SCHOOL READINESS

IN SACRAMENTO COUNTY

RESULTS OF THE 2014 FALL ASSESSMENT

Comprehensive Report

School Readiness Assessment Model™

Funding provided by: FIRST 5 SACRAMENTO

Produced by: ASR

Acknowledgments

Applied Survey Research (ASR) would like to acknowledge the following individuals for their support and assistance in the planning and implementation of the 2014 school readiness assessment in Sacramento County:

- Toni Moore, First 5 Sacramento, Executive Director
- Doreen Diehl, First 5 Sacramento, Early Learning Systems Specialist
- First 5 Sacramento School Readiness Coordinators:
  - Mikako Fisher, Karin Nakahira-Young (Elk Grove USD)
  - Denise Thomson, Linda Burkholder (Folsom Cordova USD)
  - Donna Mayo-Whitlock, Karen Shauer (Galt USD)
  - Christine Smith (Natomas USD)
  - Claudia Gibson, Arturo Jimenez (River Delta USD)
  - Robin Smith, Laura Lystrup (Robla School District)
  - Doris Reese, Amy Ronsheimer, Valerie Willover, Jennifer Osalbo, and Dr. Wanda Roundtree, Director of Child Development (Sacramento City USD)
  - Dave Pascoa, Amy Slavensky (San Juan USD)
  - Jana Fields, Leslie Cohen, Sara Haycox (Twin Rivers USD)

This assessment would also not have been possible without the support of the families and teachers of participating kindergarteners who generously gave their time and energy to help us better understand the skills of the children entering their classrooms. We gratefully acknowledge the assistance of the many kindergarten teachers listed in the following table.

Participating Sacramento County Districts, Schools, and Teachers

District	School	Teacher
Elk Grove Unified	Anna Kirchgater Elementary	Rebecca Lusk
		Sarah Peterson
	Charles E. Mack Elementary	Gwynn Woodhouse
		Nicole Roschak
	David Reese Elementary	Jill Kauble
		Jenna Shoop
	Herman Leimbach Elementary	Katie Thompson
		Gayle Gerdes
		Heidi Donnelly
	Samuel Kennedy Elementary	Mandeep Bains
		Denise Brenenstall

District	School	Teacher
Folsom Cordova Unified	Cordova Gardens Elementary	Yoly Stroeve
		Christine Suleiman
	Cordova Villa Elementary	Krissi Miramontes
		Teresa Christensen
		Megan Bussman
	White Rock Elementary	Jessica Waugh
		Will Olsson
		Zhanna Marin
		Christina Abshire
Galt Joint Union Elementary	Valley Oaks Elementary	Emily Oliveira
		Susan Penney
Natomas Unified	Jefferson Elementary	Amber Allison
		Wendy Heu
		Kristin Ayers
River Delta Joint Unified	Isleton Elementary	Stephen Wright
	Walnut Grove Elementary	Makayla Perlot
Robla	Bell Avenue Elementary	Katy Yund
		Christie Erhart
	Main Avenue Elementary	Brenda Hansen
		Crystal Saladin
Sacramento City Unified	Edward Kemble Elementary	Patricia Arellano
		Donna Rico
		Johanna Kirkman
	Ethel I. Baker Elementary	Dee DeJesus
		Jenny Nguyen
		Charisse Tuvilla
	Father Keith B. Kenny Elementary	Char Feagins
		Sabrina McNally
	John Still	Maria Lares
		Muang Saeteurn

District	School	Teacher
		Joua Vang
	Leataata Floyd Elementary	Joyce O'Keefe
		Melissa Imai
	Oak Ridge Elementary	Christy Fung
		Daniel Rule
	Pacific	Pandy Hespeler
		Chue Lao
		Siphiwe Mashinini-Nigl
	Peter Burnett Elementary	Nicole Cortez
		Jeanette Synhorst
	Rosa Parks Elementary	Guadalupe Reyes-Campos
		Stephanie Wagner
	Woodbine Elementary	Tina Aasen
San Juan Unified	Dyer Kelly Elementary	Ellen Little
		Dana Farnworth
	Howe Avenue Elementary	Erin Madden
		Alissa Lewallen
		Babette Lieberman
	Starr King Elementary	Christina Heitke
	Thomas Edison Language Institute	Nancy Nason
		Nallely Agaton
Twin Rivers Unified	Del Paso Heights Elementary	Sandra Stone
		Debra Nordyke
	Garden Valley Elementary	Olivia Wilkins
		Teresa Weddell
	Hagginwood Elementary	Renee Myers
		Julie Beard
	Kohler Elementary	Brad Thomas
		Sandra Packard
		Donna Sanchez

District	School	Teacher
	Michael J. Castori Elementary	Sarah Smith
	Noralto Elementary	Kerry Shelton
		Joan Capizzano
		Monica Roberts
		Marta Ortega
	Northwood Elementary	David Skow
		Morgann Roth

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Introduction

DEFINING SCHOOL READINESS

In one of the early large-scale efforts to establish a common framework for addressing school readiness issues, the *National Education Goals Panel* (*NEGP*) discussed school readiness in terms of 1) the child's social and academic readiness for school, 2) the readiness of families and communities to support the child's success in school, and 3) the readiness of schools to address the needs of children and their families.

NATIONAL EDUCATION GOALS PANEL
Definition of School Readiness:

- **Readiness of children** for the social and academic institution of school
- **Readiness of families and communities** to prepare children for school
- **Readiness of schools** to meet the diverse needs of incoming students and their families

The school readiness of children can be broadly defined as the set of skills students need to make a successful transition to kindergarten. Experts in the field have noted that young children's cognitive and behavioral readiness skills generally predict children's ability to smoothly transition into and through elementary school (Pianta, Cox, & Snow, 2007). For example, children who demonstrate proficiency across an array of readiness dimensions—including motor, self-regulation, social, and academic skills—are more likely to succeed academically in first grade than those who are competent in only one or two dimensions (Hair, Halle, Terry-Humen, & Calkins, 2003). Many other studies have also found linkages between early school readiness and later success in school:

- Children's patterns of readiness just prior to kindergarten, particularly possessing social competence or advanced memory skills, predict fifth grade achievement (Sabol & Pianta, 2012).
- Fine motor skills, attention skills, and academic readiness skills in kindergarten predict later math, reading, and science scores better than academic readiness skills alone (Grissmer, Grimm, Aiyer, Murrah, & Steele, 2010).
- Kindergarten academic skills (e.g., knowing numbers and letters) and the ability to sustain attention significantly predict math and reading achievement later in elementary school and early adolescence (Duncan et al., 2007).
- Children who demonstrate poor achievement early in their school careers are more likely to experience grade retention, which puts them at greater risk factor for school dropout, even if the retention occurs during elementary school (Alexander, Entwisle, & Kabani, 2001; Roderick, 1994).

Readiness for kindergarten is related to long-term academic outcomes.

Although there is somewhat less agreement on exactly which readiness skills matter most, and how broad and long-lasting their potential impact, it is clear that school readiness is a key determinant of children's academic success.

The ASR School Readiness Assessment Model

Since 2001, Applied Survey Research has conducted school readiness assessments across Northern California, as well is in Illinois, Arizona, and throughout the network of providers in the Los Angeles Unified Preschool. ASR's readiness assessment materials and protocols have been designed to reflect both the local context of school readiness as well as the current research from early education and K-12 literature. The central

instrument of the assessment, the *Kindergarten Observation Form*, was created from the input of subject matter experts, including community stakeholders, child development and education experts, preschool teachers, and kindergarten teachers.

Research conducted by ASR found that readiness skills measured by the *KOF* reliably sort into four primary domains, termed the *Basic Building Blocks of Readiness*:

- *Motor Skills* (fine/gross motor coordination)[1]
- *Social Expression* (skills related to interacting with adults and other children)
- *Self-Regulation* (basic emotion regulation and self-control skills needed to be able to perform well in the classroom)
- *Kindergarten Academics* (skills that are more academic in nature, such as writing, counting, and identifying shapes and colors)

The ASR model also incorporates other components of the *NEGP* school readiness definition, namely community and family preparation for school. A parent survey (the *Parent Information Form*) captures the degree to which the family has been involved in readiness-related activities and utilized community resources to help the child be ready for school. The model recognizes the contribution of early experiences to each of the skills that make up the *Building Blocks*.

PURPOSE OF THIS STUDY

The readiness assessment described in this report was conducted on behalf of First 5 Sacramento. The mission of First 5 Sacramento is to support the healthy development and well-being of children ages 0-5 by providing resources and services throughout the county that:

- Improve children's access to health care, especially oral health,
- Improve nutrition and physical activity for young children,
- Build effective parenting skills,
- Increase access to and participation in quality early child care and education,
- Strengthen communities, and
- Develop school readiness.

In 2012, First 5 Sacramento and ASR first engaged in a partnership to assess incoming kindergarteners' readiness for school across the First 5 countywide network of elementary schools. The assessment was intended to help First 5 and its partners understand how prepared students and their families are for kindergarten across the network, as well as the connections between readiness and other aspects of child and family development. The study was then repeated in Fall 2013 and Fall 2014.

The readiness assessment was largely framed around three primary research questions.

1) How ready for kindergarten are children across the First 5 Sacramento network of schools?

2) How ready are families to support their children's readiness?

[1] In 2014, this Building Block was refined slightly to remove "self-care" items, which nearly all students performed proficiently, and which correlated highly with special needs.

3) What are the major factors or "predictors" of readiness across the First 5 Sacramento network? Are any specific First 5-funded interventions associated with enhanced student readiness?

This report provides a "snapshot" of readiness in the First 5 Sacramento network as well as a "story" of readiness that examines the family and early education contexts of children entering kindergarten in Fall 2014. As the third consecutive year of study, it also explores some of the trends observed between 2012 and 2014 in student and family preparation for kindergarten across the First 5 network. The first section of this report presents the study's methodology: sample design, instruments, and data collection methods. The next section presents the demographic, health and well-being characteristics, as well as family backgrounds of the children assessed. This is followed by a detailed analysis of student readiness across the different skill domains and an exploration of the various child and family factors associated with school readiness. The report then describes an analysis of the associations between First 5 participation and school readiness and concludes with a summary of major findings.

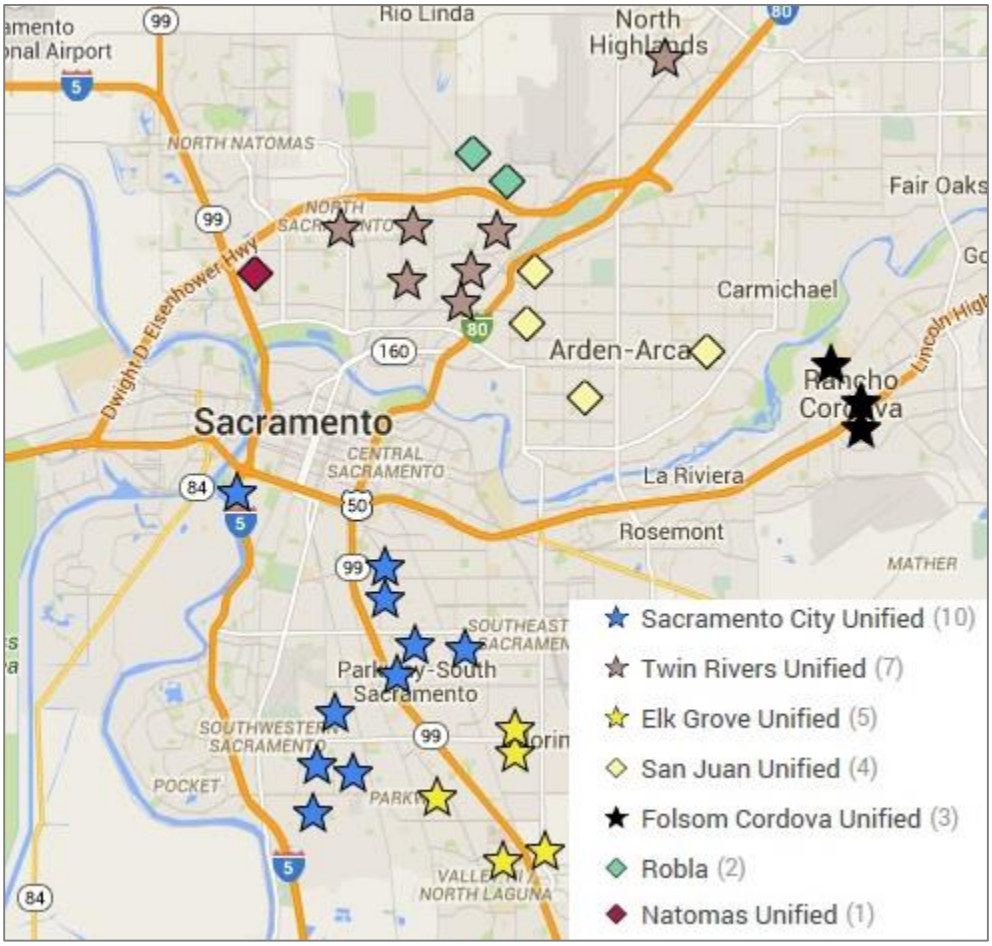
Methodology

This section provides a brief overview of the data sample and response rates, data collection instruments, and sources that comprised the school readiness assessment model for First 5 Sacramento, followed by an explanation of the statistical notations used throughout the report.

SAMPLE

The sample of schools and classrooms was drawn by First 5 Sacramento staff to cover the entire First 5 service area, particularly those schools whose incoming kindergartners and their families were most likely to have been provided First 5 school readiness services in recent years. The sample was drawn to reflect the First 5 Sacramento target population and service network, which covered parts of Sacramento City, Twin Rivers, Elk Grove, Natomas, River Delta, Folsom Cordova, Galt, Robla, and San Juan school districts. The sample was not designed to be representative or generalizable to the county at large or any individual district or school.

Figure 1: Map of First 5 Sacramento Network Schools in the 2013 Readiness Assessment, by District



Note: Galt Joint Union Elementary (one school) and River Delta Joint Unified (two schools) are not pictured. These schools are south of the city.

Schools, Classrooms, Parent Consent, and Response Rates

Figure 2 presents a summary of the participation rates for the study. Overall, there were 35 participating schools representing nine different school districts across Sacramento County. Of the 87 teachers who were trained and provided with materials, 79 completed their assessments and submitted complete forms to ASR. Teachers were contacted multiple times to achieve the highest possible response rate. In all, 1,849 individual student assessments were completed.

The overall parent consent rate was 92 percent. Of the parents who did consent, 70 percent also completed and returned the parent survey.

Figure 2: Completion Metrics of the Sacramento Co. School Readiness Assessment

Data	Number or Percent
Number of participating districts	9
Number of participating schools	35
Number of participating classrooms	79
Number of children in these classrooms	2,004
Number of student assessments completed (with passive consent of parents)	1,849
Average number of children assessed/classroom	25
Parent consent rate	92%
Number of parent surveys returned	1,289
Parent survey response rate	70%

Source: Kindergarten Observation Form and Parent Information Form 2014 returns.

Figure 3 lists the number of students assessed at each participating district, as well as the percentage of *Parent Information Forms* returned. Most students in the sample attended schools in the Sacramento City or Twin Rivers School Districts. The participation rates in most districts were similar to previous years except that a larger proportion of students in the current year came from Sacramento City and Elk Grove and smaller proportion came from Twin Rivers. The *PIF* return rates in 2014 were particularly high in Galt, Folsom Cordova, and River Delta School Districts. Across districts, *PIF* return rates were generally higher in both 2013 and 2014 than in 2012.

Figure 3: School Readiness Completion by District

District (Schools)	*KOF* Total	Percent of Total Sample	*PIF* Total	*PIF* Return Rate
Elk Grove Unified (5)	212	12%	154	73%
Folsom Cordova Unified (3)	183	10%	141	77%
Galt Joint Union Elementary (1)	30	2%	30	100%
Natomas Unified (1)	84	5%	49	58%
River Delta Joint Unified (2)	43	2%	33	77%
Robla (2)	80	4%	59	74%
Sacramento City Unified (10)	668	36%	475	71%
San Juan Unified (4)	206	11%	111	54%
Twin Rivers Unified (7)	343	19%	235	69%
Grand Total (35)	1,849	100%	1,287	69%

Source: Kindergarten Observation Form and Parent Information Form 2014 returns.

DATA COLLECTION INSTRUMENTS AND IMPLEMENTATION

Instruments and Data Sources

The two primary instruments used in this study were the *Kindergarten Observation Form,* completed by teachers to record ratings of child readiness, and the *Parent Information Form,* completed by parents and guardians to provide information about their children and family background. First 5 service and participation records for children and their parents were obtained from Walter R. McDonald Associates, a First 5 Sacramento partner.

