



Kindergarten Readiness 2022

Fall Assessment Findings in Missoula County



Acknowledgements

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ASR also gratefully acknowledges the many Missoula County families who shared information about their background and their child’s early experiences; as well as the participating kindergarten teachers listed in the table below, who generously gave their time and energy to help us better understand the skills of the children entering their classrooms. *All local photos used with permission.*

Participating Schools and Teachers

School	Teacher
	Emily Earl
	Jordan Krause
	Amy Robinson
Chief Charlo	Rebecca Miner
Clinton	Jayda Hendrickson
DeSmet	Christina Wekkin
Franklin	Keri Maart
	Yer Thao
Hellgate	Jessie Brown
	Lindsay DePuydt
	Kari Tirrell
	Paige Walde
	Christy Wasem
Jeannette Rankin	Kathleen Ormesher
	Jon Fines
	Kendra Owens
	Michelle Salisbury
Lewis and Clark	Casey Schaffer
	Melissa Cooper
	Erin Kemmis
	Megan Sorg-Pignataro
	Sherry Winter

School	Teacher
	Megan Huleatt
	Whitney Bramblett
	Jenny Christensen
Lolo	Carrie Ruffatto
Lowell	Joanna Smetanka
	Nicole Hosman
	Leslie Gallant
Paxson	Clarke McGibbon
	Meghan Rodin
	Mercedes Roberts
	Jessica Eirkson
Rattlesnake	Lisa Thomas
	Alicia St. Clair
	Trae Owens
Russell	Rachael Bawden
	Rebecca Schendel
Seeley Lake	Kelsey Malchi
Sunset	Bonnie Schraeder
	Sheila Devins
	Sadie Peterson
	Hannah Juden
Target Range	Michelle Cavoto
	Casey Black
Woodman	Tabetha Fackler
	Mariah Millhouse

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Key Findings

Kindergarten Readiness



- ◆ 42% of kindergartners were Fully Ready for kindergarten across all domains of readiness (*Self-Regulation, Social Expression, and Kindergarten Academics*).
- ◆ Readiness levels in 2022 were similar to those observed in 2020 and 2021.
- ◆ Children tended to be most ready in *Social Expression* and *Kindergarten Academics* and least ready in the *Self-Regulation* domain.
- ◆ Kindergarten readiness was significantly associated with:
Demographic and developmental characteristics: having no special needs, child's race, single-parent household, and child's gender.
Malleable factors: child attended early care and education (ECE), child health and well-being (coming to school well-rested), lower parenting stress, less screen time, living in a higher income household, and participation in the Dolly Parton Imagination Library (DPIL) program.

Preschool & ECE



- ◆ 81% of children participated in any licensed early care and education (ECE) in 2022, a six-percentage-point increase relative to 2021.
- ◆ Cost was the most common barrier to accessing ECE, reported by nearly a quarter of parents.
- ◆ Over 40% of parents have missed time from work due to ECE challenges.

Health & Well-Being



- ◆ Across all years, over 90% of children have access to a dentist and doctor.
- ◆ 74% of children received a health screening (developmental, vision, and/or hearing), a four-percentage-point increase from 2021.
- ◆ 74% of children came to school well-rested, a four-percentage-point decline from 2021.

Family Activities, Stressors, & Use of Services



- ◆ The percent of families who read to their child at least four days per week remained consistent between 2020 and 2022 (73%-74%).
- ◆ Since 2020, 93-94% of children have been exposed to over one hour of screen time on weekends.
- ◆ 31% of parents reported parenting stress (i.e., their child is "more difficult to care for" than other children), a rate higher than in previous years.
- ◆ 14% of families experienced homelessness (i.e., staying with friends or family, in a hotel, shelter, or public place due to economic hardship), the highest rate since 2019.
- ◆ The use of community resources increased in 2022 compared to the previous year; usage particularly increased for the library and community events.

Introduction

PURPOSE OF THE ASSESSMENT

Kindergarten readiness has consistently been linked to numerous long-term outcomes across an array of domains, including education, health, and socioeconomics.ⁱ Recognizing the importance of kindergarten readiness, Zero to Five, Missoula County has sponsored an annual Missoula County Kindergarten Entry Assessment (KEA) since 2019. Each year, the assessment is conducted in fall and includes a measure of children’s kindergarten entry skills, as well as a parent survey to capture the experiences young children had prior to entering kindergarten. Since 2020, the study has also measured the effects COVID-19 has had on families with young children.

This report presents the results of the assessment completed in fall 2022, and will describe:

- ◆ How prepared children in Missoula County are for kindergarten entry;
- ◆ How kindergarten readiness and other child and family experiences have changed since the prior assessments; and
- ◆ The factors that influence kindergarten readiness, particularly those factors that are considered “malleable,” such as participation in specific programs or services (quality preschool, parenting classes, etc.) or coming to school well rested.

Partners in the county can utilize the data in this report to inform investments in early childhood that help children and their families be better prepared for kindergarten. Given the links between kindergarten readiness and children’s future outcomes, such investments can contribute to positive, lasting change in the community.

METHODS

The study involved two primary tools: a teacher administered assessment, the *Kindergarten Observation Form (KOF)*, and a parent survey, the *Parent Information Form (PIF)*.

Kindergarten Observation Form (KOF)

Missoula County teachers used the *KOF* to rate students’ proficiency in 20 kindergarten readiness skills on a scale from 1 (*Not Yet demonstrating the skill*) to 4 (*Fully Proficient on the skill*). These readiness skills sort into three *Building Blocks*—*Self-Regulation*, *Social Expression*, and *Kindergarten Academics*. Two additional items related to fine- and gross-motor skills serve as a foundation for these *Building Blocks*. The pyramid below illustrates the theoretical progression of readiness skills, with foundational motor skills preceding the more advanced socioemotional skills. The top of the pyramid contains early academic skills, like counting and letter recognition. One of the academic skills, rhyming, is an advanced skill that kindergartners are not expected to be proficient in at kindergarten entry and is therefore not included in the calculation of a child’s readiness score.

Figure 1. Basic Building Blocks of Readiness and Motor Skills Items



Parent Information Form (PIF)

The *Parent Information Form* survey was completed by parents/caregivers to collect a wide variety of information, including:

- ◆ Types of child care arrangements parents used in the year before kindergarten entry;
- ◆ Use of parenting supports and family resources;
- ◆ Health and health care measures;
- ◆ Engagement in family activities and daily routines;
- ◆ Family perceptions of stress and support; and
- ◆ Demographic and socioeconomic measures.

Figure 2. Instruments Used to Assess Kindergarten Readiness

Instrument	What Key Data Are Assessed?	Who Completes It?
<i>Kindergarten Observation Form (KOF)</i>	20 school readiness skills; basic well-being; demographics.	Participating kindergarten teachers
<i>Parent Information Form (PIF)</i>	Preschool experiences; kindergarten transition activities; activities and routines in the home; parental supports, attitudes, and stressors; demographics.	Consenting parents/caregivers of children in the assessment

Who Completed the Study?

The table below shows the number of classrooms and study participants represented by each school. As seen in the table, there were 51 classrooms across 17 schools, 776 students, and 513 parents who participated in this KEA.

Figure 3. Participation by School

School	Number of Classrooms	Number of Students (KOF)	Number of Parents (PIF)
Chief Charlo School	4	65	46
Clinton School	1	13	10
DeSmet School	1	13	1
Franklin School	3	44	24
Hawthorne School	4	62	41
Hellgate Elementary	6	91	66
Jeannette Rankin Elementary	4	58	37
Lewis & Clark School	4	56	33
Lolo Elementary	4	47	37
Lowell School	3	50	35
Paxson School	3	61	40
Rattlesnake Elementary	4	55	47
Russell School	3	58	43
Seeley Lake Elementary	1	22	12
Sunset School	1	1	1
Target Range School	4	73	34
Woodman School	1	7	6
Total	51	776	513

Source: Kindergarten Observation Form (2022), Parent Information Form (2022).

Interpreting Data in This Report

The sample size from 2019 to 2022 has grown substantially. When interpreting data over time, findings for 2022 can be considered the most “stable” estimates as stability in findings grows as sample size increases. Year-over-year comparisons should be made with caution given sample differences.

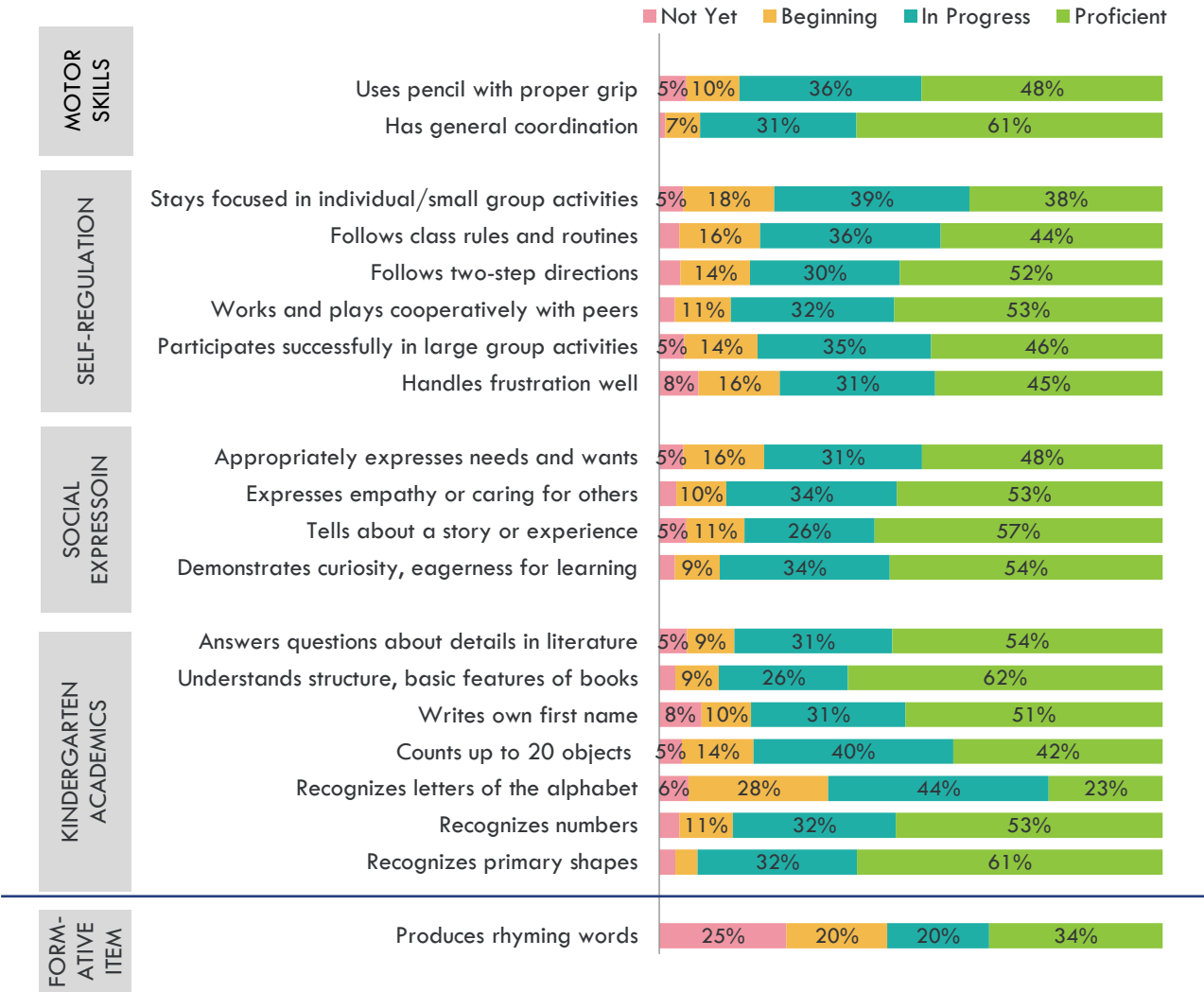
The remainder of this report presents data on kindergarten readiness, the factors associated with readiness, and the early experiences and family backgrounds of participants in the study.

