7.24 (1.4)***	NS
Debt/Credit Cards		NS	NS	1.33 (.54)**
Other Real Estate		NS	NS	NS
Stocks/IRA		4.90 (1.4)***	6.13 (1.4)***	NS
Transportation/Vehicle		NS	NS	NS
Other Savings or Assets		NS	NS	NS

Note: +Household wealth below the median is excluded category
NS > .01, ** p < .01, *** p < .001

Table 4: Sample Composition, By Race

Variable	Entire Sample			African Americans		Whites	
	N	Mean	s.d.	Mean	s.d.	Mean	s.d.
Dependent Variables							
Letter-Word Identification	1663	103.4	17.8	98.3	16.0	107.8	17.8
Applied Problems	1656	105.7	17.8	98.7	15.9	111.7	16.8
Behavior Problem Index	2230	40.0	8.3	40.6	8.8	39.7	8.0
Independent Variables							
Permanent Income (average of 1994-1997)	2933	$43,578	35,107	$28,337	22,925	$57,416	37,823
Income poverty Status	2931	.18	.38	.31	.46	.06	.23
Homeownership	2936	.57	.50	.39	.49	.73	.44
Middle Wealth (dummy)	2076	.25	.43	.19	.39	.20	.40
High Wealth (dummy)	2076	.25	.43	.08	.27	.39	.49
Net Worth 1994	2076	$92,786	356,231	$23,121	62,450	$149,608	477,127
Change in net worth, 1994-99 (truncated)	1967	$19,722	46,832	$9,055	34,892	$29,139	52,944
Cash Accounts (dummy)	2074	.65	.48	.39	.49	.86	.35
Debt/Credit cards (dummy)	2074	.52	.50	.37	.48	.64	.48
Stocks/IRA (dummy)	2074	.27	.45	.09	.29	.42	.49
Control Variables							
Number of children	2936	2.34	1.07	2.46	1.25	2.18	.84
Female Head of Household	2928	.28	.45	.51	.50	.11	.32
Education of Head	2920	12.8	2.5	12.3	1.8	13.6	2.3
Parental Skills Test	2247	31.0	5.42	28.16	5.32	33.41	4.00
Employment Status of Head	2929	.84	.37	.71	.45	.95	.23

Tablel 5: OLS Regression Model Predicting Letter Word Score

(N=1528)

Independent Variables	Model I	Model II	Model III	Model IV
Child Controls				
Gender	2.05 (1.2)	2.76 (1.1)*	2.68 (1.1)*	2.75 (1.1)*
African-American	-10.62 (1.5)***	-2.37 (2.1)	-1.84 (2.1)	-1.15 (2.3)
Hispanic	-5.65 (4.7)	-.38 (3.4)	-.34 (3.2)	.10 (3.4)
Number of children	-2.30 (.60)***	-2.58 (.51)***	-2.45 (.51)***	-2.39(.51)***
Age of child	1.10 (.19)***	1.15 (.18)***	1.08 (.18)***	1.06 (.18)***
Parental Controls				
Female-headed household		-2.98 (1.9)	-.91 (1.9)	-.26 (1.8)
Education of head		1.58 (.31)***	1.01 (.34)***	.86 (.33)**
Parental Skills Test		.79 (.15)***	.73 (.15)***	.71 (.16)***
Income				
Permanent Income			.80 (.17)***	.68 (.19)***
Wealth				
Middle Wealth (dum)				1.59 (1.5)
High Wealth (dum)				1.68 (2.0)
Cash Accounts				1.39 (1.8)
Debt/Credit Cards				-1.05 (1.3)
Stocks/IRA				1.56 (1.6)
R^2	.10	.21	.22	.23
R^2 Change	--	.11	.01	.01
F-value	18.56***	31.26***	36.34***	23.77***

Note: Coefficients with standard errors in parentheses; analysis weighted by 1997 child level weight.

$* p < .05$, $** p < .01$, $*** p < .001$

Table 6: OLS Regression Model Predicting Letter Word Score (By Race)

Independent Variables	Model A African Americans		Model B Whites		+ p<.10
	Beta	t	Beta	t	* p < .05,
					** p <
Child Controls					.01, ***
Gender	.13***	3.40	.07*	2.04	p < .001
Number of children	-.11**	-2.69	-.13***	-3.97	
Age of child	.08*	1.99	.21***	6.61	
Parental Controls					
Female-headed household	-.06	-1.22	-.04	-1.16	
Education of head	.11**	2.61	.13**	2.92	
Parental Skills Test	.17***	4.00	.13***	3.39	
Income					
Permanent Income	.05	.75	.16***	3.68	
Wealth					
Middle Wealth (dum)	.02	.51	.01	.20	
High Wealth (dum)	-.04	-.80	.04	.93	
Cash Accounts	.03	.58	.00	.00	
Debt/Credit Cards	-.04	-.88	.00	.00	
Stocks/IRA	.13**	2.80	.03	.67	
R^2	.14		.20		
N	633		823		
F-value	8.67***		15.55***		

Table 7: OLS Regression Model Predicting Applied Problem Score

(N=1521)