Kindergarten Observation Form (KOF)

Teachers used the *Kindergarten Observation Form* to record their observations of children across 20 readiness skills[2] (see Appendix I for a copy of the tool). Teachers observed and scored each child according to his or her level of proficiency in each skill, using the following response options: *Not Yet* (1), *Beginning* (2), *In Progress* (3), and *Proficient* (4). An option of *Don't Know/Not Observed* was provided as well. The *KOF* also includes fields to capture students' basic demographic information to understand who took part in the study and to examine the characteristics that are associated with children's skill development (e.g., experience in preschool and other child care settings, age, gender, whether or not the child has special needs).

Parent Information Form (PIF)

To better understand the family-based factors that contribute to children's readiness for school, all parents of children in participating classrooms were asked to complete a *Parent Information Form* (see Appendix II for a copy of the tool). This is a survey that collects a variety of information about the child and the family, such as preschool and child care arrangements for children, parenting stressors and supports, and information and services families received.

Implementation

Obtaining Participation Agreement

To launch the study, First 5 Sacramento officials, school readiness coordinators, and ASR staff reached out to the principals of each school selected to be in the assessment. Principals were provided with information about the assessment, including its purpose, what participation would entail for the kindergarten teachers, and a timeline for completion of the study. Each principal designated one to four teachers to participate in the assessment.

Teacher Trainings

Prior to and at the beginning of the 2014-15 school year, ASR conducted a series of in-depth assessment trainings for teachers at multiple Sacramento area locations and by web conference. The trainings included an overview of the project and study purpose and a detailed explanation of the data collection steps, student assessment protocol, and parent survey administration.

Parent Consent

[2] The *Kindergarten Observation Form* was revised in 2014 to remove four items that were redundant with other items and/or had low correlations with established readiness constructs. Some of the items retained were re-worded based on feedback from teachers and/or to better align with the kindergarten Common Core standards. See Appendix III for an item-by-item comparison of the current *KOF* with the version used in 2012 and 2013.

Parents granted consent for their children to participate through a process of *passive* consent. At the beginning of the school year, teachers explained the project and the consent process to parents before distributing the parent consent forms and *Parent Information Forms*. Parents who filled out a *PIF* returned it to the teacher in a sealed manila envelope that was sent back to ASR. If, after being informed of the study, parents requested that their child not participate, the child was excluded from the study. All families in the assessed kindergarten classes (both those who participated and those who did not) were given a bilingual (Spanish/English) children's book as a token of appreciation.

Conducting Student Assessments

Teachers were instructed to conduct their student assessments approximately three to four weeks after the start of the school year, drawing upon their knowledge and observations of children during the first few weeks of school. The average length of time that elapsed between the start of school and teachers' observations was 21 days – three weeks after their classes had started. Once complete, each teacher mailed the packet of completed *Kindergarten Observation Forms* and *Parent Information Forms* to ASR. When the final packets were received in full by ASR, each of the teachers was mailed a thank-you letter and a $150 stipend in appreciation of their contribution to the assessment.

Analyses and Statistical Notation

When appropriate, we conducted comparison analyses of the readiness levels, home environments, and early experiences of children based on their **demographic** characteristics (e.g., family income or maternal education) and participation in **First 5** services[3]. **Trend analyses** (i.e., comparisons over the three years of study) were also conducted for select child and family outcomes and any significant differences are noted.

Readiness skills were also analyzed using a technique known as regression, which accounts for the independent contribution of various factors to an outcome. For example, it allowed us to examine the contribution of preschool attendance to readiness, controlling for—or holding constant—other characteristics (e.g., child age, gender, and race/ethnicity).

Throughout this report, ASR uses the following standard abbreviations:

- *N* denotes the sample size for a chart or an analysis table.
- *P* values (e.g., $p < .01$) are used to note whether mean differences and correlations are statistically significant. *P*-values that are less than .05 are statistically significant.
- R^2 is a statistic that represents the degree of variance or change in one measure (e.g., readiness) that is explained by changes in other indicators or "predictors" (e.g., preschool, family income). R^2 is measured on a scale of 0 (no correlation) to 1 (perfectly correlated).

[3] Please note that, while 40 percent of the sample had received a service from First 5, the results presented in this report are for all children assessed.

A Portrait of Students and Families in First 5 Sacramento-Supported School Communities

DEMOGRAPHICS

The basic demographic characteristics of the 2012-2014 samples are provided within Figure 4. Generally speaking, the students were from a diverse range of racial and ethnic backgrounds, including significant proportions who were Latino/Hispanic and African American. On average, students in 2014 were 5½ years old at the time of the assessment. The majority of families participating in the current year earned under $35,000 per year, and over half of students' mothers had no more than a high school education. The samples across the three study years were very similar on these child and family characteristics, except that the proportion of mothers with less than a high school education in 2014 was twice what it was in 2012 and 2013, and each year the average age of the student increased (likely due to the implementation of Transitional Kindergarten).

Figure 4: Demographics of Sampled Kindergartners and their Families

	2012	2013	2014
Gender			
Boys	51%	53%	51%
Girls	49%	48%	49%
Age (at date of assessment)	5.3 avg.	5.4 avg.	5.5 avg.
Race/Ethnicity			
Latino/Hispanic	40%	40%	38%
African American	17%	18%	18%
White	15%	15%	11%
Asian	13%	16%	16%
Multiple race/ethnicity	13%	10%	15%
Filipino	<1%	1%	1%
Other	2%	1%	2%
Family Income			
$0-$14,999	42%	39%	41%
$15,000-$34,999	35%	36%	37%
$35,000-$49,999	14%	14%	13%
$50,000+	9%	11%	10%
Mother's Education (Highest level attained)			
Less than HS	12%	12%	25%
High School	42%	39%	33%
Some College	30%	33%	28%
Associate's Degree	9%	11%	8%
Bachelor's Degree (or higher)	7%	6%	6%

Source: Kindergarten Observation Form 2012-2014; Parent Information Form 2012-2014.

Note: Percentages may not sum to 100 due to rounding. N=977-1,563 (2012); 1,002-1,532 (2013); 1,210-1,844 (2014).

Child Language

Nearly forty percent of children in the sample were identified by their teachers as English Learners, but most children in the sample spoke English as their preferred language[4]: 70 percent spoke English either alone or bilingually with another language. About one-fifth of the sample spoke only Spanish as their preferred language, while smaller percentages of students spoke other languages, including Chinese, Vietnamese, Hindi, and Hmong.

Figure 5: Child Language

	N	Percentage
English Learners	706	39%
Preferred Language		
English only	1076	60%
Spanish only	355	20%
Other only	155	9%
Bilingual English-Spanish	146	8%
Bilingual English-Other	52	3%

Source: Kindergarten Observation Form 2014.

Note: Percentages may not sum to 100 due to rounding.

PRE-KINDERGARTEN EXPERIENCES

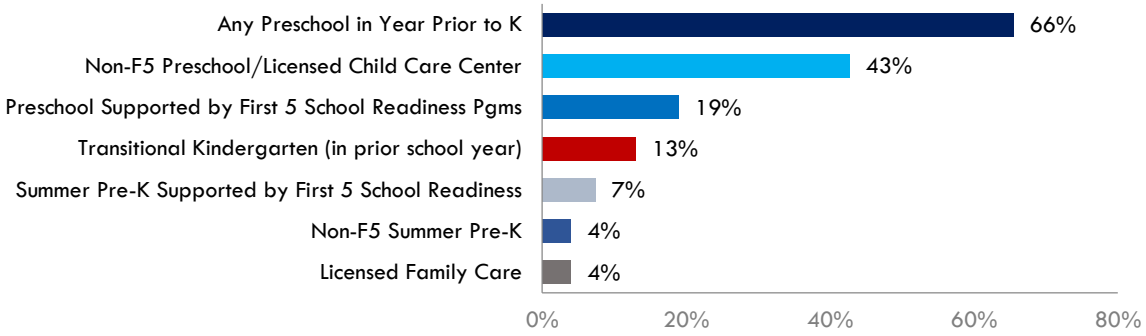
ASR used three sources to identify the specific types of preschool experiences children in the assessment had in the years prior to kindergarten entry. The *Kindergarten Observation Form* and *Parent Information Form* asked teachers and parents a series of questions about the child's child care and/or preschool arrangements during the year prior to kindergarten entry. Participation records from First 5 were also obtained to supplement these sources and identify children enrolled in First 5 pre-K.

Among the children for whom pre-kindergarten information was available, **1,021 (66%)** attended a licensed preschool or child care center in the year before they started kindergarten. In 2014, 19 percent of the sample had been to First 5-supported preschools, and 43 percent had been to other preschools or child care centers[5]. Thirteen percent of the sample attended transitional kindergarten (TK) in the prior year. Just 11 percent attended a short-term summer pre-K program (designed for children without prior preschool experience), the majority of whom attended a summer program sponsored by First 5.

[4] A small proportion of English-speaking children were nevertheless identified as English Learners, likely because they spoke another language at home.

[5] These percentages do not add to 66 percent, the overall preschool attendance rate, due to differences in the number of missing values for the First 5 and non-First 5 preschool attendance variables.

Figure 6: Types of Pre-K Experience in Year Prior to Kindergarten, 2014

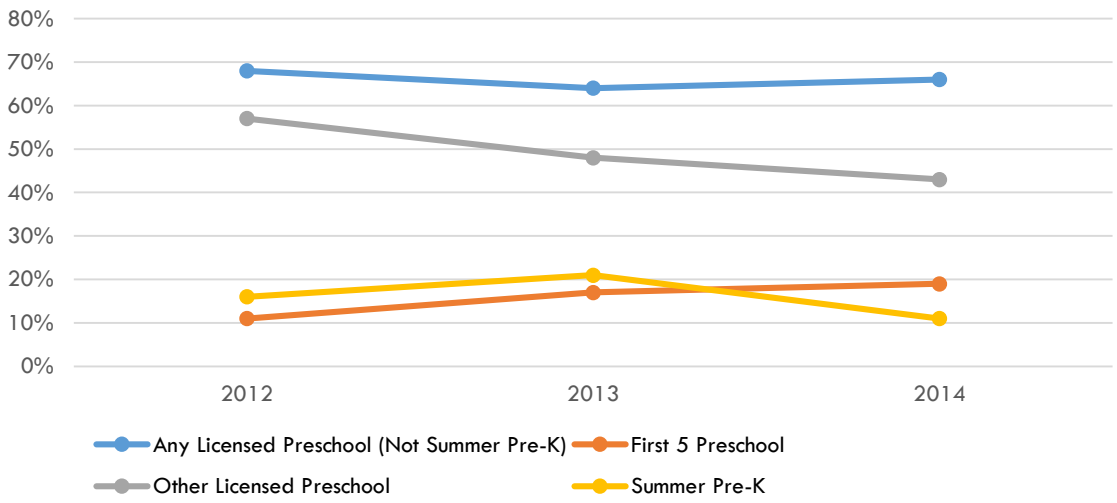


Source: Kindergarten Observation Form 2014, Parent Information Form 2014, First 5 service records.

Note: N=1,364-1,849. Percentages do not sum to 100 because some reported more than one type of preschool or childcare. TK and summer pre-k are not included within "Any Preschool in Year Prior to K."

As shown in the figure below, the types of pre-K experiences children had in the year prior to kindergarten changed somewhat from 2012 to 2014. The proportion of children in the sample who attended a First 5 preschool increased over time, while the proportion attending other types of preschools declined. The overall percentage of children attending licensed preschool or day care remained relatively stable, but the proportion enrolled in short-term summer pre-K was lowest in the current year.

Figure 7: Trends in Pre-K Experience, 2012-2014



Source: Kindergarten Observation Form 2012-2014, Parent Information Form 2012-2014, First 5 service records.

Note: N=1,366 (2012); 1,139-1,541 (2013); 1,550-1,849 (2014).

It is also informative to examine the characteristics of children who attend preschool. There were significant differences in preschool attendance based on special needs, family income, and child race/ethnicity. Interestingly, children with special needs were significantly more likely to attend preschool than typically developing children, as were Latino/Hispanic and African American children compared to White and Asian families. Families earning less than $35,000 per year were also more likely to report their children attended preschool than children from more affluent families. On the other

hand, there were no differences in preschool attendance based on mother's education or English Learner status.

Figure 8: Preschool Attendance, by Select Demographics

Demographics	Attended Preschool	N
Special Needs**		
Yes	78%	97
No	64%	1467
Race***		
Latino/Hispanic	74%	598
African American	68%	242
White	57%	182
Asian/PI (not Hmong/Mien)	55%	156
Hmong/Mien	52%	99
Multiple race/ethnicity	62%	263
English Learner		
Yes	69%	619
No	64%	938
Low Income (under $35K)***		
Yes	68%	932
No	55%	268
Mother Education		
HS or Less	67%	684
More than HS	63%	556

Source: Kindergarten Observation Form 2014, Parent Information Form 2014, First 5 service records.

Note: *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001.

First 5 Service Participation

Forty percent of students in the assessment sample (n=737) had received services from First 5 in 2014, a rate similar to the 41 percent of students with First 5 service records in 2013, but higher than the 28 percent found in 2012. The services received included preschool, summer pre-K, screenings, home visits, and family literacy services. Participation in these services was particularly high in River Delta (58%) and Robla (48%), while a smaller percentage of students in Folsom Cordova (29%) had received First 5 services.

As in both prior study years, involvement in F5 services was highest in the River Delta and Robla school districts.

Figure 9: First 5-Served Students by County

District	Total children in readiness assessment	Assessed children with F5 service records	Percent with F5 service records
Elk Grove Unified	212	90	43%
Folsom Cordova Unified	183	53	29%
Galt Joint Union Elementary	30	11	37%
Natomas Unified	84	31	37%
River Delta Joint Unified	43	25	58%
Robla Elementary	80	38	48%
Sacramento City Unified	668	264	40%
San Juan Unified	206	78	38%
Twin Rivers Unified	343	147	43%
Total	**1849**	**737**	**40%**

Source: Kindergarten Observation Form 2014, First 5 service records.

Aside from preschool and summer pre-K (see Figure 6 above), the most commonly used First 5 services among readiness study children included developmental or speech/language screenings (22% of the sample), vision or hearing screenings (24%), dental screenings (24%), and family literacy programs (15%). These rates are nearly identical to those found in 2013.

OTHER KINDERGARTEN EXPERIENCES

Small percentages of children in the sample were in **transitional kindergarten** or were **repeating kindergarten** in the 2014-15 school year. Sixty-seven students (4% of the sample) were in TK at the time of the assessment, including two classes of children in the sample that were fully TK. Fewer students in the current sample were in TK compared to the 2013 sample, in which 7 percent were TK students (TK status was not assessed in 2012). Thirty students in the 2014 assessment (2% of the sample) were repeating kindergarten (this question was not asked in 2012 or 2013).

CHILDREN'S HEALTH

This section describes results from the *Parent Information Form* and teachers' observations on the *KOF* about children's health and well-being and access to health care.

Insurance, Access to Care, and Screenings

As in prior years, nearly all children had health insurance (99%) and a regular doctor (97%). About three-quarters of students had received vision and hearing screenings from First 5 or another provider (76% and 75%, respectively), and just over half had received a developmental screening (53%).

Figure 10: Health and Development Screenings

Source: Parent Information Form 2014.

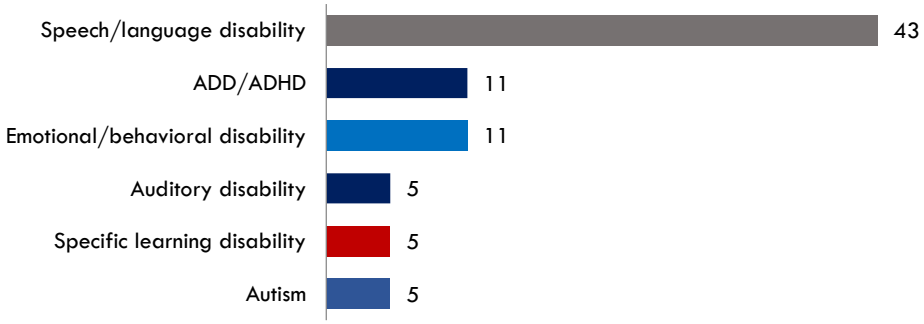
Note: N=1,355-1,362.

Birth and Developmental Outcomes

About 10 percent of the sample had been born low birthweight (under 2,500 grams), a key predictor of numerous health and developmental outcomes, including autism, learning disabilities, and chronic respiratory problems.

In addition, according to teachers and parents, 5 percent of the children assessed (98 children) had a diagnosed special need. The most common disabilities are displayed in the chart below. The majority of children with special needs had a speech or language disability.

Figure 11: Number of Children with Most Commonly Reported Disabilities



Source: Parent Information Form 2014.

Note: Children could have more than one reported diagnosis.

