

# EVALUATING THE ROLE OF CAMPUS CHILD CARE IN STUDENT PARENT SUCCESS

## Challenges and Opportunities for Rigorous Study

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## RESEARCH HIGHLIGHTS

- Access to affordable child care—especially services provided on college campuses—may be linked to improved persistence and completion among college students with children (DeMario 2017; Reichlin Cruse et al. 2019). No causal evidence of this relationship exists, in part due to the challenges of conducting a rigorous study using available higher education data and the nature of operations at campus child care centers serving student parent families.
- Nearly four million U.S. undergraduate students—or 22 percent—are raising children while attending a postsecondary education program, according to the most recent data (IWPR and Ascend at the Aspen Institute 2019). More than half (53 percent) of student parents are raising a child under age six.
- Over the last decade, the share of public academic institutions offering child care services has declined by 14 percentage points—from 59 percent in 2004 to 45 percent in 2019.<sup>1</sup> The steepest decline—nearly 17 percentage points—has taken place at community colleges, where the largest share of student parents are enrolled.

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<sup>1</sup> Authors' analysis of data from the U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics Surveys (2004-2019).

- Despite the potential for campus child care to play a critical role in student parents' ability to enroll in and complete college degrees, challenges exist to evaluating the impact of campus child care on student outcomes. These challenges include: (1) the complexity and diversity of services provided across campus child care centers; (2) the low rates of slot turnover and the uneven processes of assigning open slots to families from a wait list; and (3) the lack of data linking student parent postsecondary success to child care use.
- To rigorously study how access to campus child care may affect students' academic outcomes, the authors offer the following recommendations:
  - **Campus child care centers:** Establish lottery systems to fill slots when opening new campus child care centers or when opening new classrooms at an existing center;
  - **Institutions:** Regularly collect and analyze data on the parental status of all enrolled students and track the academic outcomes of students served by campus child care centers (as well as those on the wait list) to lend insight into the scope of demand for campus-based services; and
  - **States:** Require institutions to regularly collect and report on students' parental status and the age of their children; create opportunities for linking and accessing data across state systems; and direct state funding to the campus child care system to expand services for student parents in need of child care.

## ABOUT THE AUTHORS

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# INTRODUCTION

The COVID-19 pandemic brought the care crisis in the United States to the fore. Unprecedented closures of child care programs throughout 2020 placed a disproportionate burden on families, and mothers in particular (Heggeness and Fields 2020). Young women, for example, were more likely than their male counterparts to identify care responsibilities as the main reason for not working for pay during the pandemic (Sun 2021). For parents enrolled in college or considering postsecondary enrollment at the time of the pandemic, the loss of child care services had an amplified effect—threatening to derail their education goals. Compared with peers without caregiving demands, parents were more likely to reconsider or even pause their education plans during the pandemic, with child care concerns playing a major role in those decisions (Rothwell 2021).

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Postsecondary attainment could uplift the economic wellbeing of families hard-hit by COVID-19. And, increasing opportunities for reskilling and upskilling is a catalyst for reengaging unemployed workers, many of whom are mothers (Education Commission of the States 2020; Hegewisch 2021; Loprest, Spaulding, and Hector 2020; Reichlin Cruse et al. 2019; Strada Center for Consumer Insights 2020). Research prior to the pandemic shows that access to affordable child care—especially services provided on college campuses—may be linked to improved persistence and completion among college students with children (DeMario 2017; Reichlin Cruse et al. 2019). No causal evidence of this relationship exists, in part due to the challenges of conducting a rigorous study

using available higher education data and the nature of operations at campus child care centers serving student parent families. To ensure student parents are wholly supported in their educational pathways, research is needed to understand the link between convenient, affordable child care access and student parent academic outcomes.

This brief draws on a series of interviews with campus child care directors and a review of data and relevant literature. It presents information for academic and institutional researchers, campus child care practitioners, college and university staff and administrators, and other stakeholders interested in understanding the availability and importance of campus child care services for student parent success.

The brief makes the case for the importance of building rigorous evidence of the effect of campus child care access on student outcomes and discusses the factors related to campus child care center operations and institutional data collection that can, at times, undermine the ability to rigorously study the effectiveness of child care supports for student parents. The motivation for this work was to understand campus child care services, capacity, demand, and the processes used to fill open slots in order to assess the feasibility of a randomized control trial—the gold standard in evaluation—that could assess the impact of campus child care usage on student outcomes. The authors' findings are discussed in the context of evidence-based decision making to articulate the challenges and opportunities for conducting rigorous study. Given the timing of the feasibility study, the brief also provides a snapshot of campus child care providers' experiences during COVID-19. It concludes with recommendations to improve conditions for rigorous research on the role of campus child care in the outcomes of students with children.

## Data and Methods

This briefing paper draws from a review of data from the 2015-16 National Postsecondary Student Aid Study, the 2012-2017 Beginning Postsecondary Student Longitudinal Study, and the 2004-2019 Integrated Postsecondary Education Data System. These data include nationally representative information regarding the characteristics and educational outcomes of student parents enrolled in postsecondary education, as well as data on the presence of child care centers on college campuses.

This brief also summarizes findings from a series of interviews with campus child care directors conducted by the Institute for Women's Policy Research (IWPR) and Insight Policy Research (Insight). From late 2019 through early 2021, IWPR and Insight researchers conducted interviews with campus child care directors and staff as a part of a feasibility study to explore possible designs of a rigorous evaluation of the effect of campus child care access on student parent academic outcomes. Interviews were semi-structured, conducted over phone and Zoom, with questions focused on center operations and capacity, services provided to student parents, wait list processes, demand for care, data collection, and the impact of COVID-19 on service provision and demand. Centers were identified for interviews based on the presence of a Child Care Access Means Parents in School (CCAMPIS) grant; the potential presence of institutional data on student parents (which would be important for the implementation of an evaluation study); the authors' knowledge of centers providing services to student parents; and through a snowball approach.<sup>2</sup> Interviews were focused more heavily on community colleges as they tend to serve more student parents than four-year institutions (IWPR and Ascend at the Aspen Institute 2019)

Researchers spoke at least once with campus child care center directors and staff across 18 institutions (Table 1). Fourteen of the institutions (78 percent) represented in the interviews are public two-year institutions, or community colleges, and four are public four-year institutions. Nine institutions (50 percent) are located in Washington State, where the State Board of Community and Technical Colleges collects data on students' parent status via registration forms (Gault, Holtzman, and Reichlin Cruse 2020). The other half are located in nine other states around the country. Centers at 16 of the 18 institutions (89 percent) have a CCAMPIS grant. Seven of the centers interviewed (39 percent) offer Head Start and/or Early Head Start services.

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<sup>2</sup> CCAMPIS grants are awarded by the U.S. Department of Education to help subsidize child care access for students with children who are Pell-eligible. CCAMPIS grantees indicate the presence of dedicated services for student parents and the potential for better data on students with children, which would be important for the implementation of an evaluation study. For more information about CCAMPIS, visit <https://www2.ed.gov/programs/campisp/index.html>.

**TABLE 1. Institutions Represented by Campus Child Care Director Interviews**

Name of Institution	Institution Type	State	Total Campus Centers	Grant Recipient	Head Start Provider
Central Georgia Technical College	2-year	GA	2	Y	N
Clark College	2-year	WA	1	Y	N
Edmonds Community College	2-year	WA	1	Y	N
Evergreen College	2-year	WA	1	Y	N
Frederick Community College	2-year	MD	1	Y	N
Lane Community College	2-year	WA	1	Y	Y
Mesa Community College	2-year	AZ	1	Y	N
Miami Dade College	2-year	FL	1	Y	N
Monroe Community College	2-year	NY	1	Y	N
Mt. Wachusett Community College	2-year	MA	1	Y	Y
Olympic Community College	2-year	WA	1	Y	Y
Pennsylvania State University	4-year	PA	2	Y	N
Spokane Community College	2-year	WA	1	N	Y
Spokane Falls Community College	2-year	WA	1	N	Y
Tacoma Community College	2-year	WA	1	Y	Y
University of Utah	4-year	UT	5 <sup>3</sup>	Y	Y
University of Washington	4-year	WA	4 <sup>4</sup>	Y	N
University of Wisconsin-Madison	4-year	WI	3 <sup>5</sup>	Y	N

### Student Parents and Their Child Care Needs

Nearly four million U.S. undergraduate students—or 22 percent of all undergraduate students—are raising children while attending a postsecondary education program, as of the 2015-2016 academic year (IWPR and Ascend at the Aspen Institute 2019).<sup>6</sup> Most student parents are mothers (70 percent) and over two in five (43 percent) of all student parents are single mothers. A majority of student parents are students of color (53 percent), with Black and Indigenous women in college being particularly likely to be parenting compared with other women and men in college. The largest share of student parents (42 percent) is enrolled at community colleges. Another 18 percent attend for-profit institutions, 17 percent attend public four-year institutions, 13 percent attend private non-profit institutions, and 10 percent attend other institution types or more than one institution (IWPR and Ascend at the Aspen Institute 2019).<sup>7</sup>

<sup>4</sup> Two of the five campus child care centers at the University of Utah are focused on serving student parents.

