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SOCIAL, ECONOMIC + ENVIRONMENTAL EQUITY

RACE AND INCOME EQUITY IN CHILDCARE

Examining Time, Costs, and Parental Work Hours

BOSTON COLLEGE SCHOOL OF SOCIAL WORK

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The Boston College School of Social Work Research in Social, Economic and Environmental Equity (RISE^3). RISE^3 brings together researchers from BC and beyond with practitioners, policymakers and those experiencing inequities to better understand the root causes of social, economic and environmental equity, identify the most effective solutions and demonstrate how to implement them in ways that change lives for the better.

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INTRODUCTION

Nearly 25% of children under the age of 5 years in the United States are in some form of organized childcare such as a nursery, preschool, or day care center.[1] While organized childcare is expensive, the decision for a particular arrangement is not entirely about costs. Parents may deliberate on other facets of their lives in making childcare decisions, such as their multiple jobs, different work schedules, availability and relationship with potential family caregivers, ages of children, and the regulations and restrictions of employers, government programs or other child subsidies. Parents frequently make childcare decisions in a relatively short period of time with often limited or unverified information about resources in the neighborhood or workplace, quality of the arrangement, or reasonable alternatives. Childcare decisions are frequently complex because they are not limited to a single point in time, but can occur at multiple moments sometimes with little warning (e.g., parent or child illness, change in work hours or schedules, loss of funding for a childcare facility).[2]

This brief investigates the childcare decisions families have made and how these options are tied to distance, cost, and hours of operation. Since childcare decisions and choices are not static, this report provides a snapshot description about some overall patterns in childcare arrangements. Using three prominent national datasets, we pay particular attention to how race/ethnicity and income are associated with childcare. When possible, we assess how race/ethnicity and income jointly affect childcare.

TRAVELING TO CHILDCARE

Data from the American Time Use Survey[3] in 2015 suggests that households with children under age 4 years spent an average of 16 minutes each day transporting children to/from childcare. Poor households spent more time (24 minutes) travelling to/from childcare than higher income households (14 minutes). However, there were no differences in average time spent travelling to childcare among racial/ethnic groups (Table 1, Appendix A).

When race/ethnicity and income were combined, we found a joint association between the two on travel time to childcare (Figure 1). Among low-income households, Hispanic and African American caregivers spent more time traveling to childcare (33 minutes and 21 minutes, respectively) than white caregivers (11 minutes). In contrast, there were no differences in time spent traveling to childcare for higher income households across racial/ethnic groups. It is worth noting that this analysis, as well as those that follow, could not take into account households where childcare is provided in the home - such as a nanny coming into the home or a grandparent who is already in the home watching the child – as the data did not allow for that distinction.

Two conclusions can be drawn from these analyses. First, income level affects how long it takes caregivers to travel to childcare. Lower-income families spend more time and higher-income families spend less. Second, race/ethnicity impacts how long it takes to get to and from childcare, primarily for low-income families. Among the working poor, if you are white, you spend less time traveling to childcare, and if you are African American or Hispanic, you spend more time.

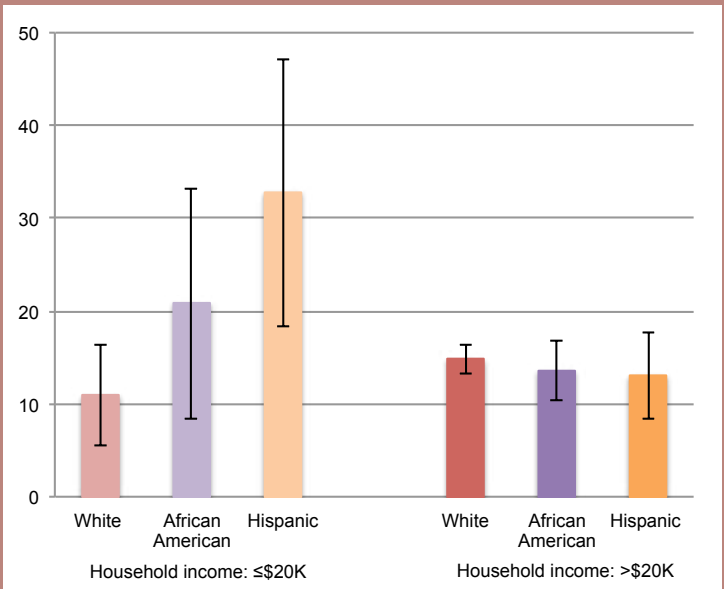

FIGURE 1. Mean time spent traveling to childcare by poverty and race/ethnicity (among those who travel to childcare >1 minute: N=7,538): American Time Use Survey, 2015.

