



STUDYING COMBINATIONS OF KINDERGARTEN TRANSITION ACTIVITIES PROVIDED TO CHILDREN AND FAMILIES

Stacy B. Ehrlich Loewe, Kyle DeMeo Cook, John Francis, Sarah Kabourek, Tamara Halle, & Mitchell R. Barrows

Research Brief

go.usa.gov/xex6Q
hs2kproject@norc.org

Report #2022-269 | October 2022



OVERVIEW

This study examined combinations of kindergarten transition activities reported by both kindergarten teachers and parents¹ to gain a comprehensive picture of supports that families experience. We identified:

- Four common combinations of transition activities provided to and experienced by families, called Transition Activity Groups;
- Whether these distinct combinations of transition activities differed for children who previously attended Head Start compared to other children; and
- If those combinations of transition activities were associated with child and family outcomes and engagement in kindergarten.

SURVEY QUESTIONS AND TRANSITION ACTIVITY GROUPS

We examined teacher and parent survey questions about specific kindergarten transition activities provided to children and families. **Figure 1** shows all the items used in this analysis and highlights the four Transition Activity Groups we identified.

Figure 1. ECLS-K:2011 Survey Items on Transition Activities and Identified Transition Activity Groups



KEY FINDINGS

1. Children and families experienced four common combinations of transition activities.
2. For children who previously attended Head Start and other children from lower-income backgrounds who had not attended Head Start, teachers and parents reported fewer types of transition activities than for higher-income children. Head Start and other lower-income children were more likely to be in *Limited Face-to-Face Activities* and *Limited Information Received* Transition Activity Groups. Specifically, they were less likely to visit to the kindergarten classroom, have parents attending an orientation, and report that schools sent home information about the kindergarten program to families.
3. The combination of transition activities provided to children and families predicted children's initial school adjustment and parent involvement in kindergarten. Children and families with more of a variety of transition activities provided showed better outcomes in these areas.

These findings offer some evidence on activities that could best support children's transitions into kindergarten. They suggest that providing more information to families about what to expect in kindergarten, engaging in more face-to-face transition activities, and making schedule adjustments to ease transitions could improve children and families' experiences as they transition into kindergarten and throughout the kindergarten year.

¹ While we use the term "parent" (as the ECLS-K project does), this represents the most knowledgeable adult in the household who responded to the ECLS-K survey and could be another family member.

BACKGROUND

Existing research suggests that some transition activities (e.g., visits to kindergarten classrooms, home visits by teachers, sharing information with families) initiated by early care and education (ECE) settings, kindergarten teachers and elementary schools, and/or families can have small, positive associations with children's outcomes in kindergarten.¹ Strong supports for the kindergarten transition may be particularly important for children and families who are experiencing poverty. For example, for children in Head Start, successful kindergarten transitions may help sustain the positive ECE experiences those children have prior to entering kindergarten.

The national Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:2011) surveys ask children's parents and kindergarten teachers about a set of potential practices implemented as children transition into kindergarten. In this brief, we look at survey responses from both teachers and parents together, and—together—these items give us a snapshot of some of the transition experiences families have. While each survey addresses different types of

kindergarten transition activities (see **Figure 1**), combined they provide a comprehensive picture of transition experiences from the perspectives of two groups of important people in children's lives: teachers and parents.

THE PURPOSE OF THIS RESEARCH was to explore the most common combinations of transition experiences for children and families. Importantly, we ask whether children who attended Head Start prior to kindergarten experienced different combinations of kindergarten transition activities than those who did not attend Head Start. We then sought to understand whether those different experiences were associated with outcomes in kindergarten.

RESEARCH QUESTIONS

1. Are there common combinations of transition experiences for children and families in the United States?
2. Do children who attended Head Start before kindergarten experience different combinations of transition supports than other children?
3. Do combinations of transition experiences predict child and family outcomes in kindergarten?

FINDINGS

We highlight key findings here and provide more information about the Methods in **Appendix A**. In interpreting these findings, it is important to note that all activities we studied were supports provided by kindergarten teachers and elementary schools. They cannot speak to individual transition activities initiated by children's former Head Start or other ECE setting.

