Supplement to

Income Inequality and Class Divides in Parental Investments

published in the *American Sociological Review*

Daniel Schneider
University of California-Berkeley
Department of Sociology

Orestes P. Hastings
Colorado State University
Department of Sociology

Joe LaBriola
University of California-Berkeley
Department of Sociology

Supplement Tables 1–16 present additional results referenced in the paper. Supplement A provides details for the construction of synthetic couples from the 2003–2014 American Time Use survey (ATUS).

Data and code for the analyses in the paper and the supplement are available on the authors' websites.

Supplement Table 1. Relationship between State-Level Top 10% Income Share and Gaps by Household Income Percentile Rank in Financial Investments in Children (CEX 1980-2014)

	(1) Main Model of Investment	(2) with Income Control	(3) Model of Investment/Income	(4) Model of Consumption
Top 10% income share × Income group 0-25p	-558.2***	-517.4***	86.0*	-0.067***
	(68.6)	(67.6)	(36.2)	(0.010)
Top 10% income share × Income group 26-75p	ref.	ref.	ref.	ref.
Top 10% income share × Income group 76-90p	770.4***	583.9***	-174.2**	0.015**
	(93.6)	(95.2)	(49.9)	(0.0045)
Top 10% income share × Income group 91-100p	1502.8***	737.8***	-448.9***	0.046***
	(171.0)	(162.2)	(88.4)	(0.0055)
Top 10% income share	142.5	168.4$^+$	39.0	0.012
	(102.9)	(93.2)	(57.8)	(0.0094)
Income group 0-25p	-74.4***	-11.4*	-26.1***	0.0095***
	(4.07)	(5.47)	(1.62)	(0.00069)
Income group 26-75p	ref.	ref.	ref.	ref.
Income group 76-90p	141.7***	74.1***	38.8***	0.00030
	(7.70)	(7.38)	(2.38)	(0.00040)
Income group 91-100p	263.1***	79.5***	93.7***	0.0034***
	(17.8)	(18.2)	(6.18)	(0.00080)
Income dollars (in thousands)		1.26***		-0.000082***
		(0.091)		(0.0000058)
Individual controls	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	221959	221959	221959	205571

State-clustered standard errors in parentheses
$^+$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 2. Relationship between State-Level Top 10% Income Share and Gaps by Parental Education in Financial Investments in Children (CEX 1980-2014)

	(1) Main Model of Investment	(2) with Income Control	(3) Model of Investment/Income
Top 10% income share × No HS	-294.7***	-226.3**	0.010
	(77.6)	(77.5)	(0.0082)
Top 10% share × HS no BA	ref.	ref.	ref.
Top 10% income share × BA+	731.5***	525.9***	0.015*
	(118.7)	(110.5)	(0.0074)
Top 10% income share	150.0	179.3+	0.018+
	(97.9)	(89.2)	(0.0092)
No HS	-39.0***	-38.0***	-0.0082***
	(7.17)	(6.70)	(0.00039)
HS no BA	ref.	ref.	ref.
BA+	151.8***	144.7***	0.0080***
	(8.27)	(7.84)	(0.00034)
Income dollars (in thousands)		1.35***	-0.000071***
		(0.089)	(0.0000055)
Individual controls	Yes	Yes	Yes
State Controls	Yes	Yes	Yes
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	221959	221959	205571

State-clustered standard errors in parentheses
+ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 3. Relationship between State-Level Top 10% Income Share and Gaps by Household Income Percentile Rank in Investments of Time in Children (AH-TUS 1975-2014)

	Mothers		Fathers	
	(1)	(2)	(3)	(4)
Top 10% income share × Income group 0-25p	771.6$^+$		-31.86	
	(452.5)		(625.7)	
Top 10% income share × Income group 26-75p	ref.		ref.	
Top 10% income share × Income group 76-100p	225.7		207.7	
	(359.6)		(358.8)	
Top 10% income share × no HS		430.5		-138.2
		(985.3)		(566.2)
Top 10% income share × HS no AA		ref.		ref.
Top 10% income share × AA+		10.40		-93.92
		(391.5)		(408.4)
Top 10% income share	138.6	137.1	36.40	39.57
	(299.7)	(299.6)	(259.9)	(258.1)
Income group 0-25p	-12.85$^+$	-12.30$^+$	-10.45	-10.54
	(7.007)	(6.915)	(7.034)	(7.076)
Income group 26-75p	ref.	ref.	ref.	ref.
Income group 76-100p	20.35***	20.29***	9.187*	9.184**
	(5.215)	(5.157)	(3.432)	(3.390)
no HS	-11.68	-11.72	-3.538	-3.548
	(8.560)	(8.521)	(4.135)	(4.155)
HS no AA	ref.	ref.	ref.	ref.
AA+	15.83**	15.79**	12.17***	12.12**
	(5.034)	(4.972)	(3.470)	(3.491)
Minutes in paid work	-0.156***	-0.157***	-0.0963***	-0.0964***
	(0.00734)	(0.00720)	(0.0105)	(0.0106)
Individual Controls	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Observations	33787	33787	23833	23833