* While there was a significant difference in mean time spent traveling to childcare by racial/ethnic group among lower income households (p=.02), there were no differences among higher income households (p=.6)

DOLLARS SPENT ON CHILDCARE

Using the Consumer Expenditure Survey,[4] we looked at the percentage of household income spent on childcare (including day care centers and babysitting) for U.S. families with children under age 6 years by income level and race/ethnicity (Figure 2). Spending on childcare was remarkably consistent over the fifteen-year period from 2000 through 2014, despite a massive recession beginning in 2008. Among households with a young child, on average about 11% of household expenditures (or $7,075) were spent on childcare (Table 2). Low-income families spent a similar proportion of their budgets on childcare (10%) compared to higher income families (11%). In terms of actual dollars spent, however, low-income families spent nearly a third less in absolute dollars than what higher income households did on childcare each year ($2,625 versus $7,353).

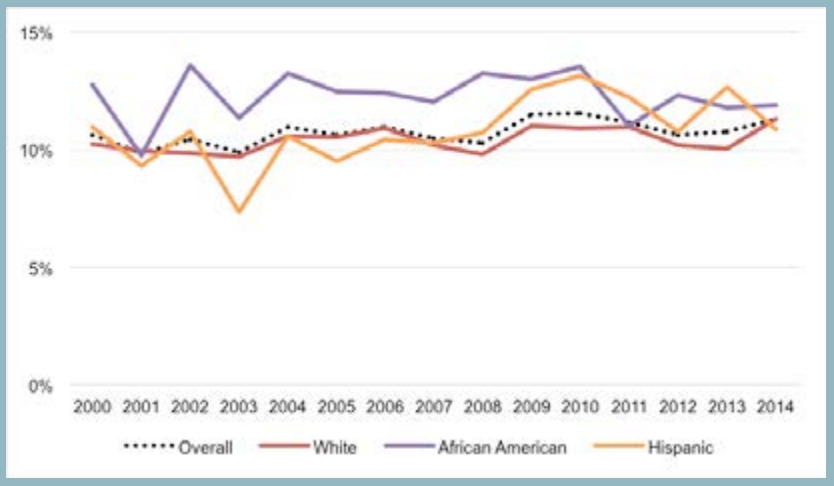

FIGURE 2. Annual childcare expenditure as a proportion of household budget by race/ethnicity (among households who spend >$1 on childcare: N=6,447): Consumer Expenditure Survey, 2000-2014

This analysis does not take into account informal childcare arrangements made with no or non-monetary payments or fully subsidized childcare such as through vouchers, as families spending $0 on childcare were, by definition, excluded from the data. Both low-income and non-English speaking households, however, are more likely to use informal childcare arrangements, as well as are families with infants.[5] While the child age distinction may not matter for this analysis, income levels and race/ethnicity do – which in some cases may be indicated by language spoken in the home.

Race/ethnicity also affected spending on childcare, particularly for white households. On average, African American and Hispanic households spent a larger proportion of their budget on childcare than did white households (12% and 11% versus 10%, respectively) (Figure 2). The absolute dollar amount households spent on childcare also varied. Hispanics ($6,179) had the lowest expenditure on childcare and there were no significant differences in expenditure between African Americans ($6,968) and Whites ($7,255).
We began this brief by framing our analyses not only as considering the impact that race/ethnicity and income each had on various aspects of accessing childcare, but also how the intersection of those factors affected access. For dollars spent on childcare, however, we were unable to analyze their joint association. Small sample sizes did not make it possible to examine whether race/ethnicity and poverty together had their own effect.