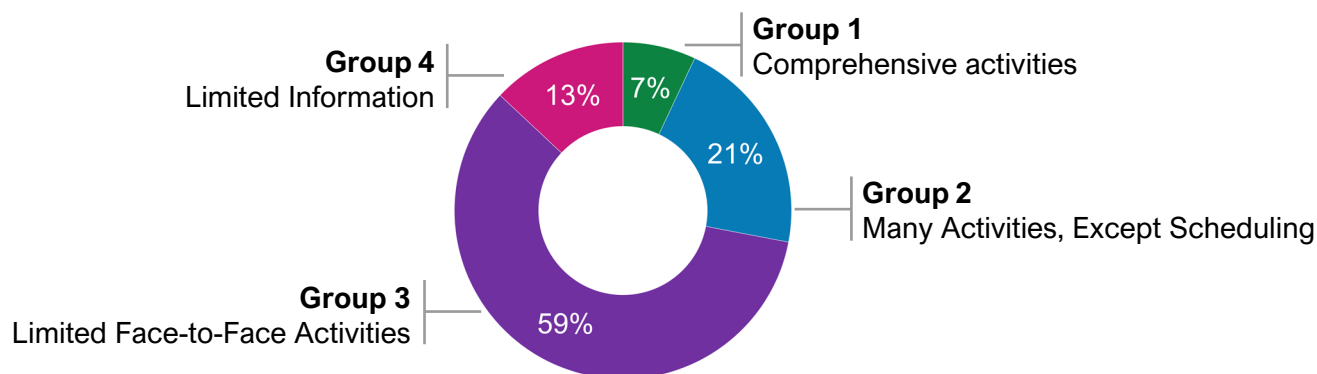
FINDING 1: CHILDREN AND FAMILIES EXPERIENCED ONE OF FOUR COMBINATIONS OF TRANSITION ACTIVITIES

We used a technique called Latent Class Analysis (LCAⁱⁱ; see **Appendix A** for more information) to explore whether teacher and parent reports of transition activities could be grouped into Transition Activity Groups. This looks for common *combinations* of survey responses across all the survey items. Our model suggested four different combinations of transition activities provided to and experienced by children and their families. The model also gave each child a *probability* of being in each group based on their teacher's and/or parent's responses to each item. We then assigned each child to the group they were *most likely* to be part of.

Our model suggested four distinct combinations of transition activities that children and their families experienced. **Figure 2** shows the proportion of children in the sample who were assigned to each Transition Activity Group. **Figure 3** then provides more information on which transition

activities each group of children were most likely to experience. The bars in **Figure 3** show—for each group—how many teachers and parents reported “yes” for each transition activity.

Figure 2. Proportion of Children Experiencing Different Sets of Transition Activities



The four combinations of experiences children and families had regarding kindergarten transition activities can be summarized into the following groups:

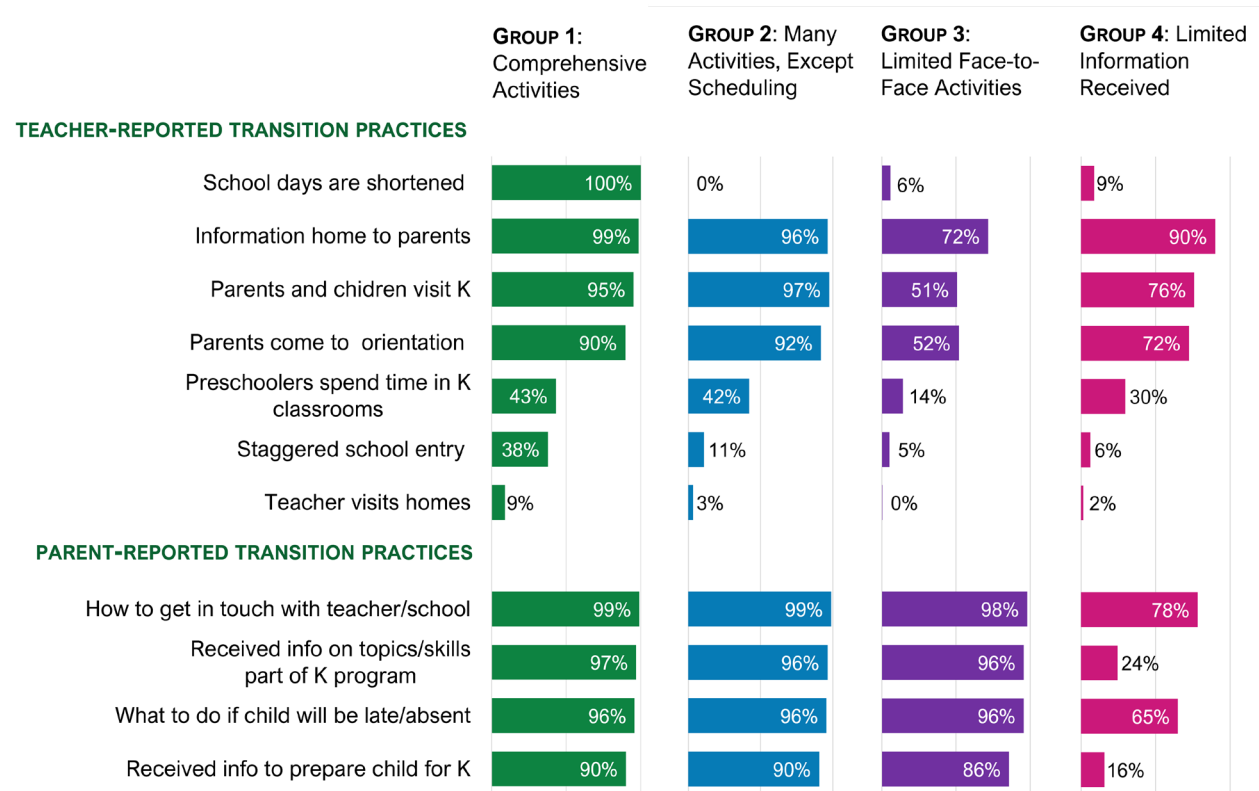
Transition Activity Group 1: Families Experienced Comprehensive Transition Activities (*Comprehensive Activities*) – Children in this group experienced the most transition activities. For this group of children, at least 90% of their kindergarten teachers and parents said “yes” to 8 of the 11 activities analyzed. Our models predicted that 7% of the ECLS-K:2011 sample were likely to have this set of experiences.

Transition Activity Group 2: Families Experienced Many Transition Activities, Except Scheduling Adaptations (*Many Activities, Except Scheduling*) – This group also experienced many transition activities. However, compared to the *Comprehensive Activities* group, a lower proportion of teachers reported shortened days and staggered school entry. Children experiencing this set of activities also had lower incidence of home visits as reported by teachers. About one-fifth of all children in the ECLS-K:2011 sample were likely to have this set of experiences.

Transition Activity Group 3: Families Least Likely to Experience Face-to-Face Transition Activities (*Limited Face-to-Face Activities*) – This group of children had less opportunity for face-to-face transition activities, where families could interact with the school (i.e., teachers said that children and their families visited kindergarten in the prior school year or had parents attending orientations). Teachers of children in this group were also less likely to say they sent information home, although more family members reported receiving relevant kindergarten transition information compared to the *Limited Information Received* group. Our model predicted that almost 60% of all children in the ECLS-K:2011 sample were likely to have this set of transition activity experiences.

Transition Activity Group 4: Families Least Likely to Receive Information about the Kindergarten Program (*Limited Information Received*) – This group had the lowest percentage of parents saying they received information from their child’s school or teacher about how to prepare their child for kindergarten, even though most teachers said they sent information home to all families. Overall, 13% of children were in this group.

Figure 3. Probability of Transition Practices Reported by Parents and Teachers of Children in Each Transition Activity Group



FINDING 2: HEAD START CHILDREN AND FAMILIES WERE LESS LIKELY TO EXPERIENCE FACE-TO-FACE ACTIVITIES AND RECEIVE INFORMATION ABOUT THE KINDERGARTEN PROGRAM FROM SCHOOLS.

Teachers and parents of children who previously attended Head Start reported fewer opportunities to engage in transition supports than those of children who did not attend Head Start. These former Head Start children were less likely to be in Transition Activity Groups 1 or 2—the groups with more comprehensive transition experiences (see **Figure 4**). Rather, Head Start children were more likely to be in the *Limited Face-to-Face* group (Transition Activity Group 3), where kindergarten teachers were less likely report children visiting kindergarten prior to the start of school, preschoolers spending time in kindergarten classrooms, or parents attending orientations. Head Start children were also more likely than non-Head Start children to be in the *Lack of Information Received* group (Transition Activity Group 4), where most parents reported that they did not receive information about preparing for kindergarten.