State-clustered stndard errors in parentheses
$^+$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 4. Relationship between State-Level Income Inequality and Gaps by Household Income Percentile Rank in Financial Investments in Children, Full Model Results (CEX 1980-2014)

	Main Model of Investment
Gini index × Income group 0-25p	-608.7***
	(74.65)
Gini index × Income group 26-75p	ref.
Gini index × Income group 76-90p	772.3***
	(135.3)
Gini index × Income group 91-100p	1599.1***
	(218.5)
Gini index	335.7+
	(167.2)
Income group 0-25p	-74.39***
	(4.008)
Income group 26-75p	ref.
Income group 76-90p	142.5***
	(7.725)
Income group 91-100p	265.3***
	(18.00)
No HS	ref.
HS no BA	38.50***
	(7.563)
BA+	188.8***
	(11.97)
Household size	-51.14***
	(2.407)
Age	-10.92***
	(1.972)
Age × Age	0.0971***
	(0.0220)
Female white	ref.
Female non-white	-27.63**
	(8.010)
Female not present	37.62***
	(9.091)
Male white	ref.
Male non-white	21.32*
	(9.212)
Male not present	3.728
	(7.419)
Female work hours	3.369***
	(0.140)
Male work hours	1.093***
	(0.152)
State median income (lagged)	0.00311***
	(0.000816)
State unemployment rate (lagged)	0.964
	(2.918)
State percent black	162.1
	(426.0)
State percent foreign born	26.45
	(237.6)
State FE	Yes
Year FE	Yes
Observations	221959

State-clustered standard errors in parentheses   5
+ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 5. Relationship between State-Level Income Inequality and Gaps by Parental Education using Education of Lowest Educated Parent in Financial Investments in Children (CEX 1980-2014)

	(1) Main Model of Investment	(2) with Income Control	(3) Model of Investment/Income
Gini index × No HS	-372.1***	-293.9***	-0.0024
	(64.3)	(59.6)	(0.0057)
Gini index × HS no BA	ref.	ref.	ref.
Gini index × BA+	821.8***	610.4***	0.022*
	(174.3)	(173.2)	(0.0098)
Gini index	353.2*	409.3**	0.031**
	(162.1)	(148.7)	(0.011)
No HS	-62.2***	-59.4***	-0.0078***
	(4.85)	(4.40)	(0.00037)
HS no BA	ref.	ref.	ref.
BA+	168.3***	159.7***	0.0081***
	(10.3)	(9.97)	(0.00043)
Income dollars (in thousands)		1.30***	-0.000074***
		(0.085)	(0.0000055)
Individual controls	Yes	Yes	Yes
State Controls	Yes	Yes	Yes
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	221959	221959	205571

State-clustered standard errors in parentheses
[+] $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 6. Relationship between State-Level Income Inequality and Gaps by Parental Education using Number of College-Completed Parents in Financial Investments in Children (CEX 1980-2014)

	(1) Main Model of Investment	(2) with Income Control	(3) Model of Investment/Income
Gini index × no BA	ref.	ref.	ref.
Gini index × 1 BA	341.8**	204.3+	-0.0027
	(119.2)	(113.1)	(0.0080)
Gini index × 2 BAs	1358.6***	1040.0***	0.029**
	(180.3)	(180.1)	(0.0092)
Gini index	350.4*	404.9**	0.031**
	(155.9)	(143.5)	(0.011)
no BA	ref.	ref.	ref.
1 BA	118.8***	115.2***	0.0078***
	(5.81)	(5.54)	(0.00039)
2 BAs	215.4***	204.1***	0.011***
	(14.1)	(13.7)	(0.00054)
Income dollars (in thousands)		1.27***	-0.000072***
		(0.085)	(0.0000055)
Individual controls	Yes	Yes	Yes
State Controls	Yes	Yes	Yes
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	221959	221959	205571