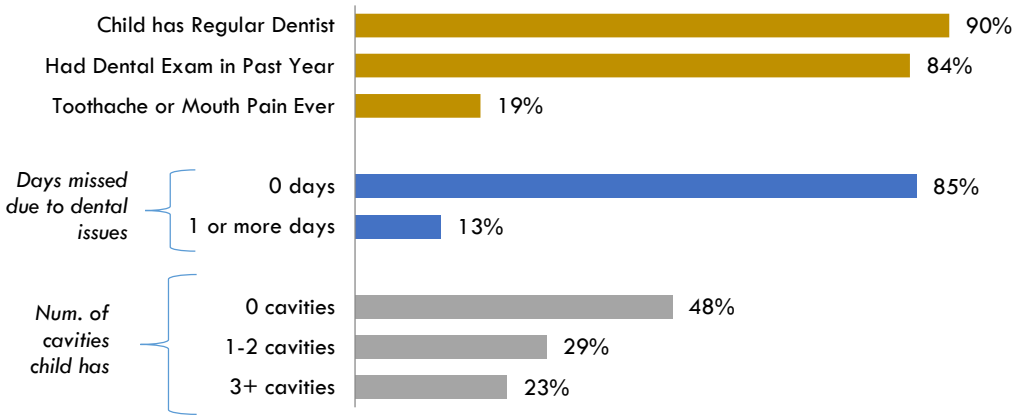
Eighty percent of children with a diagnosed special need had received professional help.

While these disabilities have implications for school readiness, early intervention can ameliorate the readiness challenges children with special needs face. Therefore, it is encouraging that, among the parents who said their child had a diagnosed special need, 80 percent said had they had sought professional help for their child's disability.

Dental Health Indicators and Access to Care

Across all three readiness studies, about 9 out of 10 children had a regular dentist, and a little over 8 in 10 had received a dental exam in the last year. In 2014, 19 percent had reported a toothache (a little higher than the 16% who had a toothache in both prior years). Thirteen percent of students had missed school (or preschool) due to dental issues and nearly a quarter (23%) came into kindergarten having had at least three cavities (nearly the same percentages as in prior years).

Figure 12: Dental Health and Access to Care



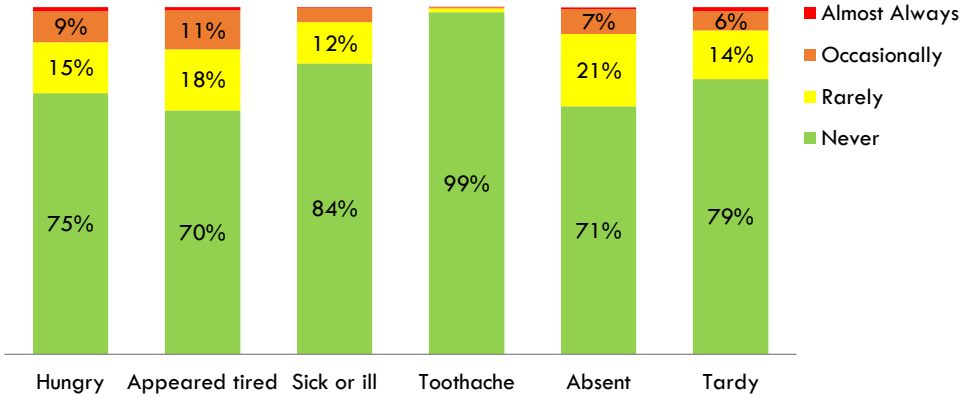
Source: Parent Information Form 2014.

Note: N=1,078-1229. Percentages may not sum to 100 due to rounding.

Child Well-Being and Attendance Patterns

Teachers were asked to report the degree to which students were hungry, tired, sick, absent, or tardy at school. Figure 13 (below) displays the percentage of students showing such adverse signs. The most commonly reported problems were hunger (10 percent told the teacher they were hungry occasionally or almost always) and fatigue (11 percent appeared tired occasionally or almost always).

Figure 13: Child Well-Being and Attendance



Source: Kindergarten Observation Form 2014.

Note: N=1,838-1,843. Proportions less than 5% not labeled. Percentages may not sum to 100 due to rounding.

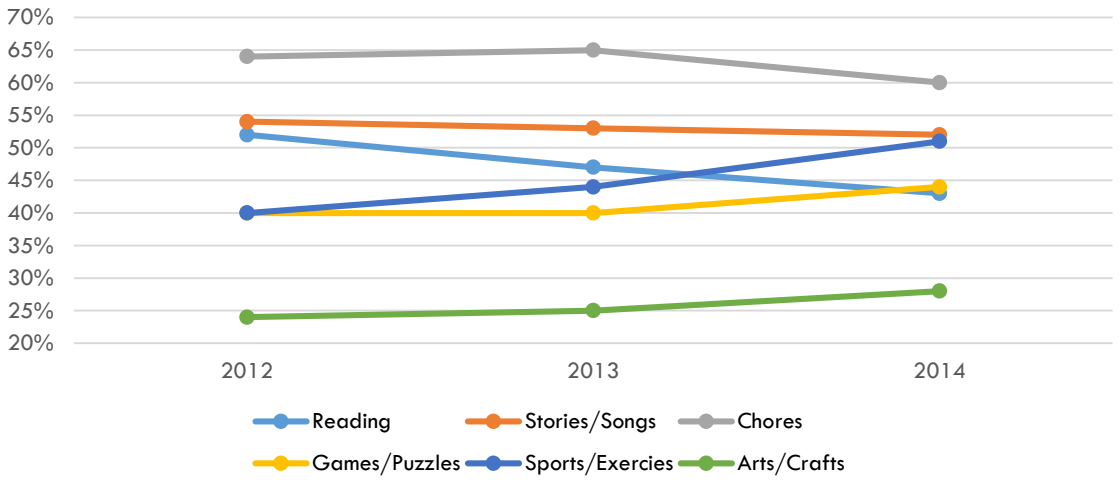
FAMILY ACTIVITIES

Family Activities in the Home

To better understand the home environment of entering kindergartners, parents were asked how often they engaged in a variety of activities (e.g., reading, story-telling) with their children in a typical week. The

proportion of parents saying they did these activities five times per week or more is shown in Figure 14. Across all three study years, the majority of parents engaged their children in household chores at least five times per week (60% in 2014), while fewer parents engaged in arts and crafts with their children (28% in 2014). Compared to prior years, more families in 2014 played sports or exercised with their children at least five times per week, but fewer families read together this frequently in the current year.

Figure 14: Trends in Family Activities 5 Times per Week or More, 2012-2014



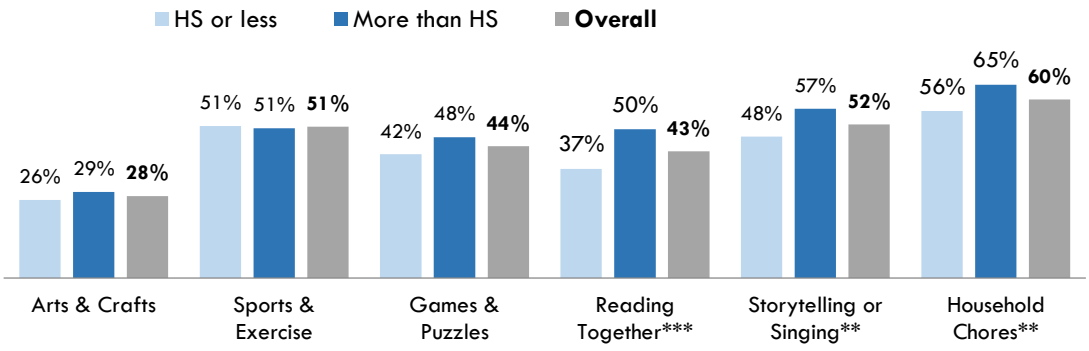
Source: Parent Information Form 2012-2014.

Note: N=1,127 (2012), 999-1,021 (2013), 1,077-1,158 (2014).

Maternal education positively related to engagement in several types of family activities, including reading.

The observed decline in reading frequency may be partly due to changes in sample demographics; maternal education is related to family activity engagement and in 2014, fewer mothers had more than a high school education compared to earlier years. As seen in the chart below, mothers who had attended at least some college were significantly more likely than mothers with no more than a high school diploma to read with their children at least five times per week. More educated mothers were also significantly more likely to tell stories or sing songs and involve their children in chores at least five times per week.

Figure 15: Family Activities 5 times per Week or More, 2014



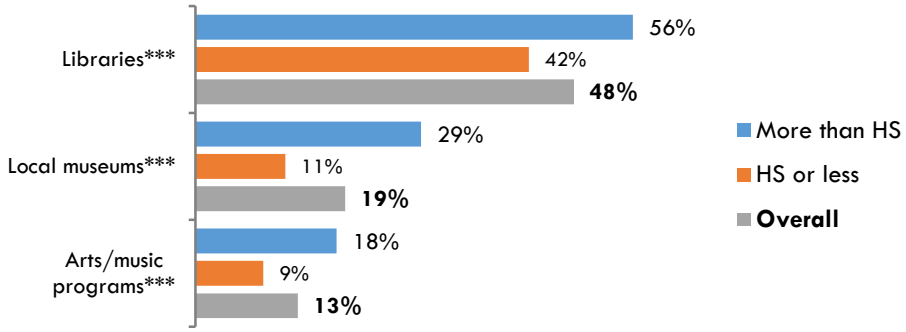
Source: Parent Information Form 2014.

Note: N=1,077-1,158. *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001.

Use of Local Educational Resources

When asked which types of local educational resources their families used in the last year, the most commonly cited resource was the library (48%), followed by local museums (19%). Relatively few families utilized arts and music programs (13%). The proportion of families using each type of local resource was higher in 2014 than in previous years. However, there were differences in resource use by maternal education. Children whose mothers had higher educational attainment were significantly more likely to be exposed to all three types of enrichment resources.

Figure 16: Use of Local Educational Resources



Source: Parent Information Form 2014.

Note: N=1,206. *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001.

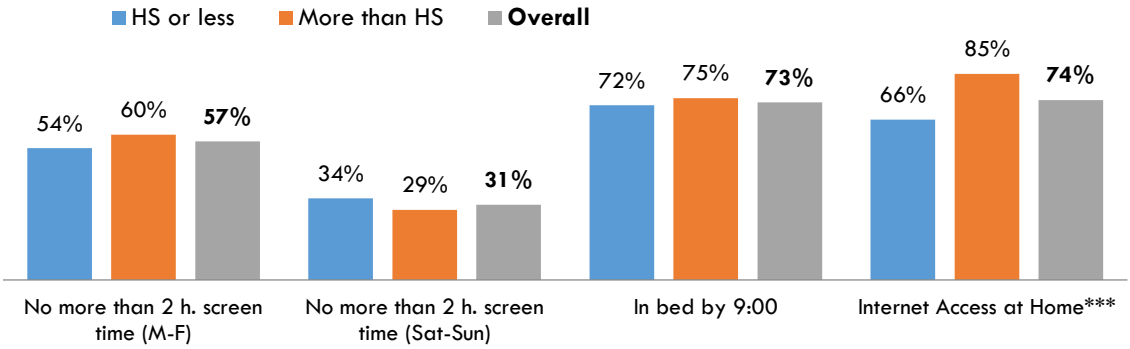
Other Home Practices: Screen Time, Bedtime, and Internet Access

The American Academy of Pediatrics' (n.d.) recommends that young children spend no more than two hours per day watching TV, using a computer, or playing video games and videos. While more than half of children were limited to two hours of screen time per day during the week, only 31 percent were limited to this amount on the weekends. Children whose mothers had attended at least some college were somewhat more likely to limit their children's screen time, but this difference were not statistically significant.

Close to three-quarters (73%) of kindergartners regularly went to bed no later than 9:00 pm (nearly the same proportion found in previous years). Again, children whose mothers had more education were slightly more likely to be in bed by 9:00, but the difference was not statistically significant.

About 74 percent of parents indicated that they have access to the internet for personal use (similar to the percentage found in 2013 [73%], but higher than that found in 2012 [69%]). However, access to the internet at home was significantly less common among families in which the mother had no more than a high school education.

Figure 17: Home Environment: TV, Bedtime, Internet



Source: Parent Information Form 2014.

Note: N=1,066-1,146. *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001.

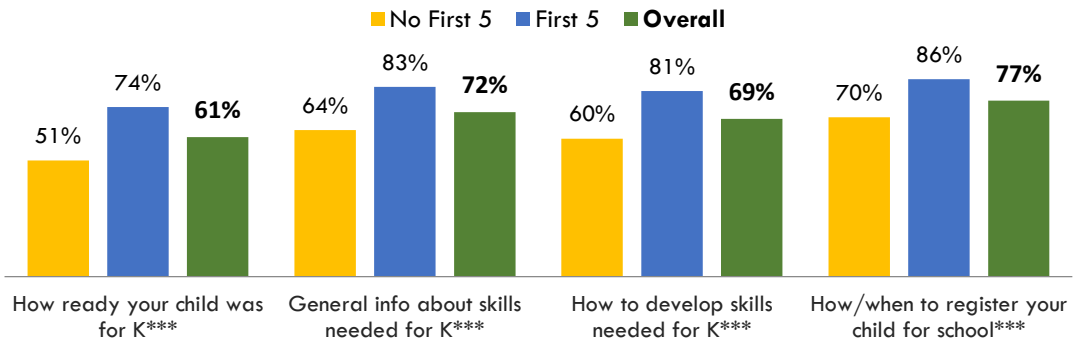
PREPARATION FOR KINDERGARTEN IN THE HOME

Preparation for Kindergarten

School Readiness Information

A majority of parents in 2014 said they had received various kinds of information in preparation for their child's entry into kindergarten, and the rates at which parents reported receiving kindergarten transition information were unchanged from prior years of study. The most common type of information received in the current year was about how and when to register their child for school (77%). As is evident in the chart below, however, families receiving First 5 services were significantly more likely to receive each type of school readiness information than families who did not. For example, 74 percent of children receiving First 5 services received information about how ready their child was for school, while just over half of families who did not receive First 5 services received such information.

Figure 18: Information Received About School Readiness



Source: Parent Information Form 2013, First 5 service records.

Note: N=1,226-1,242. *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001.

Kindergarten Preparation Activities at Home

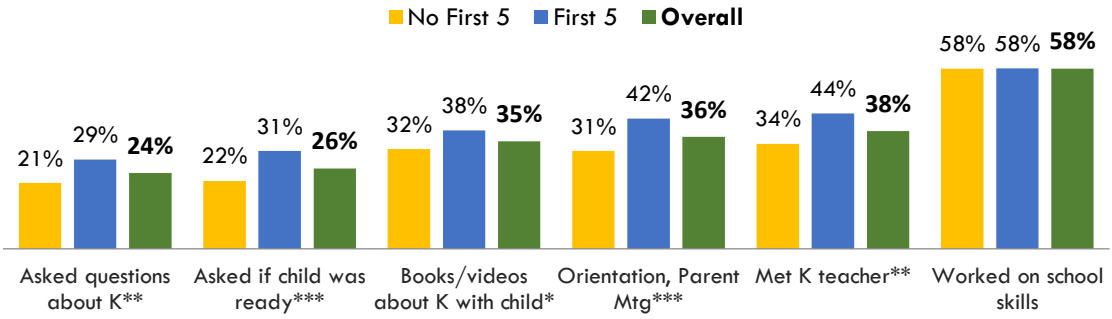
In addition to reporting the types of information they received, parents were asked to identify whether or not they engaged in a range of activities to help prepare for their children's transition to kindergarten. The

majority of parents reported working with the child on school skills (58%), but fewer parents reported meeting the child's kindergarten teacher (38%), attending a parent orientation or meeting (36%), reading or watching videos about kindergarten with the child (35%), and asking the child's childcare provider or preschool teacher questions about kindergarten (26% asked the provider or teacher if the child was ready for school, while 24% asked general questions about kindergarten). In general, families in the current year were as likely to engage in school readiness activities compared to prior study years with one exception: fewer families in the current year asked their child's child care provider or preschool teacher if their child was ready for kindergarten (26% in the current year compared to 32% in 2013 and 35% in 2012).

Notably, families who participated in First 5 services were more likely to have engaged in most of the preparation activities than families who did not. First 5 service recipients were more likely to have read books or watched videos about kindergarten with their child, met the child's kindergarten teacher prior to the first day of school, attended a parent meeting or orientation, and asked the child's childcare provider or preschool teacher about kindergarten.

First 5 service recipients were more likely to engage in various types of school readiness activities.

Figure 19: How Parents Helped Children Prepare for Kindergarten



Source: Parent Information Form 2014, First 5 service records.