We then explored a more nuanced comparison, looking at the reported experiences of children based on both their income and prior Head Start enrollment. Children from low-income families (below the federal poverty guidelines) who did not attend Head Start had similar experiences as children who had attended Head Start. Children from families with higher incomes (above the federal poverty guidelines) who did not attend Head Start were more likely to fit into Groups 1 and 2 (and less likely to be in Groups 3 and 4) than both children who formerly attended Head Start *and* children from low-income families who did not attend Head Start.

Figure 4. Proportion of Children in Each Group, based on Former Head Start Experience and Family Income

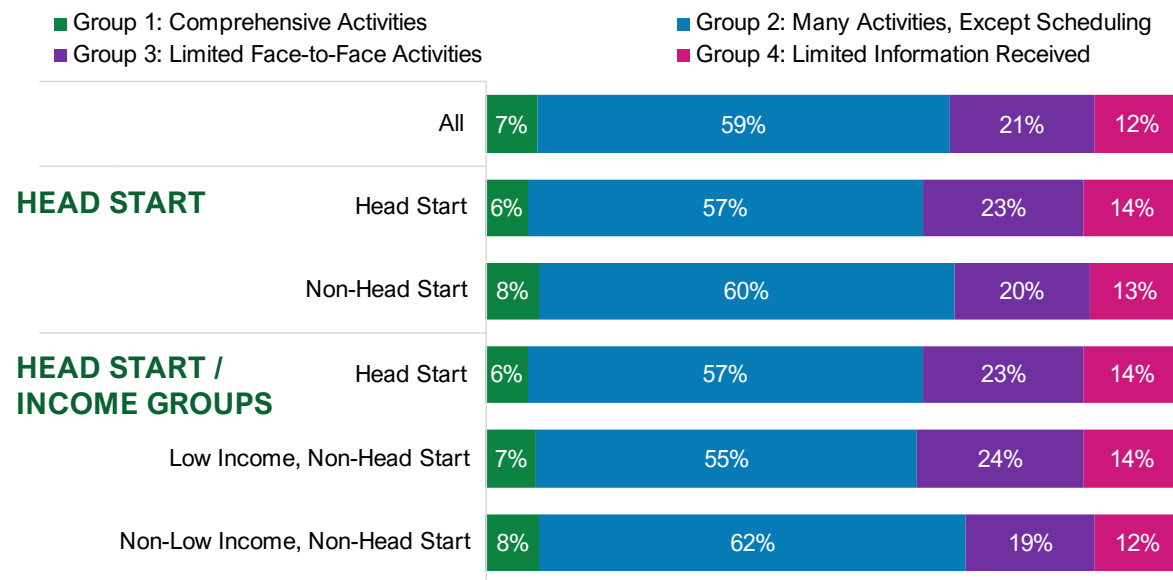


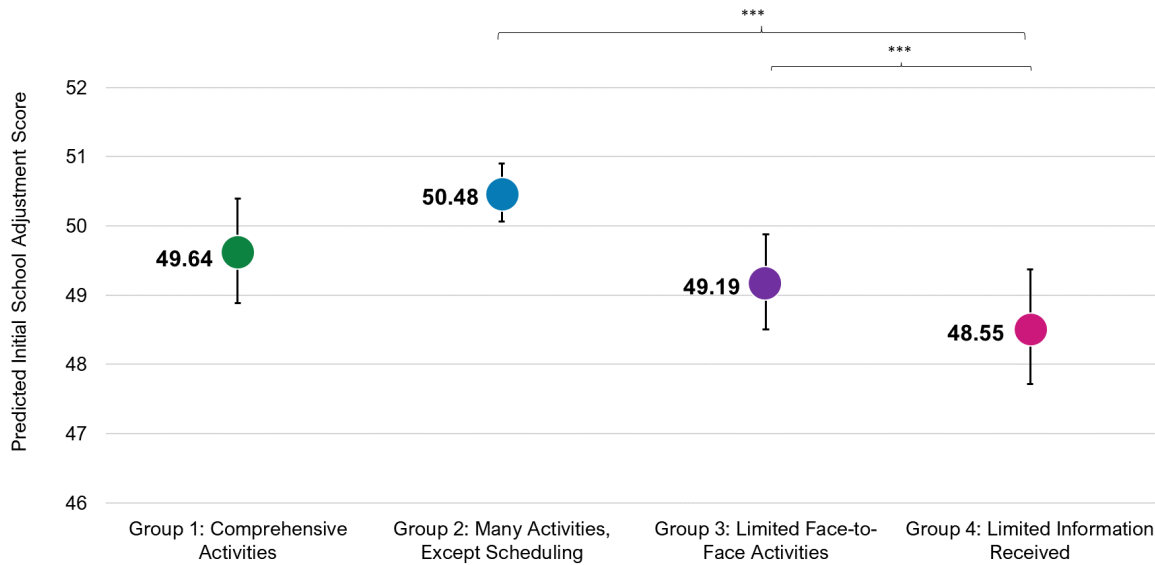
Figure Note: There were significant differences between the proportion of former Head Start attendees and Low Income, Non-Head Start groups in Transition Activity Groups 3 and 4. However, the differences were very small and do not seem to represent meaningfully different experiences.