ARRANGEMENTS MADE FOR CHILDCARE

Using the National Survey of Early Care and Education (NSECE)[6] in 2012, we looked at which households used standard and nonstandard hours of childcare as well as the associated costs. Standard hours include childcare coverage Monday through Friday from 8am to 6pm. However, not all employment is scheduled during these times and parents may need coverage outside of a typical workday. All other hours, including weekend hours, are considered nonstandard hours.[6] While we focused on households that report paying for childcare, it is important to recognize that parents also use no-cost options for childcare. In our sample, 34% of children under age 4 who were in care had arrangements that cost $0, which includes Head Start, family members and friends, and/or the family received a subsidy so there was no cost. Families with unpaid childcare arrangements were more likely to be low income (53%) than higher income (25%). They were also more likely to be African American (39%) or Hispanic (34%) than white (28%). Accordingly, this analysis may not fully capture how poverty and race/ethnicity affects childcare arrangements.

The remaining analyses focus on the 66% of households who are unable to provide care themselves due to work, school, and/or training, and therefore pay for childcare. Total time spent in childcare did not vary based on the factors we considered in this analysis. Children from these households were in care for a total of 29 hours per week on average. This length of weekly stay in childcare did not vary based on income or race/ethnicity. Low-income and higher-income households alike, as well as African American, Hispanic and white households paying for childcare used on average about 30 hours per week (Table 3).
Cost of childcare did vary, however, but not by race/ethnicity – only by income level. The weekly cost of childcare was less for lower income households ($119) than higher income households ($169). When we examined the combination of household race/ethnicity and income, we found no differences in the total number of hours that children were in childcare.

Since employment does not always fit within an 8am-6pm workday schedule, we examined the number of hours and cost for both standard and nonstandard childcare options. For those families using standard childcare hours, children from higher income household were in care for longer (27 hours) and these families paid more for care ($170) than those from lower income households (24 hours and $119, respectively) (Table 4). In contrast, there were no racial/ethnic differences in the number of hours children were in care or the cost of care. When we examined the combination of household race/ethnicity and income, we found no differences in the number of standard hours that children were in childcare.

Parental employment may extend into nonstandard childcare hours, including weekends, shift work, or overnight care. Children from lower income households were in nonstandard care twice as long each week as children from higher income households (11 versus 5 hours) (Table 5). However, the weekly cost of nonstandard care was greater for higher income families ($175) than lower income families ($112). While African American children were in nonstandard care longer (11 hours) than Hispanic (7 hours) and white (5 hours) children, there were no differences in the weekly cost of nonstandard care.

ARRANGEMENTS MADE FOR CHILDCARE

Taken together, we sought to examine whether both race/ethnicity and poverty mattered for the number of hours that children were in nonstandard care. In short, yes. Figure 3 illustrates that race/ethnicity and poverty are important determinants in whether families use nonstandard hours of childcare. Children from low-income families from all racial/ethnic groups spent more time in nonstandard childcare than children from higher income families. African American children spent more hours in nonstandard childcare than white children among both families in poverty and higher income families, while Hispanic children spent more hours in nonstandard care than white children among higher income families only.