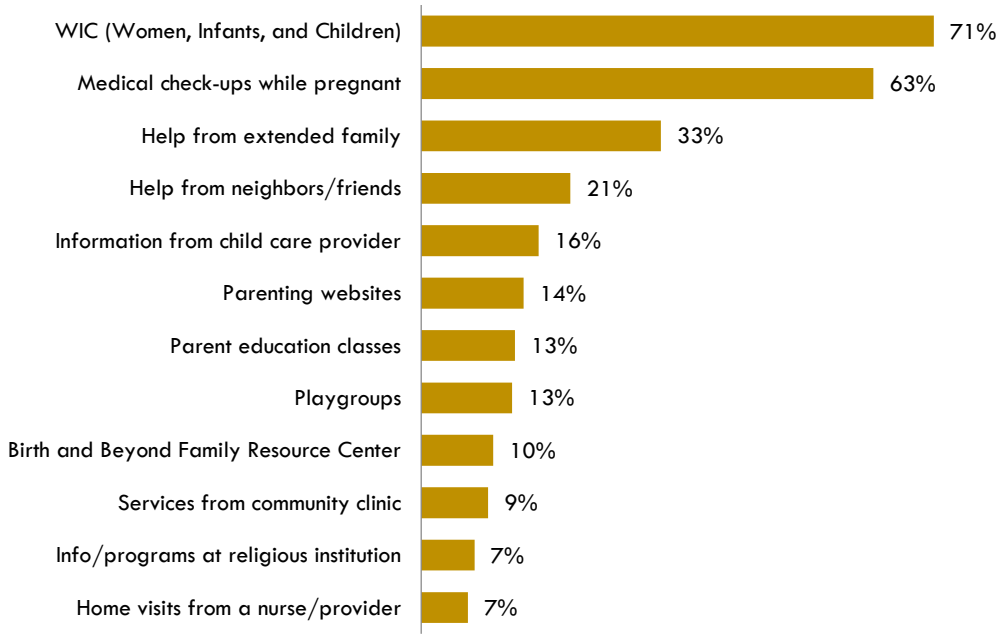
Note: N=1,267. *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001. Preparation activities not shown in chart: Visited kindergarten school with child (62% of full sample); gave child opportunities to play with other children (52%); read books/watched videos about kindergarten transition (20%). First 5 participants had higher rates of engagement only for read books/watched videos about the transition (25% of F5 participants compared to 17% of non-F5 participants, p<.01).

PARENTAL SUPPORTS AND STRESSORS

Use of Parenting Programs, Services, and Other Support

The *PIF* also collected information about families' utilization of parenting services and supports. As shown in Figure 20 (below), the two most common types of support accessed by parents were WIC (71%) and prenatal medical checkups (63%). Less than half of all parents reported receiving other service types. The only notable change in service and support utilization over the three years of study was that fewer families reported receiving help from neighbors or friends in the current year (21% in current year compared to 27% in 2013 and 31% in 2012).

Figure 20: Parents' Usage of Programs, Services and Other Support



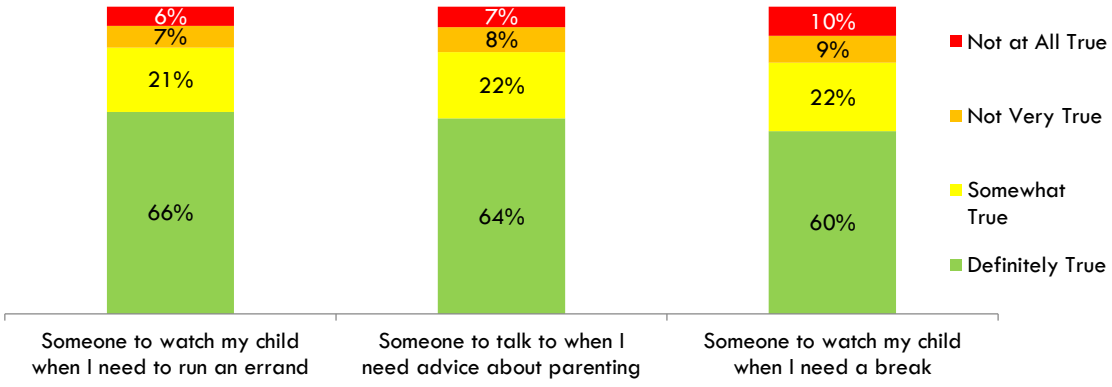
Source: Parent Information Form 2014.

Note: N=1,224.

Social Support and Parenting Strain

Most parents reported that they have parenting support from others. For example, about 87 percent of parents said they knew someone who could watch their child while they ran an errand. Similarly, most parents (86%) reported being able to get advice about child rearing. In addition, just over 80 percent of parents felt they had someone to watch their child when they needed a break. These proportions did not vary from year to year, but in the current year—as in prior years—low-income families (i.e., those earning under $35,000 per year) were significantly less likely to have all types of support than more affluent families.

Figure 21: Social Support

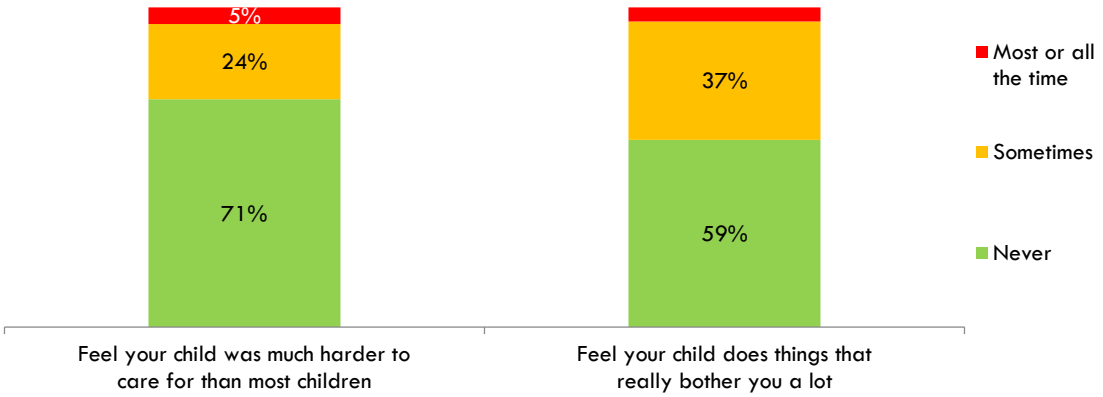


Source: Parent Information Form 2014.

Note: N=1,227-1,232. Percentages may not sum to 100 due to rounding.

As Figure 22 (below) indicates, the vast majority of parents did not show signs of serious parenting strain. Just 4-5 percent of parents reported that their child was hard to care for or bothered them "most" or "all the time." These proportions were unchanged from 2012 to 2014 and there were no differences in the current year by income level.

Figure 22: Parenting Strain



Source: Parent Information Form 2014.

Note: N=1,204-1,210. Percentages may not sum to 100 due to rounding. Proportions under 5% not shown.

Household Stressors

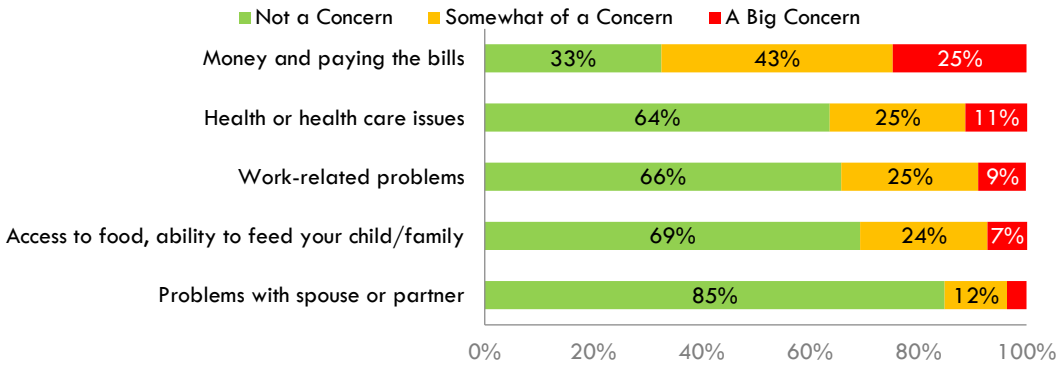
Job Loss, Single Parenthood, and Mobility

Parents were also asked about various potential stressors in their household. For example, 24 percent of parents reported that they or another primary caregiver in the family experienced job loss in the prior year (a rate very similar to the rates found in 2012 and 2013). In addition, 30 percent of families were headed by a single parent, a proportion that remained relatively unchanged from 2013 and 2012. Nearly 34 percent of families in 2014 had moved at least twice since the child was born, but this level of mobility was also about as common as in prior years.

Parent Perceptions of Stressors

Parents were also asked to indicate the level of concern they felt about various sources of stress within their household. The figure below shows that worries about "Money and paying the bills" were cited by 68 percent of the sample, including 25 percent who said it was "a big concern" for them. This is perhaps not surprising considering over three-quarters of families in the sample earned less than $35,000 per year. Significantly fewer parents reported other types of concerns, including work-related problems and problems with one's spouse or partner. Money, work-related problems, and access to food, were significantly more likely to be a big concern to low-income families than more affluent families. In contrast, there were no income-based differences in reported concerns about one's spouse or partner and health or health care issues.

Figure 23: Proportion of Families Indicating Stress by Source of Concern, 2014

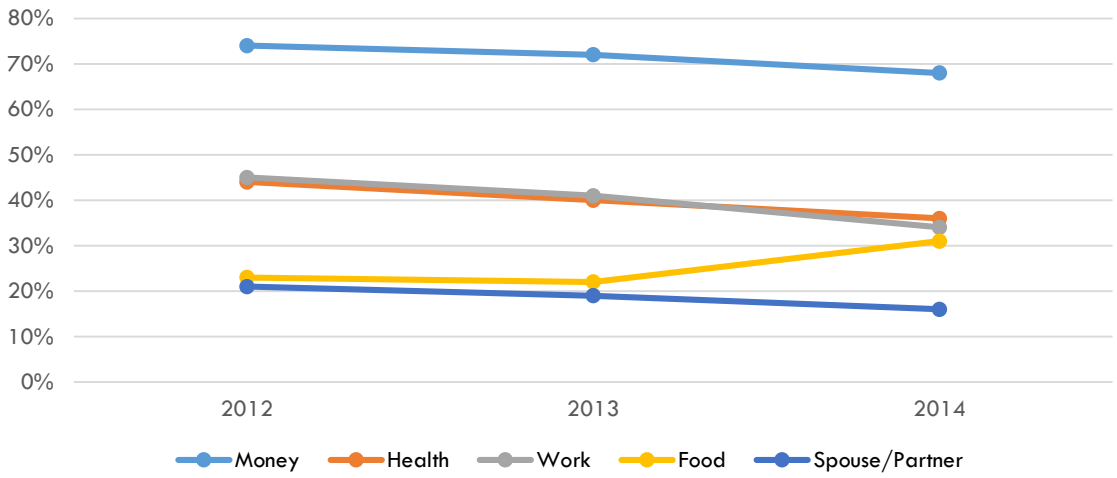


Source: Parent Information Form 2014.

Note: N=1,176-1,206. Percentages may not sum to 100 due to rounding. Proportions 5% and under not labeled.

Compared to prior years, fewer parents in 2014 reported all types of concerns except for "access to food," which was a concern for a larger percentage of families in the current year (31%) compared to 2013 (21%) and 2012 (23%).

Figure 24: Trends in Family Stress (Percent Indicating Issue is "Somewhat of a Concern" or "A Big Concern"), 2012-2014



Source: Parent Information Form 2012-2014.

Note: N=1,002 (2012); 1,027-1,036 (2013); 1,176-1,206 (2014).

FAMILY BACKGROUND SUMMARY

Families participating in the 2014 school readiness assessment were predominately low income (78% earned under $35,000) and Latino/Hispanic children formed the largest racial/ethnic group in the sample (38%). Over half of mothers had no more than a high school education, and nearly 3 in 10 children were being raised by a single parent. Nevertheless, nearly all families had access to health care; most children came to school healthy, alert, and well-fed; and two-thirds of children attended preschool or licensed child care.

Family activity engagement and resource use tended to vary depending on the type of activity or resource, maternal educational attainment, and First 5 service receipt. For example, across all families, working on school skills, telling stories or singing songs, and involving the child in household chores were reported by the majority of families. Relatively few parents, on the other hand, enrolled their child in an arts or music program or engaged the child in arts and crafts at home. Maternal educational attainment, however, was positively associated with several types of educational enrichment resources and activities, including visiting libraries and museums, reading, and telling stories or singing songs with the child. Similarly, families who had received First 5 services were more likely to have engaged in school readiness activities and to have received school readiness information than children who were not involved in First 5 services.

Most parents reported low levels of parenting stress and high levels of social support. However, low-income parents were less likely to report having someone to watch their child or someone to turn to for advice on parenting. About a third of all families had concerns about health, work, or access to food, while nearly 70 percent of families felt concerned about money and paying the bills. As might be expected, problems with work, food access, and money were more likely to be a concern for low-income families.

This section set the context for the next section on school readiness skills by outlining the characteristics, family backgrounds, and early experiences children bring with them to the classroom. Later in the report, the link between some of these demographic, early education, and family factors and school readiness will be examined.

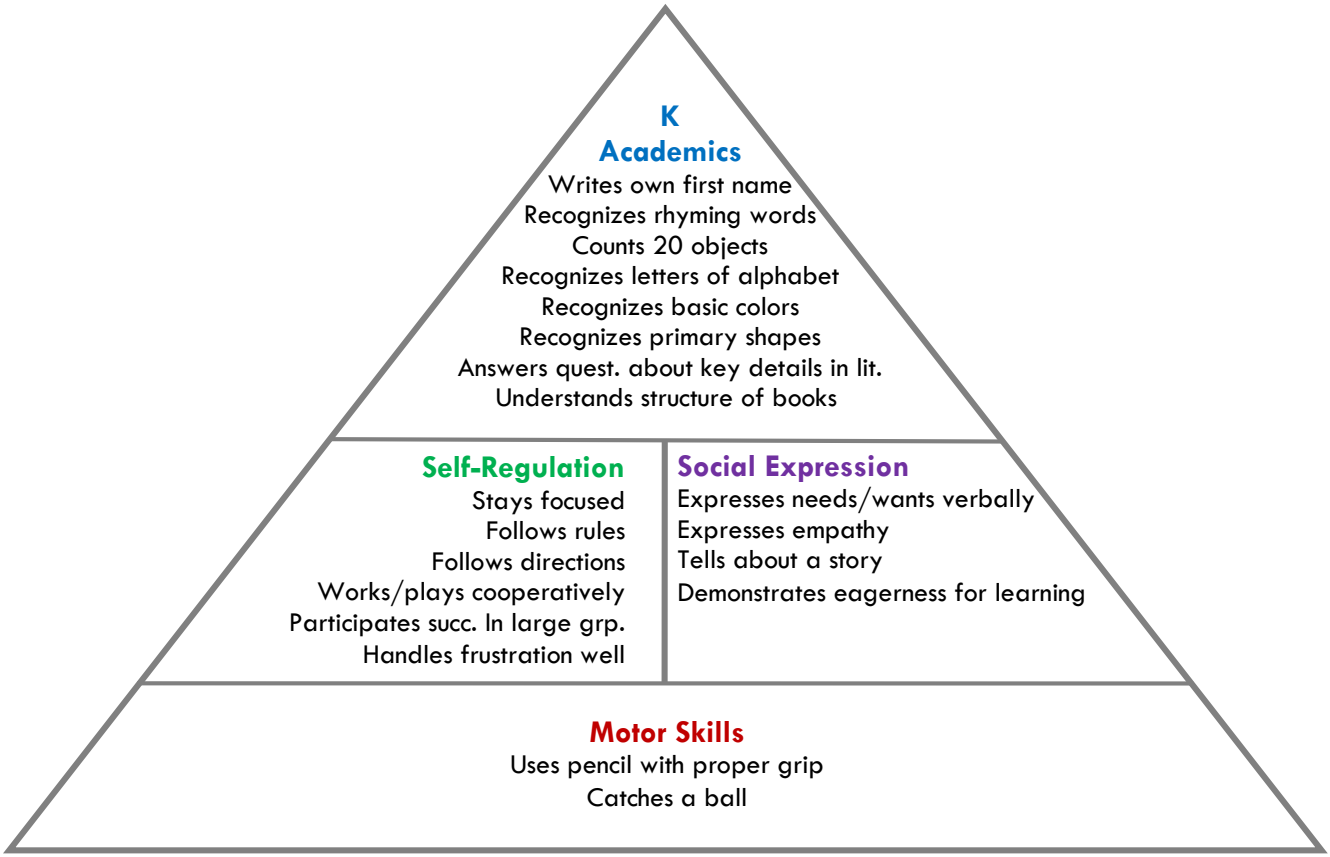
Kindergarten Student Readiness

BASIC BUILDING BLOCKS OF READINESS

Using the *Kindergarten Observation Form,* participating teachers rated the proficiency of their students across 20 readiness skills. Each of these 20 skills is part of one of the four *Basic Building Blocks,* as displayed in the pyramid shown in the figure below: *Motor Skills, Self-Regulation, Social Expression,* and *Kindergarten Academics*.