<sup>5</sup> University of Washington has two additional centers located on its medical center campuses that are not operated by the institution.

<sup>6</sup> University of Wisconsin (UW) Madison also has an affiliated child care center that provides hourly and back-up child care services, with priority given to UW-Madison families, including student families.

<sup>7</sup> Data from the 2015-2016 National Postsecondary Student Aid Survey (NPSAS) are the most recent available from the U.S. Department of Education National Center for Education Statistics. NPSAS data are released every four years.

<sup>8</sup> Other institution types include public less-than-two-year and private nonprofit less-than-four-year institutions.

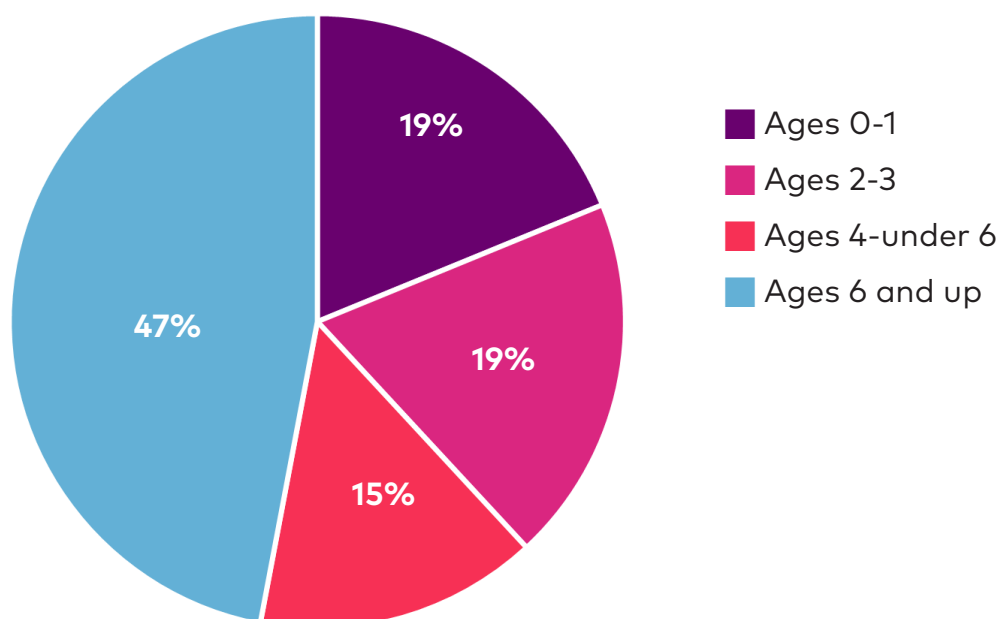


More than half (53 percent) of student parents are raising a child under age six.

More than half (53 percent) of student parents are raising a child under age six. Similar shares of student parents—nearly 20 percent each—have infants ages 0 to 1 and toddlers ages 2 to 3; and 15 percent have a youngest child aged 4 to 6 (Figure 1). The large majority of student parents have one or two children (nearly 80 percent; IWPR and Ascend at the Aspen Institute 2019).

### FIGURE 1. Over Half of Student Parents Have Children Under Age Six, and Nearly 40 Percent Have an Infant or Toddler

Share of Student Parents by Age of Youngest Child, 2015-16



**Source:** Institute for Women’s Policy Research analysis of data from the U.S. Department of Education, National Center for Education Statistics, 2015-16 National Postsecondary Student Aid Study (NPSAS:16).

Student parents often face numerous demands on their time. Most student parents (55 percent) work 25 hours or more per week, excluding work study, and 52 percent are enrolled full time or a mix of full and part time (IWPR 2021a). Student parents also spend significant time caring for their families and their households. Analysis of data from the American Time Use Survey, for example, finds that single mothers enrolled in college full time spend an average of nine hours per day on care and housework (Reichlin Cruse et al. 2018). The COVID-19 pandemic likely escalated the amount of time student parents spent on dependent care. Available evidence suggests that student parents were more likely to pause enrollment plans during the pandemic, mostly due to child care concerns, compared with non-parents (Rothwell 2021).

In addition to greater demands on their time, students with children face higher non-tuition costs than their peers without children. A Georgetown Center for Policy and Inequality study using 2014-2018 Consumer Expenditure Survey data found that older student parents (those age 30 and above) spend an average of nearly \$6,000 more annually on non-tuition costs than comparable students without children (Palacios et al. 2021). Student parents spend more on food, clothing and personal care, utilities, housing, and transportation than their childless peers. Another study of the net price of college for student parents in California found that, on average, student parents pay a premium

of nearly \$7,600 more for college per child than do students without children (California Competes 2020).

Student parents also have fewer financial resources to cover non-tuition expenses than students without children. Over two-thirds of parenting students (68 percent) have incomes below 200 percent of the federal poverty threshold, compared with 49 percent of non-parenting students (IWPR 2021a). A 2019 survey by the Hope Center for College, Community, and Justice of over 23,000 students with children from over 200 two- and four-year institutions underscores this financial insecurity, finding that 53 percent of respondents reported food insecurity and 68 percent reported facing housing insecurity (Goldrick-Rab, Welton, and Coca 2020).

## Student Parents' Access to Child Care

Qualitative evidence suggests that, to help balance the demands of college, work, and family, securing affordable and reliable child care is important for student parents to enroll in college or remain enrolled (Contreras-Mendez and Reichlin Cruse 2021). The majority of families in the United States, however, lack access to affordable child care, with more than half of families living in "child care deserts" (Malik et al. 2018). On average, U.S. families pay approximately \$10,000 annually for center-based care for an infant, toddler, or four-year-old.<sup>8</sup> As of 2018, the average cost of full-time, center-based child care was more expensive than annual tuition and fees at public four-year institutions in 31 states (Child Care Aware of America 2019). According to the 2019 survey by the Hope Center, 62 percent of all respondents, and 70 percent of single student parents, shared that their child care costs were unaffordable (Goldrick-Rab, Welton, and Coca 2020).

Over the last decade, the share of public academic institutions offering child care services has declined by 14 percentage points. The steepest decline has taken place at community colleges, where the largest share of student parents are enrolled.