Kindergarten Readiness

HOW READY FOR KINDERGARTEN WERE CHILDREN IN MISSOULA COUNTY?

Based on teacher ratings of the 20 kindergarten readiness skills on the *KOF*, children were most likely to be proficient in understanding the structure of books, recognizing primary shapes, and having general coordination. They were least likely to be proficient in recognizing the letters of the alphabet. Rhyming is typically mastered later in the kindergarten year and therefore ratings on this ‘formative’ item are not included in the calculation of children’s readiness scores.

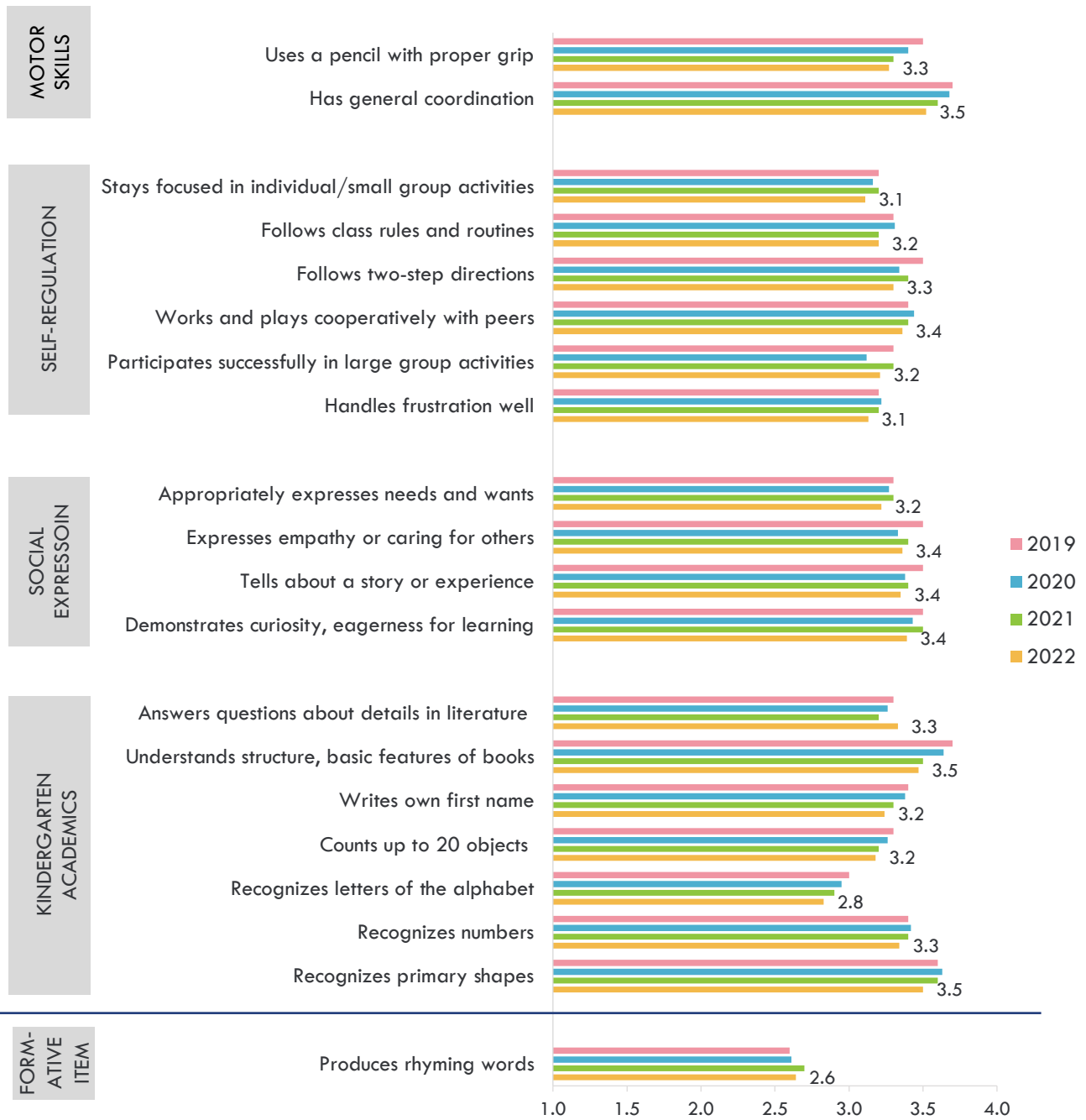
Figure 4. Students’ Proficiency Levels Across 20 School Readiness Skills



Source: *Kindergarten Observation Form* (2022).
 Note: N = 750-774. Scores range from 1 (Not Yet) to 4 (Proficient). Percentages may not equal 100% due to rounding. Proportions of less than 5% are not labeled. Formative items are skills that children master later in the kindergarten year and are not included in readiness score calculations.

Compared to prior years, children’s readiness improved on one item (“Answers questions about details in literature”), stayed the same on one item (“Follows class rules and routines”), and declined on all other measures. It is important to consider, however, that while proficiency levels declined for most items, proficiency levels vary by only a few tenths of a point over time and differences in proficiency levels are due, at least in part, to differences in samples.

Figure 5. Students’ Proficiency Levels, by School Readiness Skill Over Time

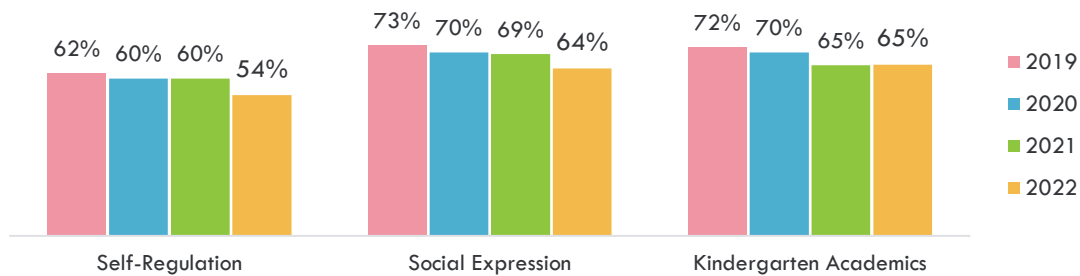


Source: Kindergarten Observation Form (2019, 2020, 2021, 2022).

Note: N = 240-251(2019); N = 216-232 (2020); N = 667-689 (2021); N = 750-774 (2022). Scores range from 1 (Not Yet) to 4 (Proficient). Formative items are skills that children master later in the kindergarten year and are not included in readiness score calculations.

We clustered the readiness items and created average scores for each of the three primary domains or *Building Blocks*. For each domain, students with an average score demonstrating proficiency or near proficiency (i.e., 3.25 out of 4.00) were considered ready. The figure below shows the percent of children who were ready in each *Building Block* between 2019 and 2022. Across all years, including 2022, children tended to be most ready in *Social Expression* and *Kindergarten Academics*, with the lowest readiness scores for all years occurring in the *Self-Regulation* domain. Declines in readiness were observed between 2019 and 2022 in all *Building Blocks*, but the biggest change over time occurred in the *Social Expression* domain, where the percent of children ready declined nine percentage points. These decreases in readiness could be due to the lingering effects of COVID-19 and changes in the sample from year to year.

Figure 6. Percent Ready Within Each Building Block, by Year

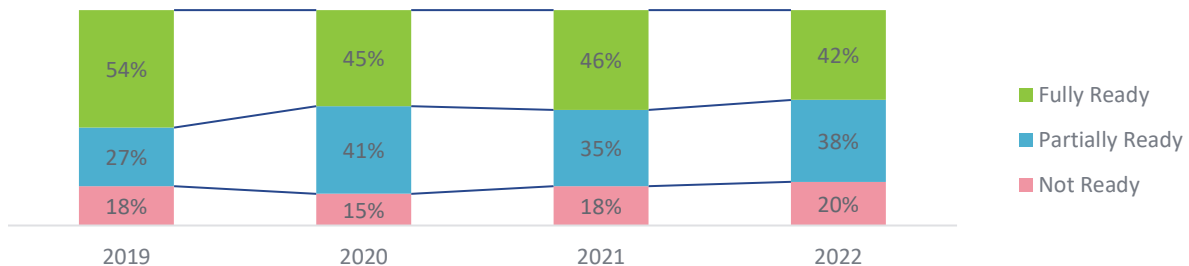


Source: *Kindergarten Observation Form* (2019, 2020, 2021, 2022).

Note: N = 250-251 (2019); N = 231-232 (2020); N = 684-690 (2021); N = 773-774 (2022). *Kindergarten Academics* scores do not include ratings on the rhyming item.

Because children tend to have better academic outcomes later in life if they are well-prepared in *multiple* domains of kindergarten readiness,ⁱⁱ students in our study were defined as Fully Ready for kindergarten if they scored at or above 3.25 on all three *Building Blocks*. Those who scored below 3.25 on all three domains were categorized as Not Ready, and the remaining students were considered Partially Ready. About 42% of Missoula County kindergarten students were Fully Ready for kindergarten in the current year, while 38% were Partially Ready, and 20% were Not Ready. Across the four years, we saw that in 2019 (pre-pandemic), more students were Fully Ready than in subsequent years. Most recently, the percent Fully Ready between 2021 and 2022 dropped by four percentage-points.

Figure 7. Kindergarten Readiness, by Year



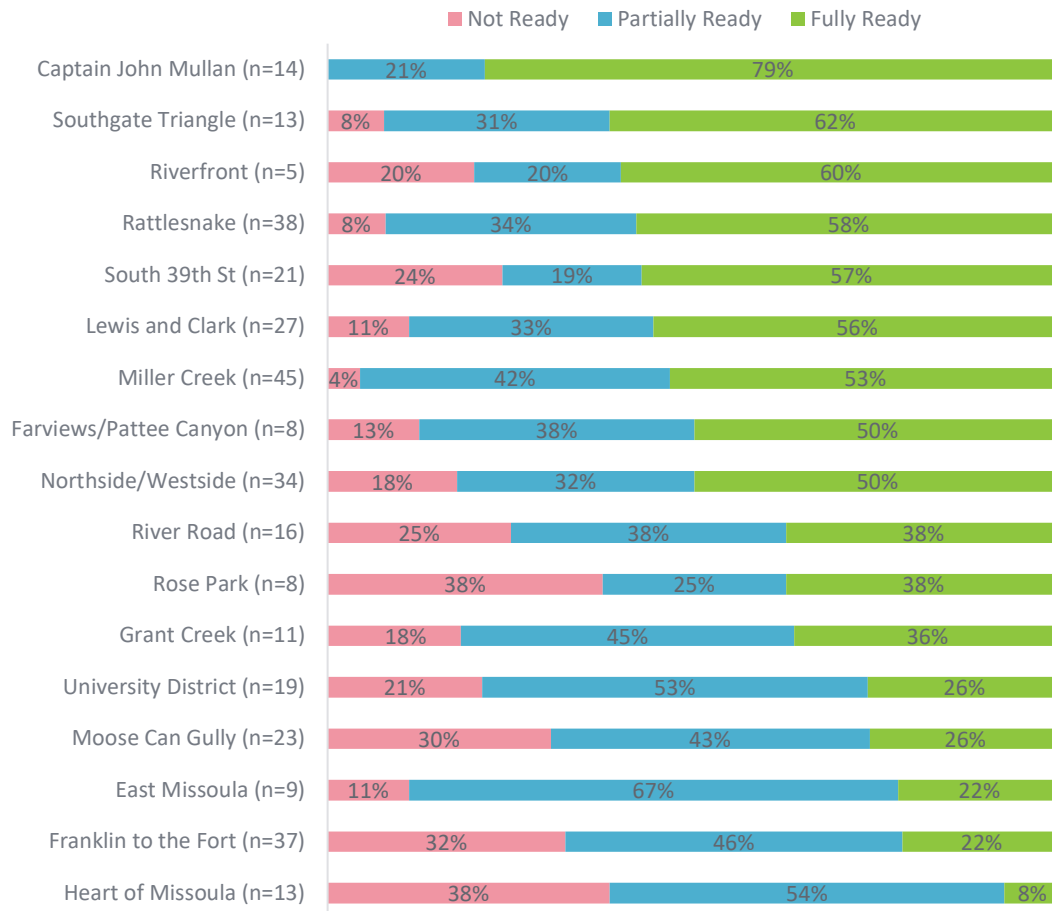
Source: *Kindergarten Observation Form* (2019, 2020, 2021, 2022).