FINDING 3: TRANSITION ACTIVITY GROUPS WERE ASSOCIATED WITH CHILDREN’S INITIAL ADJUSTMENT AND PARENT INVOLVEMENT

Next, we used regression analyses to look at whether Transition Activity Group membership predicted child and family outcomes. Children in the *Limited Information Received* group (Transition Activity Group 4) had lower initial school adjustment scores than children in either the *Many Activities, Except Scheduling* group (Transition Activity Group 2) or the *Limited Face-to-Face Activities* group (Transition Activity Group 3). (Scores are out of 100; see **Figure 5**.)

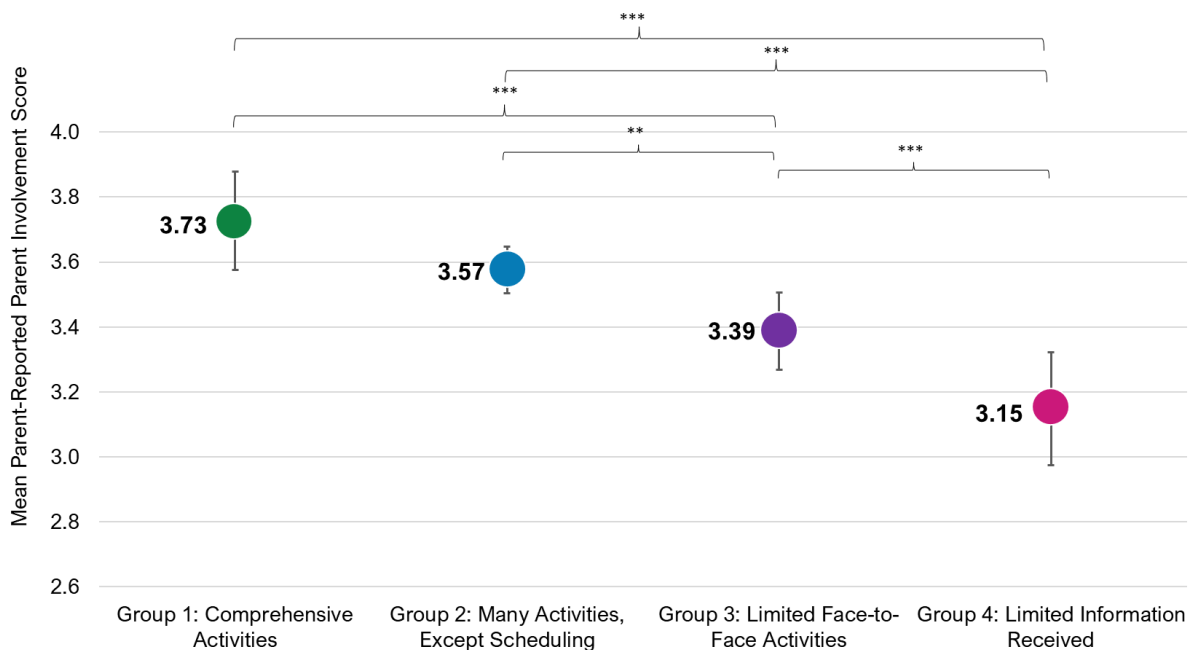
Each Transition Activity Group had parent involvement scores that progressively went down. Children in the *Comprehensive Activities* group (Transition Activity Group 1) had the highest parent-reported parent school involvement, while children in the *Limited Information Received* group (Transition Activities Group 4) had the lowest parent-reported parent involvement scores by the end of kindergarten (see **Figure 6**).