In addition, over the last decade, the share of public academic institutions offering child care services has declined by 14 percentage points—from 59 percent in 2004 to 45 percent in 2019 (Figure 2). The steepest decline—nearly 17 percentage points—has taken place at community colleges, where the largest share of student parents are enrolled (IWPR and Ascend at the Aspen Institute 2019). Public four-year institutions have seen a decline of roughly 10 percentage points. Further analysis shows that the differences in the declines appear to widen over time (Table A1). By the end of the period, public two-year institutions report significantly

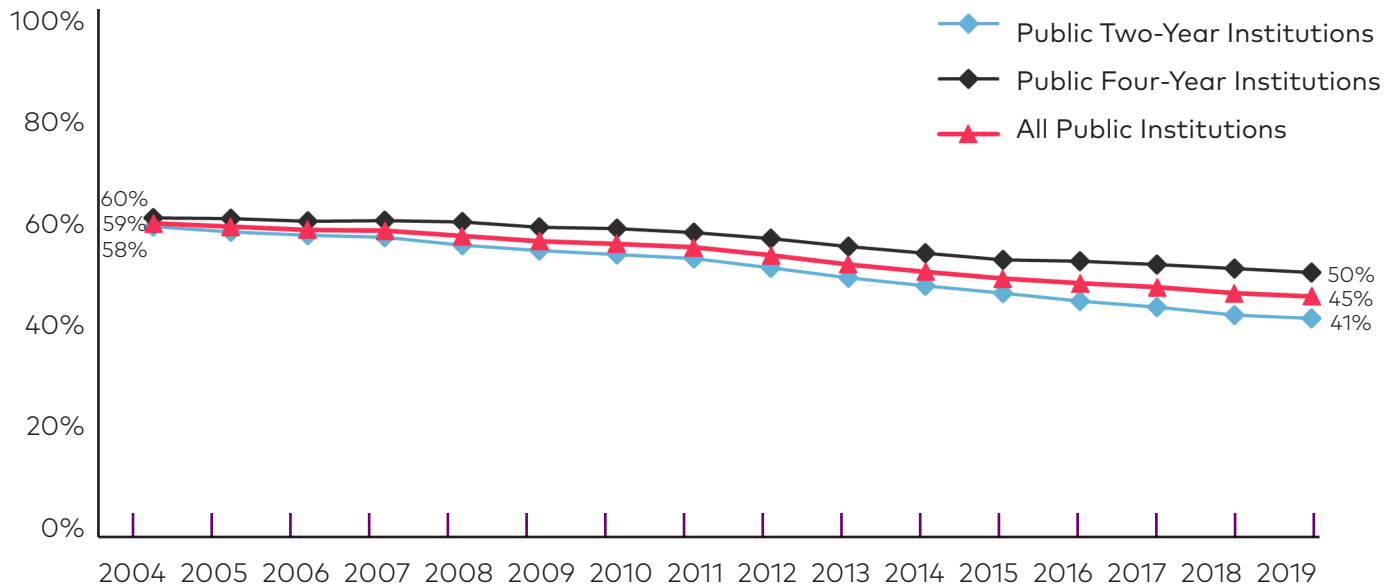
fewer child care service offerings compared with public four-year institutions (41 percent compared with 50 percent respectively, a difference of nine percentage points).

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<sup>8</sup> Estimate of national average annual cost of center-based care across age groups from IWPR analysis of data from Child Care Aware of America (2019).

## FIGURE 2. Campus Child Care Has Declined by Nearly 25% Since 2004

Trend in the Share of Non-Profit, Degree-Granting Institutions with On-Campus Child Care Centers, by Institution Type, 2004-2019



**Note:** Includes 50 U.S. states, the District of Columbia, U.S. Service academies, and other U.S. jurisdictions.

**Source:** Authors' analysis of data from the U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics Surveys (2004-2019).

## The Effect of Child Care Access on Student Parents' Academic Outcomes: Reviewing the Evidence

The challenges that student parents face to college entry and completion can make it harder for them to complete college than students who are not parents. Just 18 percent of student parents earn an associate's or bachelor's degree within six years of enrolling in college, compared with over half (54 percent) of dependent students and 27 percent of independent students without children (IWPR 2021b).<sup>9</sup>

Evidence suggests that access to affordable child care can affect student parents' persistence and completion rates. For example, according to the 2021 Community College Survey of Student Engagement (CCSSE), roughly one quarter of community college students surveyed report spending 21 hours or more each week providing care to dependents, including parents, children, spouses, or other dependents. And nearly 30 percent report that dependent caregiving may cause them to withdraw from school (CCSSE 2021).

<sup>9</sup> Dependent students are evaluated for financial aid purposes based on both their and their parents' incomes. Independent students are evaluated based on their own and/or their spouses' income and have one or more of the following characteristics: at least 24 years old; married; a graduate or professional student; a veteran; a member of the armed forces; an orphan, in foster care, or a dependent or ward of the court since age 13; has legal dependents other than a spouse; an emancipated minor; or homeless or at risk of becoming homeless (Federal Student Aid n.d.).



A 2015 survey of over 550 community college women students in Mississippi found that nearly one-in-four interrupted their college careers due to insufficient child care. Of respondents with dependent children, 42 percent said that having more stable or affordable care would help them stay in school (Hess et al. 2014).

According to the 2019 Hope Center survey, 56 percent of student parents using child care reported missing one or more days of class during the previous semester due to their child care arrangements, eight percent of whom missed five or more days (Goldrick-Rab, Welton, and Coca 2020). Two in five respondents reported that they would benefit from access to affordable, full-day on-campus child care.

While rigorous studies of the association between child care access and student parent outcomes are scant, analysis of eight years (2006-2014) of data from Monroe Community College (MCC) in Rochester, New York, suggests that students who used the campus child care center had greater retention and completion rates relative to peers who did not (DeMario 2017; Reichlin Cruse et al. 2019).

In addition, evidence from the *CareerAdvance* program by the Community Action Program of Tulsa County (CAP Tulsa) shows that parental participation in a two-generation workforce-focused model—which provides job training to parents in in-demand sectors alongside quality early childhood education for their children via Head Start—improved psychological wellbeing and social capital among parents. Treatment parents also had higher rates of certification and employment after one year than the comparison group of parents whose children were also enrolled in Head Start (Chase-Lansdale et al. 2019).

## UNDERSTANDING CAMPUS-BASED CHILD CARE SERVICES

Despite the potential for campus child care to play a critical role in student parents' ability to enroll and complete college degrees, evaluating the impact of campus child care on student outcomes is difficult. Challenges include:

- **The complexity and diversity of services provided across campus child care centers.** Child care centers provide varying intensities of services, including full-time care (full day and full week), part-time care (either part day or part week, sometimes with varying days), and nontraditional hour care (such as evening or weekend, hourly, drop-in, or back-up care). This complexity results in variation in intensity and frequency of care across centers.
- **The limited size of centers.** Child care centers must adhere to various legal, safety, and accreditation regulations, which can result in high operation costs and small classroom sizes, limiting the number of children that can be served. Infant care, for example, requires a smaller ratio of children-to-trained adults than care services for older children. This restricts the number of children served by campus child care centers.
- **The uneven processes of assigning open slots to families.** Some child care centers use wait lists determined by child age, desired days of the week for care, and the desired intensity of care, while others use a hybrid system that prioritizes some families before others. These systems of serving families have different philosophies of "fair" allocation, and are reluctant

to implement a lottery system, which makes implementation of a rigorous process for assignment very difficult.

- **The lack of data linking student success to child care use.** As discussed in detail later in this brief, most institutions cannot identify whether their students are parents. Currently, there are not sufficient system-wide processes in place to track this information.<sup>10</sup> As a result, campus child care centers do not have full information on student parents, and rely on their institutional research department to link data between child care use and academic performance. While making these connections is possible, access to the full set of campus child care and student outcome data is rare, with the norm being summary reports from the institutional research department provided upon request to the child care center director.

The next sections summarize findings from the authors' interviews with campus child care center directors. These interviews were intended to better understand campus child care services, capacity, demand, the processes used to fill open slots, and the availability of institutional data on all students who are parents—to inform the design of a randomized control trial that could assess the impact of campus child care usage on student outcomes.

The authors focused on understanding wait list processes as a potential avenue for random assignment. Randomly assigning students' children to slots from a wait list would enable a comparison between (a) parents of students who would be randomly assigned to receive campus child care slots and (b) parents of students who would be randomly assigned to seek alternative child care arrangements. That is, the randomization process could create comparable groups (on both observable characteristics and non-observable characteristics, such as the resilience of student parents). Reflections on the potential for a randomized study based on the authors' review of campus child care operations are also provided below.

## Services Provided at Campus Child Care Centers

**Number of students served:** Data collected from interviews with campus child care center directors show that their centers serve an average of roughly 94 children, with total capacity ranging from a low of 39 to a high of 180 children. Centers operate an average of roughly six classrooms; three centers operate a low of two classrooms and four centers operate highs of 9 to 10 classrooms.