State-clustered standard errors in parentheses
$^+ p < .1$, $^* p < .05$, $^{**} p < .01$, $^{***} p < .001$

Supplement Table 7. Relationship between State-Level Income Inequality and Gaps by Household Income Percentile Rank in Three Categories of Financial Investments in Children (CEX 1980-2014)

	(1) Main Model (Lessons)	(2) Main Model (School)	(3) Main Model (Childcare)
Gini index × Income group 0-25p	-65.8***	-141.7**	-401.2***
	(15.0)	(43.5)	(45.8)
Gini index × Income group 26-75p	ref.	ref.	ref.
Gini index × Income group 76-90p	102.4***	44.1	625.8***
	(25.2)	(83.4)	(111.8)
Gini index × Income group 91-100p	300.5***	310.3**	988.4***
	(66.2)	(104.3)	(174.1)
Gini index	9.22	-37.6	364.0**
	(34.4)	(79.7)	(105.8)
Income group 0-25p	-4.08***	-17.1***	-53.2***
	(1.05)	(2.11)	(3.38)
Income group 26-75p	ref.	ref.	ref.
Income group 76-90p	18.5***	40.4***	83.6***
	(1.59)	(2.86)	(8.22)
Income group 91-100p	61.3***	95.5***	108.6***
	(4.57)	(5.76)	(13.8)
Individual controls	Yes	Yes	Yes
State Controls	Yes	Yes	Yes
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	221959	221959	221959

State-clustered standard errors in parentheses
$^{+}$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 8. Relationship between State-Level Income Inequality and Gaps by Household Income Percentile Rank in Financial Investments in Children by Age (CEX 1980-2014)

	(1) Age 0-5	(2) Age 6-13	(3) Age 14-17
Gini index × Income group 0-25p	-981.7***	-509.7*	-231.5**
	(100.5)	(197.5)	(84.5)
Gini index × Income group 26-75p	ref.	ref.	ref.
Gini index × Income group 76-90p	1490.0***	298.1	485.9**
	(247.4)	(262.8)	(151.2)
Gini index × Income group 91-100p	2074.4***	1489.1**	1095.4***
	(317.8)	(478.1)	(249.9)
Gini index	617.6**	219.7	-154.1
	(229.4)	(265.9)	(189.5)
Income group 0-25p	-90.8***	-78.8***	-41.2***
	(6.32)	(7.14)	(8.14)
Income group 26-75p	ref.	ref.	ref.
Income group 76-90p	229.5***	109.0***	77.9***
	(15.7)	(15.0)	(10.2)
Income group 91-100p	394.8***	256.1***	177.0***
	(23.2)	(24.3)	(14.0)
Individual controls	Yes	Yes	Yes
State Controls	Yes	Yes	Yes
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	85997	51345	63357

State-clustered standard errors in parentheses
$^+ p < .1$, $^* p < .05$, $^{**} p < .01$, $^{***} p < .001$

Note: Models by age use the age of youngest child in the household. Alternative operationalizations of age categories by age of oldest child in the household, by whether there is any child in the household of that age, and by whether all children in the household are of that age all produce substantively identical results for the models in Supplement Tables 8, 9, 10, and 11. These models are available upon request.

Supplement Table 9. Relationship between State-Level Income Inequality and Gaps by Household Income Percentile Rank in Expenditures on Lessons in Children by Age (CEX 1980-2014)

	(1) Age 0-5	(2) Age 6-13	(3) Age 14-17
Gini index × Income group 0-25p	-18.9	-142.0***	-73.7[+]
	(14.5)	(31.9)	(40.6)
Gini index × Income group 26-75p	ref.	ref.	ref.
Gini index × Income group 76-90p	52.1[+]	182.0**	109.4*
	(27.8)	(62.8)	(48.5)
Gini index × Income group 91-100p	211.3***	433.9**	314.3***
	(56.9)	(131.3)	(85.6)
Gini index	25.9	77.0	-111.6[+]
	(28.6)	(67.0)	(63.1)
Income group 0-25p	-3.37***	-9.27***	-4.11
	(0.79)	(2.36)	(2.53)
Income group 26-75p	ref.	ref.	ref.
Income group 76-90p	12.3***	31.9***	17.1***
	(1.71)	(4.58)	(2.64)
Income group 91-100p	35.1***	94.6***	60.3***
	(3.13)	(9.95)	(7.03)
Individual controls	Yes	Yes	Yes
State Controls	Yes	Yes	Yes
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	85997	51345	63357