Figure 5. Kindergarten Adjustment Scores for Children in Each Transition Activity Group



Notes: (1) School Adjustment is a T score with a mean of 50, SD of 10. (2) Error bars represent statistical significance based on 95% confidence intervals. (3) The figure presents marginal means that model the outcomes for children in each group based on regression models that include control variables (see Appendix B for all control variables). Therefore, each outcome takes into account that children with different characteristics were assigned to different groups. (4) *** $p < .001$, all significant comparison were at a value where $p < .008$, which accounts for multiple comparisons. Post-hoc tests revealed that Group 2 was significantly different than Groups 3 and 4. (5) Analyses were weighted.

Figure 6. Parent Involvement Scores for Children in Each Transition Activity Group



Notes: (1) Scores are out of a count of seven school-based parent involvement activities. (2) Error bars represent statistical significance based on 95% confidence intervals. (3) The figure presents marginal means that model the parent involvement outcome for family members of children in each group based on regression models that included control variables (see Appendix B for all control variables). Therefore, each outcome takes into account that children with different characteristics were assigned to different groups. (4) ** $p < .01$, *** $p < .001$, all significant comparison were at a value where $p < .008$, which accounts for multiple comparisons. Post-hoc tests revealed that all groups were significantly different from one another except for Groups 1 and 2. (5) Analyses were weighted.

SUMMARY AND IMPLICATIONS



CHILDREN AND FAMILIES EXPERIENCED FOUR DISTINCT COMBINATIONS OF TRANSITION SUPPORTS.

Some children and families experienced a broader set of practices, including face-to-face opportunities and the receipt of information about kindergarten. Others experienced fewer types of transition support activities. Our models suggested four different groupings of experiences based on responses to the ECLS-K:2011 teacher and parent surveys. Our findings suggest that elementary schools and staff differ in how many types, and combinations of, transition activities they deliver to families.



HEAD START CHILDREN AND LOWER-INCOME CHILDREN WHO DID NOT ATTEND HEAD START WERE LESS LIKELY TO EXPERIENCE FACE-TO-FACE TRANSITION ACTIVITIES AND RECEIVE INFORMATION ABOUT KINDERGARTEN PROGRAMS THAN OTHER CHILDREN.

In particular, former Head Start children and non-Head Start children facing poverty were less likely to experience activities such as school visits and time in kindergarten classrooms prior to kindergarten. This implies that elementary schools and districts may need to develop more strategic supports to address the needs of low-income children transitioning to kindergarten, regardless of their prior ECE setting. For example, schools and districts may need to broaden outreach activities, consider whether the timing of activities and events is accessible to all families, and address potential barriers to receiving kindergarten-relevant information. More research is needed to better understand which specific outreach activities best support different groups of children and families.



HEAD START CHILDREN AND LOWER-INCOME CHILDREN WHO EXPERIENCED FEWER TYPES OF TRANSITION ACTIVITIES HAD LOWER INITIAL SCHOOL ADJUSTMENT SCORES, AND THEIR FAMILIES REPORTED LESS SCHOOL INVOLVEMENT IN KINDERGARTEN.

The types and combinations of transition supports that children and families have opportunities to experience matter because they are associated with both children's initial adjustment to school and parent involvement with their child's kindergarten school. Transitions may matter especially for those attending a program like Head Start, where children make significant progress in preparing for kindergarten.ⁱⁱⁱ Having various transition supports can help children's adjustment into kindergarten, setting the stage for future learning. Yet, former Head Start children, along with

other low-income children, are offered fewer opportunities to participate than higher-income peers and are less likely to experience the combinations of practices that were associated with positive outcomes in this study.