**Class size:** The number of slots provided per classroom depend on the age of the child, the number of trained adults present, and a maximum group size, which is regulated on a state-by-state basis.<sup>11</sup> For example, early childhood experts suggest that infant rooms maintain a ratio of 3 to 4 infants per trained adult, for a maximum group size of 6 to 8 infants per room (Administration for Children and Families, Office of Child Care 2021). Guidance for preschool classrooms suggests a ratio of one trained adult per 6 to 10 children, with a maximum of 12 to 20 children in one room.

**Parent eligibility:** Campus child centers vary in the composition of families they serve. Many offer services to students, most also serve faculty and staff, and some serve community members. Six centers of those represented by study interviews report providing 80 to 90 percent of slots to students with children, with two additional centers allocating 60 percent or more to student parents.

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<sup>10</sup> For a full discussion of the availability of data on college students with children, see <https://iwpr.org/iwpr-issues/student-parent-success-initiative/understanding-student-parent-experience-need-improved-data-collection/>.

<sup>11</sup> For more information on state regulations for child care ratios, see <https://childcare.gov/index.php/consumer-education/ratios-and-group-sizes>.

**Care intensity:** All but one center represented by interviews with campus child care directors (23 of 24) offer full-time care. Fifteen provide part-time care options, four provide hourly care, and four provide care for school-aged children. The combination of day, time, and sometimes hourly options of care can create complex care schedules that can lead to complicated processes for filling slots, as described later, and can elongate the time a family spends on a wait list for care.

## UNDERSTANDING THE COMPLEXITIES: SPOTLIGHT ON CAMPUS CHILD CARE SERVICES FOR STUDENT PARENTS AT THE UNIVERSITY OF UTAH

While most centers provide full-day, full-week care, some also provide varying levels of service to families based on their care and scheduling needs. This variation leads to complex processes for filling slots from the wait list. For example, among the **University of Utah's** five campus child care centers, two are intentionally designed for serving the diverse care needs of students with children.

At **UKids President's Circle**, one of the campus-based centers, the children of college students represent 90 to 95 percent of children served. Students enroll their children at the center based on their course schedule. Parents can enroll their children up to 25 hours each week, at whatever hours work for them from 7am to 7pm. Students re-enroll each semester to accommodate their changing course schedules. Slots are filled fluidly as they open up throughout each term, with the most sought-after hours filled first. Child care and time slots are allocated according to a priority system when there is excessive demand, with priority given first to students by income level and then by student status, with undergraduates prioritized over graduate students. While licensed for 60 children, this center serves up to roughly 120 children per semester due to the hourly nature of services.

The University also operates a more traditional full-day center, **UKids East Village**, which is licensed for 72 children, ages six weeks to five years. Located in university student housing, 60 to 70 percent of slots at UKids East Village go to the children of students. It also has a longer wait list than the hourly center on campus. For children under three years, the wait list is upwards of 200 families for a full-day slot. Most children on the wait list are the children of students. It can take roughly 15 months to get a slot for a child under three years.

For both centers, a university-employed enrollment specialist handles applications for the on-campus centers. The specialists help students and other parents apply for wait lists when slots are not immediately available and communicate with families about their placement on those lists.

## Turnover

Access to campus child care services is determined first by whether there is an open slot. Slots open due to several factors, with children moving from prekindergarten to kindergarten, or “aging out,” as the primary cause. Other factors include:

- Student parents graduate from the institution and are required or prefer to move their children to a new center;
- Student parents pause their enrollment prior to graduation and are required or prefer to take their children out of the campus child care center;
- Cost considerations, such as if a student parent loses access to subsidized care; or
- A family move.

Interviews revealed that the number of slots that open each academic year or term, depending on how centers manage enrollment, tend to be limited. Families that secure slots at campus child care centers often work to ensure they do not lose those slots, both because continuity of care is known to be important for healthy child development and because the care provided by these centers is usually high quality, convenient for campus-affiliated families, and as a result, highly sought after (McMullen 2018).<sup>12</sup> Exact numbers of slots that turn over depend on the overall capacity of the center, and it is difficult for child care staff to estimate ahead of time.

## The Complexity of Campus Child Care Wait Lists

Even when there are open slots, the process of assigning them to families is dictated by a complex set of factors. Many campus centers operate wait lists when demand for slots exceeds available supply. Unpublished IWPR research found that the average length of campus child care center wait lists is roughly 90 children.<sup>13</sup> From the interviews conducted with centers for this study, four centers reported typically having more than 100 families—students as well as other families—on their wait lists, three of which say their wait lists often numbered over 200.<sup>14</sup>

The amount of time families spend on the wait list depends on the size of the institution and capacity of the child care center, the nature of the demand for care (e.g., age of child and hours of care needed), administration of slots (e.g., hourly, or full day), and the wait list priority system—or the rules that campus child care centers use to determine the order in which families gain access to slots from a wait list (e.g., first-come, first-served or priority for student parents). The wait for a slot can take as little as one month or academic term and as long as a year or more. At least two centers reported that pregnant mothers can get on the wait list for care even before their child is born, to maximize their chances of receiving a slot when they need it.

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<sup>12</sup> For a discussion of the benefits of campus-based child care and early learning for student parent families, see <https://iwpr.org/iwpr-issues/student-parent-success-initiative/head-start-college-partnerships-as-a-strategy-for-promoting-family-economic-success-a-study-of-benefits-challenges-and-promising-programs/>.

<sup>13</sup> Unpublished data from a 2019 Institute for Women’s Policy Research survey of members of the National Coalition for Campus Children’s Centers.

<sup>14</sup> Wait list lengths reported here are pre-pandemic numbers; campus child care closures and reductions in services as a result of the pandemic-affected demand for care and uses of wait lists, though the authors did not collect data on these changes from all centers interviewed given that some of the interviews took place prior to or early in the pandemic’s onset.

## **Nature of Demand for Care**

Wait lists are longest for care that is in most demand. For seven of the 18 centers, the most in-demand slots are for infants and toddlers (children ages 0 to 3).<sup>15</sup> One large four-year university with multiple campus child care centers reported that before COVID-19, the wait list for infant and toddler slots was over 200 families long.

Two centers said that care, regardless of type, is highly sought after. For example, one center reported that, given its location in a relatively rural area with few community-based child care options, its services are in demand across the board. Another reported high demand given their policy of allowing student parents to keep their children enrolled beyond their graduation from the institution (which lessens slot turnover).

## **Movement from the Wait List**

Once a family is on the wait list, their movement from the wait list to an open slot is dependent on the nature of the slot opening—primarily the ages served by the classroom of the slot that has opened—and the age of children in need of slots on the wait list. For example, a slot open in the 2-year-old toddler classroom will be offered to the next eligible child on the wait list, who may be 10<sup>th</sup> on the list behind families with older or younger children. This can contribute to long waits for slots since the number of slots in each classroom are limited according to child-to-adult ratios. This means relatively few slots may open up at one time and not necessarily in the age range required by families in need of care.

In the case of centers that provide care on an hourly basis (which is rare), or part-time care that can vary daily (e.g., Monday/Wednesday/Friday and Tuesday/Thursday), the scheduling needs of the family versus what days/hours are possible for the open slot are also factors. The characteristics of the slot that is available, therefore, must align with what the family needs. If it is not a fit for the first family on the wait list, the center proceeds down the list until they find a good match.

## **Prioritization in Filling Open Slots**

Most centers also apply priority categories that dictate the order in which families receive a slot from the wait list. For example, 15 centers prioritize student parents for services over faculty, staff, and community members (nine centers do not give student parents first priority). In addition to student parent status, centers may have additional priority factors that determine when families receive a slot. Those categories can be set internally (from the center or institution) or externally (from funding sources, such as Head Start). Additional priority categories can include veteran status, income level, whether the family has a sibling already being served by the center, undergraduate/graduate student status, and homelessness, among others.

