Appendices to Research Brief: Child Care Utilization in Maryland During the COVID-19 Pandemic

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Appendix A: About the Maryland COVID-19 Parent Survey: Survey Recruitment, Data Collection, and Analytic Strategy

Recruitment

In September of 2020, the Maryland State Department of Education (MSDE) sent letters announcing an online survey available in English and Spanish to all families in the state enrolled in the Child Care Scholarship Program and to all licensed child care providers operating in Maryland. Providers were asked to share the survey link with families. As an incentive, providers were offered Professional Activity Units for providing MSDE with a list of families enrolled in their program, families' email addresses, and proof of attendance; informing families about the aims of the survey; and completion of the survey by at least half of the families they serve. MSDE's biweekly virtual newsletter for licensed child care providers included an announcement about the survey, and the survey link was posted on the Child Care Scholarship Program webpage.

Once the survey was launched, the majority of survey submissions were in English and thus additional measures were taken to recruit Spanish-speaking families. MSDE partnered with the Latino Child Care Association of Maryland, Inc., an organization that works closely with Spanish-speaking child care providers, to enlist their help to reach Spanish-speaking families. Spanish versions of the recruitment letter and flyers containing a link to the survey were emailed to all families in the state enrolled in the Child Care Scholarship Program; however, the response rate to the Spanish version of the survey remained low.

As a result of the recruitment approach, the families that responded to the survey were primarily those who had a child under the age of 13 in child care before the pandemic. A constraint of this approach was that families who were not using child care before the pandemic were unlikely to hear of or complete the survey.

Data collection

The survey was open from 9/4/2020 through 11/9/2020; approximately 3,600 families with young and/or school-age children responded. The questionnaire asked families about their current child care needs, arrangements, and costs, and how their current care arrangement differed from their child care

arrangement before the COVID-19 pandemic for infants, toddlers, and preschoolers, or between the summer and 2020-2021 school year for school-age children.

Individuals who completed the survey were entered into a raffle to earn one of two $50 gift cards to Amazon or Walmart.

Analytic strategy

Descriptive analyses at the child and household level explored patterns of child care needs, arrangements, and costs. Subgroup analyses examined differences by scholarship receipt and respondent race to investigate whether any disparities exist in access to child care or child care expenses. In addition, we conducted analyses by race among a subsample of respondents who reported a household income less than $50,000 to further understand the racial differences observed. In our subgroup analyses, we reported differences where statistically significant (at $p<.05$). We did not adjust our p-values for multiple comparisons because we had relatively small samples, especially among the sample of households with an income less than $50,000, and did not want to inflate the odds of Type II error (false negatives) by being overly conservative in our interpretations.[i] We did not report findings for subgroups when the analytic sample of that subgroup was lower than 50. Although we did not need to suppress any subgroup findings, our policy is to do so if there are fewer than five respondents represented in a single cell.[ii]

Appendix B: Sample Size and Demographics Tables

Table 1. Sample sizes of respondents and their children

Sample/Subsample	Sample Size
Respondents	
All respondents	3,634
Respondents with at least one young child in their household in child care before the pandemic	2,155
Respondents with at least one school-age child in their household	2,089
Children	
Young children in child care before the pandemic	2,606
School-age children	2,934

Note. Because some respondents reported information about multiple children, there are more children than respondents in each age bracket.

Table 2. Demographic characteristics of survey respondents[1]

Demographic Characteristic	Number of Respondents (% of Respondents)	% of Maryland Population
County of Residence (n=2,812) [iii]		
Baltimore	490 (17%)	14%
Montgomery	477 (17%)	17%
Prince George's	385 (14%)	15%
Baltimore City	298 (11%)	10%
Anne Arundel	188 (7%)	10%
Harford	156 (6%)	4%
Frederick	149 (5%)	4%
Howard	108 (4%)	5%
Other	561 (20%)	21%
Household Income (n=3,239) [iv]		
Less than $10,000	360 (11%)	5%
$10,000 - $49,999	1,434 (44%)	25%
$50,000 - $99,999	567 (18%)	29%
$100,000 - $149,999	412 (13%)	19%
$150,000 or more	466 (14%)	23%
Scholarship Receipt (n=3,619)		
Yes, received scholarship	2,026 (56%)	Not available
No, did not receive scholarship	1,488 (41%)	Not available
Not sure if received scholarship	105 (3%)	Not available
Race (n=3,223)[2,3]		
Asian	69 (2%)	6%
Black/African American	1,393 (43%)	30%
White	1,260 (39%)	59%
Multiracial	170 (5%)	3%
Ethnicity (n=3,223)		
Hispanic/Latino	293 (9%)	10%
Household Language (n=3,254[v]**)**		
English only	2,912 (90%)	81%
Spanish only	51 (2%)	Not available