Although all of these skill dimensions are essential components of readiness, the pyramid suggests a framework of skill progression. That is, basic motor skills are at the base because they are likely to precede the more advanced self-regulation and socio-emotional skills. The top of the pyramid contains some of the early academic skills that are the foundation for academic content covered in kindergarten and beyond.

Figure 25: The Basic Building Blocks of Readiness



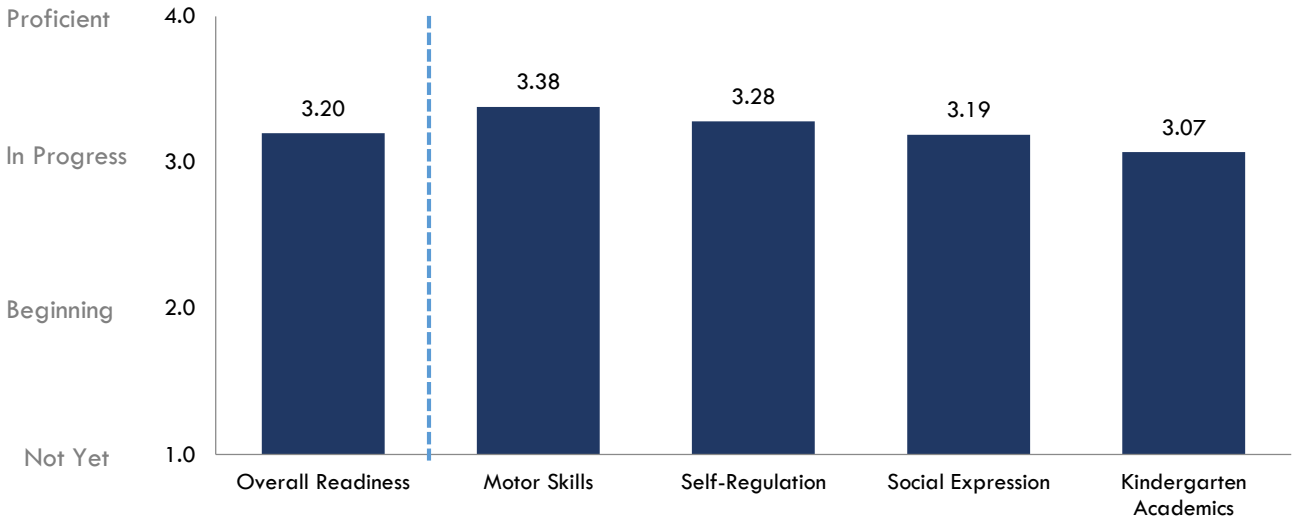
These *Basic Building Blocks* will be discussed in greater detail through the remainder of this report. They form the basis upon which to examine general patterns of readiness.

Basic Building Blocks Scores

Across all study three years, students were *In Progress* on their kindergarten readiness skills.

For each individual readiness skill, children were scored on a scale from *Not Yet* (1) to *Proficient* (4). As Figure 26 shows, the average overall readiness score across the 2014 First 5 sample was **3.20**—just above the benchmark for *In Progress,* but below that of *Proficient*. This is the same general rating students had in 2012 and 2013. Across all three years of study, scores were highest in *Motor Skills*[6] and lowest in *Kindergarten Academics*. Due to changes made to some KOF items in 2014, directly comparing the mean *Building Blocks* scores across years is not appropriate. For a comparison of scores using items that did not change, see Appendix IV.

Figure 26: Average Scores Across the Basic Building Blocks of Readiness



Source: Kindergarten Observation Form 2014.

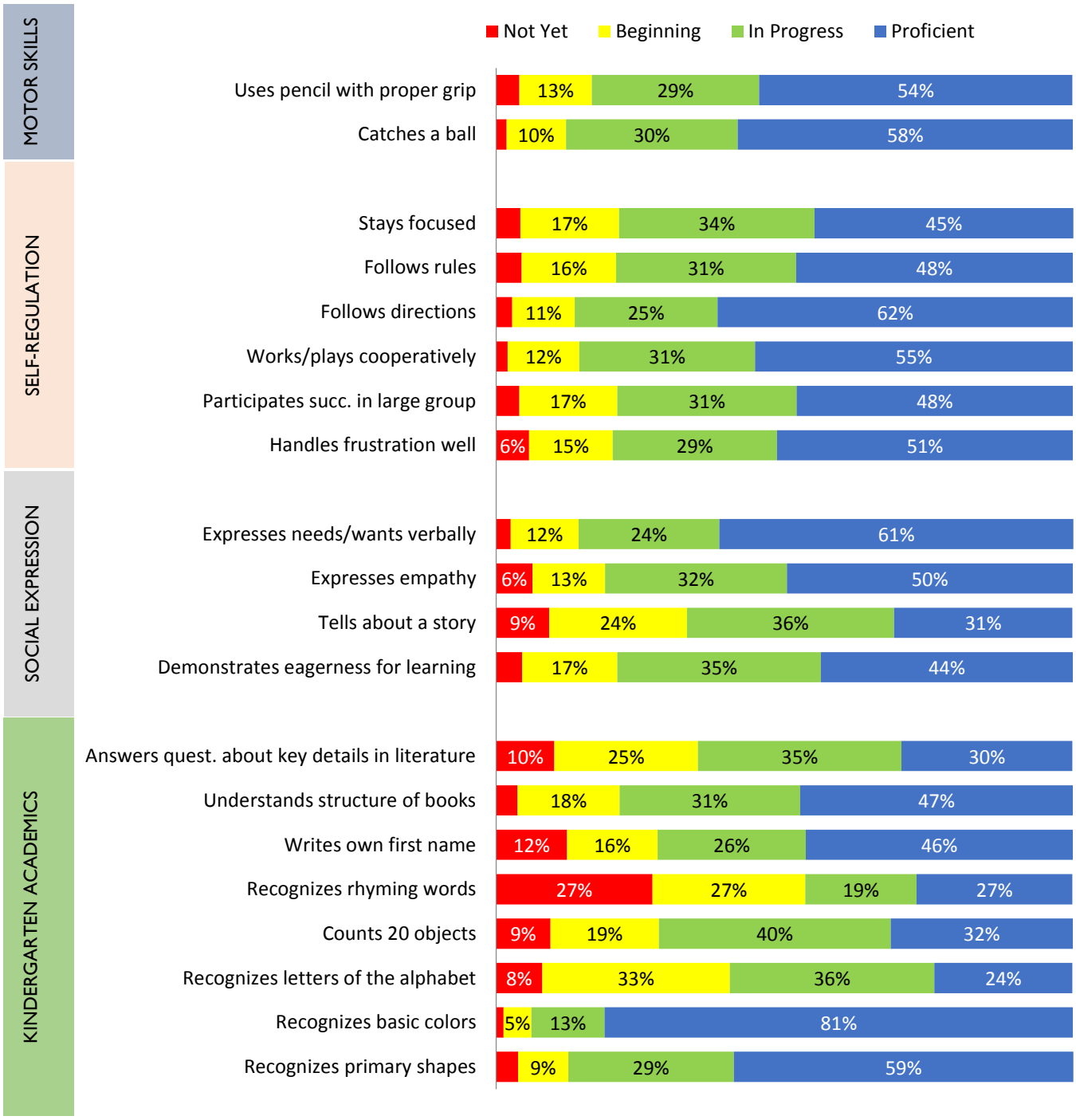
Note: N=1,721-1,846.

Performance across the Individual Skills

Figure 27, on the following page, shows the percentage of children scoring at the *Not Yet, Beginning, In Progress,* and *Proficient* levels across all 20 readiness skills[7]. Most students were proficient in fine and gross motor skills, recognizing basic colors and primary shapes, following directions, playing cooperatively with others, and handling frustration. In contrast, relatively few were proficient in recognizing all letters of the alphabet, rhyming, counting, telling about a story or experience, and answering questions about a story they had heard. Many of the items that were difficult for children assessed skills aligned with the Common Core (see Appendix V for a list of Common Core-aligned KOF items). Therefore, we did not expect children to be proficient on these items at the time of assessment.

[6] Note that *Motor Skills* in 2014 was composed of only two items: "Uses a pencil with proper grip" and "Catches a ball".
[7] Scores were omitted for the following items when language barriers were a concern: Follows directions; Expresses needs/wants verbally; Tells about a story; Demonstrates eagerness for learning; Answers questions about key details in literature; Recognizes rhyming words; Counts 20 objects; Recognizes letters of the alphabet; Recognizes basic colors; Recognizes primary shapes.

Figure 27: Percentage of Children at Each Proficiency Level Across Readiness Skills

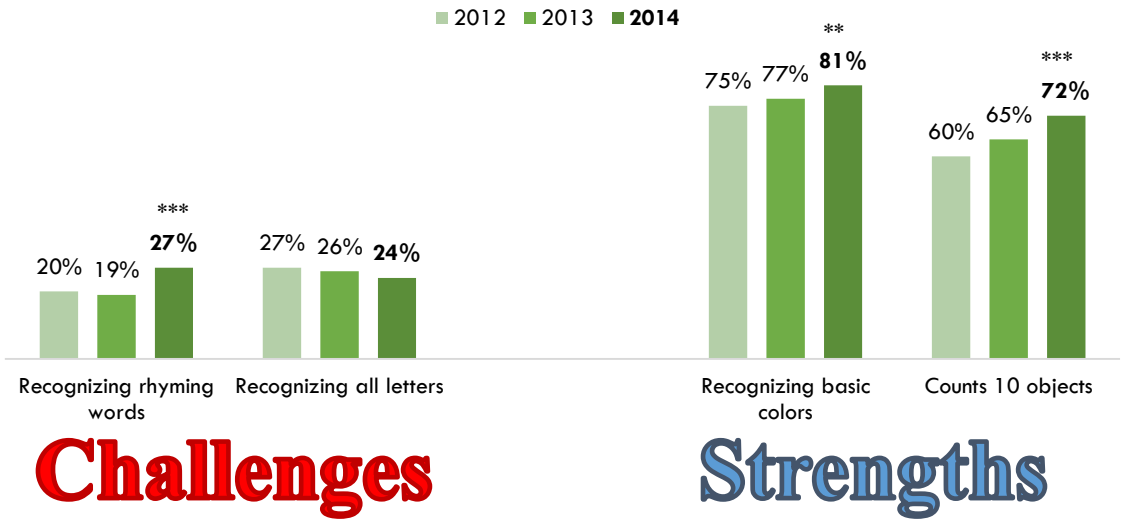


Source: Kindergarten Observation Form 2014. N=1,598-1,843. Note: Proportions of less than 5% are not labeled. Percentages may not sum to 100 due to rounding. Scores were omitted for language-dependent items when language barriers were a concern.

Greatest Strengths and Needs across Years

While there was some variation over time in the percent of children scoring *Proficient* on each of the readiness items, children consistently showed strengths in certain areas over others. Specifically, children across all three years were strong in counting and recognizing basic colors, but had room for growth in knowing their letters and recognizing rhymes[8]. With the exception of letter recognition, a greater proportion of students were proficient in the current year on each of these items (see Appendix III for a comparison items assessed across years).

Figure 28: Percentage of Children Scoring *Proficient*, 2012-2014



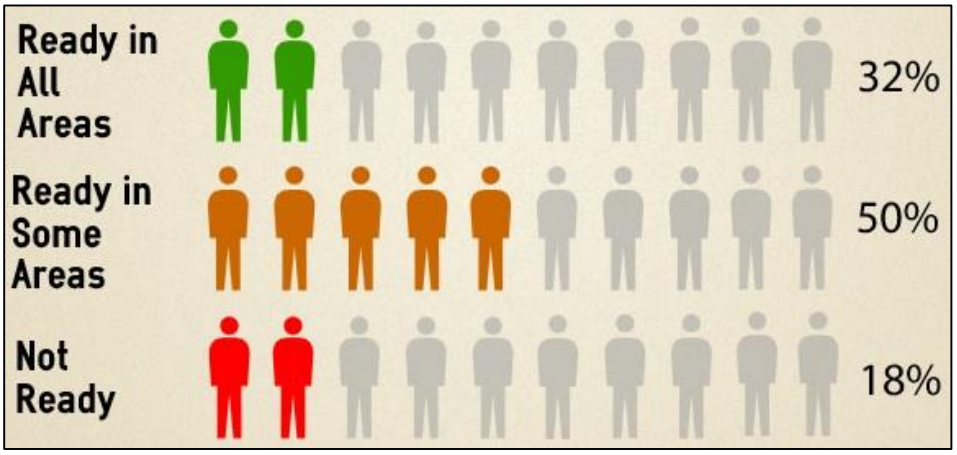
Sources: Kindergarten Observation Form 2012-2014. N=1565 (2012); 1320-1540 (2013); 1,598-1,843 (2014). Note: The 2014 counting item (counts 20 objects) was recoded here to compare proficiency in the current year to prior years. The administration of this item was adjusted in 2014, likely accounting for the difference in student performance between 2013 and 2014. *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001.

[8] As rhyming is a Common Core-aligned skill to be learned by the end of kindergarten, we did not expect all entering kindergartners to be proficient on this item.

HOW MANY STUDENTS WERE READY FOR KINDERGARTEN?

Students were considered "ready" for kindergarten in all areas if they scored at or above 3.25 on all Building Blocks, meaning they were *Proficient* or nearing proficiency on *Motor Skills, Self-Regulation, Social Expression,* and *Kindergarten Academics* (as mentioned earlier, because some of the items assessed Common Core end-of-year kindergarten standards, we did not expect children to be fully proficient on all items in each domain). Using these criteria, **32 percent** of the sample were *Ready in All Areas* for kindergarten, while another 50 percent were *Ready in Some Areas*, having scored at or above 3.25 on some but not all of the *Building Blocks*. The remaining 18 percent were *Not Ready*, having scored below 3.25 on all four *Building Blocks*. These percentages were nearly identical to those found among children in the 2012 and 2013 readiness studies.

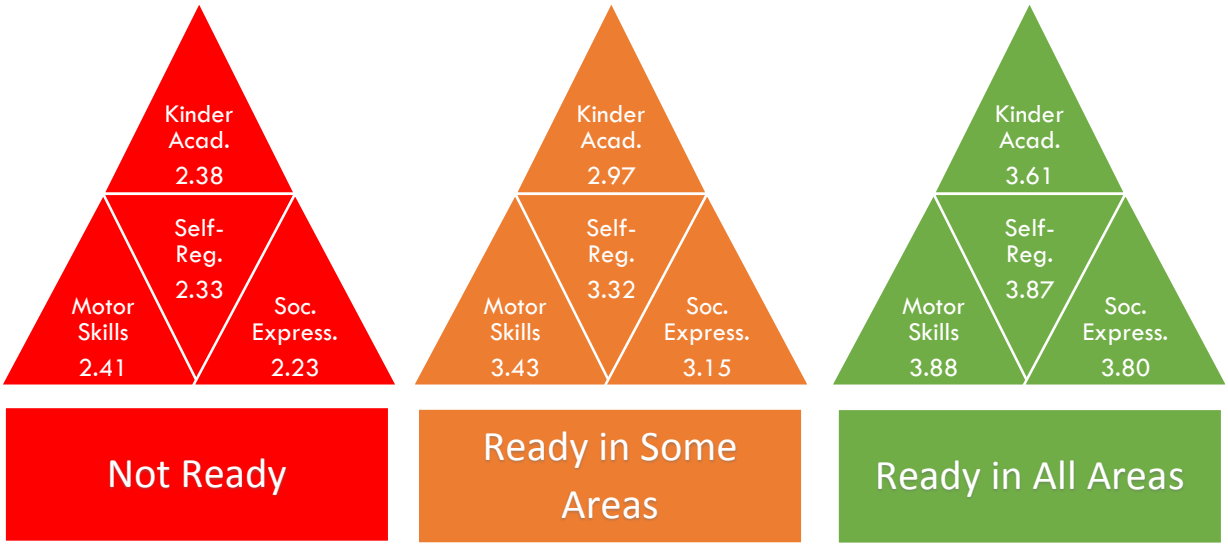
Figure 29: Percent Ready for Kindergarten



Source: Kindergarten Observation Form 2014. N=1,714.

Children who were *Ready in All Areas* were particularly strong in *Self-Regulation* and *Motor Skills*. Among children who were *Ready in Some Areas*, scores were lowest in *Kindergarten Academics* and highest in *Motor Skills.* Children who were *Not Ready* also scored highest in *Motor Skills,* but lowest in *Social Expression*.