For Head Start and local school systems, this highlights the importance of building and maintaining collaborations around how to prepare families for kindergarten transitions. For example, Head Start programs and local schools can come together to work on joint transition activities, especially in places where elementary schools are currently carrying out fewer transition supports. In support of this type of collaboration, since 2010-11 there have been increased requirements for Head Start and elementary schools to work together around the kindergarten transition. Cross-system collaboration is included in key regulations and legislation for both Head Start (through updates to the Head Start Program Performance Standards^{iv}) and K-12 (through the 2015 reauthorization of the Elementary and Secondary Education Act (ESEA), known as the Every Student Succeeds Act (ESSA)^v). Therefore, findings represented in this brief may look different than current practices and experiences in the field. This warrants future research on children and families' experiences around the transition and how they are associated with outcomes using newer data sources.

ⁱ Cook, K. D. & Coley, R. L. (2017). School transition practices and children's social and academic adjustment in kindergarten. *Journal of Educational Psychology*, 109, 166-177. <https://doi.org/10.1037/edu0000139>

Cook, K. D., & Coley, R. L. (2019). Coordination between Head Start and elementary schools to enhance children's kindergarten success. *Early Education and Development*, 30, 1063-1083. <https://doi.org/10.1080/10409289.2019.1656318>

Kagan, S. L., & Tarrant, K. (2010). Transitions for young children: *Creating connections across early childhood systems*. Baltimore, MD: Brookes Publishing Company.

LoCasale-Crouch, J., Mashburn, A. J., Downer, J. T., & Pianta, R. C. (2008). Pre-kindergarten teachers' use of transition practices and children's adjustment to kindergarten. *Early Childhood Research Quarterly*, 23, 124-139. <https://doi.org/10.1016/j.ecresq.2007.06.001>

Schulting, A. B., Malone, P. S., & Dodge, K. A. (2005). The effect of school-based kindergarten transition policies and practices on child academic outcomes. *Developmental Psychology*, 41, 860-871. <https://doi.org/10.1037/0012-1649.41.6.860>

ⁱⁱ Hagenaars, J. A., & McCutcheon, A. L. (Eds.). (2002). *Applied latent class analysis*. Cambridge University Press.

ⁱⁱⁱ U.S. Department of Health and Human Services, Administration for Children and Families (January 2010). *Head Start Impact Study. Final Report*. Washington, DC.

Tourangeau, K., Nord, C., Lê, T., Sorongon, A. G., Hagedorn, M. C., Daly, P., & Najarian, M. (2015). *Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K: 2011): User's manual for the ECLS-K: 2011 kindergarten data file and electronic codebook, public version (NCES 2015-074)*. Washington, DC: National Center for Education Statistics.

^{iv} U.S. Department of Health & Human Services; Administration for Children & Families (2016). *Head Start Program Performance Standards*. Available at: <https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xiii>

^v Every Student Succeeds Act, 20 U.S.C. § 6301 (2015).

APPENDIX A: METHODOLOGY

This study used data on children, families, and their teachers from the **EARLY CHILDHOOD LONGITUDINAL STUDY, KINDERGARTEN CLASS OF 2010 – 2011 (ECLS-K:2011)**. These data include information from both the fall and spring of kindergarten and is nationally representative of kindergarten children, teachers, and schools in 2011.

Our sample included 13,813 children who entered kindergarten in fall 2011. Within the full sample, 52% were white, 23% Black, 13% Latinx, and 10% mixed race or another race/ethnicity. Twenty-three percent of children were dual language learners and 22% received special education services. Approximately 13% of children in the sample had attended Head Start prior to kindergarten entry. Information about socio-economic status were included in the dataset. See Appendix B for more information about the sample.

In this study, rather than counting the number of transition activities—which puts the transition activities at the center of the analyses—we used a more “person-centered” analytical approach (latent class analysis (LCA)^{vi}) so we could understand the constellation of transition activities that are offered to children and their families. The use of this person-centered approach is increasingly common in education research with large-scale nested datasets such as the Early Childhood Longitudinal Study^{vii}—and even more specifically in understanding children’s transition to kindergarten^{viii}—because this approach can address questions about groups of individuals who share similar patterns of experiences. Using a person-centered approach to understand combinations of experiences also allows us include both what teachers report they offer to children and families and what families report they were provided. Therefore, we used LCA to explore whether transition activities reported by teachers and families could be grouped together based on common combinations of experiences. The models were weighted with a child level weight that takes into account classroom and school data, as well as the inclusion of primary sampling unit and strata variables to account for the nested nature of the sampling design. Four groups emerged, as described in the Findings section.