Note: N = 250 (2019); N = 231 (2020); N = 683 (2021); N = 774 (2021). Readiness scores do not include ratings on the rhyming item.

HOW DID KINDERGARTEN READINESS VARY ACROSS MISSOULA COUNTY?

There were significant neighborhood differences in children’s readiness. For instance, children were most likely to be Fully Ready in the Captain John Mullan and least likely to be Fully Ready in Heart of Missoula.

Figure 8. Percent of Children Fully Ready, by Missoula Neighborhood



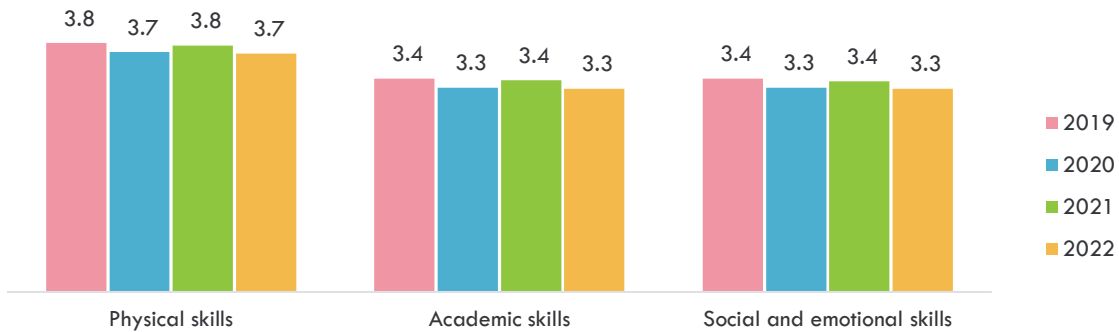
Source: Parent Information Form (2022).
 Note: N = 341.

PARENTS’ PERCEPTIONS OF READINESS AND RECEIPT OF KINDERGARTEN TRANSITION INFORMATION

Parents also rated their child’s kindergarten readiness and shared what kinds of information and support they received to help their child transition to kindergarten.

Parents rated their child’s readiness in each domain on a scale from 1 (Not Yet Ready) to 4 (Fully Ready). As seen in the figure that follows, the average parent rating of readiness across the three domains slightly decreased this year compared to the previous year, returning to the rates seen in 2020 across all three domains. *Note: Parents and teachers rated children’s readiness using different scales and measures and therefore readiness on these two measures should not be compared.*

Figure 9. Parents' Readiness Ratings, by Skill Domain



Source: Parent Information Form (2019, 2020, 2021, 2022).

Note: N = 165 (2019); N = 226 (2020); N = 460 (2021); N = 508 (2022). Parents rated children on a scale from 1 (Not Yet Ready) to 4 (Fully Ready).

The figure that follows shows that in 2022, about 82% of parents received information about how and when to register their child for school (a decrease of three percentage points compared with the previous year). Additionally, 76% received specific information about ways they can help their child develop kindergarten readiness skills, a slight decrease of three percentage points since 2021. Not shown in the figure, parents most commonly reported receiving this kind of information from their child's preschool teacher or child care provider (56%) or kindergarten teacher or school (39%).

Figure 10. Information Obtained by Parents Related to Kindergarten Transition

	2019	2020	2021	2022
Received information about how and when to register child for school	80%	79%	85%	82%
Received specific information about how to help your child develop skills to be ready for kindergarten	76%	70%	79%	76%

Source: Parent Information Form (2019, 2020, 2021, 2022).

Note: N = 162-164 (2019); N = 223 (2020); N = 456-457 (2021); N = 505-510 (2022).



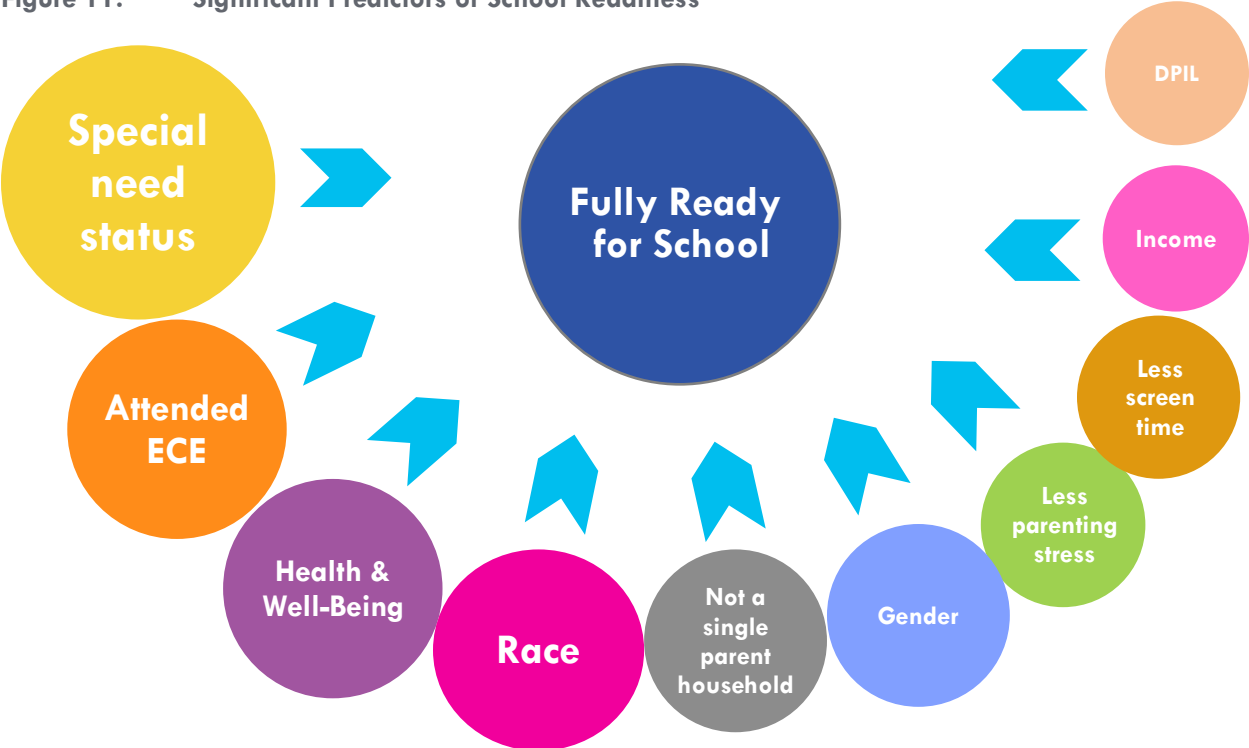
Predictors of Kindergarten Readiness

WHAT CHILD, COMMUNITY, AND FAMILY FACTORS PREDICT KINDERGARTEN READINESS?

We conducted an analysis that identifies the child and family characteristics and experiences that are most strongly related to kindergarten readiness. In the current year, **ten factors significantly predicted kindergarten readiness**: special need status of a child, attending ECE (early care and education), health and well-being, child’s race, family composition, child’s gender, lower parenting stress, less screen time, family income, and participation in the Dolly Parton Imagination Library (DPIL) program. In the diagram that follows, the size of each bubble represents the strength of each factor’s relationship with readiness.

Attending ECE, coming to school well rested, and less screen time were some of the strongest predictors of kindergarten readiness.

Figure 11. Significant Predictors of School Readiness



Source: Kindergarten Observation Form (2022), Parent Information Form (2022).
 Note: N = 477.



The strongest predictor of Missoula County kindergarten readiness was the presence of a special need. Children without special needs had higher readiness scores compared to those with special needs, even when considering other key factors.

Children who attended **early childhood education** were more likely to be ready for kindergarten than children who did not.

Children who **rarely came to class tired** were more likely to be ready for kindergarten than children with lower levels of health and well-being.

Children who were identified as **White** were more likely to be ready for kindergarten than children from other racial/ethnic groups.

Children who were raised by more than one caregiver were more likely to be kindergarten ready than children from **single parent** households.

Girls tended to be more ready for kindergarten than boys.

Children with parents with **lower levels of parenting stress** (i.e., they reported less difficulty caring for their children) were more likely to be ready for kindergarten compared to children with parents experiencing more parenting stress.

Children **with less screen time** per week were more likely to be kindergarten ready than children who had more screen time.

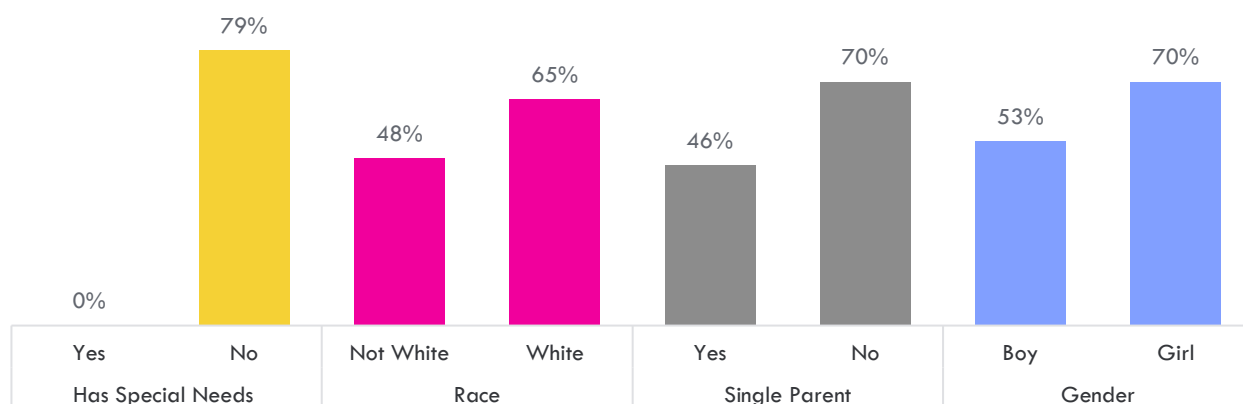
Children from **higher-income** households were more likely to be kindergarten ready than children from lower-income households.

Children who participated in the **Dolly Parton Imagination Library** program were more likely to be ready for kindergarten.

READINESS BY DEMOGRAPHIC AND DEVELOPMENTAL CHARACTERISTICS

The figures that follow show the predicted probability a child is Fully Ready for kindergarten by key characteristics and experiences, after taking into account all of their significant predictors of readiness. The first figure shows how readiness varies by demographic and developmental characteristics. For example, we can see from the figure that children who have no special needs, are white, live in a multi-parent household, and are female, have a higher probability of being Fully Ready for kindergarten.

Figure 12. Predicted Probability of Being Fully Ready for Kindergarten, by Demographic and Developmental Characteristics



Source: *Kindergarten Observation Form (2022), Parent Information Form (2022)*. Differences are significant at $p < 0.05$. Note: $N = 466$.

Interpreting Demographic and Developmental Differences in Readiness

There are several explanations for the developmental and demographic differences we see in readiness. First, there are limitations inherent to teacher observations, including implicit bias and negative stereotypes about the behavior and aptitude of children with special needs, children of color, and boys. However, there are additional developmental and structural explanations as well. For example, children with special needs have delays in one or more areas assessed on the KOF, and developmental researchers have noted that girls are more developed than boys at this age, particularly in their social and behavioral skills.ⁱⁱⁱ To address readiness disparities based on gender or special needs, schools should recognize and be prepared to meet each student where they are developmentally.