These prioritizations can result in a dynamic wait list that can change daily. At centers that provide Head Start services, for example, families who are experiencing homelessness, have a child with a disability, or are receiving public assistance (such as Temporary Assistance for Needy Families or cash assistance) receive automatic priority for services. If such a family applies (or withdraws), that can influence the ordering of all other families on the list at the time of application (or withdrawal). Two of the centers that do not give student parents priority use a first-come, first-served approach; a third prioritizes veterans first before students, who do get priority over non-veteran families. A fourth reserves 30 percent of its slots for student parents, with the largest share of remaining slots

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<sup>15</sup> Sixteen of the centers represented in the authors' interviews provide infant care.



allocated to community members, then faculty and staff. The process of filling slots from a wait list was made even more complicated by the onset of the COVID-19 pandemic, which led to reductions in services and temporary center closures.<sup>16</sup>

## COVID-19'S IMPACT ON CAMPUS CHILD CARE DEMAND, SERVICES, AND WAIT LISTS

The COVID-19 pandemic caused major disruptions to campus child care service provision, as it did for child care providers more broadly. Many campus-based providers closed temporarily, and most were forced to reduce the number of slots provided once they had reopened. Among the centers interviewed, 10 centers closed for at least part of the pandemic. Four centers interviewed remained open without closing at all. At least five of the 18 center directors interviewed reported providing care for the children of frontline and essential workers.

Temporarily halting operations or reducing services meant centers lost significant revenue, while also facing higher costs related to the procurement of cleaning materials, masks, and other resources needed to maintain safe operations. Centers also faced the complicated challenges of determining how to handle positive COVID-19 diagnoses among families and staff, how to encourage social distancing and mask-wearing among young children, the impact of safety practices on children's learning and development, and the need to furlough or lay off child care staff due to reduced services and revenue.

For centers that reopened mid-pandemic, reductions in services to align with safety protocols meant that they were unable to serve all the families with enrolled children prior to the onset of the pandemic. Centers that could not accommodate all previously enrolled families were faced with having to make tough decisions to assign limited slots. In many cases, state guidance was instructive or required certain priority models (e.g., prioritizing the children of frontline or essential workers). Some centers established approaches that attempted to prioritize families with the greatest need, usually defining student parent families as some of the most "vulnerable."

For example, one center fielded a survey to families to establish levels of need, then anonymized the survey data to fairly allocate limited slots. Two centers in the same community college district that provide Head Start services adapted their existing point system to account for certain priority factors, such as needing to complete in-person coursework as a part of a student's academic program. Another center used a tiered approach to fill slots as their services reopened, starting with frontline workers and then moving to student parent families and other specific groups, before returning to pre-pandemic operations.

Many centers interviewed, however, reported reductions in overall demand, even for types of care that are typically highly sought after (e.g., infant care). Reduced demand among student parent families stemmed at least in part due to the movement of college courses to online instruction. At least four centers continued to see reduced demand even once they reopened.

### Considerations for a Random Assignment Evaluation

Random assignment is considered the gold standard in evaluation research methodology because it enables causal interpretation. That is, in large samples, the methodology effectively rules out other

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<sup>16</sup> The authors considered working with programs to randomly assign the reduced slots created by pandemic precautions. However, demand for services also declined precipitously, resulting in child care centers having remaining slots after serving all families that desired care.

explanations for differences in the outcomes between student parents using campus-based child care and student parents using other means of child care. In addition, randomization can increase fairness by giving each eligible family the same “chance” (or probability) to earn a child care slot. Randomization can also be performed after other prioritization procedures take place, such as conducting randomization after all Head Start-eligible families are served. Other procedures, such as first come, first served, may result in the awarding of slots to student parents differently in ways that may be deemed less fair, including potentially leading to racial inequities.<sup>17</sup> Randomization has been employed successfully in understanding the impact of early child care. However, the most notable randomized control trial (RCT) studies implemented in the 1960s and 1970s both relied on the opportunity to add a substantive number of additional slots as the method to conduct RCTs (Heckman et al. 2010).<sup>18</sup> Most recently, the Head Start Impact Study leveraged a Congressional mandate to participate in a study to induce 84 agencies to participate in randomization (U.S. Department of Health and Human Services, Administration for Children and Families 2010).

While there are benefits to randomization as an approach to assess the contributions of campus-based child care on student parent academic success, the operations of campus child care centers make the methodology particularly challenging to implement.

- First, low turnover and difficulty predicting slots results in a very small number slots potentially available for randomization. This could result in multiple semesters of recruitment across multiple sites being needed to reach sufficient sample size to detect the effects of care on student parent academic success or a multi-site study.<sup>19</sup>
- Second, while wait lists can be sizable, the families on the wait list do not all represent student parents. As a result, randomization would need to be done in such a way that does not disadvantage student parent families assigned to the control group (which would not be eligible for a slot) relative to a non-student family (who would not be randomized as a part of the RCT) that is higher on the wait list for the same slot.
- Third, the process of filling open slots from the wait list is complicated as child age, day and time demands, along with other restrictions need to be factored into the randomization.
- Finally, some center directors interviewed felt strongly that changing how they operate the wait list would be unfair for families who had been waiting for a slot for a long time; others were confident in the fairness of their practices or their efforts to serve the families with the greatest need for care. These factors made randomization challenging during the pre-pandemic period when some interviews took place. The landscape dramatically changed during the pandemic.

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<sup>17</sup> For example, under a first-come, first-serve model, student parents who are better connected to the administration or who personally know the center director may have a greater chance of receiving a slot as a result of early notification. Such practice can contribute to sustaining disparities in service.

<sup>18</sup> The authors also explored campus child care centers that were considering adding classrooms, as this would result in an immediate increase in slots. Of the three centers considering such additions at the time of the interviews, two centers were at least two years away from opening and a third was in preliminary conversation with the interim president about starting a new infant room.

<sup>19</sup> While multi-site studies are an option, many sites would be required. For example, the Head Start Impact Study involved 84 separate agencies. Studies of curriculum in pre-kindergarten, such as Making P-K Count and High 5s, involved 69 pre-K sites covering 173 classrooms (Mattera, Jacob, and Morris 2018).

# STUDENT PARENT DATA COLLECTION

Given the authors' intent to design a rigorous evaluation of the effect of campus child care services on students' academic outcomes, and the challenges to designing a randomized study, the next best approach for assessing the impact of campus-based child care is a quasi-experimental design (QED) study. A QED attempts to assess impact while addressing the issue of self-selection—where student parents choose to use campus-based child care themselves through some other mechanism than randomization—through the development of a reasonable comparison group (Shadish, Cook, and Campbell 2002). Because they were considering a QED approach, the authors were also interested in the availability of data on students who are parents being served by the center and by the institution.

Most colleges, however, do not collect data on parental status, complicating the identification of a carefully matched comparison groups.<sup>20</sup> Interviews supported this, revealing inconsistency in the collection of data on student parents with children enrolled at campus child care centers, gaps in the transfer of data that are collected by centers to institutional research offices, and a widespread absence of data on the larger population of students with children being served by academic institutions. Based on the authors' interviews and scans of student parent data availability, just one institution and three state higher education systems have data collection practices, described below, which offer the possibility for a quasi-experimental study.

Most colleges, however, do not collect data on parental status, complicating the identification of a carefully matched comparison groups.

## Data Collection at Campus Child Care Centers

All campus child care centers interviewed collect at least some basic information on the parents of children enrolled in services, including student parents. These data are typically collected via applications, intake forms, and one-time or semi-regular surveys. Data collected by campus child care centers can include information on the children or family (e.g., age and number of children), parent affiliation to the institution, parent or child demographics, and family receipt of child care financial assistance programs. If desired by the campus child care center or the institution, these data can usually be linked to administrative data by the institutional research office via student IDs. In addition, at least five of the centers interviewed reported surveying families to explore topics such as demand for care, types of care needed or preferred, and family satisfaction with the care they have received.

Institutions that receive grants from the Child Care Access Means Parents in School (CCAMPIS) program are required to report annually on the student parents who receive services through the grant. These data are usually collected by the child care center or the CCAMPIS director (if situated in a different department). Child care centers or the office directing the CCAMPIS grant collaborate with their institutional research office to pull administrative data for CCAMPIS annual reports, including demographic information and information on persistence, retention, graduation, and transfer, using CCAMPIS participants' student IDs. CCAMPIS programs also may supplement their compilation of administrative data with participant surveys as a part of the annual reporting process.