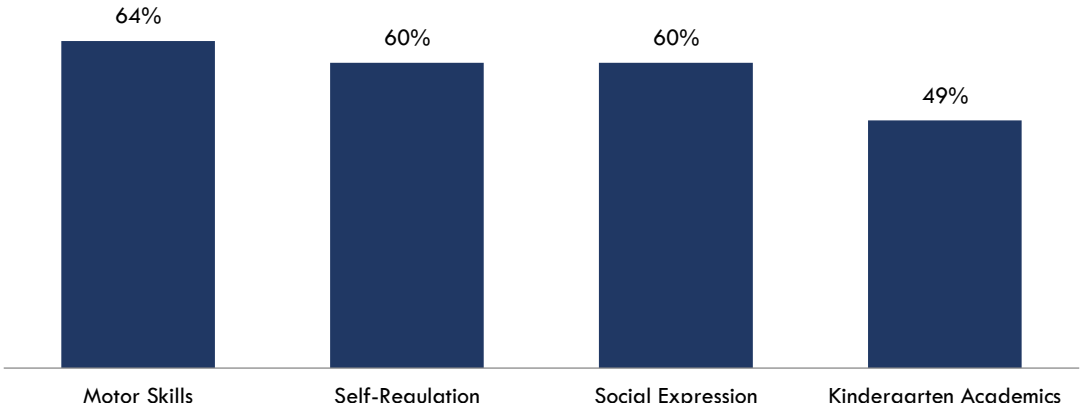
Figure 30: Average Building Block Scores, by Readiness Level



Source: Kindergarten Observation Form 2014. N=1,714.

When each *Building Block* is considered separately, we find that most children are "ready" (i.e., score at or above 3.25) on the *Motor Skills* domain. About 60 percent of the children were "ready" on *Self-Regulation* and the same proportion were "ready" on *Social Expression.* However, just under half of the sample was "ready" on *Kindergarten Academics*.

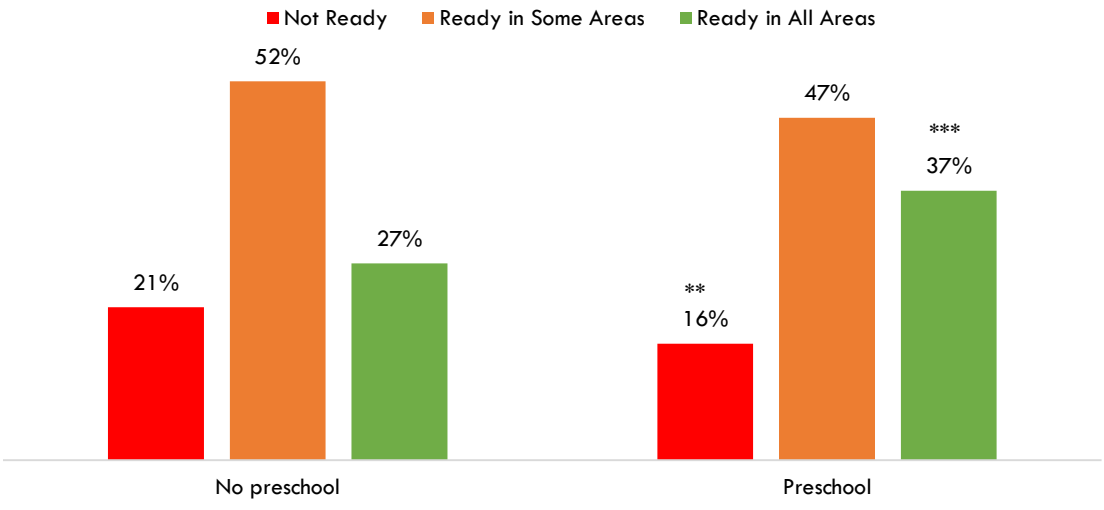
Figure 31: Percent Ready in Each Building Block



Source: Kindergarten Observation Form 2014. N=1,631-1,745.

Children who attended preschool were significantly more likely to be *Ready in All Areas* than their peers who did not attend preschool. As shown in the following figure, 37 percent of children who attended preschool were *Ready in All Areas*, compared to just 27 percent of children who had not. Conversely, children who had no preschool experience were more likely to be *Not Ready* than children who had attended preschool. Although a slightly higher proportion of children who did not attend preschool were *Ready in Some Areas* compared to children with preschool experience, this difference was not statistically significant.

Figure 32: Percent *Ready in All Areas*, *Ready in Some Areas*, and *Not Ready*, by Preschool Experience



Source: Kindergarten Observation Form 2014, Parent Information Form 2014, First 5 service records.

N=1,466. *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001.

WHAT ARE THE KEY PREDICTORS OF SCHOOL READINESS ACROSS THE FIRST 5 NETWORK?

This section presents an analysis of the relationship between readiness and a wide range of child and family backgrounds and experiences. These potential "predictors" of readiness included child demographics (e.g., age, gender, race/ethnicity, English Learner status, special needs); family characteristics (e.g., income, mother's education, parental stress, parental use of resources); early educational experiences; child health/well-being; school attendance; and receipt of First 5 services (e.g., literacy programs, parent education, preschool).

Each potential predictor was tested for its association with school readiness through an analysis called multiple regression. This approach allows us to look at how a set of variables are uniquely related to readiness levels, holding constant any other possible predictors. For example, it allows us to examine how preschool experience is related to readiness levels above and beyond the contribution from other factors, like family income and maternal education level. In addition, the regression analyses conducted for this report utilized **multilevel modeling** techniques, which help account for similarities that exist among students within a classroom and for unmeasured variations in classrooms (e.g., different teachers, different classroom environments, and different groups of peers).[9]

How to Interpret the Bar Chart in This Section:

1. In Figure 33, predictors are listed in descending order of their association with overall school readiness.
2. Only statistically significant predictors are shown.
3. The strength of each predictor has been standardized for comparison purposes. This makes it possible to compare factors on a common scale even if they were initially measured on different scales.
4. The factors shown are correlated with, but do not necessarily *cause* children to have higher readiness levels. Similarly, the strength of the association does not reflect its relative *impact* on readiness.

It is important to note that a multivariate approach like this cannot conclusively determine *why* children have different levels of readiness, and cannot be used to infer that certain predictors necessarily *caused* readiness. It is simply a method of understanding which *observed and measured characteristics* tend to be associated with readiness. In the absence of a controlled experiment, the possibility remains that other factors not measured in this study account for differences in school readiness.

Predictors of Overall Readiness

The following chart displays the predictors significantly associated with overall kindergarten readiness scores across the First 5 network, in order of predictive strength. Because this study cannot conclude any factor caused children to have higher readiness levels, it is important to note that this strength of association does not necessarily reflect the relative impact a given factor has on readiness. The single largest predictor of readiness was **child well-being**. Children who came to school well-rested and well-fed had significantly higher readiness scores than children who did not.

The second strongest predictor of readiness was **preschool** attendance; children who attended a licensed preschool—both First 5-funded and other facilities—had higher readiness scores[10]. Additionally, controlling

[9] This technique is used for "nested" data (e.g., students nested within classrooms).

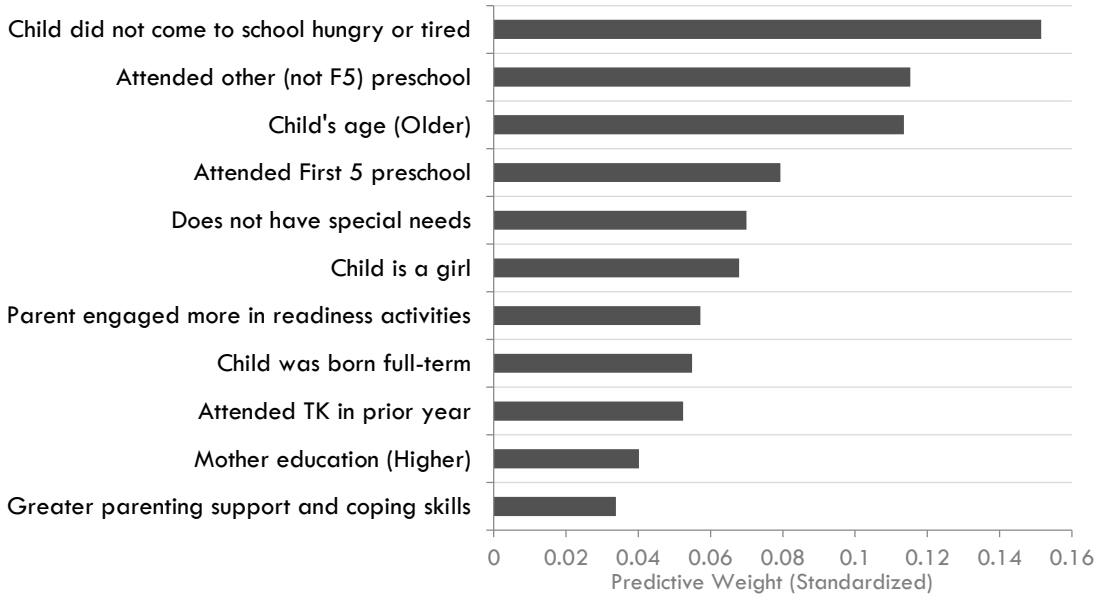
[10] Although there was a slightly stronger association between readiness and attending a preschool not funded by First 5 relative to attending a First 5 preschool, we cannot conclude from this analysis that one type of preschool was better in preparing children for school than the other. Both preschool types were strongly and significantly associated with readiness.

for age and preschool attendance, children who had attended **transitional kindergarten** in the prior year had higher readiness scores than those who had not.

Several other child demographics were related to higher readiness skills, including **age**, **gender**, and **special needs**. Older children had higher readiness scores than their younger peers, holding constant all other predictors. Likewise, girls had higher readiness scores than boys, and children without special needs had higher scores than those with a diagnosed disability. In addition, being born **full-term** positively predicted readiness.

Finally, three parent-related factors were significantly associated with readiness. For instance, mothers with higher **educational attainment** had children with higher readiness skills. Controlling for other factors, including maternal education, parents who engaged in a greater number of **school readiness activities** (e.g., working on school skills with the child, meeting the child's teacher, attending a parent orientation or meeting, reading books about kindergarten) also had children with significantly higher readiness scores. Additionally, we found that parents who reported having higher levels of **parenting support and coping skills** (e.g., they had someone to talk to for advice on parenting, they did not feel their child was harder to care for than other children) had children with stronger readiness skills.

Figure 33: Strongest Predictors of Overall School Readiness (in Order of Strength)

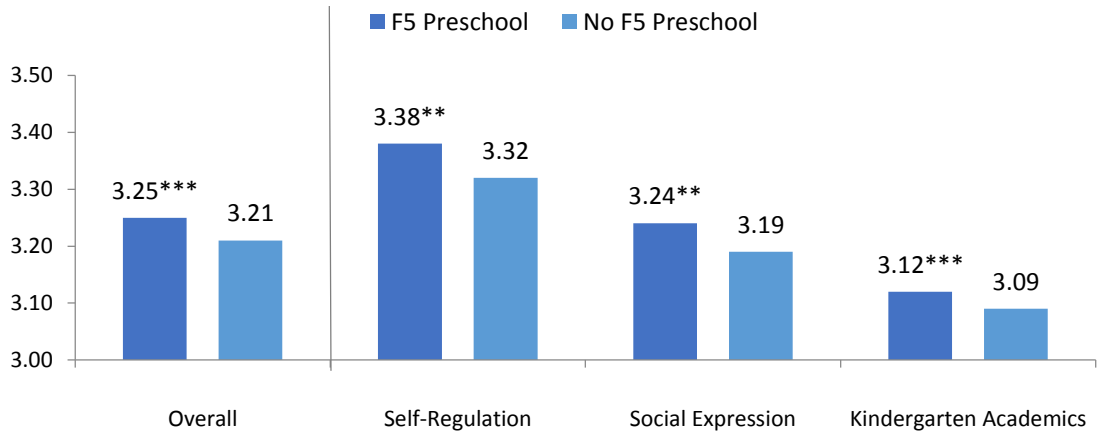


Source: Kindergarten Observation Form 2014, Parent Information Form 2014, First 5 service records. N=912. R^2=.219.

What are the Specific Gains in Kindergarten Readiness Associated with First 5 Preschool Attendance?

The chart on the next page displays the differences in readiness scores for First 5 preschool participants compared to children who did not attend a First 5 preschool, after adjusting for other factors linked to readiness, including child and family demographics. Children who attended preschools supported by First 5 readiness services had significantly higher overall readiness scores than children who did not. These children also had significantly higher *Self-Regulation*, *Social Expression,* and *Kindergarten Academics* scores (the analysis was not conducted for motor skills, as this block was comprised of only two items). Although the differences here appear small, they are significant because they apply to large numbers of children.

Figure 34: Readiness Scores, by F5 Preschool Experience (Adjusted for Other Child/Family Factors)



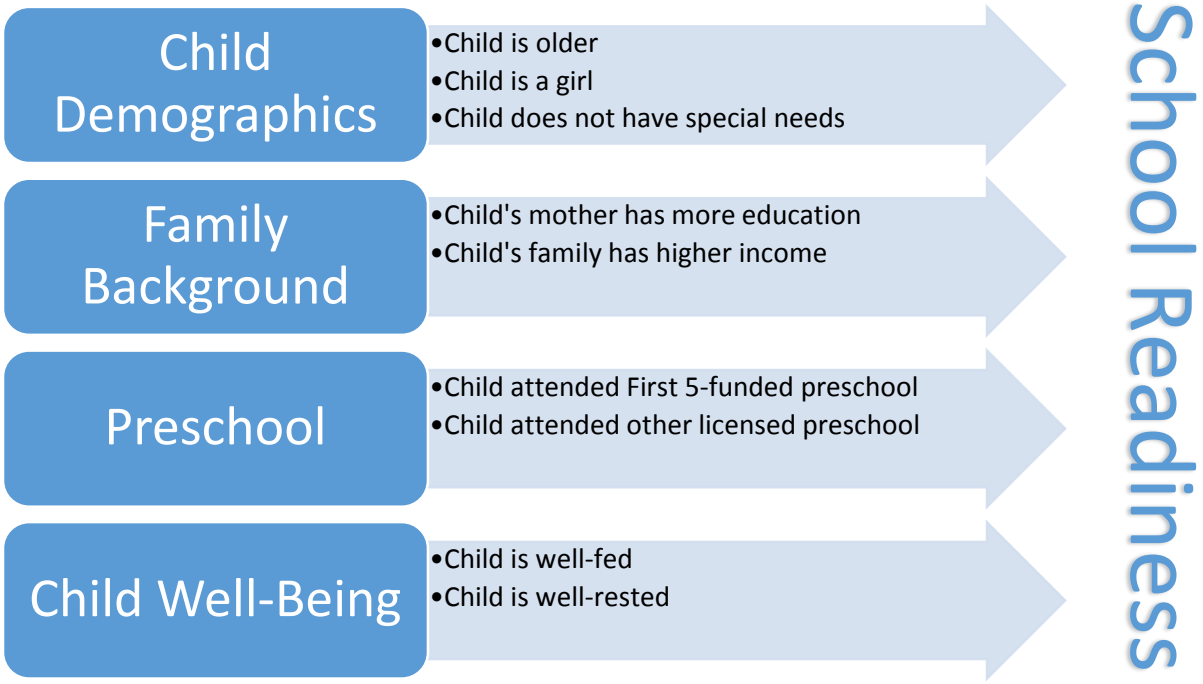
Source: Kindergarten Observation Form 2014, First 5 service records.

Note: N=912. *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001.

What Predictors of Readiness Did We Find across All Three Years?

As the following graphic illustrates, there were four categories of factors that predicted readiness across all three readiness studies in Sacramento: child demographics, family background, preschool attendance, and child well-being. More specifically, school readiness was consistently predicted by child gender, age, and special needs; maternal education and family income; licensed preschool attendance; and child fatigue and hunger. These characteristics and experiences contributed to readiness in all three years independently of one another and over and above other factors that play a role in readiness.

Figure 35: Common Predictors of Readiness in 2012, 2013, and 2014



First 5 Services and Readiness

In addition to the association between attending a **First 5-funded preschool** and overall readiness (see Figure 33 above), a deeper analysis of participation in specific First 5 services and readiness skills uncovered the following links in 2014:

- **Receiving at least one First 5 service**[11] was significantly related to being *Ready in All Areas* for kindergarten. That is, children who received a First 5 service were more likely than those who did not to have scored at least 3.25 on all four *Building Blocks* of readiness.

- **Receiving a greater number of First 5 services** predicted greater *Kindergarten Academics* skills, which included answering questions about key details in literature; understanding the structure and basic features of books; writing one's own first name; recognizing rhymes; counting; and recognizing colors, letters, and shapes.