State-clustered standard errors in parentheses
[+] $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 10. Relationship between State-Level Income Inequality and Gaps by Household Income Percentile Rank in Expenditures on School in Children by Age (CEX 1980-2014)

	(1) Age 0-5	(2) Age 6-13	(3) Age 14-17
Gini index × Income group 0-25p	-118.0***	-214.8	-125.5[+]
	(30.1)	(137.3)	(71.9)
Gini index × Income group 26-75p	ref.	ref.	ref.
Gini index × Income group 76-90p	-92.9	-6.74	332.7*
	(76.3)	(204.2)	(152.6)
Gini index × Income group 91-100p	21.3	308.1	663.0**
	(173.3)	(345.3)	(224.0)
Gini index	-6.65	-97.4	-85.1
	(68.0)	(194.0)	(153.2)
Income group 0-25p	-6.16*	-33.4***	-33.2***
	(2.31)	(4.69)	(6.59)
Income group 26-75p	ref.	ref.	ref.
Income group 76-90p	14.3***	51.0***	57.3***
	(3.56)	(10.9)	(9.46)
Income group 91-100p	54.4***	101.1***	108.7***
	(5.22)	(16.9)	(10.6)
Individual controls	Yes	Yes	Yes
State Controls	Yes	Yes	Yes
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	85997	51345	63357

State-clustered standard errors in parentheses
[+] $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 11. Relationship between State-Level Income Inequality and Gaps by Household Income Percentile Rank in Expenditures on Childcare in Children by Age (CEX 1980-2014)

	(1) Age 0-5	(2) Age 6-13	(3) Age 14-17
Gini index × Income group 0-25p	-844.8***	-152.9+	-32.3+
	(107.5)	(87.5)	(17.5)
Gini index × Income group 26-75p	ref.	ref.	ref.
Gini index × Income group 76-90p	1530.9***	122.8	43.8
	(269.6)	(111.2)	(39.7)
Gini index × Income group 91-100p	1841.8***	747.1***	118.1**
	(273.0)	(205.4)	(38.1)
Gini index	598.3**	240.1*	42.6
	(186.8)	(116.6)	(38.2)
Income group 0-25p	-81.3***	-36.1***	-3.88***
	(5.22)	(4.38)	(0.79)
Income group 26-75p	ref.	ref.	ref.
Income group 76-90p	202.9***	26.1**	3.49*
	(14.7)	(8.32)	(1.59)
Income group 91-100p	305.3***	60.4***	7.96***
	(20.5)	(11.9)	(2.13)
Individual controls	Yes	Yes	Yes
State Controls	Yes	Yes	Yes
State FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	85997	51345	63357

State-clustered standard errors in parentheses
$^+$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 12. Relationship between State-Level Income Inequality and Class Gaps in Investments of Time in Children (Only Using ATUS 2003-2014)

	Mothers		Fathers	
	(1)	(2)	(3)	(4)
Gini index × Income group 0-25p	32.39		7.761	
	(81.34)		(82.52)	
Gini index × Income group 26-75p	ref.		ref.	
Gini index × Income group 76-90p	-56.63		-87.59	
	(106.0)		(89.11)	
Gini index × Income group 91-100p	20.73		49.57	
	(141.0)		(114.8)	
Gini index × no HS		176.9		215.0$^+$
		(123.5)		(113.1)
Gini index × HS no BA		ref.		ref.
Gini index × BA+		-164.5*		-47.04
		(78.75)		(71.29)
Gini index	62.69	65.94	13.80	14.87
	(48.09)	(48.19)	(58.36)	(58.08)
Income group 0-25p	-9.139***	-9.173***	-6.245**	-6.230**
	(2.227)	(2.228)	(2.159)	(2.160)
Income group 26-75p	ref.	ref.	ref.	ref.
Income group 76-90p	7.148**	7.129**	5.683*	5.756*
	(2.315)	(2.300)	(2.328)	(2.332)
Income group 91-100p	11.21***	11.59***	6.048*	6.475**
	(2.969)	(2.984)	(2.538)	(2.495)
no HS	-15.49***	-15.49***	-10.46***	-10.29***
	(3.044)	(3.055)	(3.059)	(3.075)
HS no BA	ref.	ref.	ref.	ref.
BA+	33.96***	34.05***	17.06***	17.12***
	(1.889)	(1.892)	(1.686)	(1.683)
Minutes in paid work	-0.154***	-0.153***	-0.100***	-0.1000***
	(0.00371)	(0.00371)	(0.00381)	(0.00379)
Individual Controls	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Observations	31242	31242	22106	22106