<sup>20</sup> For a full discussion of the availability of data on college students with children, see <https://iwpr.org/iwpr-issues/student-parent-success-initiative/understanding-student-parent-experience-need-improved-data-collection/>.

## Institutional Data Collection

Nearly every center director interviewed (17) reported that their institution does not systematically collect information on students' parent status, other than through regularly collected financial aid data from the Free Application for Federal Student Aid (FAFSA) and data collected for funding received through the Carl D. Perkins Career and Technical Education Act (Perkins). The FAFSA asks students to disclose whether they have a dependent child, although the age of the child is not required (so it is unclear from the FAFSA whether child care may be needed). Institutions with Perkins grants provide opportunities for students to self-report whether they are in a designated special population, including whether they are a single parent.

Only one center interviewed for this study—**Monroe Community College (MCC)**—reported that their institution collects regular data on whether students are parents, separately from the FAFSA and Perkins data collection. MCC requires students to fill out a brief survey each term when enrolling in classes, which includes a question intended to document students' parent status and the age of their children (Gault, Holtzman, and Reichlin Cruse 2020).

### BEST PRACTICES FOR STUDENT PARENT DATA COLLECTION: SPOTLIGHT ON MONROE COMMUNITY COLLEGE

**Monroe Community College (MCC)** in Rochester, New York, collects information on a semesterly basis on students' parent status through a required survey completed during course registration (Gault, Holtzman, and Reichlin Cruse 2020). The survey asks students to report their parental status and ages of their children:

*Which one of the following statements applies to you?*

- (A) I have children who are age 5 and younger and/or I'm expecting a baby*
- (B) I have children who are age 6-18*
- (C) I have children who are in both of the above age groups*
- (D) I don't have any children in the above age groups*
- (E) Prefer not to answer*

MCC institutional research staff have combined data collected from these surveys with data compiled from the campus child care center, enabling comparisons between student parents who used the campus child care center and those who did not. These data are also unique in that they are collected on a term-by-term basis, which allows for students to report changes in their pregnancy and parenting status over time. Institutions that collect these data could use them to inform the need for and design of tailored supportive services that would enable greater persistence and retention of students who become pregnant or who are parents. They also create opportunities for research that can provide important insight into the supports that are most effective in supporting these students' academic success.

## System-Level Data Availability

The authors' search for data on student parents found three state community and technical college systems that collect data on parenting college students. These college systems collect data on student parent status comprehensively for all students.

The **Washington State Board of Community and Technical Colleges**, for example, includes a question on "family status" on its application form. The question asks students to voluntarily report whether they fit into the following categories: single parent; couple with children or without children or dependents; or other (Gault, Holtzman, and Reichlin Cruse 2020).

The **Georgia Community and Technical College System** and **Wisconsin Technical College System** (WTCS) both collect and analyze data collected from their institutions on students' single parent status for their Perkins grants. WTCS used these to track student parent enrollment trends during the pandemic, for example, finding that single parents' enrollment declined by 69 percent in summer 2020 and 37 percent in fall 2020, compared with overall declines in student enrollment of 11 to 12 percent in the same terms (Barker et al. 2021).

Progress toward greater data collection of student parent status was made during 2021 state legislative sessions. Oregon and Illinois passed bills that require state academic institutions to collect and report data on enrolled students who are parents of dependent children (Denbrow et al. 2021; Stuart et al. 2021). These data will enhance the ability of institutions and state higher education systems to track enrollment and outcomes among students with children, in addition to creating new opportunities for research that can examine the effect of specific interventions in promoting successful outcomes.

Progress toward greater data collection of student parent status was made during 2021 state legislative sessions. Oregon and Illinois passed bills that require state academic institutions to collect and report data on enrolled students who are parents of dependent children.



# RECOMMENDATIONS TO IMPROVE CONDITIONS FOR RIGOROUS STUDY

Data gathered from interviews with staff from campus child care centers and community and technical college systems provide new insight into possibilities for future research on the effect of campus child care access on the academic outcomes of student parents. At the institutional level, data from Monroe Community College, collected every term by all students and not limited to single parent status, offer the best hope for use in a quasi-experimental study. Such data permit the ability to match student parents using the campus-based child care center to student parents with similar characteristics who do not use the child care center on campus. Examining the outcomes between these two groups (after matching) permits an estimate of the effect of campus-based child care relative to alternative child care arrangements.<sup>21</sup>

While the data collected by state higher education systems represent a significant improvement on the data collected by the large majority of institutions and state systems, these data still do not provide a full picture of the population of students with children. They tend to focus on single student parents, are voluntary for students to report, and are typically collected at a single point in time, making it impossible to capture changes in students' parent status. These data do, however, offer possibilities for linking with data from other state systems, such as agencies that collect data on recipients of state child care assistance and other forms of public assistance and labor departments. Combined, these data could enable the development of carefully matched comparison groups based on a set of individual and family characteristics, similar to that used by Schochet and Johnson (2019) in their examination of the impact of child care subsidies on maternal education.<sup>22</sup>

To rigorously study how access to campus child care may affect students' academic outcomes—and to lend greater insight more broadly into the experiences and outcomes of students with children—states, institutions, and campus child care centers should consider the following recommendations.

## CAMPUS CHILD CARE CENTERS

- Use a lottery system to fill slots when opening new campus child care centers or when opening new classrooms at an existing center, to establish precedence for the practice, encourage the use of such a system for the wait list moving forward, and enable potential assessments of the benefits of the programs.
- Encourage institutions to regularly compile and analyze data from campus child care centers, in conjunction with administrative data records, on students whose children are receiving services and students who are on the wait list, to inform their advocacy for increased financial and in-kind support from institutions and other sources.

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<sup>21</sup> In this design, the comparison condition will consist of all other child care solutions, which may include family care, a home-based setting, external care that does not meet quality rating standards, and other off-campus high-quality child care. While the child care settings of the control group have been shown to matter in studies of the direct effect of Head Start (Feller et al. 2016), the primary question of interest is the impact of the availability of child care on student parent success.

<sup>22</sup> The background characteristics available from state systems are not as comprehensive as the list used by Schochet and Johnson (2019), who rely on the Early Childhood Longitudinal Study-Birth Cohort (ECLS-B). This nationally representative study has rich information on maternal and family characteristics, but limited information on the type of child care (including no information on whether child care earlier than kindergarten was obtained at an institution of higher education). To view the ECLS-B instrument and questionnaire, visit <https://nces.ed.gov/ecls/pdf/birth/parentMatrix.pdf>.

## INSTITUTIONS

- Regularly (on a term-by-term basis) collect and analyze data on the parental status of all enrolled students, including additional variables such as age and number of children, students' marital status, family income, among other information. These data can be used to further disaggregate student performance data (as well as examine the intersection of parental status with other student characteristics such as race, ethnicity, and gender), facilitate research on effective interventions to promote student parent success, and inform the provision of services targeted to the student groups that need it the most.
- Collect data on students served by campus child care centers or on campus child care center wait lists to track outcomes like persistence, degree attainment, and time to degree, and to lend insight into the scope of demand for campus-based services. Institutions with demonstrated demand for on-campus child care should explore ways to increase supply, especially for student parents with low incomes, such as through applications to CCAMPIS, partnerships with Head Start, student government funds and/or student fees, and enhanced in-kind support.<sup>23</sup>

## STATES

- Require institutions to regularly collect and report on students' parental status and the age of their children (under or over six years of age, for example). Such information may be obtained upon application to an institution or registration for classes each term. Technical assistance may be needed by institutions to meet this requirement.
- Create opportunities for linking and accessing data across state systems, including the higher education, human services, early childhood, and employment systems. Some states, such as Washington, already have some of these linkages in place, allowing the state and researchers to disaggregate outcomes to identify groups that may need more support or assistance.
- Direct state funding and early childhood programs to the campus child care system to expand services for student parents in need of child care and bolster the availability of financial resources supporting campus-based centers. For example, states can provide direct financial support for campus child care programs or to student parents, such as through a grant program, to help them cover the cost of care at campus child care centers. They can also encourage early childhood programs, such as Child Care Development Fund child care assistance programs, state prekindergarten programs, Head Start programs, and others, to offer services at campus child care centers to ensure student parent and other families have the opportunity to benefit (Boressoff 2013). In an ideal world, state investment in campus child care would include a plan for evaluating the effects of student parent usage on their academic outcomes.