In addition, structural inequities underlie many of the racial disparities seen in school readiness.^{iv} For example, with lower family incomes and more limited access to resources, supports, and enrichment opportunities like ECE, non-White children are more likely to enter kindergarten with lower readiness levels compared to White children. Poverty is also related to higher rates of stress and poor health among parents/caregivers, as well as less time to spend with their child and less disposable income to cover basic needs and health and enrichment supports, which then impact other key “malleable assets” associated with readiness like screen time. Closing the readiness gap will require interventions that ultimately

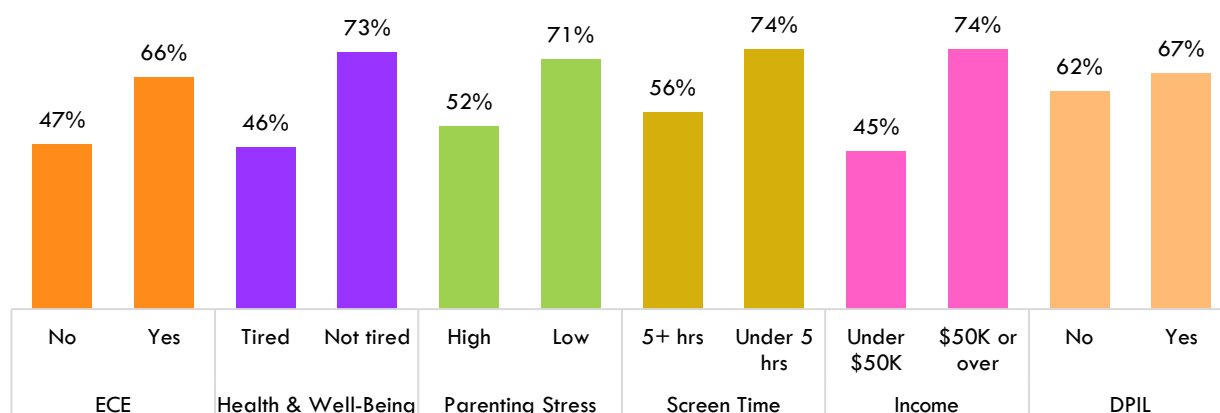
address the policies and systems that produce and reproduce the unequal conditions that lead to readiness inequities.

READINESS BY MALLEABLE ASSETS

Some factors, or “assets”, strongly associated with readiness can be more easily addressed with intervention than others. These “malleable assets” include attended ECE, child health and well-being, lower parenting stress, less screen time, living in a higher income household, and participation in the DPIL program. The next figure illustrates how readiness levels were higher among children who rarely appeared tired in class, whose families have higher income, who participated in DPIL and who had less than five hours of screen time per week.

There is a cumulative effect of malleable assets on readiness such that the more assets a child has, the more likely he or she is to be Fully Ready for kindergarten.

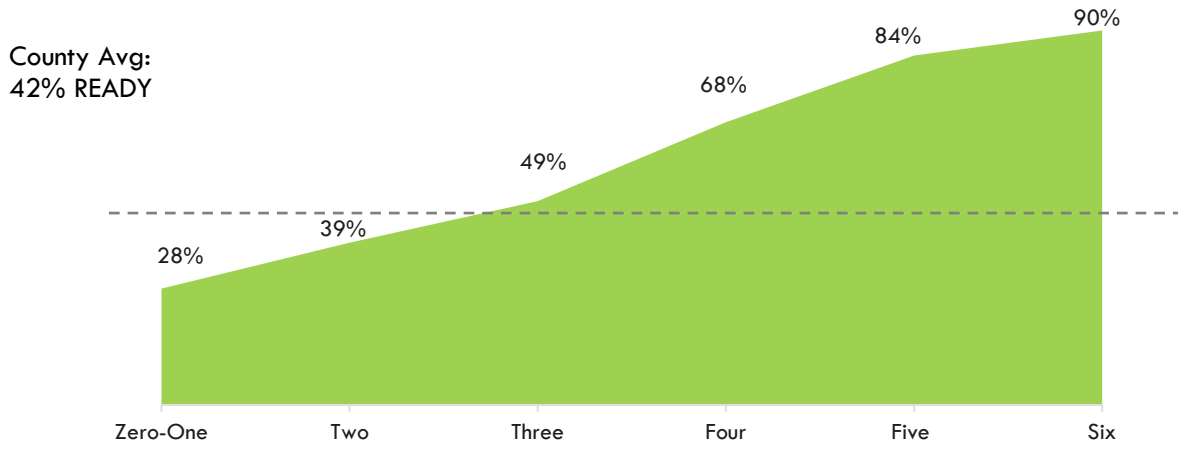
Figure 13. Predicted Probability of Being Fully Ready for Kindergarten, by Malleable Characteristics



Source: *Kindergarten Observation Form (2022), Parent Information Form (2022)*. Differences are significant at $p < 0.05$.
 Note: N = 460. “Parenting stress” is measured by asking parents how often they feel their child is more difficult to care for than most children; parents who responded Rarely or Sometimes were categorized as “low stress,” while those who responded Often or Almost Always were considered “high stress”. “Health and Well-Being” is measured by the teacher reporting how often the child came to school tired; “tired” children came to school tired on at least some days and “not tired” children came to school tired rarely or almost never.

Children with a greater number of these assets were significantly more likely to be Fully Ready for kindergarten. As seen in the figure below, 90% of children who have all six “malleable assets” are Fully Ready for kindergarten.

Figure 14. Percent Fully Ready, by Number of Malleable Assets



Source: Kindergarten Observation Form (2022), Parent Information Form (2022).

Note: N = 459. Differences statistically significant, $p < .001$.



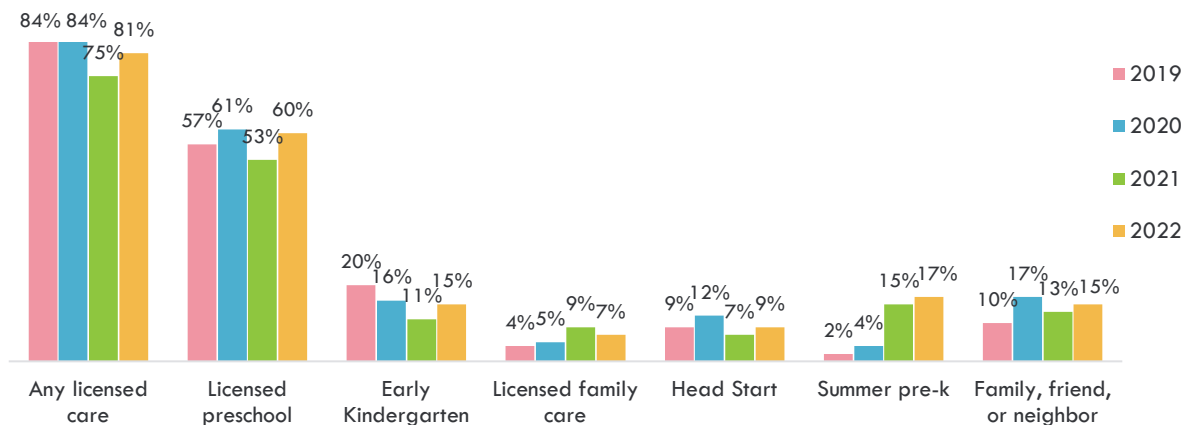
Characteristics and Experiences of Children and Families

As children’s experiences and home environments prior to kindergarten can greatly impact their readiness, we asked parents to answer questions about their child’s early childhood education (ECE) experience, the family’s use of services and resources, the child’s health and well-being, the family’s engagement in activities and routines, and the family’s experience of stress and support. This section of the report compares such characteristics and experiences of children and families in the current sample to those who participated in prior years, including those who participated prior to the onset of COVID-19.

PRESCHOOL & EARLY CARE AND EDUCATION (ECE)

The percent of children participating in any licensed ECE has gone up since 2021, nearing pre-pandemic rates. In 2022, 81% of children participated in licensed care before entering kindergarten, compared to 75% in 2021. This increase was primarily driven by a rise in the percent of children who attended Early Kindergarten or Head Start or other free/low-cost preschool. There were also small increases in the percent of children attending summer pre-K and the percent being cared for by family, friends, or neighbors.

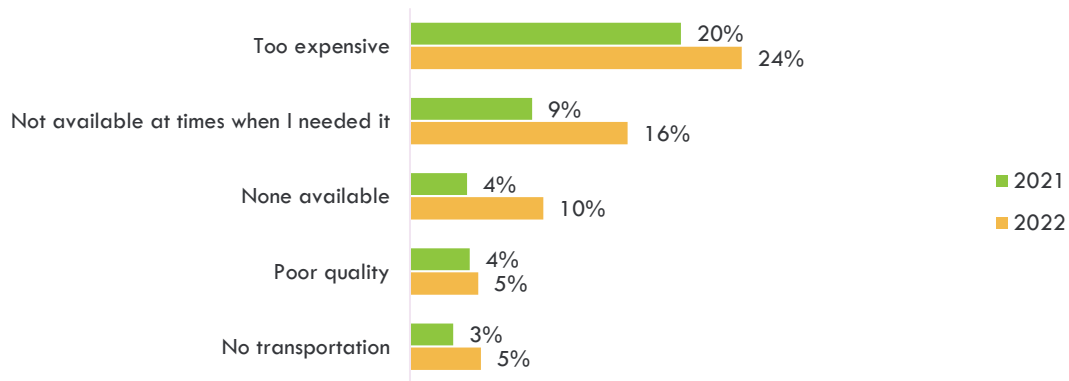
Figure 15. Child Care in the Last 12 Months



Source: *Kindergarten Observation Form* (2019, 2020, 2021, 2022), *Parent Information Form* (2019, 2020, 2021, 2022).
 Note: N = 164-226 (2019); N = 226-269 (2020); N = 457-552 (2021); N = 513-658 (2022). Percentages may not equal 100% as more than one source of care could be selected.

Parents reported that the most common challenge they experienced in accessing ECE was the cost, reported by 20% in 2021 and increasing to 24% percent in 2022.

Figure 16. Challenges Related to Accessing ECE



Source: Parent Information Form (2021, 2022).

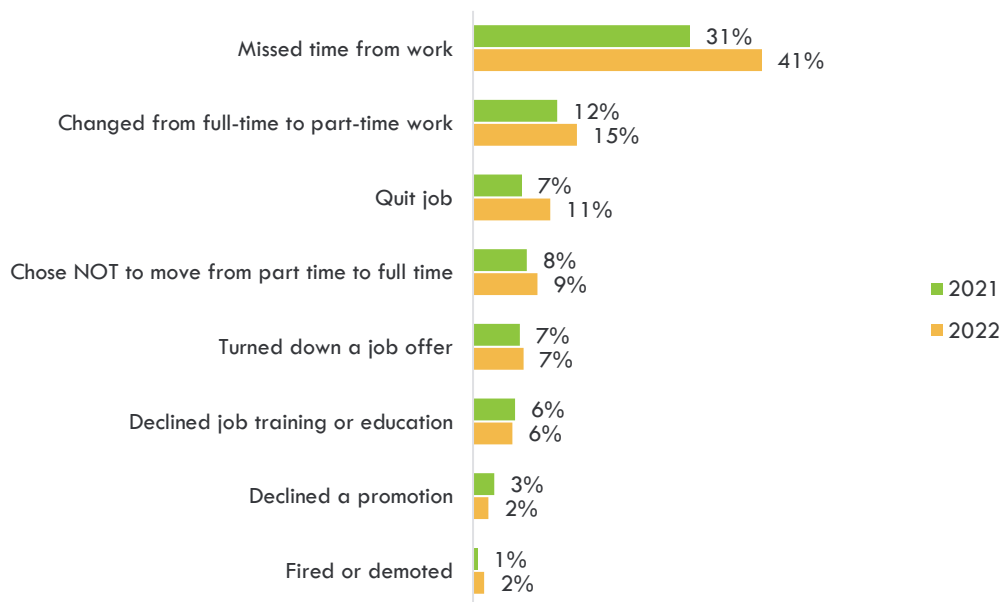
Note: N = 446 (2021); N = 498 (2022). Question not asked prior to 2021. Percentages may not equal 100% as participants could select more than one response.