[1] Due to our recruitment approach which resulted in an overrepresentation of scholarship recipients in our sample, caution should be taken when interpreting comparisons between the sample of survey respondents and the state population. While it would have been optimal to compare the characteristics of our sample with those of scholarship recipients in Maryland as a whole, we could not take this approach due to limited publicly available data on characteristics such as county of residence and change in employment status for all scholarship recipients statewide.

[2] Due to small sample sizes (n<50), percentages of respondents who identified as American Indian/Alaskan Native, Native Hawaiian or Pacific Islander, or "other" are not reported. Because of this, categories sum to less than 100%.

[3] Percentages of individuals in each racial group (e.g., Asian, Black/African American) in Maryland state data include those who do and do not identify as Hispanic. In our sample, race and ethnicity is a mutually exclusive categorical variable. Percentages of individuals in each racial group include only those who did *not* identify as Hispanic, and those in the Hispanic group could have identified as any race.

Table 2, continued

Demographic Characteristic	Number of Respondents (% of Respondents)	% of Maryland Population
English and Spanish	138 (4%)	Not available
Other	153 (5%)	Not available
Essential Worker in Household (n=3,606)		
Yes	2,599 (72%)	40%[vi]
No	1,007 (28%)	60%
Negative Change in Employment Status (n=3,622)		
Yes	1,436 (40%)	Not available
No	2,186 (60%)	Not available

Note: 'n' indicates the number of respondents who provided information for each demographic characteristic.
Note: Category percentages may sum to 99% or 101% due to rounding.
Note: State household income and household language statistics are from the United States Census Bureau Maryland.
QuickFacts. County of residence of the Maryland population is the US Census' projected percentages.

Table 3. Household income, scholarship receipt, and change in employment status by respondent race

Race	Household Income (n=3,195)					Scholarship Receipt (n=3,213)	Change in Employment Status (n=3,217)
	Less than $10,000	$10,000 - $49,999	$50,000 - $99,999	$100,000 - $149,999	$150,000 or higher	Has child care scholarship	Adult in household working fewer hours, was furloughed, lost a job, or quit a job
Asian	6 (9%)	18 (26%)	14 (20%)	11 (16%)	20 (29%)	15 (22%)	26 (38%)
Black	257 (19%)	849 (61%)	192 (14%)	44 (3%)	41 (3%)	831 (60%)	637 (46%)
Hispanic/Latino	33 (12%)	146 (51%)	59 (21%)	25 (9%)	24 (9%)	125 (43%)	142 (49%)
White	36 (3%)	311 (25%)	258 (21%)	298 (24%)	345 (28%)	272 (22%)	356 (28%)
Multiracial	16 (9%)	69 (41%)	31 (18%)	22 (13%)	32 (19%)	65 (38%)	76 (45%)

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References

[i] Perneger, T. V. (1998). What's wrong with Bonferroni adjustments. *BMJ, 316*, 1236-1238. doi: 10.1136/bmj.316.7139.1236

[ii] National Center for Education Statistics. (2010). *Statistical Methods for Protecting Personally Identifiable Information in Aggregate Reporting.* https://nces.ed.gov/pubs2011/2011603.pdf

[iii] Maryland Manual On-line (2010). Maryland Population: Population Growth Rates (projections for 2020). https://msa.maryland.gov/msa/mdmanual/01glance/html/pop.html

[iv] U.S. Census Bureau (2019). Maryland QuickFacts. https://www.census.gov/quickfacts/MD

[v] Ibid.

[vi] United Way of the National Capital Area. US States with the Most Essential Workers. https://unitedwaynca.org/stories/us-states-essential-workers/