State-clustered standard errors in parentheses
$^+$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 13. Relationship between State-Level Income Inequality and Class Gaps in Age-Appropriate Childcare Time (AHTUS 1975-2014)

	Mothers		Fathers	
	(1)	(2)	(3)	(4)
Gini index × Income group 0-25p	1140.7		-569.2	
	(1017.6)		(777.0)	
Gini index × Income group 26-75p	ref.		ref.	
Gini index × Income group 76-100p	-701.8		653.2	
	(614.7)		(556.5)	
Gini index × no HS		-248.6		306.7
		(768.0)		(761.5)
Gini index × HS no AA		ref.		ref.
Gini index × AA+		-485.7		231.7
		(628.4)		(538.3)
Gini index	1443.0**	1451.5**	489.3	507.4
	(526.2)	(524.8)	(747.3)	(753.9)
Income group 0-25p	-7.914	-7.199	-13.72**	-13.94**
	(5.702)	(5.689)	(4.916)	(5.039)
Income group 26-75p	ref.	ref.	ref.	ref.
Income group 76-100p	13.09**	13.39**	11.45**	11.56**
	(4.742)	(4.713)	(3.451)	(3.441)
no HS	-14.31*	-14.59**	2.564	2.798
	(5.499)	(5.409)	(3.908)	(3.918)
HS no AA	ref.	ref.	ref.	ref.
AA+	10.54*	10.30*	11.09**	10.85**
	(4.789)	(4.806)	(3.205)	(3.179)
Minutes in paid work	-0.0954***	-0.0955***	-0.0545***	-0.0545***
	(0.00517)	(0.00514)	(0.00818)	(0.00819)
Individual Controls	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Observations	28916	28916	20415	20415

State-clustered standard errors in parentheses
$^{+}$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 14. Relationship between State-Level Income Inequality and Class Gaps in Total Parental Time with Children (Only Using ATUS 2003-2014)

	Mothers		Fathers	
	(1)	(2)	(3)	(4)
Gini index × Income group 0-25p	-128.2		208.5	
	(141.4)		(169.9)	
Gini index × Income group 26-75p	ref.		ref.	
Gini index × Income group 76-90p	-33.93		-168.7	
	(139.7)		(165.6)	
Gini index × Income group 91-100p	-215.9		53.61	
	(206.3)		(217.8)	
Gini index × no HS		50.76		383.5^{+}
		(221.3)		(223.8)
Gini index × HS no BA		ref.		ref.
Gini index × BA+		-38.03		-313.7^{*}
		(120.6)		(143.4)
Gini index	-98.65	-99.03	90.56	94.58
	(92.86)	(92.76)	(129.5)	(129.1)
Income group 0-25p	-2.996	-3.019	-6.713	-6.606
	(4.231)	(4.226)	(4.900)	(4.907)
Income group 26-75p	ref.	ref.	ref.	ref.
Income group 76-90p	-1.203	-1.261	-0.850	-0.866
	(3.577)	(3.539)	(3.723)	(3.707)
Income group 91-100p	-4.536	-5.038	-0.947	-0.0976
	(4.496)	(4.448)	(4.627)	(4.602)
no HS	-6.093	-6.076	-2.259	-1.954
	(5.344)	(5.340)	(5.470)	(5.490)
HS no BA	ref.	ref.	ref.	ref.
BA+	42.79^{***}	42.85^{***}	22.10^{***}	22.29^{***}
	(3.166)	(3.169)	(3.274)	(3.257)
Minutes in paid work	-0.475^{***}	-0.475^{***}	-0.393^{***}	-0.393^{***}
	(0.00635)	(0.00636)	(0.00745)	(0.00743)
Individual Controls	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Observations	31242	31242	22106	22106

State-clustered standard errors in parentheses
$^{+}$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 15. Relationship between State-Level Income Inequality and Class Gaps in Investments of Time in Children, excluding Time in Management (AHTUS 1975-2014)