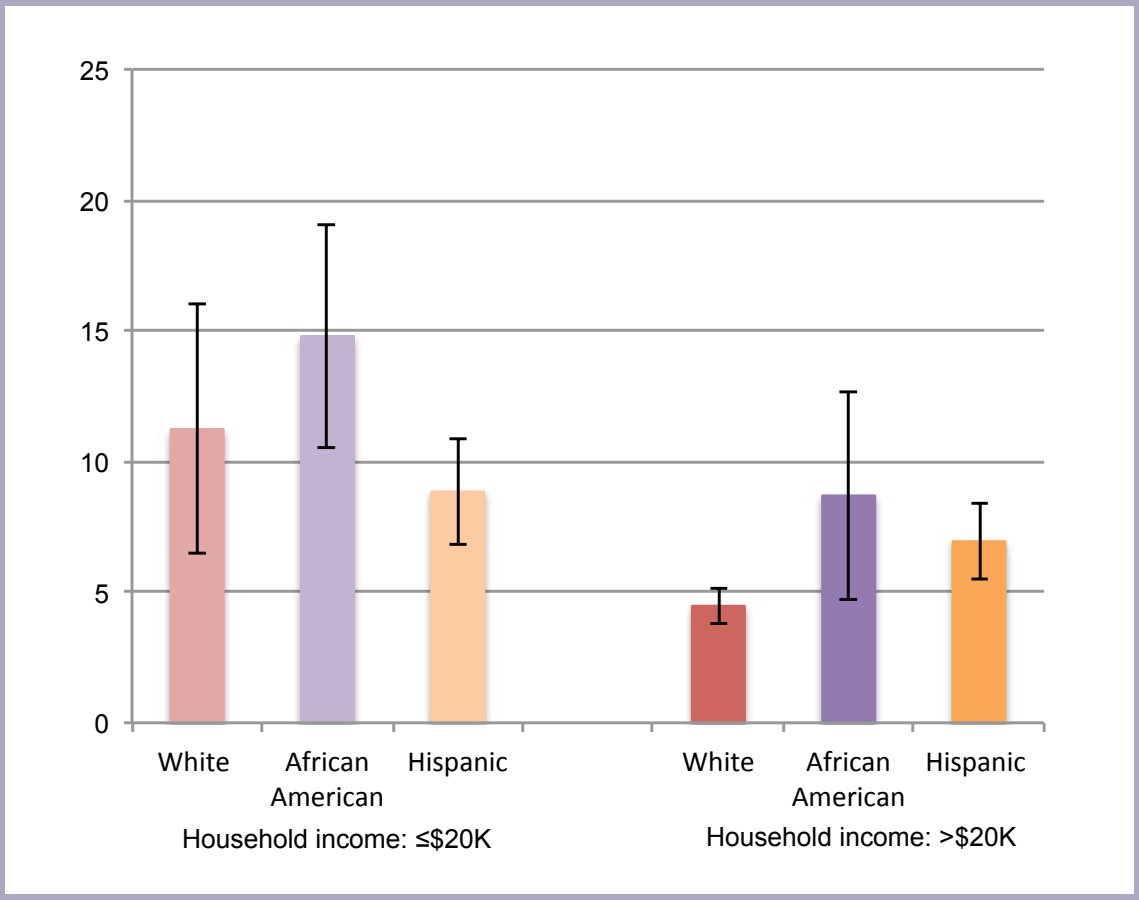

Figure 3 Total number of nonstandard hours in childcare (among households with child under 4 years of age who report >0 hours and >$0: N=511): National Survey of Early Care and Education – Child Public Data, 2012.
* There was a significant difference in mean number of nonstandard hours by racial/ethnic group among lower income (p=.04) and higher income households (p<.001)

ARRANGEMENTS MADE FOR CHILDCARE

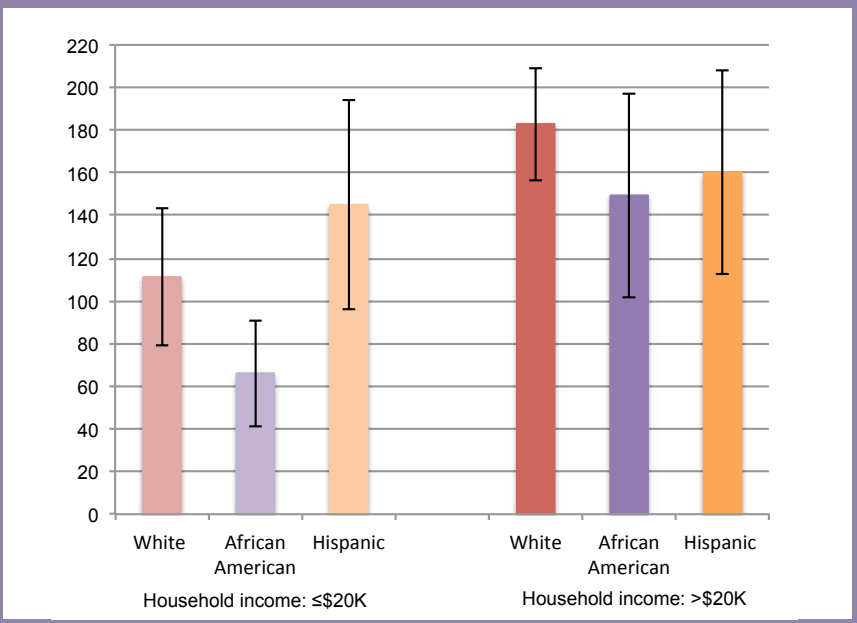

Figure 4. Total weekly cost for non-standard childcare (among households with child under 4 years of age who report >0 hours and >$0: N=511): National Survey of Early Care and Education – Child Public Data, 2012