- **Receiving at least one type of First 5 screening service** (i.e., vision, hearing, developmental, dental, or behavioral) also marginally predicted higher levels of *Kindergarten Academic* skills and receiving vision screening specifically predicted being *Ready in All Areas* for kindergarten. Twenty-nine percent of the sample had received at least one type of First 5 screening service, while 23 percent had received a vision screen, specifically.

Several First 5 services were related to readiness in prior study years. For example, in 2013, receiving **First 5 literacy services** was significantly related to higher overall readiness and receiving **First 5 home visiting services** predicted higher levels of *Self-Regulation*. In 2012, the number of **First 5 kindergarten transition services** received significantly predicted higher levels of *Kindergarten Academics*.

[11] In 2014, 40 percent of the sample (737 children) received at least one type of First 5 service.

Finally, we also combined data from all three years to explore associations between First 5 services and readiness among participants in all three studies. This analysis yielded the following findings:

- Receiving a **First 5 developmental screen** predicted higher *Self-Regulation* scores.
- Participating in a **First 5 Summer Pre-K** program predicted higher *Kindergarten Academics* scores.

SCHOOL READINESS SUMMARY

Most children were fully ready or on their way to being ready for kindergarten. However, certain students, including those who are younger, have special needs, are male, and come from lower socio-economic backgrounds, need additional supports in the pre-K years to help them be as prepared for school as their peers. The readiness studies conducted in Sacramento over the last few years suggest students' readiness levels are stronger when they attend licensed preschool and receive health and developmental screenings, and may also benefit when their parents receive parenting support and engage in school readiness activities with them. Over the years, First 5 has played a key role in providing the services and supports that contribute to school readiness.

Summary and Conclusion

In 2014, the third annual school readiness study in the First 5 Sacramento network was conducted. As in previous years, most families in the study were low-income (78% earned under $35,000) and came from diverse racial/ethnic backgrounds (40% of children were Hispanic/Latino, 18% were African American, and 15% were mixed race/ethnicity). Fewer than half of mothers had any education beyond high school and 25 percent did not have a high school diploma. Nevertheless children in the study had several types of experiences and backgrounds that helped prepare them for school. For example, 66 percent of children had attended preschool and 13 percent had attended TK in the prior year. Moreover, nearly all children were connected to regular health care and came to school healthy, and most had received health and developmental screenings.

Mother's education and First 5 participation were positively related to family engagement in enrichment activities.

The majority of parents also engaged in at least one school readiness activity and few reported significant parenting stressors or problems. However, maternal education level was related to family activity engagement such that enrichment activities, like reading and working on school skills, were more prevalent among families in which the mother had more than a high school education. First 5 participation also related to families' preparation for kindergarten. Children who participated in First 5 services had parents who received more information about the kindergarten transition and who engaged in more readiness activities with their children.

Over the three years of readiness studies in First 5 Sacramento's network, the average readiness levels remained just above *In Progress* on the four-point scale of readiness (1=*Not Yet*, 2=*Beginning*, 3=*In Progress*, 4=*Proficient*). Across all three years, students were strongest in *Motor Skills* and had the greatest needs in *Kindergarten Academics*, particularly recognizing rhymes and knowing their letters.

Readiness levels varied, however, depending on a range of child and family characteristics and experiences. In all three years, children were better prepared for kindergarten when they were older, female, did not have special needs, and came to school well-rested and well-fed. In addition, children with higher readiness levels tended to come from families of higher socio-economic status. Finally, we consistently found that children who had attended licensed preschool (including First 5 preschool) had significantly higher overall readiness levels than those without preschool experience. In the current study year, we also found parents who engaged in readiness activities and felt they had stronger parenting support and coping skills had children with higher readiness levels.

We have consistently found readiness relates to child well-being, preschool attendance, and family background—important points of intervention for First 5 and its partners.

The findings from the 2014 study largely confirm the results from prior studies in Sacramento. Children in Sacramento are better prepared for school when their early experiences involve high-quality preschool and adequate supports for children's well-being, including screenings provided by First 5 Sacramento. Given the important role family background and home environment play in school readiness, children benefit from supports provided to their parents as well, such as First 5 home visits and services that ease the family's transition to school. These points of intervention highlight the role First 5 and their partners play in contributing to the school readiness of children in Sacramento County.

References

Alexander, K., Entwisle, D., & Kabbani, N. (2001). The dropout process in life course perspective: Early risk factors at home and school. *The Teachers College Record*, *103*(5), 760-822.

American Academy of Pediatrics (n.d.). Media and children. Retrieved from http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/pages/media-and-children.aspx

Duncan, G. D., Claessens, A., Huston, A. C., Pagani, L. S., Engel, M., Sexton, H., Dowsett, C. J., Magnuson, K., Klebanov, P., Feinstein, L., Brooks-Gunn, J., Duckworth, K., & Japel, C. (2007). School readiness and later achievement. *Developmental Psychology, 43*, 1428-1446.

Grissmer, D., Grimm, K. J., Aiyer, S. M., Murrah, W. M., & Steele, J. S. (2010). Fine motor skills and early comprehension of the world: Two new school readiness indicators. *Developmental Psychology*, *46*(5), 1008.

Hair, E.C., Halle, T., Terry-Humen, E., and Calkins, J. (2003). *Naturally occurring patterns of school readiness: How the multiple dimensions of school readiness fit together.* Paper presented at the 2003 Biennial Meeting for the Society for Research in Child Development: Tampa, Fl.

Pianta, R. C., Cox, M. J., & Snow, K. L. (2007). *School readiness and the transition to kindergarten in the era of accountability*. Baltimore, MD: Brookes.

Roderick, M. (1994). Grade retention and school dropout: Investigating the association. *American Educational Research Journal*, *31*(4), 729-759. doi:10.3102/00028312031004729

Sabol, T. J., & Pianta, R. C. (2012). Patterns of school readiness forecast achievement and socioemotional development at the end of elementary school. *Child Development*, *83*(1), 282-299. doi:10.1111/j.1467-8624.2011.01678.x

Appendix I: Kindergarten Observation Form

SACRAMENTO COUNTY

Class # Child # 10947

Kindergarten Observation Form 2014

1. Child's start date of instruction: Month ☐☐ Day ☐☐ Year 1 4

2. Child's initials: First ☐ Middle ☐ Last ☐☐

(e.g., Maria Ines Chavez Lopez: First: M Middle: I Last: C L)

3. Child's sex: O Male O Female

4. Child's date of birth: Month ☐☐ Day ☐☐ Year ☐☐

5. First name of child's mother (if applicable): _____

6. Is this child currently a Transitional Kindergarten (TK) student? O Yes O No

7. Is this child repeating kindergarten (not TK) this year? O Yes O No

8. In the 12 months prior to the school year, did the child participate in any of the following?

a. Transitional kindergarten	O Yes	O No	O Information not available
b. Short-term summer pre-K program (e.g., Summer Bridge, Kinder Camp)	O Yes	O No	O Information not available
c. Preschool or licensed child care	O Yes	O No	O Information not available
9. If yes, what type of program was it?			
a. Head Start?	O Yes	O No	O Information not available
b. Other licensed child care center?	O Yes	O No	O Information not available
c. Licensed family child care home?	O Yes	O No	O Information not available

10. Since the start of school, how frequently did the following occur?

	Never	Rarely	Occasionally	Almost Always
a. Child indicated he/she was hungry	O	O	O	O
b. Child appeared tired in class	O	O	O	O
c. Child was sick	O	O	O	O
d. Child complained of a tooth ache or mouth pain	O	O	O	O
e. Child was absent	O	O	O	O
f. Child was tardy	O	O	O	O

11a. Did this child enter kindergarten with a designated Special Needs Status or an IEP?
O Yes O No O Information not available

11b. If no or information is not available, do you believe he/she has a special need?
O Yes O No

12. What is this child's primary race/ethnicity? (Please mark all that apply.)
O Hispanic/Latino O Asian O Filipino O Hmong/Mien
O Pacific Islander O Black/African American O Alaskan Native or American Indian
O White O Arab/Middle Eastern O Other_____ O Don't know

13. What is the child's preferred language? (Please mark all that apply.)
O English O Spanish O Filipino or Tagalog O Chinese/Mandarin/Cantonese
O Farsi or Dari O Vietnamese O Punjabi or Hindi O Other: _____ O Don't know

14. Is this child an English Learner? O Yes O No O Information not available

If the child is an English Learner or you are not sure, please answer Q15 - 18 below. Otherwise, please turn the sheet over to continue.

15. How would you rate this child's skills in understanding English? (receptive language skills)
O Beginning O Early Intermediate O Intermediate O Early Advanced O Advanced

16. How would you rate this child's skills in speaking English? (expressive language skills)
O Beginning O Early Intermediate O Intermediate O Early Advanced O Advanced

17. Do you have any difficulty communicating with the child due to language differences?
O Yes O No

18. Will this child be assessed in his/her preferred language by you or a bilingual aide?
O Yes O No

>> PLEASE TURN OVER

Kindergarten Observation Form

10947

Please refer to the Scoring Guide for instructions on how to rate each of these readiness skills.

For each skill, assign one of four levels of competency:

Not Yet:	Does not demonstrate skill yet. Cannot perform without adult assistance.
Beginning:	Just beginning to demonstrate skill. Needs significant or frequent adult assistance.
In Progress:	Demonstrates skill occasionally and somewhat competently. Needs minor/occasional adult assistance.
Proficient:	Demonstrates consistently and competently. Performs independently.

TEACHERS PLEASE COMPLETE:

19. Date assessment completed: *Month* ☐☐ *Day* ☐☐

20. Teacher's initials: *First* ☐ *Middle* ☐ *Last* ☐

▶ = *Language-dependent item, which involves oral communication in the classroom. If you feel you cannot provide an accurate assessment of these or any other items, please indicate "Don't know/Not observed."*

	NOT YET	BEGINNING	IN PROGRESS	PROFICIENT	Don't know/ Not observed
21. Uses a pencil with proper grip *(pincer or tripod grip towards tip of pencil)*	O	O	O	O	O
22. Catches a ball *(from 5 feet away)*	O	O	O	O	O
23. Stays focused during individual and small group activities *(ex: drawing a picture)*	O	O	O	O	O
24. Follows class rules and meets behavioral expectations *(ex: is not disruptive of others)*	O	O	O	O	O
▶ 25. Follows two-step directions *(ex: "Please hang-up your jacket, and go sit on the rug.")*	O	O	O	O	O
26. Works and plays cooperatively with peers *(ex: takes turns and shares, helps others)*	O	O	O	O	O
27. Participates successfully in large group activities *(ex: circle time)*	O	O	O	O	O
28. Handles frustration well *(ex: does not become unresponsive)*	O	O	O	O	O
▶ 29. Appropriately expresses needs and wants verbally *(ex: tells teacher when needs to use toilet)*	O	O	O	O	O
30. Expresses empathy or caring for others *(ex: consoles or comforts a friend who is crying)*	O	O	O	O	O
▶ 31. Tells about a story or experience *(in response to one or more prompts)*	O	O	O	O	O
▶ 32. Demonstrates curiosity and eagerness for learning *(ex: tries new activities, asks questions)*	O	O	O	O	O
▶ 33. Answers questions about key details in literature *(answers who?, what?, where? questions)*	O	O	O	O	O
34. Understands structure and basic features of books *(holds upright, follows text left to right, turns pages)*	O	O	O	O	O
35. Writes own first name *(writes all letters correctly and facing the right direction regardless of case)*	O	O	O	O	O

▶ 36. Recognizes rhyming words *(can say whether two specific words rhyme or not)*	O 0-1 correct	O 2 correct	O 3 correct	O 4 correct	O
▶ 37. Counts up to 20 objects *(correctly counts 3 sets containing 5, 10 and 20 objects)*	O zero sets	O 1 set	O 2 sets	O 3 sets	O
▶ 38. Recognizes all letters of the alphabet *(can point to a letter named when presented out of sequence)*	O zero letters	O 1-12 letters	O 13-25 letters	O 26 letters	O
▶ 39. Recognizes basic colors *(can point to basic 8: red, green, orange, blue, black, purple, brown, yellow)*	O zero colors	O 1-4 colors	O 5-7 colors	O 8 colors	O
▶ 40. Recognizes primary shapes *(can point to a circle, triangle, square and rectangle)*	O zero shapes	O 1 shape	O 2-3 shapes	O 4 shapes	O

Appendix II: Parent Information Form

SACRAMENTO COUNTY

DO NOT FOLD FORM

Class # Child #

7771613170

School Readiness Assessment Model

Parent Information Form 2014

This survey asks you questions about your son or daughter who just started kindergarten.
To thank you for your time, your child's teacher will give your child a new book to keep.
When finished, please place this form in the envelope provided and seal it. Return the sealed envelope to your child's teacher.

Shade Circles Like This--> ●
Not Like This--> ⊗ ✓

1. What are your child's initials? First _____ Middle _____ Last _____
This survey is confidential - please do not write your child's name!

Example: Monica Patricia Morales Lopez: First: M, Middle: P, Last: ML)

2. What is your child's birth date? Month _____ Day _____ Year _____

3. Is this child a boy or a girl? ○ Boy ○ Girl

Now we have a few questions about your child's preparation for kindergarten.

4. Please mark which of the following childcare/preschool experiences your child has had in the last 12 months. Please write in the name of the program or school. *(Please shade all that apply.)*

	Yes	Name
4a. Transitional Kindergarten	○	
4b. Head Start preschool	○	
4c. Other licensed preschool or child care center	○	
4d. Licensed family child care home	○	
4e. Short-term summer pre-k program	○	
4f. Other	○	
4g. None of these	○	

5. Did you receive the following kinds of information prior to your child entering kindergarten?

5a. General information about the skills all children need for kindergarten ○ Yes ○ No

5b. Specific information about how you could help your child develop the skills to be ready for kindergarten ○ Yes ○ No

5c. Specific information about how ready your child was for kindergarten ○ Yes ○ No

5d. Information about how and when to register your child for school ○ Yes ○ No

6. Which of these things did you do before the first day of school? *(Please shade all that apply.)*

- ○ Attended a parent meeting or orientation
- ○ Visited the school with your child
- ○ Met your child's kindergarten teacher
- ○ Worked with your child on school skills
- ○ Read books or watched videos about kindergarten with your child
- ○ Read books or articles about your child's transition to school
- ○ Asked child's child care provider/preschool questions about kindergarten
- ○ Asked child's child care provider/preschool whether child was ready for kindergarten
- ○ Provided opportunities for your child to play with other children in small groups
- ○ Other
- ○ None of these

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Now we have questions about your family's activities and routines.

7. In a typical week, how often do you or any other family member do the following things with your child?
(Please write the number of times per week in each space below.)

7a. Read for more than five minutes	About _____times per week
7b. Tell stories or sing songs	About _____times per week
7c. Household chores or pet care	About _____times per week
7d. Play games or do puzzles	About _____times per week
7e. Do arts or crafts	About _____times per week
7f. Play a sport or exercise	About _____times per week

8. What time does your child usually go to bed on a week night? *(Please shade only one response.)*

○ Before 8pm ○ 8pm ○ 8:30pm ○ 9pm ○ 9:30pm ○ 10pm ○ 10:30pm ○ 11pm ○ After 11pm

9. About how many total hours a day does your child watch television, watch videos, or play video or computer games?
(Please write a number in each space.)

Weekdays: About _____ hours and _____ minutes per day Weekends: About _____ hours and _____ minutes per day

10. Do you have access to the internet for your personal (not work-related) use? ○ Yes ○ No

11. What kinds of parenting programs, services, or supports have you received? *(Please shade all that apply.)*

- ○ Regular medical check-ups while pregnant
- ○ WIC (Women, Infants, and Children)
- ○ Services from community clinic
- ○ Home visits from a nurse, community worker, or other provider
- ○ Information from your child's child care provider
- ○ Information or programs at your place of worship
- ○ General information about child development and parenting
- ○ Birth & Beyond Family Resource Center (e.g., Meadowview or La Familia)
- ○ Parent education/support classes
- ○ Help from extended family
- ○ Help from neighbors and/or friends
- ○ Playgroups
- ○ Parenting websites
- ○ Local radio shows about parenting
- ○ Other parenting resources
- ○ None of these

12. In the past year, what types of local community resources have you used with your child? *(Please shade all that apply.)*

○ Arts/music programs ○ Libraries ○ Zoos ○ Other: _____
○ Museums ○ Parks ○ Recreational activities, camps, or sports ○ None of these

13. Please tell us the extent to which the following statements are true for you. *(Please shade only one response for each statement.)*

	Definitely true for me	*Somewhat true for me*	*Not very true for me*	*Not at all true for me*
13a. There is someone I can count on to watch my child when I need to run an errand.	○	○	○	○
13b. There is someone I can count on to watch my child when I need a break.	○	○	○	○
13c. I can easily find someone to talk to when I need advice about how to raise my child.	○	○	○	○

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1 Adapted from Hoover Dempsey & Sandler, 2005

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14. Thinking about the past month, how much of the time you have felt...[1] *(Please shade only one response for each statement.)*

	None of the time	Some of the time	Most of the time	All of the time
14a. That your child was much harder to care for than most children	O	O	O	O
14b. That your child does things that really bother you a lot	O	O	O	O

15. How much have the following things been a concern for you in the last year? *(Please shade only one response for each statement.)*

	Not a concern	Somewhat of a concern	A big concern
15a. Money and paying the bills	O	O	O
15b. Health or health care issues	O	O	O
15c. Work-related problems	O	O	O
15d. Problems with your spouse or partner	O	O	O
15e. Having enough food for my family	O	O	O

Below are a few health-related questions about your child.