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<sup>23</sup> For more information on financing options for campus child care, see <https://iwpr.org/iwpr-publications/toolkit/financing-child-care-for-college-student-success/>.

## CONCLUSION

Rigorous evidence on the effect of campus-based child care on the outcomes of student parents is crucial for justifying the availability and potential expansion of such services. This evidence takes on greater importance because of the declining share of colleges that provide child care on campus. It would also provide new understanding into the role of these services in promoting family success, as well as for serving the central persistence and attainment missions of academic institutions. In light of the importance of child care in the education, career, and economic success of student parents, underscored and exacerbated by the effects of the COVID-19 pandemic, greater understanding of the potential of child care for boosting parental educational attainment is also essential for equitable economic recovery and growth (Heggeness and Fields 2020; Rothwell 2021; Sun 2021).

*This brief was authored by the Institute for Women's Policy Research (IWPR) and Insight Policy Research (Insight). The authors would like to thank the campus child care, institutional, and system staff and directors who were interviewed for this study, as well as the project advisory board: Ann Mosle, Vice President, Aspen Institute and Executive Director, Ascend; Dr. Teresa Eckrich Sommer, Research Professor, Institute for Research on Poverty, Northwestern University; and Michael Weiss, Senior Researcher, MDRC. They also appreciate the ongoing support of Chase Sackett, Manager of Higher Education, Arnold Ventures. Final thanks go to the IWPR staff who helped prepare and disseminate this publication, including Adrienne Smith, former Vice President of Research; Maureen Coffey, Research Associate, Student Parent Success Initiative; Jodi Narde, Director, Content and Publications; and William Lutz, Vice President of Communications and External Affairs. This brief was made possible with the support of Arnold Ventures.*

Photo credit: FatCamera via Getty Images.

# APPENDIX A. TRENDS IN CAMPUS CHILD CARE AT PUBLIC, NON-PROFIT INSTITUTIONS

Table A1. Share of Non-Profit, Public Two- And Four-Year, Degree-Granting Institutions with Campus Child Care Centers, 2004-2019

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Public 2-Year Institutions	58%	57%	57%	56%	55%	54%	53%	52%	50%	48%	47%	46%	44%	43%	41%	41%
Lower confidence interval	54%	54%	52%	53%	50%	50%	49%	49%	46%	45%	43%	42%	40%	40%	37%	38%
Upper confidence interval	62%	60%	61%	59%	59%	57%	57%	55%	55%	52%	51%	49%	49%	46%	46%	44%
Public 4-Year Institutions	60%	60%	59%	59%	59%	58%	58%	57%	56%	54%	53%	52%	52%	51%	50%	50%
Lower confidence interval	55%	56%	54%	55%	54%	54%	53%	53%	51%	51%	48%	48%	47%	47%	45%	46%
Upper confidence interval	65%	63%	64%	63%	64%	62%	63%	61%	61%	58%	58%	56%	57%	55%	55%	53%
Difference	2%	2%	3%	3%	4%	4%	5%	5%	5%	6%	6%	6%	7%	8%	9%	9%
Significantly different?	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	Yes

**Note:** Includes 50 U.S. states, the District of Columbia, U.S. Service academies, and other U.S. jurisdictions.

[The margin of error is calculated as  $\sqrt{\frac{p(1-p)}{n}}$  multiplied by the critical value for a 5 percent level of significance.]

**Source:** Authors' analysis of data from the U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) Institutional Characteristics Surveys (2004-2019).

## REFERENCES

- Administration for Children and Families, Office of Child Care. 2021. "Ratios and Group Sizes." *Childcare.Gov*. <<https://childcare.gov/index.php/consumer-education/ratios-and-group-sizes>>.
- Barker, Hilary, Scott DuBenske, Mandy Johnson, Tou Ya Khang, Ben Konruff, Kristin Long, Leonard Simpson, and WTCS Student Success Center Team. 2021. "Early Impacts of COVID-19 Pandemic on the Wisconsin Technical College System." Madison, WI: Wisconsin Technical College System. <<https://mywtcs.wtcsystem.edu/wp-content/uploads/2021/06/Covid-Spring-2020-Research-Brief.pdf>>.
- Boressoff, Todd. 2013. *Financing Campus Child Care for College Student Success*. Report, IWPR #G719. Washington, DC: Institute for Women's Policy Research. <<https://iwpr.org/iwpr-publications/toolkit/financing-child-care-for-college-student-success/>>.
- California Competes. 2020. "Clarifying the True Cost of College for Student Parents." Oakland, CA: California Competes. <[https://californiacompetes.org/assets/general-files/CACompetes\\_Clarifying-the-True-Cost-of-College-for-Student-Parents\\_Final.pdf](https://californiacompetes.org/assets/general-files/CACompetes_Clarifying-the-True-Cost-of-College-for-Student-Parents_Final.pdf)>.
- CCSSE. 2021. "Community College Survey of Student Engagement - 2021 Cohort: 2021 Frequency Distributions - Main Survey." Austin, TX: Center for Community College Student Engagement, The University of Texas at Austin. <[https://www.ccsse.org/survey/reports/2021/standard\\_reports/ccsse\\_2021\\_coh\\_freqs\\_allstu.pdf](https://www.ccsse.org/survey/reports/2021/standard_reports/ccsse_2021_coh_freqs_allstu.pdf)>.
- Chase-Lansdale, P. Lindsay, Terri J. Sabol, Teresa Eckrich Sommer, Elise Chor, Allison W. Cooperman, Jeanne Brooks-Gunn, Hirokazu Yoshikawa, Christopher King, and Amanda Morris. 2019. "Effects of a Two-Generation Human Capital Program on Low-Income Parents' Education, Employment, and Psychological Wellbeing." *Journal of Family Psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)* 33 (4): 433–43.
- Child Care Aware of America. 2019. *The US and the High Price of Child Care: Appendices*. Arlington, VA: Child Care Aware of America. <<https://cdn2.hubspot.net/hubfs/3957809/2019%20Price%20of%20Care%20State%20Sheets/Final-TheUSandtheHighPriceofChildCare-Appendices.pdf>>.
- Contreras-Mendez, Susana and Lindsey Reichlin Cruse. 2021. *Busy with Purpose: Lessons for Education and Policy Leaders from Returning Student Parents*. Report, IWPR #C496. Washington, DC: Institute for Women's Policy Research. <<https://iwpr.org/iwpr-issues/student-parent-success-initiative/busy-with-purpose-lessons-for-education-and-policy-leaders-from-returning-student-parents/>>.
- DeMario, Mary Ann M. 2017. "Outcomes of Monroe Community College Student Parents Who Used the Campus Child Care Center vs. Those Who Didn't, Fall 2006 - Fall 2014. Unpublished Overview of Research Findings."
- Denbrow, Michael, Lew Fredrick, James I. Manning Jr., Teresa León, Maxine Dexter, Dacia Grayber, Karin A. Power, et al. *Relating to Student Demographic Data at Post-Secondary Institutions of Education*. 81st Oregon Legislative Assembly, 2021 Regular Session, 2021. <<https://olis.oregonlegislature.gov/liz/2021R1/Measures/Overview/SB564>>.
- Education Commission of the States. 2020. "COVID-19 Series: Upskilling & Reskilling." Denver, CO. <<https://www.ecs.org/covid-19-series-upskilling-reskilling/>>.
- Federal Student Aid. n.d. "Dependency Status | Federal Student Aid." <<https://studentaid.gov/apply-for-aid/fafsa/filling-out/dependency>>.