* While there was a significant difference in mean number of nonstandard hours by racial/ethnic group among lower income households (p=.004), there were no differences among higher income households (p=.4)

When we examined the combination of race/ethnicity and poverty for the cost of nonstandard childcare, we found that despite low-income households using more nonstandard care they spent less than higher income households (Figure 4). Among families in poverty, Hispanic families spent more on nonstandard care than African American and white families. We found no racial/ethnic differences in the weekly cost of nonstandard care among higher income households. We found similar patterns for the total cost of childcare and cost for standard hours as well. In results not shown, low-income, Hispanic families had higher costs for all types of childcare than African American and white families, while there were no racial/ethnic differences in cost among higher income families. These are findings that warrant further investigation.

CONCLUSIONS

Childcare decisions are some of the most critical choices parents can make because they tend to have long-term consequences for the child and parent. Parental employment, particularly maternal employment, has been shown to improve household income and economic opportunities as well as children's social and emotional well-being.[7] But parents need childcare to engage in employment. Childcare types and arrangements have been associated with cognitive development and school readiness, social skills, and emotional and physical health.[8] This brief considered some facets of childcare decisions--especially distance, costs and nonstandard hours. We examined how income and race/ethnicity have common and unique associations with childcare. Because of the limitations in the datasets, such as small sample sizes, it was not possible to fully examine the joint influences of income and race/ethnicity. It was also not within the scope of this brief to examine other meaningful facets of childcare like the quality of care. Despite these constraints, this brief highlights how income and race/ethnicity may shape different dimensions of childcare.

Even acknowledging the constraints of this research, the findings suggest some areas of important consideration for policy makers and nonprofit service providers alike that are interested in equality of opportunity for families. First, it seems clear that low-income families of color are more likely to require childcare services in nonstandard hours than are higher-income families. Therefore, childcare investments via government subsidy, nonprofit service provision and philanthropic dollars should consider supporting increased access to childcare services during nonstandard hours in low-income communities of color. Second, low-income families of color must invest more time into traveling to and from childcare, limiting the availability of that time to do other things. Especially when considered alongside *Are we there yet?: Race, poverty and equity in neighborhood transportation*, the data support arguments that apples-to-apples comparisons of outcomes and investments by families from higher-income, white communities and lower-income communities of color are misleading. If race/ethnicity and income change the inputs to opportunity, the outputs will vary as well. Yet, we often measure the results of a subsidy, for example, as if the playing field factors can be made even by a simple dollar amount.

Third, we need more work to understand the relationship between childcare spending and childcare quality – the results of which should inform government policy for childcare subsidies. Income appears to determine the amount spent on childcare- so much so that racial/ethnic differences in spending smooth out as income rises. Higher income families spend more dollars on childcare than lower-income families. Among low-income families, race/ethnicity further defines the total dollars spent. If dollars spent is a reasonable proxy for childcare quality – which is not entirely clear as family perception of childcare quality tends to be disconnected from actual quality – then low-income families of color are receiving, on average, inferior services, even while we know their children are likely to experience an educational divide in the first place.[9] This would suggest that subsidies must take into account the relationship between cost and quality, and then create opportunities for low-income families of color not only to access childcare, but to access childcare of the same or similar quality to those in higher-income communities.