	Mothers		Fathers	
	(1)	(2)	(3)	(4)
Gini index × Income group 0-25p	1475.3$^+$		181.1	
	(760.1)		(1067.4)	
Gini index × Income group 26-75p	ref.		ref.	
Gini index × Income group 76-100p	339.2		345.8	
	(542.3)		(447.6)	
Gini index × no HS		-238.2		-862.8
		(1393.2)		(1227.8)
Gini index × HS no AA		ref.		ref.
Gini index × AA+		-491.5		-440.4
		(710.2)		(333.5)
Gini index	-91.84	-97.87	-267.1	-257.2
	(592.0)	(592.4)	(673.9)	(674.7)
Income group 0-25p	-7.069	-6.457	-8.627	-8.623
	(5.762)	(5.699)	(6.059)	(6.064)
Income group 26-75p	ref.	ref.	ref.	ref.
Income group 76-100p	10.22*	10.22*	4.753	4.598
	(3.937)	(3.873)	(3.034)	(3.037)
no HS	-6.688	-6.750	0.408	0.212
	(6.292)	(6.207)	(3.687)	(3.770)
HS no AA	ref.	ref.	ref.	ref.
AA+	14.34***	14.23***	9.321**	9.310**
	(3.807)	(3.762)	(2.793)	(2.846)
Minutes in paid work	-0.128***	-0.128***	-0.0697***	-0.0698***
	(0.00593)	(0.00583)	(0.00890)	(0.00892)
Individual Controls	Yes	Yes	Yes	Yes
State Controls	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes
Observations	33787	33787	23833	23833

State-clustered standard errors in parentheses
$^+$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement Table 16. Relationship between State-Level Income Inequality and Class Gaps in Total Parental Investments of Time in Children (ATUS 2003-2014)

	(1)	(2)
Gini index × Income group 0-25p	19.41	
	(48.03)	
Gini index × Income group 26-75p	ref.	
Gini index × Income group 76-90p	-52.31	
	(59.72)	
Gini index × Income group 91-100p	29.45	
	(84.06)	
Gini index × no HS		82.93
		(71.91)
Gini index × HS no BA		ref.
Gini index × BA+		-109.9**
		(37.40)
Gini index	40.20	56.12$^+$
	(34.04)	(29.74)
Income group 0-25p	-8.198***	-6.402***
	(1.427)	(1.138)
Income group 26-75p	ref.	ref.
Income group 76-90p	10.18***	11.63***
	(1.627)	(1.245)
Income group 91-100p	15.68***	20.09***
	(1.984)	(1.495)
no HS	-17.97***	-17.81***
	(2.183)	(1.766)
HS no BA	ref.	ref.
BA+	27.75***	27.47***
	(1.154)	(0.977)
Avg. minutes of work	-0.0901***	-0.0822***
	(0.00238)	(0.00176)
Individual Controls	Yes	Yes
State Controls	Yes	Yes
State FE	Yes	Yes
Observations	53338	53338

State-clustered standard errors in parentheses
$^+$ $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Supplement A: Estimation of Total Parental Investments of Time Received by Children of ATUS Respondents

We estimate total parental investments of time received by children of 2003–2014 American Time Use survey (ATUS) respondents by matching respondents who have coresident partners with other respondents who have coresident partners and by matching respondents who do not have coresident partners with respondents who report having an own child who does not live in their household. We introduce several new variables for our matching procedure, which is similar to the procedure for matching coresident partners in the ATUS used by LaBriola and Schneider (2018). Alongside the age, sex, and race of respondents (and their coresident partners, if applicable), which are defined as in our main models, we operationalize education of the respondent as years of education instead of our categorical measure used in our main model, since we match based on the Mahalanobis distance between respondents (Mahalanobis, 1936), and it is recommended to use continuous rather than categorical variables when using Mahalanobis matching (Stuart, 2010:6). For parental respondents with coresidential partners, we also consider each partner's usual hours worked per week, which are likely to partially reflect any jointly-made decisions about how to allocate child care time within the household, and estimate the relative wages of each partner in the household, which may affect which partner is more likely to specialize in paid work versus unpaid child care. Because we do not observe the wages of parents who are not working, we estimate each parent's wages using the Heckman (1979) two-stage method. First, we use a probit regression to predict the probability that a respondent or partner is employed based on the number of children in the household under the age of 18, age, age squared, years of education, year of survey, and state-level unemployment rate:

$$Prob(D_i = 1|Z_i) = \Phi(Z_i\gamma) + \epsilon, \tag{1}$$

where D_i equals 1 if the respondent (or partner) is employed and 0 if not, and Z_i is the vector of controls listed above. Second, we use a standard transformation of the predicted probabilities of working as an additional variable to predict the individual's wage, alongside the respondents' age, age squared, years of education, year of survey, and state-level unemployment rate:

$$E[w_i|X_i, D_i = 1] = X_i\beta + \rho\sigma_u\lambda(Z\gamma) + u, \tag{2}$$

where w_i is a measure of wages, X_i is a vector of the above controls, ρ is the correlation between the unobserved determinants of the probability to work ϵ and the unobserved determinants of wages u, σ_u is the standard deviation of u, and $\lambda(Z\gamma)$ is the inverse Mills ratio evaluated at $Z\gamma$. We then use these estimated wages (which are given a floor of \$5 per hour) to calculate the estimated relative wages of each partner (one's own estimated wage divided by that of their partner).