Over 40% of parents missed time from work due to ECE challenges.

Parents were also asked how ECE challenges affected their employment. The most common response was that they had to miss time from work (reported by 31% in 2021 and increasing to 41% in 2022).

Figure 17. Impact of ECE Challenges on Employment in the Last Five Years



Source: Parent Information Form (2021, 2022).

Note: N = 444-446 (2021); N = 499 (2022). Question not asked prior to 2021. Percentages may not equal 100% as participants could select more than one response.

HEALTH & WELL-BEING

In 2022, there were some slight declines in child health and well-being, as reported by teachers on the *KOF*. Specifically, fewer children *Rarely* appeared tired (74%) or hungry (81%) or were sick (86%) in 2022 as compared to 2021. There were minimal changes over time in the percent who complained of a mouth ache.

Figure 18. Teacher Reports of Children’s Health and Well-Being



Source: *Kindergarten Observation Form* (2019, 2020, 2021, 2022).

Note: N = 248-250 (2019); N = 226-232 (2020); N = 693-697 (2021); N = 755-769 (2022).

The vast majority of children had a dental exam and routine well-child checkup in the past year, but children were slightly more likely to have visited the doctor than the dentist.

Figure 19. Students’ Access to and Use of Health Care

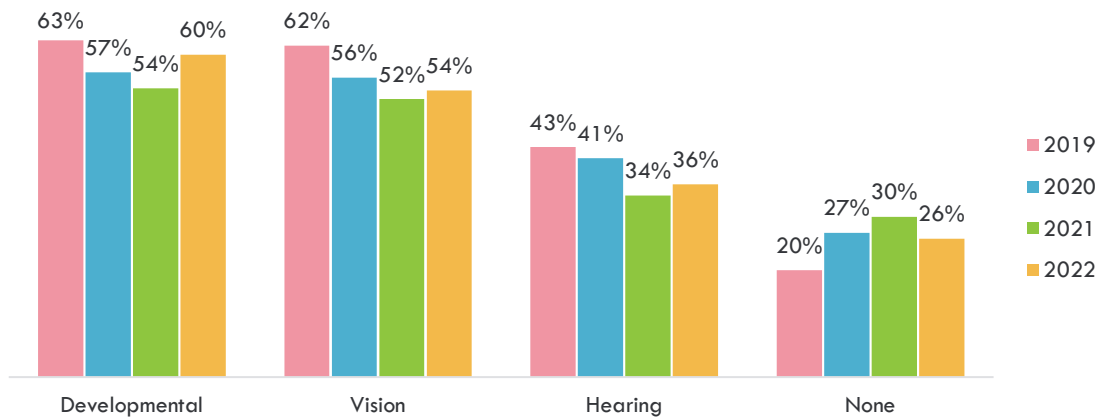
	2019	2020	2021	2022
Has had a dental exam in the past year	93%	94%	90%	94%
Had a routine well-child checkup	N/A	94%	95%	96%

Source: *Parent Information Form* (2019, 2020, 2021, 2022).

Note: N = 163-165 (2019); N = 223-224 (2020); N = 455 (2021); N = 501-504 (2022).

In 2022, six in ten children (60%) had received a developmental screening, over half (54%) received vision screening, and about one-third (36%) received a hearing screening. About a quarter did not receive any screening. Screening rates increased in 2022 and were similar to the rates observed in 2020.

Figure 20. Health Screenings

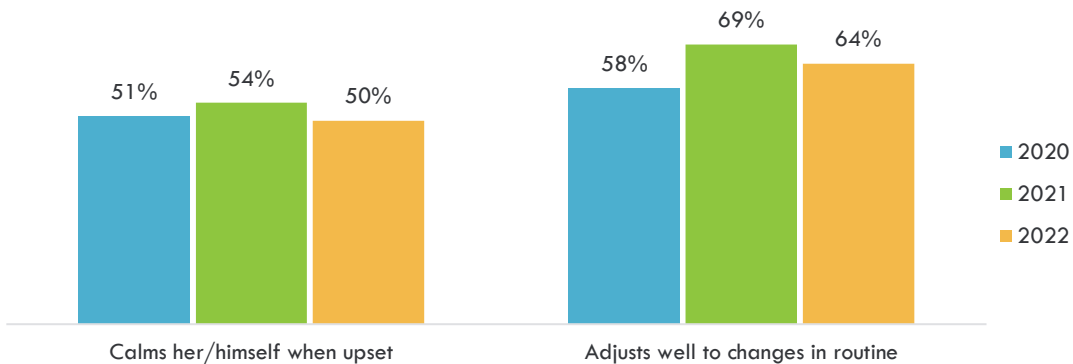


Source: Parent Information Form (2019, 2020, 2021, 2022).

Note: N = 161 (2019); N = 222 (2020); N = 455 (2021); N = 502 (2022).

Half of parents (50%) reported in 2022 that their child was often or almost always able to calm themselves when upset—a decrease of four percentage points from 2021, but similar to the percent seen in 2020. Additionally, about two-thirds (64%) of parents reported that their child adjusts well to changes in routine, a decrease from 69% in 2021, but an increase from 58% in 2020.

Figure 21. Percent of Families Reporting High Levels of Child Resilience



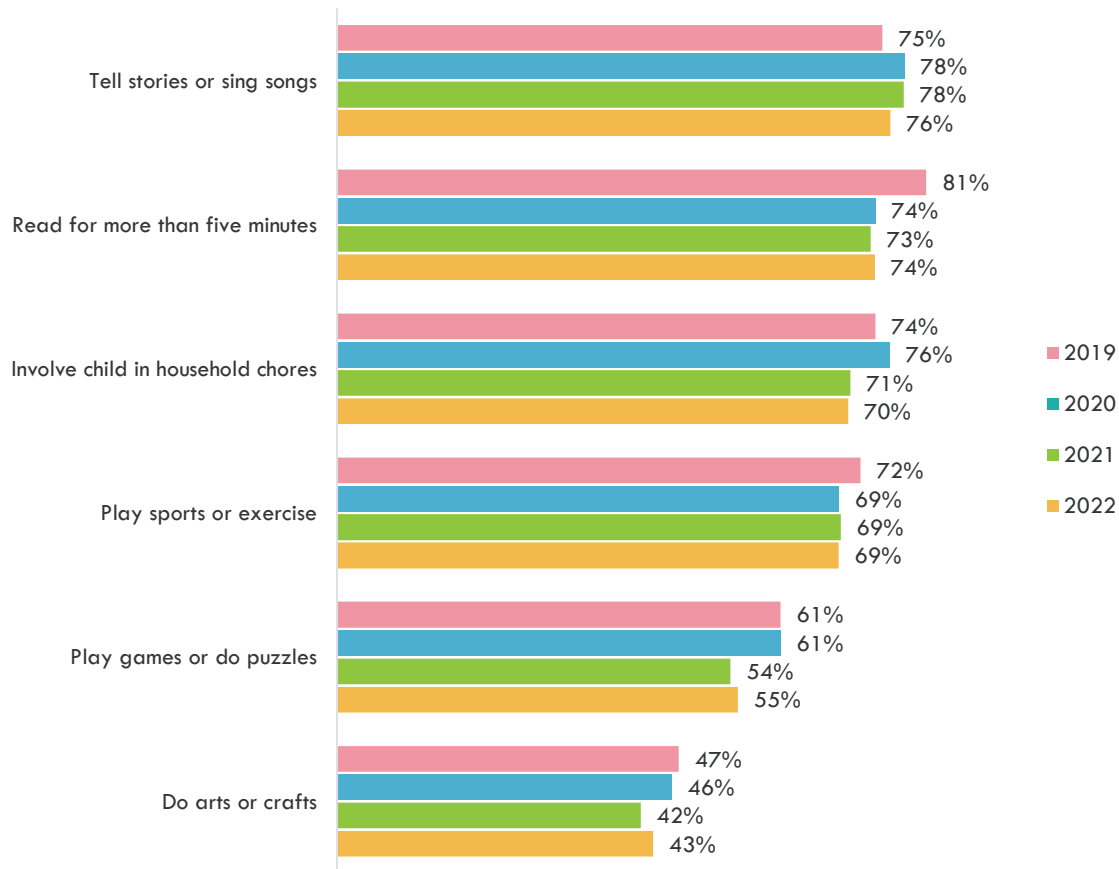
Source: Parent Information Form (2020, 2021, 2022).

Note: N = 223 (2020); N = 458 (2021); N = 506 (2022). 2019 values not included due to changes in question wording. Values reflect percent who selected “Often” or “Almost Always”.

FAMILY ACTIVITIES & ROUTINES

Most families engaged in activities like telling stories, reading, or playing sports with their child at least four days per week, with telling stories or singing songs being the most common activity reported in 2022. Compared to 2021, engagement in all activities remained consistent.

Figure 22. Percent of Families Engaging in Family Activities at Least Four Days per Week

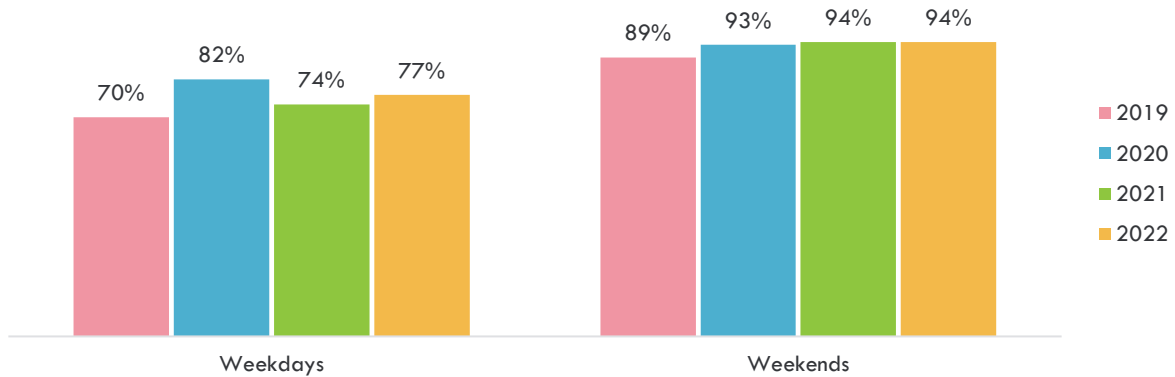


Source: *Parent Information Form* (2019, 2020, 2021, 2022).

Note: N = 163-165 (2019); N = 225-226 (2020); N = 462 (2021); N = 503-510 (2022).

The American Academy of Pediatrics recommends no more than one hour of screen time for children 2-5 years old.^v The proportion of children with more than an hour on weekdays was 77%, a three percentage point increase from the prior year. The proportion of children with more than an hour of screen time on weekends was 94% and has remained consistent over the past three years.

Figure 23. Percent of Children with More than One Hour of Screen Time Daily

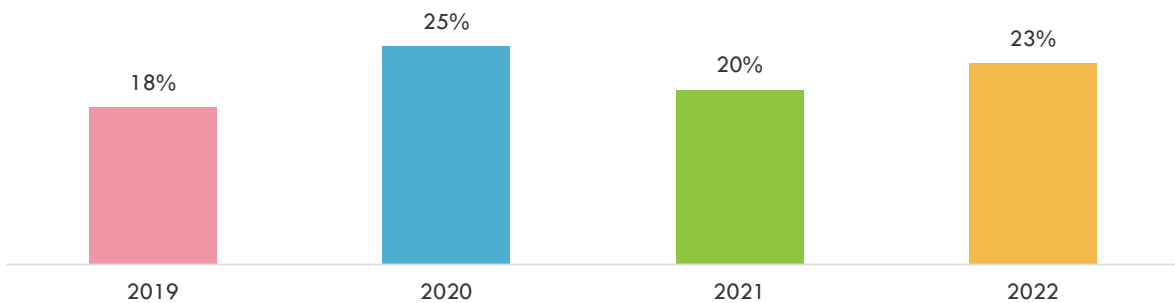


Source: Parent Information Form (2019, 2020, 2021, 2022).