APPENDIX A

Table 1. Mean time spent traveling to/from childcare by poverty and race/ethnicity (among those who travel >1 minute with children under 4 years of age: N=1,317): American Time Use Survey, 2015

	N	%[a] in dataset	Time[a], minutes	p-value[b]
Poverty – annual household income				.04
≤ $20K	166	12.6%	24.4	
> $20	1151	87.4%	14.3	
Race/ethnicity				.7
White	903	68.5%	14.7	
African American	143	10.9%	15.4	
Hispanic	271	20.6%	17.3	
Total	1,317	100	15.5	

[a] Weighted estimates

[b] Overall difference between groups

Table 2. Mean annual household expenditure on childcare by poverty and race/ethnicity (among households who spend >$1 on childcare with children under 6 years of age: N=6,447): Consumer Expenditure Survey, 2000-2014

	N	%[a] in dataset	%[a] expenditure	p-value[b]	Expenditure[a], dollars	p-value[b]
Poverty – total household expenditure				0.08		<0.001
Below poverty	366	5.9%	10.1%		$2,625.35	
Above poverty	6,081	94.1%	10.8%		$7,352.51	
Race/ethnicity						
White	4,798	74.0%	10.4%		$7,254.56	
African American	777	12.6%	12.3%	<0.001[c]	$6,967.69	0.3[c]
Hispanic	872	13.3%	11.0%	0.03[c]	$6,179.03	<0.001[c]
Total/Mean	6,447	100%	10.7%		$7,074.76	

[a] Weighted estimates

[b] Overall difference between groups

[c] p-value is pairwise comparison vs. White. P-value for pairwise comparison between African American and Hispanic was significant at p ≤ 0.01.

Table 3. Total number of hours in and weekly cost for childcare (among households[c] with child under 4 years of age who report >0 hours and >$0: N=1,129): National Survey of Early Care and Education – Child Public Data, 2012

	N	%[a] in dataset	Time[a], hours	p-value[b]	Cost[a], dollars	p-value[b]
Poverty – annual household income				1.0		<.001
≤ $20K	255	22.6	29.2		$118.52	
> $20	874	77.4	29.3		$169.33	
Race/ethnicity				.8		.2
White	597	52.9	29.0		$168.21	
African American	195	17.3	30.2		$140.36	
Hispanic	337	29.8	29.7		$155.16	
Total	1,129	100	29.3		$162.11	

[a] Weighted estimates

[b] Overall difference between groups

[c] Parent engaged in work-related activities, including work, school, training, and commuting to/from/between these activities.

Table 4. Total number of standard hours in and weekly cost for standard hours of childcare (among households[c] with child under 4 years of age who report >0 hours and >$0: N=1,103): National Survey of Early Care and Education – Child Public Data, 2012

	N	%[a] in dataset	Time[a], hours	p-value[b]	Cost[a], dollars	p-value[b]
Poverty – annual household income				.004		<.001
≤ $20K	252	22.8	23.5		$118.55	
> $20	851	77.2	27.3		$170.36	
Race/ethnicity				.8		.2
White	589	53.4	27.0		$168.88	
African American	189	17.1	25.9		$140.66	
Hispanic	325	29.5	26.4		$156.37	
Total	1103	100	26.8		$162.89	

[a] Weighted estimates

[b] Overall difference between groups

[c] Parent engaged in work-related activities, including work, school, training, and commuting to/from/between these activities

Table 5: Total number of nonstandard hours in and weekly cost for nonstandard hours of childcare (among households[c] with child under 4 years of age who report >0 hours and >$0: N=511): National Survey of Early Care and Education – Child Public Data, 2012 [1].

	N	%[a] in dataset	Time[a], hours	p-value[b]	Cost[a], dollars	p-value[b]
Poverty – annual household income				<.001		<.001
≤ $20K	136	26.6	11.2		$112.22	
> $20	375	73.4	5.4		$174.53	
Race/ethnicity				<.001		.07
White	248	48.5	5.1		$175.44	
African American	89	17.4	10.5		$124.46	
Hispanic	174	34.1	7.3		$156.62	
Total	511	100	6.4		$164.54	

[a] Weighted estimates

[b] Overall difference between groups

[c] Parent engaged in work-related activities, including work, school, training, and commuting to/from/between these activities

APPENDIX B

American Time Use Survey (ATUS)[3]

The ATUS is sponsored by the U.S. Bureau of Labor Statistics and has been conducted by the U.S. Census Bureau annually since 2003. Households that have completed their final month of the Current Population Survey are eligible for the ATUS. Households are selected to participate in the ATUS based on a range of demographic characteristics. One person age 15 years or older is randomly chosen from the household to answer questions about the amount of time he/she spends doing a range of activities, including travel to childcare. Participants are interviewed one time regarding the previous days' activities (4am previous day to 4am interview day) with oversampling for weekends. In 2015, there were nearly 25,000 participants interviewed for the ATUS. Those with children under 4 years of age were asked how long they spent traveling to pick up and drop off child from childcare (referred to as traveling to/from childcare).