16. When your child was born, did he/she weigh less than 5 pounds 8 ounces (2,500 grams)? O Yes O No O Don't know

17. If your child has a special need, please mark all physical or developmental special needs that your child has below: (If your child does not have a special need, please skip to question 20)

- O Speech or language impairment
- O Autism
- O Intellectual/developmental disabilities (mental retardation)
- O Specific learning disabilities
- O Emotional/behavior disorder or 'disturbance'
- O Severe visual impairment, including blindness
- O Auditory impairment (deafness or hard of hearing)
- O Traumatic brain injury
- O Orthopedic impairment
- O Multi-sensory impairment
- O Other health impairments (such as Attention Deficit and/or Hyperactivity Disorder - ADD or ADHD)
- O Other serious special needs: _____

18. How did you learn that your child has special need(s)? *(Please shade only one response option.)*
O Professional diagnosis / assessment (e.g., by a doctor) O Your own diagnosis / assessment

19. Has your child received professional help for this special need *(e.g., help from a pediatrician, school professional, therapist, regional center services)?*
O Yes O No

20. Does your child have a regular doctor, pediatric provider or clinic? O Yes O No

21. Does your child have a regular dentist? O Yes O No

22. In the past year, has your child had a dental exam? O Yes O No

22a. How many cavities has your child ever had? O None O 1-2 O 3-4 O 5+ O Don't know

22b. Has your child ever complained of mouth ache or toothache? O Yes O No

22c. In the past year, how many days of school or childcare has your child missed due to dental issues? O None O 1-2 O 3-4 O 5+ O Don't know

23. What type of health insurance does your child have? *(Please shade all that apply.)*
O No insurance O Medi-Cal O Healthy Families or other subsidized insurance O TRICARE O Private insurance

24. In the past year, has your child received any of the following screenings? *(Please shade all that apply.)*
O Hearing O Vision O Developmental O None of these

Page 3

1 Adapted from National Survey of American Families, 1999

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Finally, we would like to know basic demographic information about your family and the child who is in kindergarten.

25. What is your child's ethnicity? *(Please shade all that apply.)*

O Hispanic/Latino	O Pacific Islander	O Alaskan Native/American Indian
O Asian	O Black/African American	O Arab/Middle Eastern
O Filipino	O White	O Other: _____

26. What is the language you use MOST often with your child at home? *(Please shade only one response.)*

O English	O Hmong	O Cantonese, Mandarin, or other Chinese language
O Spanish	O Korean	O Hindi, Punjabi, or other South Asian language
O Vietnamese	O Navajo	O Farsi, Dari, Arabic, or other Middle Eastern language
O Russian	O Tagalog or other Filipino language	O Other _____

27. What is your relationship to this child? *(Please shade only one response.)*

O Mother O Father O Grandparent O Foster Parent O Other: _____

28. Do you consider yourself to be a single parent? O Yes O No

29. Have you or any other primary parent / guardian lost your job during the past year? O Yes O No

30. How many home addresses have you had since your kindergarten child was born (including your current address)?

_____Addresses

31. What is the child's mother's date of birth? Month ____ Day ____ Year ____ O Don't know/Not applicable

32. What is the highest education level the child's mother has completed?

O Less than 6th grade	O High school (diploma)	O Bachelor's degree (BA or BS)
O Middle school (6th, 7th or 8th)	O Some college	O Advanced degree
O Some high school	O Associate's degree (AA or AS)	O Don't know/Not applicable

33. What is your approximate family income per year?

O $0 - $14,999	O $50,000 - $74,999
O $15,000 - $34,999	O $75,000 - $99,999
O $35,000 - $49,999	O $100,000 or more

Thank you! Please place survey in envelope provided and seal the envelope. Do not fold! Then, give the sealed envelope to your child's teacher.

For Office use only: 30. ☐ 31. ☐☐☐☐☐☐

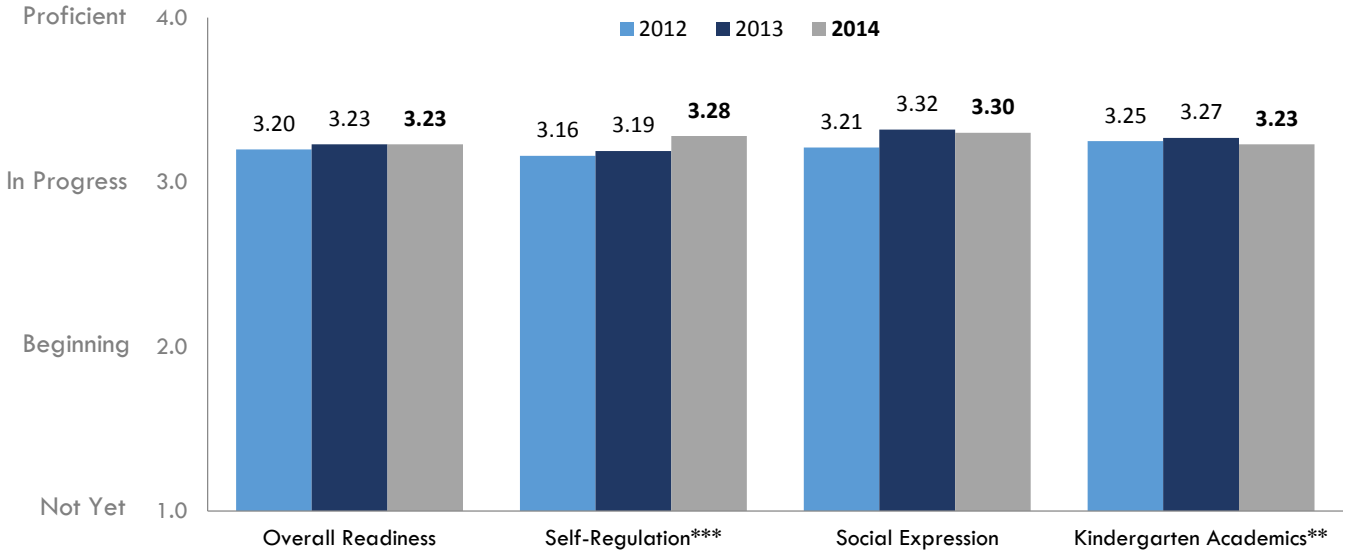
Appendix III: Comparison of Items in 2012-2013 KOF and 2014 KOF

Area	**2012 and 2013 KOF** – 24 items	**2014 KOF** – 20 items Specific changes in **bold**
Fine & Gross Motor Skills	Uses small manipulatives (i.e., effectively uses pencil and scissors)	**Uses a pencil with proper grip *(pincer or tripod grip towards tip of pencil)***
	Has general coordination on playground (e.g., kicks or catches ball, runs smoothly, hops on one foot)	**Catches a ball *(from 5 feet away)***
	Performs basic self-help / self-care tasks (e.g., independently eats and uses toilet)	**[removed]**
Self-Regulation	Comforts self, using adult guidance when appropriate (e.g., Initiates strategies to soothe themselves)	**[removed]**
	Stays focused / pays attention during activities (e.g., stays focused in large group, completes tasks in small group)	Stays focused **during individual and small group activities *(ex: drawing a picture)***
	Controls impulses and self-regulates (e.g., follows class rules, is not disruptive of others)	**Follows class rules and meets behavioral expectations *(ex: is not disruptive of others)***
	Follows one to two-step directions (ex: "Please hang-up your jacket, and go sit on the rug.")	**Follows two-step directions** *(ex: "Please hang-up your jacket, and go sit on the rug.")*
	Negotiates with peers to resolve social conflicts using adult guidance when appropriate (e.g., engages in problem-solving)	**[removed]**
	Works and plays cooperatively with peers *(ex: takes turns and shares, helps others)*	[no change]
	Participates successfully in circle time (ex: circle time)	Participates successfully in **large group activities** *(ex: circle time)*
	Handles frustration well *(e.g., does not act out, asks for help, does not withdraw/become unresponsive)*	[no change]
Social Expression	Relates appropriately to adults other than parent/primary caregiver (e.g., converses with, seeks help from)	**[removed]**
	Appropriately expresses needs and wants verbally in primary language *(ex: tells teacher when needs to use toilet)*	Appropriately expresses needs and wants verbally *(ex: tells teacher when needs to use toilet)* [removed **'in primary language'**]
	Expresses empathy or caring for others *(ex: consoles or comforts a friend who is crying)*	[no change]
	Has expressive abilities (e.g., tells about a story or experience in response to a prompt)	**Tells *about a story or experience*** *(in response to prompt(s))*
	Expresses curiosity and eagerness for learning *(e.g., tries new activities, asks questions)*	**Demonstrates** curiosity and eagerness for learning *(ex: tries new activities, asks questions)*
	Engages in symbolic /imaginative play with self or peers	[removed]
Kindergarten Academics	[n/a]	New item: **Answers questions about key details in literature *(answers who?, what?, where? questions)***
	Engages with books (e.g., knows how to gold a book, knows where a book starts, pretends to read, knows a book conveys information)	**Understands structure and basic features of books *(holds upright, follows text left to right, turns pages)***
	Writes own first name *(e.g., spells and writes all letters correctly)*	Writes own first name ***(writes all letters correctly and facing the right direction regardless of case)***
	Recognizes rhyming words *(can say whether two specific words rhyme or not)*	[Item is same except rhyming pattern is shorter]
	Counts 10 objects correctly ("Please give Maria 10 crayons" or "Please put 10 blocks in the basket")	Counts up to **20 objects *(correctly counts 3 sets containing 5, 10 and 20 objects)***
	Recognizes letters of the alphabet *(note: out of sequence, may be CAPs, lowercase or combination)*	Recognizes all letters of the alphabet ***(can point to a letter named when presented out of sequence)***
	Recognizes basic colors (Basic 8: red, orange, yellow, green, blue, purple, brown, and black)	[no change]
	Recognizes primary shapes *(circle, triangle, square)*	Recognizes primary shapes *(circle, triangle, square, **rectangle**)*

Appendix IV: Trends in Readiness Levels, 2012-2014

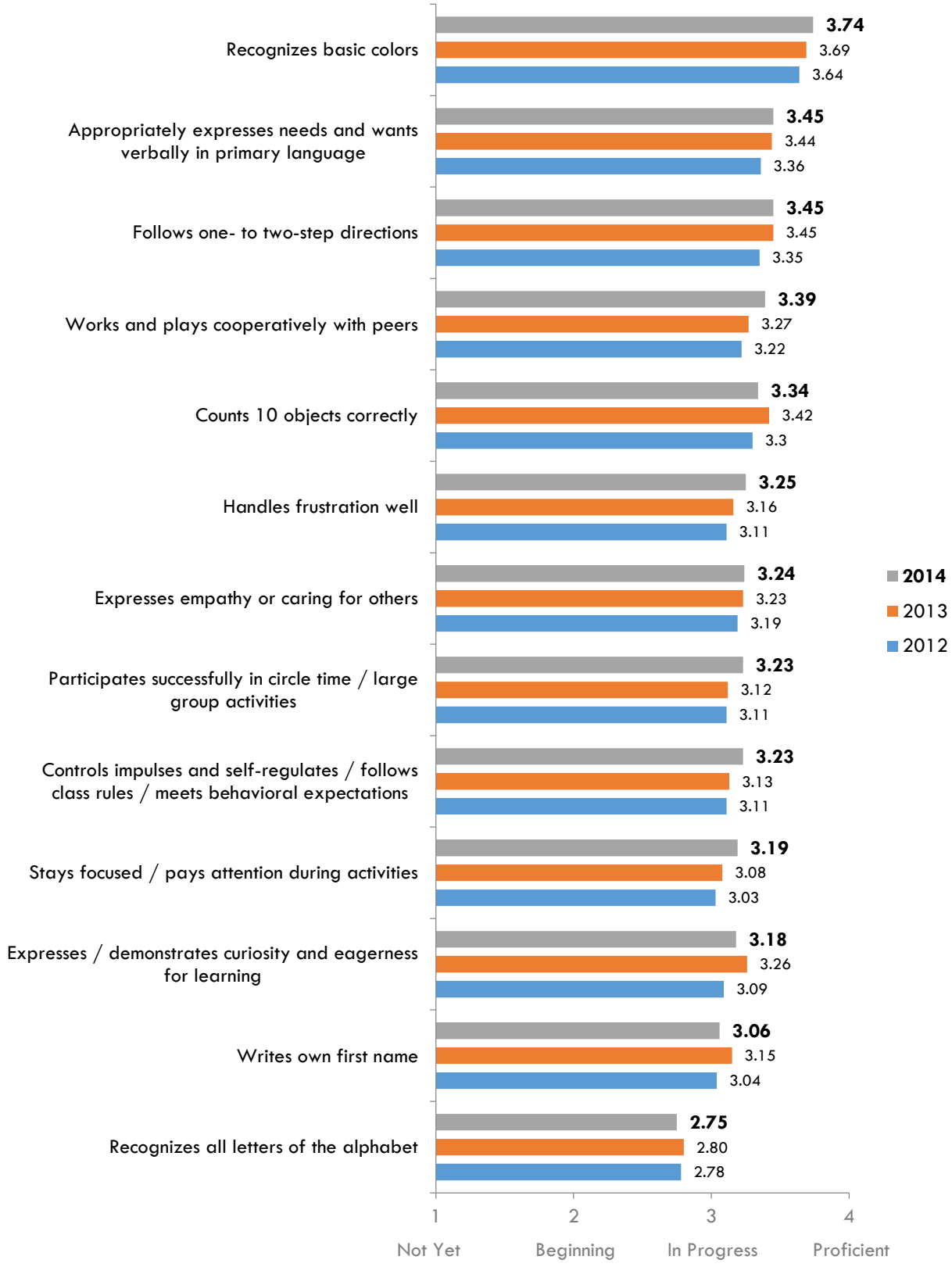
Readiness scores generally were somewhat higher in 2013 than in 2012, but overall scores did not change from 2013 to 2014. *Self-Regulation* scores were highest in the current year, while *Kindergarten Academics* and *Social Expression* scores were highest in 2013. Controlling for other child and family factors, the observed score differences were significant only for *Self-Regulation* and *Kindergarten Academics*.

Readiness Levels on Building Blocks Using Items Common to 2012-2013 KOF and 2014 KOF



N=1711-1744 (2012); 1429-1540 (2013); 1712-1846 (2014). 13 items were common to the KOF across all three years. *Statistically significant at p<.05; **statistically significant at p<.01; ***statistically significant at p<.001.

Average Readiness Levels on Items Common to 2012-2013 KOF and 2014 KOF



Appendix V: Common Core-Aligned KOF Items

Area	Item	Common Core Skill	Common Core Domain
ELA	Participates successfully in large group activities	Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion) (SL.K.1a)	Speaking and Listening: Comprehension and Collaboration
	Tells about a story or experience	Describe familiar people, places, things, and events and, with prompting and support, provide additional detail (SL.K.4)	Speaking and Listening: Presentation of Knowledge and Ideas
	Answers questions about key details in literature: Answers who?, what?, where? questions	With prompting and support, ask and answer questions about key details in a text (RL.K.1)	Reading, Literature: Key Ideas and Details
	Understands structure and basic features of books: Holds upright, follows text left to right, turns pages	Follow words from left to right, top to bottom, and page by page (RF.K.1a)	Reading, Foundational Skills: Print Concepts
	Recognizes rhyming words (in combination with *Produces rhyming words*): Can say whether two specific words rhyme or not	Recognizes and produces rhyming words (RF.K.2a)	Reading, Foundational Skills: Phonological
	Recognizes all letters of the alphabet (in combination with *Names all letters of the alphabet*)	Recognizes and names all upper- and lowercase letters of the alphabet (RF.K.1d)	Reading, Foundational Skills: Print Concepts
Math	Counts up to 20 objects: Correctly counts three sets containing 5, 10, and 20 objects	Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration (CC.K.B.5)	Counting and Cardinality: Count to tell the number of objects