Note: N = 1 62-165 (2019); N = 223-225 (2020); N = 4 51-459 (2021); N = 503-509 (2022).

In 2022, there was a slight increase in the percent of children who had a bedtime of 9:00 PM or later. The percent seen in the current year (23%) neared the rate observed in 2020 (25%).

Figure 24. Percent of Children Going to Bed at 9 PM or Later



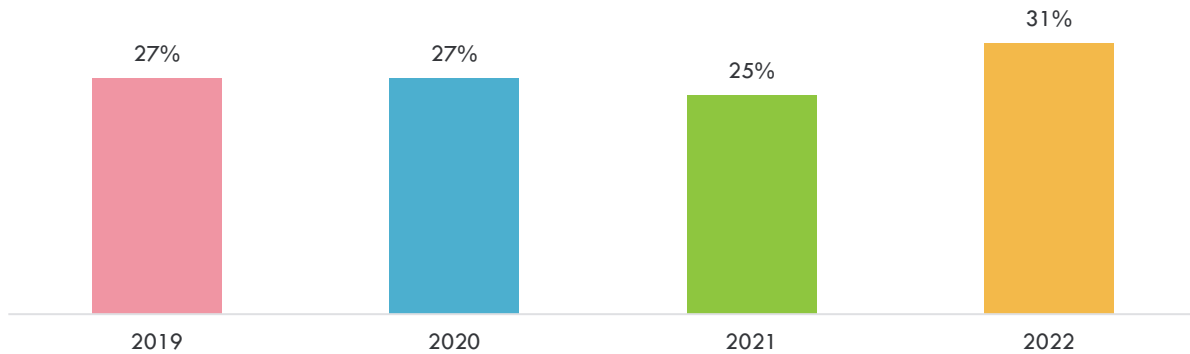
Source: Parent Information Form (2019, 2020, 2021, 2022).

Note: N = 162 (2019); N = 225 (2020); N = 455 (2021); N = 500 (2022).

FAMILY STRESS & SUPPORT

About a third of parents (31%) reported high parenting stress, considering their child to be harder to care for than most. This is an increase from about a quarter of parents who reported parenting stress in prior years of the study and the highest rate seen since data collection started in 2019.

Figure 25. Percent of Caregivers Reporting Higher Parenting Stress

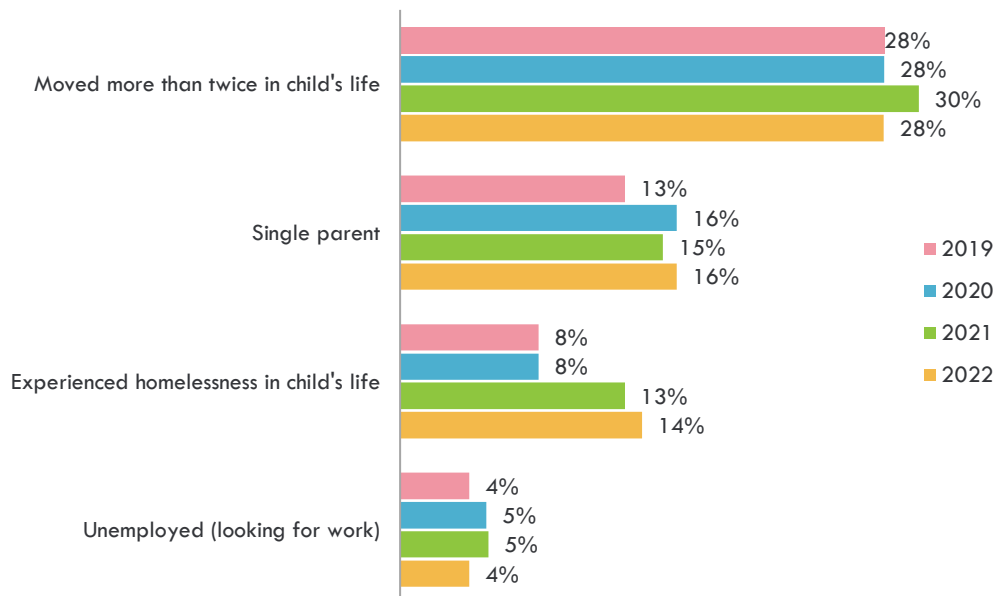


Source: *Parent Information Form* (2019, 2020, 2021, 2022).

Note: N = 164 (2019); N = 223 (2020); N = 457 (2021); N = 505 (2022). Parenting stress is measured by asking parents how often they feel their child is more difficult to care for than most children. Parents who say Almost Always or Often in the past month are categorized as experiencing higher parenting stress.

The prevalence of most family risk factors, such as housing stability, unemployment, and single parenthood remained relatively constant over time. However, the proportion of families that experienced homelessness during their child’s lifetime increased from 8% in 2019 and 2020 to 13% in 2021 and 14% in 2022. For this report, homelessness included staying temporarily with friends or family, in a hotel or motel, in a shelter or transitional housing program, or in a public place, due to economic hardship.

Figure 26. Family Risk Factors



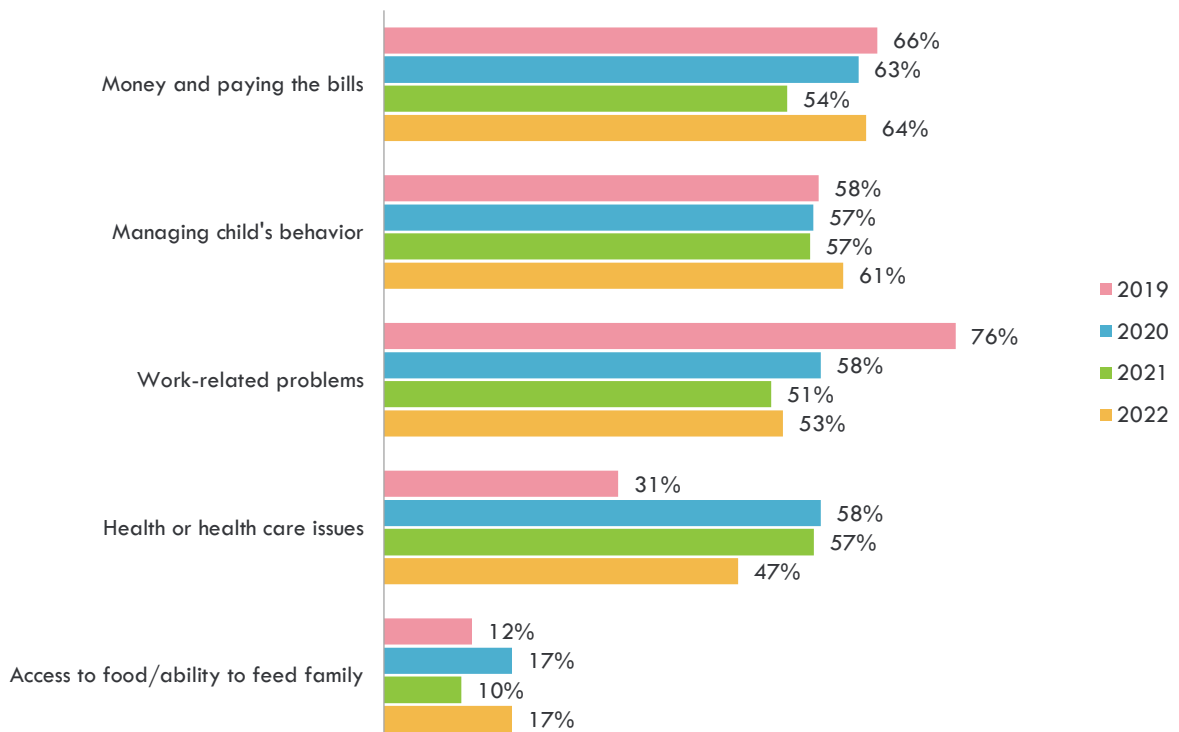
Source: *Parent Information Form* (2019, 2020, 2021, 2022).

Note: N = 159-163 (2019); N = 219-223 (2020); N = 453-462 (2021); N = 430-504 (2022). Homelessness included staying temporarily with friends or family, in a hotel or motel, in a shelter or transitional housing program, or in a public place due to economic hardship.

The most common concerns reported by parents in 2022 were money and paying bills (64%) and managing their child’s behavior (61%). Reports of these concerns increased by 10 percentage points and four percentage points, respectively, in the most recent year. In addition, concerns about access to food increased by seven percentage points from 2021, returning to 2020 pandemic levels. Concerns about work-related problems were steady from 2021 to 2022, while concerns about health decreased by 10 percentage points in the most recent year.



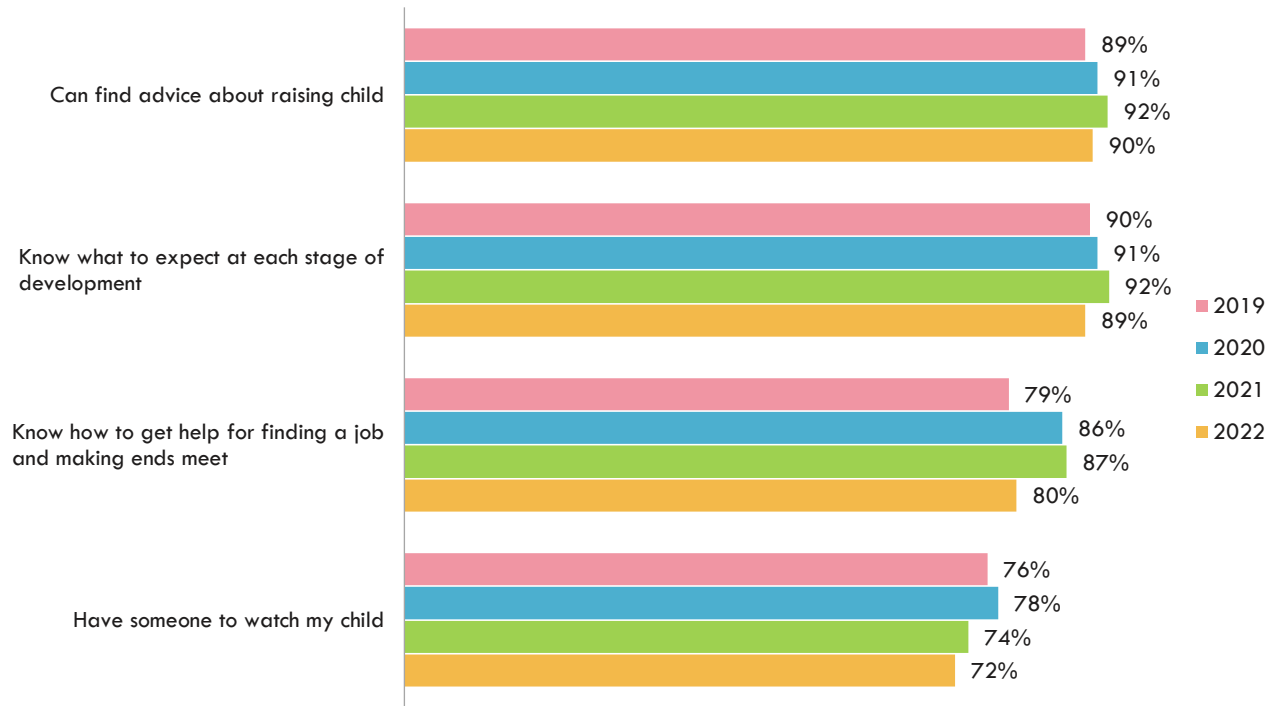
Figure 27. Parental Concerns



Source: *Parent Information Form* (2019, 2020, 2021, 2022).
 Note: N = 161-162 (2019); N = 224 (2020); N = 457-459 (2021); N = 505-507 (2022). Reflects percent who marked “A Little”, “Moderately”, or “Very” Concerned.