We used 2015 ATUS data on 1,317 respondents age 18+ years who reported having a child under age 4 years and traveling at least 1 minute to childcare. This analysis excluded participants who had a young child, but traveled 0 minutes to childcare in the prior day. These data do not capture childcare arrangements in the home, such a grandparent or nanny. The primary respondent reported the socio-demographic characteristics of himself/herself and their household, including race/ethnicity (White, Black, Hispanic). Household poverty status was based on self-reported annual total family income was dichotomized as ≤ $20K versus > $20K. Due to sample size restrictions, respondents identifying as Asian or Other race/ethnicity were excluded. Survey weights were used in all analyses to produce nationally-representative estimates.

Consumer Expenditure Survey (CES)[4]

The CES has been sponsored and conducted by the U.S. Bureau of Labor Statistics (BLS) annually since 1979. The CES is a rotating panel study that randomly selects households from the U.S. civilian population to assess household expenditure. Annually approximately 7,000 new households are randomly selected to participate in the survey over the course of five quarters. The first interview of each household collects demographic data, with the following four consecutive quarter interviews collecting family expenditure over the past three months. Up to 95% of total household expenditures may be identified in the interview panel survey.

We used 2000-2014 CES data to capture the earliest observation containing expenditure information per household (N=6,447 with primary respondent age 18+ years) within the series of four quarterly interviews on household expenditures. At each interview, respondents answered a question asking whether any member of the household paid for preschool or child day care centers and the monthly amount of this expense. A second question asked each respondent if the household had expenses for babysitting, nanny services, or other childcare inside or outside of the respondent's house, as well as the monthly amount of this expense. We included only those households who reported having a child under age 6 years and spending at least $1 on childcare (including both day care centers and babysitting). The BLS computed quarterly expenditure on childcare, and we computed quarterly expenses of early education costs based on monthly expenses during the quarter capturing each household's earliest observation. We summed the early education and childcare expenses, top-coded to four standard deviations above the mean to reduce the role of outliers, and multiplied by four to yield an annual estimate of household early education and childcare expenditure, per BLS guidelines. We then calculated both the total expenditure in real dollars using the national consumer price index (2013-2015=100)[10] and the percentage of early education and childcare expenditure as a proportion of the total household expenditure. The primary respondent reported the socio-demographic characteristics of himself/herself and their household, including race/ethnicity (White, Black, Hispanic). Due to sample size restrictions, households identifying as Asian or Other race/ethnicity were excluded. Household poverty status was derived using total expenditure as a proxy for household income. We computed a dichotomous indicator to measure household income relative to the annual federal poverty level using the US Department of Health and Human Services poverty guidelines: below poverty threshold (below poverty) versus above poverty threshold (above poverty). Replicate population replicate weights were used in all analyses to produce nationally-representative estimates.[11]

National Survey of Early Care and Education (NSECE)[6]

The NSECE has been funded by the Office of Planning, Research and Evaluation in the Administration for Children and Families at the US Department of Health and Human Services to capture the current utilization and availability of early child-

care and education. The NSECE is a set of four, nationally-representative surveys and the latest data available were from the survey conducted in 2012. In this survey, 12,000 interviews were conducted with adults in households with children under age 13 years.

We used 2012 NSECE data on 1,699 respondents age 18+ years who reported having a child under 4 years of age and their child was in at least 1 hour of childcare each week. Subsequent analyses focused only on the 66% of respondents who also spent at least $1 on childcare. The primary respondent reported the socio-demographic characteristics of himself/herself and their household, including race/ethnicity of the child (White, Black, Hispanic). Household poverty status was based on self-reported annual total family income was dichotomized as ≤ $20K versus > $20K. Due to sample size restrictions, respondents identifying as Asian or Other race/ethnicity were excluded. Survey weights were used in all analyses to produce nationally-representative estimates.

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