We also match on several household-level variables: household income (measured as below the 25th percentile, between the 25th and 75th percentile, between the 75th and 90th percentile, or above the 90th percentile), the number of children under 18 living in the household, and the state-

level Gini index corresponding to year the survey was taken.

We use conceptually similar techniques to match 1) parental respondents (described by R_i) with coresident partners P_i and household-level characterstics H_i to other parental respondents R_j with partners P_j and household-level characteristics H_j to maximize similarity between the vectors (R_i, P_i, H_i) and (P_j, R_j, H_j), as to match 2) parental respondents R_i without coresident partners with respondents R_j who have a child that they do not live with and who are of the opposite sex as R_i. In both cases, we first use exact matching on key covariates, eliminating potential matches that do not share exact values of certain characteristics. Next, we calculate the Mahalanobis distance based on the remaining covariates between matches that remain after the exact matching in step one. For each respondent, we then only consider matches that are either a) within the closest 25% of remaining matches in their respective sample of matched respondents, as measured by the Mahalanobis distance, or b) the closest match for a given respondent, if no matches are within the closest 25% of remaining matches in their respective sample. This is done to ensure that, for respondents who have many potential matches after exact matching, we only consider matches that are relatively good. Finally, for each respondent, we take the mean across matches (weighted by the Mahalanobis distance) of time spent in child care to arrive at an estimate of investments of time in children of the respondent's partner or non-coresident co-parent. This procedure, which combines exact matching with matching on Mahalanobis distance within certain calipers of Mahalanobis distance, is similar to procedures outlined in a recent and well-cited statistical review of matching methods (Stuart, 2010:6).

We explain the procedure in greater (mathematical) detail below. Without loss of generality, we use our procedure to estimate co-parenting time for respondent i from N potential matches. Respondent i can be described by (X_i, Y_i), where X_i represents a vector of key covariates on which we will use exact matching, while Y_i represents a vector of other variables that will be used in calculating the Mahalanobis distance between respondents. (These vectors will be defined in the cases for which respondents do and do not have coresident partners below.) We define the distance D_{ij}^1 between respondents i and j as follows:

$$D_{ij}^1 = \begin{cases} (Y_i - Y_j)'\Sigma^{-1}(Y_i - Y_j) & \text{if } X_i = X_j \text{ AND } i \neq j \\ \infty & \text{else.} \end{cases} \tag{3}$$

$(Y_i - Y_j)'\Sigma^{-1}(Y_i - Y_j)$ is the Mahalanobis distance between vectors Y_i and Y_j, where Σ is the covariance matrix of Y in the entire group of potential matches. The inclusion of the covariance matrix in the Mahalanobis distance accounts for variables having different variances (so that all distances are measured in standard deviations) as well as for the covariance between variables. Note that we assign all respondents j for whom $X_i \neq X_j$ an infinite distance, so that respondents who do not have exact matches on their X vectors will not be considered. We also do not allow respondents to match to themselves.

We then further refine our distance measure by only considering exact matches for which the computed Mahalanobis distance (based on Y) is among the smallest 25% of all exact matches in the

sample, or for which the computed Mahalanobis distance is the smallest for a given respondent if no exact matches have a sufficiently small Mahalanobis distance. We define P_n as the nth percentile of D_{ij}^1 for $D_{ij}^1 \neq \infty$. Then we define D_{ij}^2 as follows:

$$D_{ij}^2 = \begin{cases} (Y_i - Y_j)' \Sigma^{-1} (Y_i - Y_j) & \text{if } X_i = X_j \text{ AND } i \neq j \text{ AND } \left(D_{ij}^1 \leq P_{25} \mid D_{ij}^1 = \min_{\forall n \in N} D_{in}^1 \right) \\ \infty & \text{else.} \end{cases} \quad (4)$$