Overall, most parents reported access to parenting support and knowledge. Parents were most likely to report being able to find advice about raising their child (90%) and knowing what to expect at each stage of their child’s development (89%).

Figure 28. Percent of Caregivers with Parenting Support and Knowledge



Source: *Parent Information Form* (2019, 2020, 2021, 2022).

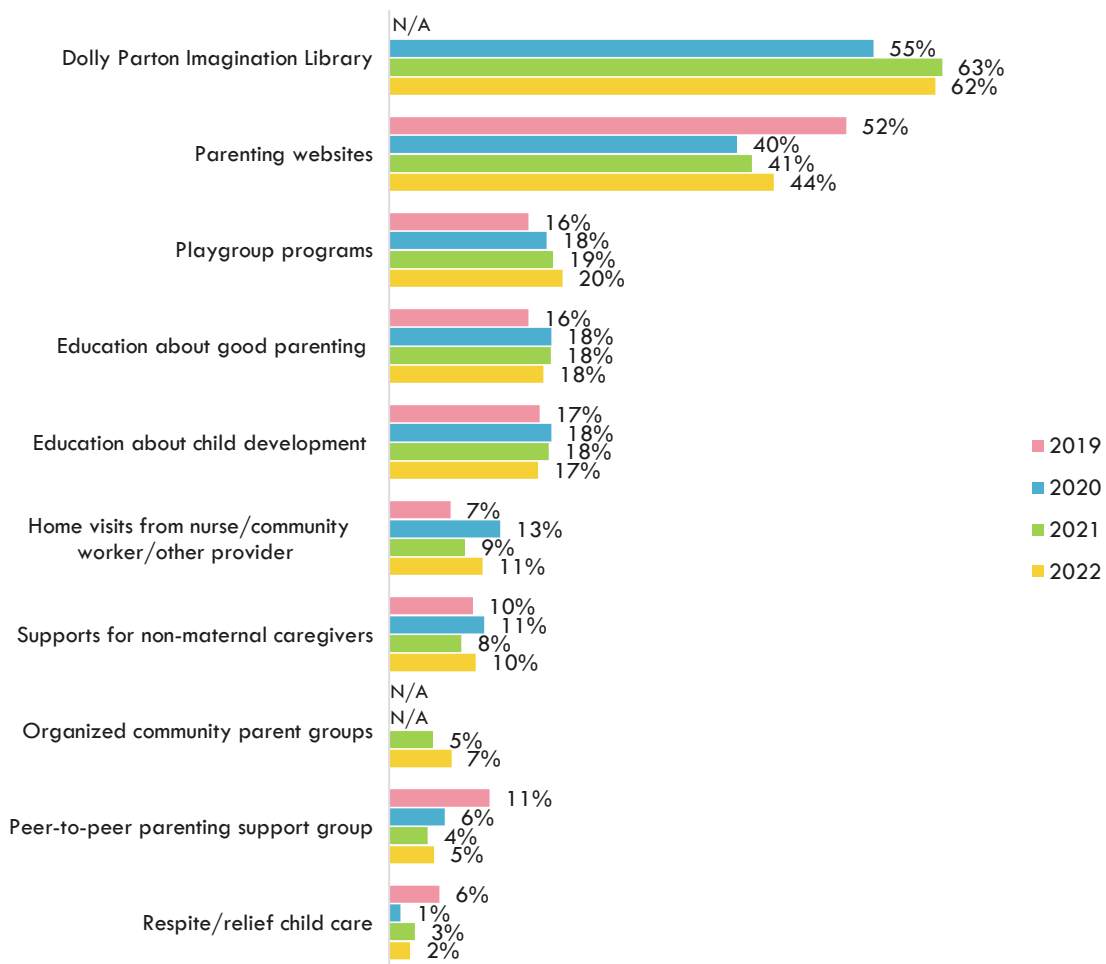
Note: N = 161-164 (2019); N = 221-223 (2020); N = 454-458 (2021); N = 504-506 (2022). Reflects percent who marked "Somewhat True" or "Definitely True".

FAMILY USE OF SERVICES AND RESOURCES

The most common services and resources families used in 2022 included participation in the Dolly Parton Imagination Library (DPIL, 62%) and using parenting websites (44%). (See next section for details on the impact of the DPIL.) Families' use of other services did not change significantly from 2021 to 2022.



Figure 29. Percent of Families Using Services

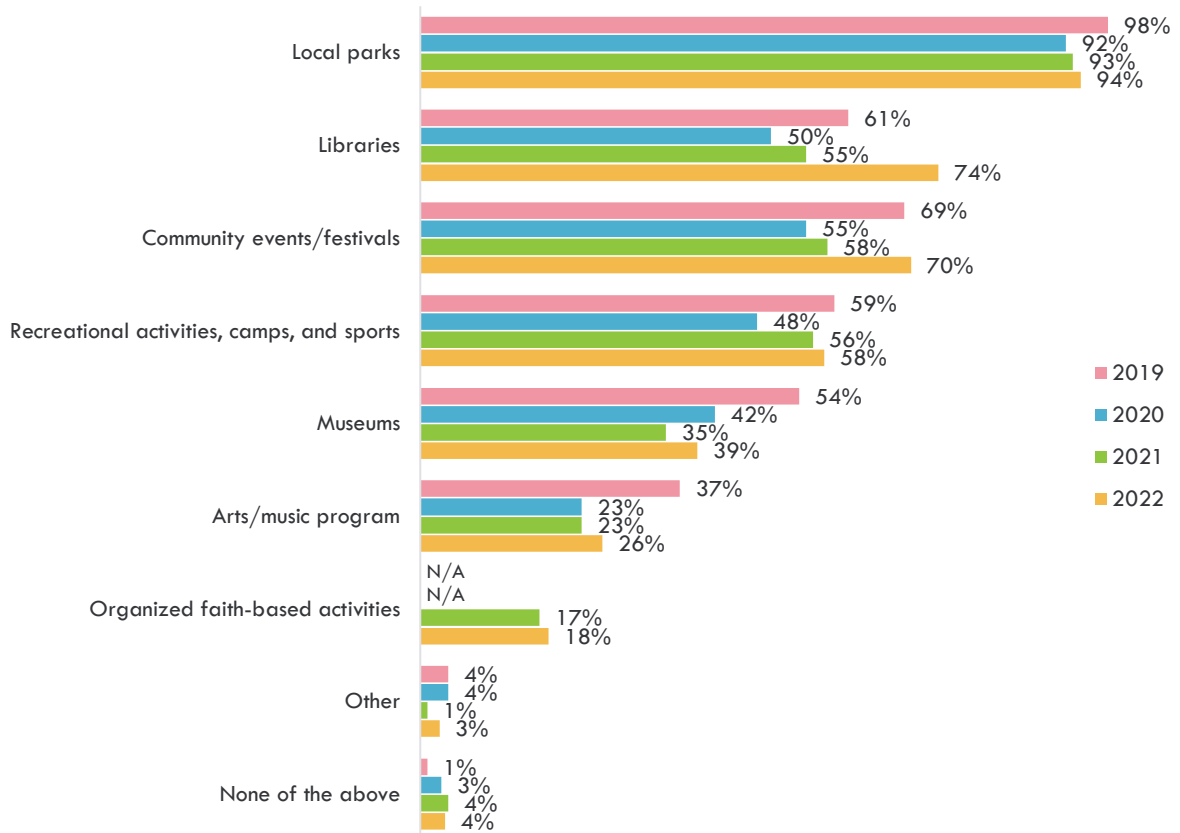


Source: *Parent Information Form* (2019, 2020, 2021, 2022).

Note: N = 158 (2019); N = 223 (2020); N = 452 (2021); N = 508 (2022). N/A: response option was not offered in this year of data collection.

Across years, the most commonly used community resource was local parks, used by 94 percent of the sample in 2022. A large increased utilization of libraries was observed in the current year (19 percentage points increase). As well, more families attended community events as compared to the prior two years, most likely due to the return of offering these events at full swing after a reduction in opportunities during the first two years of the pandemic.

Figure 30. Percent of Families Using Community Resources



Source: Parent Information Form (2019, 2020, 2021, 2022).

Note: N = 165 (2019); N = 225 (2020); N = 457 (2021); N = 509 (2022). N/A: response option was not offered in this year of data collection.

The Positive Impact of Dolly Parton Imagination Library (DPIL) Program

The Dolly Parton Imagination Library (DPIL) is a program that aims to inspire a love of reading by giving books to children 0-5 for free. In Missoula County, the program is sponsored by Zero to Five Missoula, and in the current study, two-thirds of families participated in the program. Most of these families (75%) had been part of the program for three to four years.^{vi} The program appeared to have an impact on reading engagement, overall readiness scores, and readiness scores for two of the three *Building Blocks* (*Self-Regulation* and *Social Expression*), even after accounting for socioeconomic differences between families.

Children in families who participated in DPIL had significantly higher kindergarten readiness scores.

IMPACT OF DPIL

Children in families who participated in the DPIL program tended to have significantly higher readiness scores overall and within each of the *Building Blocks*. In addition, the longer children had been in the DPIL program, the higher their kindergarten readiness scores.

Figure 31. Readiness by DPIL Participation

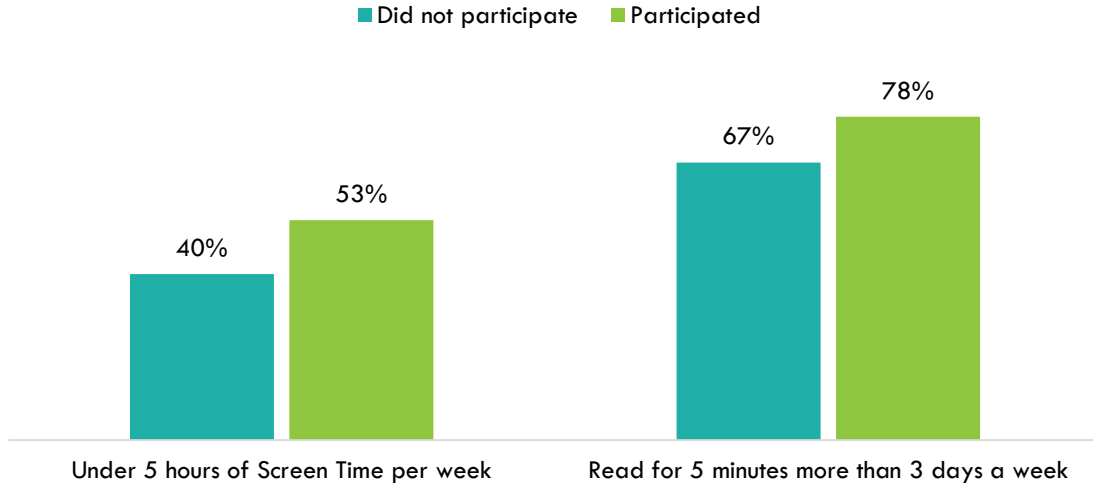


Source: *Kindergarten Observation Form* (2022), *Parent Information Form* (2022).

Note: N = 481. Children were rated on a scale from 1 (Not Yet) to 4 (Proficient). Differences statistically significant, $p < 0.05$, with the exception of *Kindergarten Academics*, which was marginally significant, $p < 0.10$.

Families who participate in DPIL were also significantly more likely to read to their children more frequently, and their children had less screen time during the week compared to families that did not participate in DPIL.

Figure 32. Reading to Child and Screen Time, by DPIL Participation



Source: Parent Information Form (2022).
Note: N = 314-315. Differences statistically significant, $p < .01$.

While we know many other factors impact children’s readiness, the results of this section suggest a positive impact of participation in DPIL on families in Missoula County.