Independent Variables	Model I	Model II	Model III	Model IV	IV-B
Child Controls					
Gender	-3.31 (1.2)**	-2.79 (1.1)**	-2.84 (1.1)**	-2.64 (1.1)**	-3.92***
African-American	-12.37 (1.2)***	-6.75 (1.5)***	-6.37 (1.5)***	-5.08 (1.5)***	-7.78***
Hispanic	-14.59 (2.5)***	-9.88 (2.0)***	-9.85 (2.1)***	-8.88 (2.4)***	-15.75***
Number of children	-1.55 (.63)*	-1.69 (.58)**	-1.60 (.58)**	-1.45 (.59)**	-1.54**
Age of child	.82 (.18)***	.86 (.18)***	.81 (.17)***	.76 (.17)***	.77***
Interactions					
Gender X Black					6.70***
Gender X Hispanic					9.74**
Parental Controls					
Female-headed household		.61 (1.6)	2.07 (1.7)	3.12 (1.7)	3.16
Education of head		1.74 (.31)***	1.34 (.32)***	1.08 (.30)***	1.13***
Parental Skills Test		.62 (.15)***	.58 (.15)***	.55 (.15)***	.54***
Income					
Permanent Income			.56 (.17)**	.33 (.19)	.33
Wealth					
Middle Wealth (dum)				2.09 (1.5)	2.19
High Wealth (dum)				3.35 (1.6)*	3.34*
Cash Accounts				3.56 (1.4)*	3.75*
Debt/Credit Cards				-3.08 (1.0)**	-2.93**
Stocks/IRA				2.17 (1.4)	2.09
R^2	.12	.21	.22	.24	.24
R^2 Change	--	.09	.01	.02	--
F-value	29.76***	35.79***	33.58***	24.55***	26.36***

Note: Coefficients with standard errors in parentheses; analysis weighted by 1997 child level weight.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 8: OLS Regression Model Predicting Applied Problem Score (By Race)

Independent Variables	Model A African Americans		Model B Whites	
	Beta	t	Beta	t
Child Controls				
Gender	.06+	1.64	-.09**	-2.77
Number of children	-.04	-.84	-.06	-1.62
Age of child	.13***	3.24	.14***	4.46
Parental Controls				
Female-headed household	-.05	-.89	.05	1.37
Education of head	.12**	2.61	.12**	2.81
Parental Skills Test	.15***	3.53	.15***	4.25
Income				
Permanent Income	-.01	-.06	.10**	2.46
Wealth				
Middle Wealth (dummy)	.02	.58	.05	1.30
High Wealth (dummy)	.01	.22	.08+	1.77
Cash Accounts	-.02	-.36	.09**	2.57
Debt/Credit Cards	.01	.13	-.10***	-3.05
Stocks/IRA	.12***	3.13	.03	.86
R^2	.10		.18	
N	628		821	
F-value	5.88***		16.41***	

+ p<.10 * p < .05, ** p < .01, *** p < .001

Table 9: OLS Regression Model Predicting Behavior Problem Index

(N=1958)

Independent Variables	Model I	Model II	Model III	Model IV
Child Controls				
Gender	-.99 (.50)*	-1.09 (.48)*	-1.06 (.47)*	-1.03 (.47)*
African-American	.66 (.55)	-1.67 (.75)*	-1.94 (.76)*	-1.84 (.88)*
Hispanic	-1.93 (1.4)	-2.92 (1.3)*	-3.18 (1.2)*	-2.75 (1.2)*
Number of children	-.01 (.24)	-.11 (.24)	-.09 (.24)	-.13 (.24)
Age of child	.12 (.08)	.12 (.08)	.14 (.08)	.18 (.08)*
Parental Controls				
Female-headed household		2.47 (.81)**	1.80 (.82)*	1.75 (.82)*
Education of head		-.31 (.13)*	-.09 (.14)	-.08 (.14)
Employment Status of Head		-3.04 (1.2)**	-2.83 (1.2)*	-2.75 (1.1)*
Income				
Permanent Income			-.28 (.07)***	-.21 (.08)**
Wealth				
Middle Wealth (dum)				-1.03 (.72)
High Wealth (dum)				-1.83 (.72)*
Cash Accounts				-.04 (.87)
Debt/Credit Cards				1.35 (.53)*
Stocks/IRA				.29 (.64)
R^2	.01	.05	.07	.08
R^2 Change	--	.04	.02	.01
F-value	2.31*	6.01***	7.24***	6.18***

Note: Coefficients with standard errors in parentheses; analysis weighted by 1997 child level weight.
$* \ p < .05, \ ** \ p < .01, \ *** \ p < .001$

Table 10: OLS Regression Model Predicting Behavior Problem Index (By Race)

Independent Variables	Model A African Americans		Model B Whites	
	Beta	t	Beta	t
Child Controls				
Gender	-.11***	-3.25	-.07*	-2.30
Number of children	-.04	-.88	-.02	-.49
Age of child	.07*	2.02	.05+	1.76
Parental Controls				
Female-headed household	.04	.77	.12**	2.98
Education of head	-.05	-1.08	-.05	-1.39
Employment Status of Head	-.10*	-2.09	-.09+	-1.93
Income				
Permanent Income	-.12**	-2.57	-.08*	-2.06
Wealth				
Middle Wealth (dummy)	-.01	-.33	-.02	-.59
High Wealth (dummy)	-.03	-.66	-.10*	-2.41
Cash Accounts	.02	.40	-.04	-.83
Debt/Credit Cards	.05	1.36	.10**	2.94
Stocks/IRA	.01	.29	.05	1.41
R^2	.06		.09	
N	828		1028	
F-value	3.68***		6.52***	

+ p<.10 * p < .05, ** p < .01, *** p < .001