Finally, we define weights for each pair ij using the inverse of the Mahalanobis distance as suggested by Marshall and Olkin (1960):

$$w_{ij} = (1 + D_{ij}^2)^{-\frac{1}{2}}, \quad (5)$$

and then use these weights to calculate the weighted mean of child care time as an estimate of investments of time in children by the respondent's alter (be it a coresident partner or non-coresident co-parent). Formally, for a given measure of investment of time in children C, we estimate investment of time in children by the respondent's alter C_i^p as follows:

$$C_i^p = \frac{\displaystyle\sum_{n \in N} w_{in} C_n}{\displaystyle\sum_{n \in N} w_{in}}. \quad (6)$$

For parents with coresident partners, the set of variables on which we demand exact matches (X above) between respondents and alters are sex (such that the respondent's partner's sex is the same as the alter's sex, since we want to estimate the respondent's partner's investment of time in children [1]), whether the time diary was filled on a weekend or weekday, household income, and the number of children under 18 living in the household (1, 2, 3, or 4+). Less than one in 200 parents in the ATUS who live with their children and have a coresident partner have no exact matches along these dimensions.

Then, we create the Mahalanobis distance D_{ij}^1 between respondents i and alters j based on age, race, education, usual hours worked, and estimated relative wages of the respondent and their partner (Y_i above) as compared to the alter's partner and alter, respectively. We emphasize that the attributes of respondents' partners are compared to the attributes of alters, whose investment of time in children we want to use to estimate the investments of respondents' partners. But, at the same time, we also seek to match between the attributes of respondents and those of alters' partners.

Calculating D_{ij}^1 allows us to compute D_{ij}^2, w_{ij}, and C_i^p for a given measure of investment of time in children C. Here C_i^p represents our estimate of investments of time in household children

---

[1]This allows for the possibility of matching between respondents in opposite-sex relationships and alters in same-sex relationships, or vice versa. We thus carry the assumption that investment of time in children is most significantly determined by one's own sex and not by that of one's partner.

for respondent i's partner. We define C_i^r as the actual investments of time in children performed by respondent i not in the presence of their partner. We can then calculate total parental investments of time received from the perspective of household children of the respondent as

$$C_i^T = C_i^r + C_i^p. \tag{7}$$

We match respondents living with their own child under the age of 18 who do not have a coresident partner with alters of the opposite sex who have an own child under the age of 18 with whom they do not live. Because we do not assume that single parents and their non-coresident co-parents must share any household characteristics, the only variable we use for exact matching is whether the time diary was filled out on a weekend or not. We then create the Mahalanobis distance D_{ij}^1 between single parents (indexed by i) and non-coresident co-parents of the opposite sex (indexed by j) based on age, race, and education. This procedure assumes that homogamous individuals are more likely to mate, and thus that the closest match for a given single parent is a non-coresident co-parent who is similar to them along these dimensions.

As above, we can use D_{ij}^1 to compute D_{ij}^2, w_{ij}, C_i^p, and C_i^T. Investments of time by non-coresident co-parents is measured as child care spent on non-household children. It cannot be determined whether child care of non-household children is for the respondent's own children, or what amount of child care time is done in the presence of a respondent's non-coresident co-parent. This implies our measure of total investments of time received by children of respondents without coresident partners is likely to be biased upward.

After calculating C_i^T for parents with and without coresident partners, we use this estimate of total parental investments of time received by household children as the dependent variable in Supplement Table 16. This model is identical to the ATUS-only model (Supplement Table 12), except that, for coresident partners, education is measured as the highest level of education of both parents in the household and age is measured as the age of the oldest parent in the household.

References

Heckman, James. 1979. "Sample Selection Bias as a Specification Error." *Econometrica.* 47(1): 153-161.

LaBriola, Joe, and Daniel Schneider. 2018. "Class Inequality in Total Parental Time with Children: Evidence from Synthetic Couples in the ATUS." Paper presented at the Annual Meeting of the Population Association of America, April 27, Denver, CO.

Mahalanobis, Prasanta Chandra. 1936. "On the generalised distance in statistics." *Proceedings of the National Institute of Sciences of India.* 2(1): 49-55.

Marshall, Albert W. and Ingram Olkin. 1960. "Multivariate Chebyshev Inequalities." *The Annals of Mathematical Statistics.* 31(4): 1001-1014.

Stuart, Elizabeth A. 2010. "Matching Methods for Causal Inference: A Review and a Look Forward." *Statistical Science.* 25(1): 1-21.