Conclusion

This fourth annual Kindergarten Entry Assessment (KEA) found that 42% of children were Fully Ready in 2022. While this is the lowest overall readiness rate since the study began in 2019, the rates have been mostly stable since the COVID-19 pandemic, and across all years, children have demonstrated stronger skills in the *Kindergarten Academics* and *Social Expression* domains than in *Self-Regulation*. Readiness in 2022 was strongly related to demographics and developmental characteristics, as well as “malleable assets”, such as attending early care and education (ECE), coming to school well rested, less stress among caregivers, being exposed to less screen time, living in a higher-income household, and participating in the Dolly Parton Imagination Library (DPIL) program. The more of these “malleable assets” a child had, the higher his or her readiness levels.

Although we didn’t see an increase in readiness in 2022, the data gathered for the assessment suggest Missoula County is recovering from the pandemic across several critical areas linked to kindergarten readiness. For example, family income and participation in DPIL increased in 2021 and remained high in 2022. In addition, ECE attendance increased from the previous year. However, despite these positive signs, there are some areas in which families are still experiencing difficulties. Nearly a quarter of parents report ECE is too costly, and 40% have missed time from work due to ECE challenges. There has also been a decline in the percent of children who come to school well rested and an increase in the percent of parents reporting parenting stress. Exposure to screen time has also remained high over the past three years, with over 90% of children watching TV or playing video games for over an hour on weekends.

The study results point to potential solutions that can address the strongest predictors of readiness. Steps the community can take to address the malleable factors associated with readiness include the following:

KEY RECOMMENDATIONS

Early learning and kindergarten transition supports



Ensure equitable access to high-quality ECE

- ◆ Provide all children the opportunity to attend high-quality ECE, addressing common barriers, including cost, hours, and availability.
- ◆ Make investments to develop the capacity of ECE providers, providing professional development opportunities and a living wage.

Medical and mental health services



Support child health & well-being

- ◆ Ensure families have universal access to healthcare and mental health care to promote their children’s health and development.
- ◆ Promote access to developmental screenings and early intervention and provide parent education and support for families of children with diagnosed special needs.

KEY RECOMMENDATIONS

Support for parents and caregivers



Promote access to parent education, support, and parent-child engagement opportunities

- ◆ Increase parents' access to mental health services and stress relief, as well as parent education to help them manage children's difficult behaviors.
- ◆ Continue to offer and promote participation in services like the DPIL that encourage family engagement in enriching activities like reading and help families overcome barriers to these activities, such as access to books.
- ◆ Encourage parents to implement regular bedtimes and limited screen time near bedtime, so children come to school well rested, but also address barriers to quality sleep, such as homelessness and overcrowded housing.
- ◆ Educate parents on the importance of limited screen time and address the underlying reasons for high exposure to screens, including lack of adequate child care or parenting stress.
- ◆ Continue to promote the increased use of libraries and community events, ensuring they are accessible to all families.

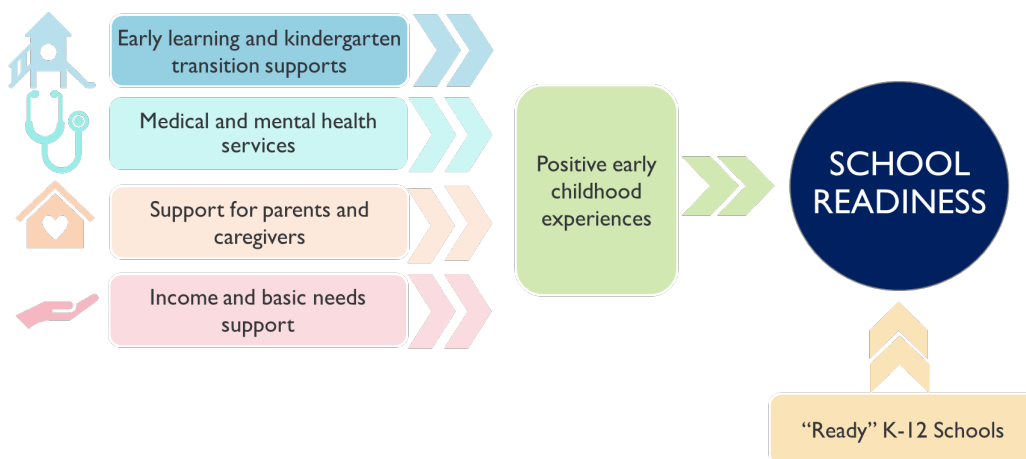
Income and basic needs support



Provide families with the income and basic needs supports

- ◆ Advocate for policies that ensure families have access to basic needs like housing, food, and financial security, so they have the resources they need to support their children's health and development.

Policies and investments that support young children and families should be developed and implemented equitably, prioritizing populations and communities that have historically experienced disinvestment and structural inequality. In addition, investments must be made to ensure schools are "Ready" for children, with adequate resources and preparation to meet children where they are and engage families in their children's education. Brain development is more rapid in the first five years of life than at any other time, and thus it is vital to invest in early childhood, so children have the best opportunity to enter kindergarten ready to learn and experience positive health, education, and employment outcomes later in life.



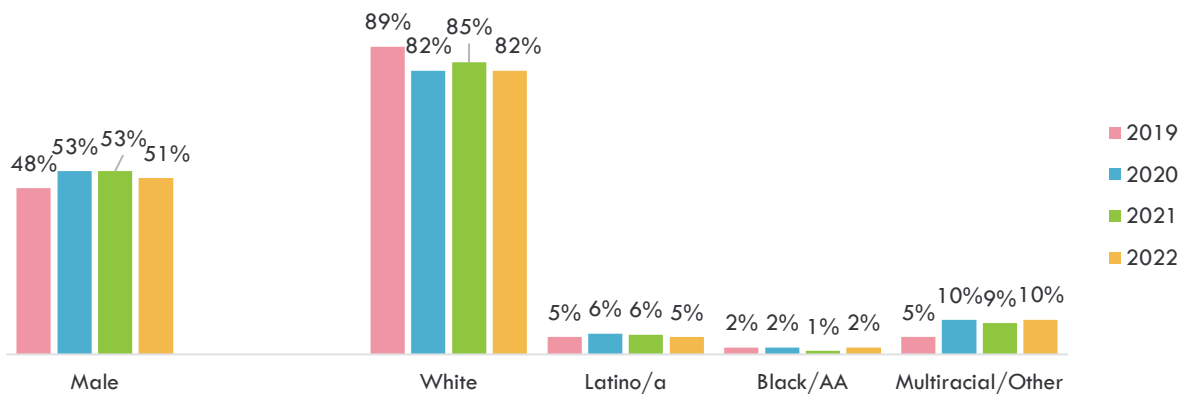
Appendix A: Child & Family Demographics

Figure 33. Child's Age

	2019	2020	2021	2022
Under 5.5 years	37%	46%	37%	53%
At least 5.5 and less than 6 years	46%	43%	46%	40%
6 years and older	17%	10%	17%	7%

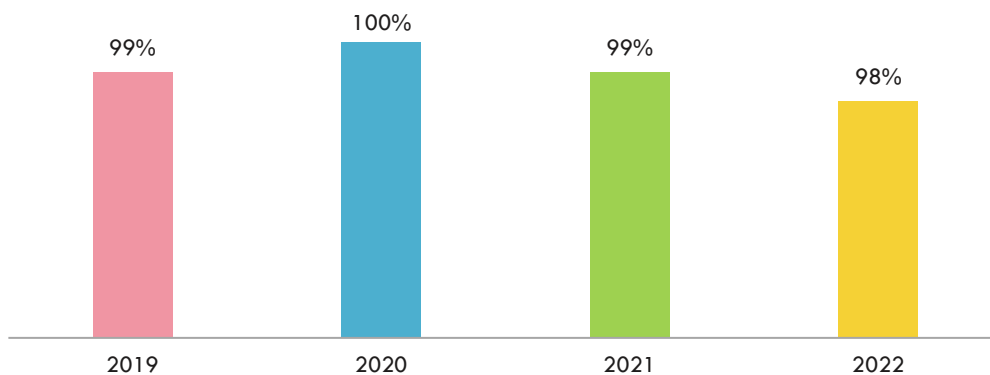
Source: Kindergarten Observation Form (2019, 2020, 2021, 2022), Parent Information Form (2019, 2020, 2021, 2022).
 Note: N = 243 (2019); N = 289 (2020); N = 793 (2021); N = 771 (2022). Percentages may not equal 100% due to rounding.

Figure 34. Child's Gender & Race/Ethnicity



Source: Kindergarten Observation Form (2019, 2020, 2021, 2022), Parent Information Form (2019, 2020, 2021, 2022).
 Note: N = 244-249 (2019); N = 290-291 (2020); N = 683 (2021); N = 737-749 (2022). Percentages may not equal 100% due to rounding.

Figure 35. Percent of Children who Speak English at Home



Source: Parent Information Form (2019, 2020, 2021, 2022).
 Note: N = 165 (2019); N = 225 (2020); N = 459 (2021); N = 503 (2022).

Figure 36. Maternal Educational Attainment

	2019	2020	2021	2022
Less than High School	0%	1%	1%	1%
Some High School	2%	2%	2%	2%
High School Diploma	14%	15%	15%	15%
Some College	14%	23%	19%	18%
Associates Degree	14%	7%	6%	10%
Bachelor's Degree	30%	30%	33%	28%
Advanced Degree	27%	22%	24%	26%

Source: Parent Information Form (2019, 2020, 2021, 2022).

Note: N = 161 (2019); N = 225 (2020); N = 456 (2021); N = 497 (2022). Percentages may not equal 100% due to rounding.

Figure 37. Family Income

	2019	2020	2021	2022
Under \$15,000	6%	7%	7%	7%
\$15,000-\$34,999	12%	19%	14%	13%
\$35,000-\$49,999	17%	11%	9%	11%
\$50,000-\$74,999	20%	20%	18%	19%
\$75,000-\$99,999	16%	15%	17%	14%
\$100,000 or more	29%	27%	35%	36%

Source: Parent Information Form (2019, 2020, 2021, 2022).

Note: N = 109-161 (2019); N = 219 (2020); N = 433 (2021); N = 493 (2022). Percentages may not equal 100% due to rounding.

Figure 38. Child's Neighborhood in Missoula

	2019	2020	2021	2022
Captain John Mullan	7%	6%	4%	4%
East Missoula	N/A	1%	<1%	2%
Farviews/Pattee Canyon	1%	5%	5%	2%
Franklin to the Fort	1%	16%	10%	10%
Grant Creek	7%	2%	4%	3%
Heart of Missoula	2%	2%	3%	3%
Lewis and Clark	1%	7%	9%	7%
Miller Creek	5%	7%	17%	12%
Moose Can Gully	17%	14%	7%	6%

	2019	2020	2021	2022
Northside/Westside	23%	13%	9%	9%
Rattlesnake	15%	2%	1%	10%
Riverfront	0%	1%	2%	1%
River Road	0%	2%	5%	4%
Rose Park	2%	2%	3%	2%
South 39th St	0%	4%	3%	5%
Southgate Triangle	0%	1%	1%	3%
University District	1%	1%	7%	5%
Unknown	18%	14%	9%	13%

Source: Parent Information Form (2019, 2020, 2021, 2022).

Note: N = 139 (2019); N = 212 (2020); N = 328 (2021); N = 391 (2022).

Endnotes

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ⁱⁱ Hair, E., Halle, T., Terry-Humen, E., Lavelle, B. and Calkins, J., 2006. Children's school readiness in the ECLS-K: Predictions to academic, health, and social outcomes in first grade. *Early Childhood Research Quarterly*, 21(4), pp.431-454.

ⁱⁱⁱ DiPrete, T. A., & Jennings, J. L. (2012). Social and behavioral skills and the gender gap in early educational achievement. *Social Science Research*, 41(1), 1-15.

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^v American Academy of Pediatrics. (2016). Media and young minds. *Pediatrics*, 135(5), e20162591

^{vi} Imaginationlibrary.com. About Us. <https://imaginationlibrary.com/about-us/>