- Feller, Avi, Todd Grindal, Luke Miratrix, and Lindsay C. Page. 2016. "Compared to What? Variation in the Impacts of Early Childhood Education by Alternative Care Type." *The Annals of Applied Statistics* 10 (3): 1245–85.
- Gault, Barbara, Tessa Holtzman, and Lindsey Reichlin Cruse. 2020. "Understanding the Student Parent Experience: The Need for Improved Data Collection on Parent Status in Higher Education." Briefing Paper, IWPR #C485. Washington, DC: Institute for Women's Policy Research. <[https://iwpr.org/wp-content/uploads/2020/10/Understanding-the-Student-Parent-Experience\\_Final.pdf](https://iwpr.org/wp-content/uploads/2020/10/Understanding-the-Student-Parent-Experience_Final.pdf)>.
- Goldrick-Rab, Sara, Carrie Welton, and Vanessa Coca. 2020. *Parenting While in College: Basic Needs Insecurity Among Students with Children*. Philadelphia, PA: Hope Center for Community, College, and Justice. <[https://hope4college.com/wp-content/uploads/2020/05/2019\\_ParentingStudentsReport.pdf](https://hope4college.com/wp-content/uploads/2020/05/2019_ParentingStudentsReport.pdf)>.
- Heckman, James J., Seong Hyeok Moon, Rodrigo Pinto, Peter A. Savelyev, and Adam Yavitz. 2010. "The Rate of Return to the High/Scope Perry Preschool Program." *Journal of Public Economics* 94 (1–2): 114–28.
- Hegewisch, Ariane. 2021. "Women and the COVID-19 Pandemic: Five Charts and a Table Tracking the 2020 Shecession by Race and Gender." Quick Figure, IWPR #Q094. Washington, DC: Institute for Women's Policy Research. <<https://iwpr.org/wp-content/uploads/2021/01/QF-Women-Jobs-and-the-COVID-19-Feb-to-Dec-2020.pdf>>.
- Heggeness, Misty L. and Jason M. Fields. 2020. "Parents Juggle Work and Child Care During Pandemic." *The United States Census Bureau*. August 18. <<https://www.census.gov/library/stories/2020/08/parents-juggle-work-and-child-care-during-pandemic.html>>.
- Hess, Cynthia, Sylvia Krohn, Lindsey Reichlin, Stephanie Roman, and Barbara Gault. 2014. *Securing a Better Future: A Portrait of Female Students in Mississippi's Community Colleges*. Report, IWPR #C417. Washington, DC: Institute for Women's Policy Research and the Women's Foundation of Mississippi. <<https://iwpr.org/iwpr-issues/student-parent-success-initiative/securing-a-better-future-a-portrait-of-female-students-in-mississippis-community-colleges/>>.
- IWPR. 2021a. Institute for Women's Policy Research (IWPR) analysis of data from the U.S. Department of Education, National Center for Education Statistics, 2015-16 National Postsecondary Student Aid Study (NPSAS:16).
- . 2021b. Institute for Women's Policy Research (IWPR) analysis of data from the U.S. Department of Education, National Center for Education Statistics, 2012/17 Beginning Postsecondary Students Longitudinal Study (BPS:12/17).
- IWPR and Ascend at the Aspen Institute. 2019. "Parents in College: By the Numbers." Fact Sheet, IWPR #C481. Washington, DC: Institute for Women's Policy Research and the Aspen Institute. <[https://iwpr.org/wp-content/uploads/2020/08/C481\\_Parents-in-College-By-the-Numbers-Aspen-Ascend-and-IWPR.pdf](https://iwpr.org/wp-content/uploads/2020/08/C481_Parents-in-College-By-the-Numbers-Aspen-Ascend-and-IWPR.pdf)>.
- Loprest, Pamela, Shayne Spaulding, and Ian Hector. 2020. *Strategies for Workforce Recovery in Response to the Current Crisis: A Resource for Local Leaders*. Washington, DC: Urban Institute. <[https://www.urban.org/sites/default/files/publication/103248/strategies-for-workforce-recovery-in-response-to-the-current-crisis-a-resource-for-local-leaders\\_0.pdf](https://www.urban.org/sites/default/files/publication/103248/strategies-for-workforce-recovery-in-response-to-the-current-crisis-a-resource-for-local-leaders_0.pdf)>.
- Malik, Rasheed, Leila Schochet, Cristina Novoa, Simon Workman, and Steven Jessen-Howard. 2018. *America's Child Care Deserts in 2018*. Washington, DC: Center for American Progress. <<https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/>>.

- Mattera, Shira, Robin Jacob, and Pamela Morris. 2018. *Strengthening Children's Math Skills with Enhanced Instruction: The Impacts of Making Pre-K Count and High 5s on Kindergarten Outcomes*. New York, NY: MDRC. <[https://www.mdrc.org/sites/default/files/MPC-High\\_5s\\_Impact\\_FR\\_0.pdf](https://www.mdrc.org/sites/default/files/MPC-High_5s_Impact_FR_0.pdf)>.
- McMullen, Mary Benson. 2018. "The Many Benefits of Continuity of Care for Infants, Toddlers, Families, and Caregiving Staff." *YC Young Children; Washington* 73 (3): 38–39.
- Palacios, Vincent, Casey Goldvale, Chris Geary, and Laura Tatum. 2021. *Obstacles to Opportunity: Increasing College Success by Understanding & Addressing Older Students' Costs Beyond Tuition*. Washington, DC: Georgetown Center on Poverty and Inequality. <<https://www.georgetownpoverty.org/wp-content/uploads/2021/05/CBT-Obstacles-to-Opportunity-Report-May2021.pdf>>.
- Reichlin Cruse, Lindsey, Barbara Gault, Jooyeoun Suh, and Mary Ann DeMario. 2018. "Time Demands of Single Mother College Students and the Role of Child Care in Their Postsecondary Success." Briefing Paper, IWPR #C468. Washington, DC: Institute for Women's Policy Research. <<https://iwpr.org/wp-content/uploads/2020/10/C468.pdf>>.
- Reichlin Cruse, Lindsey, Jessica Milli, Susana Contreras-Mendez, Tessa Holtzman, and Barbara Gault. 2019. *Investing in Single Mothers' Higher Education: National and State Estimates of the Costs and Benefits of Single Mothers' Educational Attainment to Individuals, Families, and Society*. Report, IWPR #R600. Washington, D.C.: Institute for Women's Policy Research. <<https://iwpr.org/iwpr-issues/student-parent-success-initiative/investing-in-single-mothers-higher-education-state/>>.
- Rothwell, Jonathan. 2021. "College Student Caregivers More Likely to Stop Classes." *Gallup Blog*. January 29. <<https://news.gallup.com/opinion/gallup/328970/college-student-caregivers-likely-stop-classes.aspx>>.
- Schochet, Owen N. and Anna D. Johnson. 2019. "The Impact of Child Care Subsidies on Mothers' Education Outcomes." *Journal of Family and Economic Issues* 40 (3): 367–89. doi:10.1007/s10834-019-09628-0.
- Shadish, William R., Thomas D. Cook, and Donald T. Campbell. 2002. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. New York, NY: Houghton Mifflin.
- Strada Center for Consumer Insights. 2020. "Public Viewpoint: COVID-19 Work and Education Survey." Strada Center for Consumer Insights. <<https://www.stradaeducation.org/wp-content/uploads/2020/06/pv-charts-062420.pdf>>.
- Stuart, Katie, Carol Ammons, Fred Crespo, Sue Scherer, Emmanuel C. Welch, Cristina H. Pacione-Zayas, Cristina Castro, et al. *Student Parent Data Collection*. Illinois General Assembly, 102nd General Assembly, 2021. <<https://www.ilga.gov/legislation/BillStatus.asp?DocNum=2878&GAID=16&DocTypeID=HB&SessionID=110&GA=102>>.
- Sun, Shengwei. 2021. "Out of Work, Taking on Care: Young Women Face Mounting Challenges in the 'She-Cession.'" Policy Brief, IWPR #C498. Washington, DC: Institute for Women's Policy Research. <<https://iwpr.org/iwpr-general/out-of-work-taking-on-care-young-women-face-mounting-challenges-in-the-she-cession/>>.
- U.S. Department of Health and Human Services, Administration for Children and Families. 2010. *Head Start Impact Study: Final Report Executive Summary*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families. <<https://www.acf.hhs.gov/opre/report/head-start-impact-study-final-report-executive-summary>>.

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