We then looked to see whether children with different background characteristics and experiences, such as former Head Start enrollment, were more or less likely to be in each of the four groups. Lastly, we used weighted regression analysis to study whether membership in distinct Transition Activity Groups was related to differences in children’s reading, math, social skills, initial child adjustment to kindergarten, as well as parent involvement and parent satisfaction at the end of kindergarten. All regression analyses included child, family, and school control variables that are included in Appendix B and were weighted using the appropriate child level weight, primary sampling unit, and strata provided by ECLS-K:2011 dataset to account for the nested nature of the data.

^{vi} Hagenaars, J. A., & McCutcheon, A. L. (Eds.). (2002). *Applied latent class analysis*. Cambridge University Press.

^{vii} e.g., Alameda-Lawson, T., & Lawson, M.A. (2018). A latent class analysis of parent involvement subpopulations, *Social Work Research*, 42, 118–130, <https://doi.org/10.1093/swr/svy008>

Hair, E., Halle, T.G., Terry-Humen, E., Lavelle, B., & Calkins, J. (2006). Profiles of school readiness in the ECLS-K: Predictions to academic, health, and social outcomes in first grade. *Early Childhood Research Quarterly*, 21, 431-454. <https://doi.org/10.1016/j.ecresq.2006.09.005>

Halle, T.G., Hair, E.C., McNamara, M., Wandner, L., & Chien, N. (2012). Predictors and outcomes of early vs. later English language proficiency among English language learners in the ECLS-K. *Early Childhood Research Quarterly*, 27, 1-20. <https://doi.org/10.1016/j.ecresq.2011.07.004>

^{viii} e.g., Lee, P. & Bierman, K.L. (2016). Profiles of kindergarten classrooms and elementary school contexts: Associations with the first-grade outcomes of children transitioning from Head Start. *The Elementary School Journal*, 117, 119-142. <https://doi.org/10.1086/687813>

Slicker, G., Barbieri, C.A., Collier, Z.K., & Hustedt, J.T. (2021). Parental involvement during the kindergarten transition and children's early reading and mathematics skills. *Early Childhood Research Quarterly*, 55, 363-376. <https://doi.org/10.1016/j.ecresq.2021.01.004>

APPENDIX B: SAMPLE CHARACTERISTICS

CHARACTERISTIC	ANALYTIC SAMPLE	FORMER HEAD START CHILDREN within analytic sample
Sample N	13,813	1,773
Survey Weighted Population	4,053,154	600,766
Mean Age in Months	66.17	65.95
Race		
White	52.44%	31.15%
Black	13.45%	29.83%
Latinx	24.31%	31.13%
Other	9.79%	7.89%
% Non-White Students in School Attended	46.16%	59.28%
Gender		
Female	48.30%	47.57%
Male	51.70%	52.43%
Dual Language Status	23.18%	30.04%
Special Education Status	21.96%	21.88%
SES Quartile 1	25.00%	40.56%
SES Quartile 2	26.21%	35.22%
SES Quartile 3	24.73%	17.62%
SES Quartile 4	24.05%	6.60%
Mean District Composite Poverty Level of District Attended	19.68	23.98
Urbanicity Of Elementary School Attended		
City School	31.71%	36.57%
Suburb School	33.37%	26.93%
Town School	10.98%	12.96%
Rural School	23.94%	23.54%
Type Of School		
Private School	11.28%	4.66%
Public School	88.72%	95.34%
Size Of School Attended		
0-149	4.75%	4.30%
150-299	11.23%	10.39%
300-499	32.03%	37.80%
500-749+	35.80%	35.01%
750+	16.19%	12.50%
Child Attends Half-Day Kindergarten	17.33%	9.87%

Studying Combinations of Kindergarten Transition Activities Available to Children and Families

OPRE REPORT #2022-269, OCTOBER 2022

Stacy B. Ehrlich Loewe, Kyle DeMeo Cook, John Francis, Sarah Kabourek, Tamara Halle, Mitchell R. Barrows

SUBMITTED TO:

Kathleen Dwyer, Project Officer
Office of Planning, Research, and Evaluation Administration for Children and Families
U.S. Department of Health and Human Services

CONTRACT NUMBER: HHSP2332015000481

PROJECT DIRECTOR

Stacy B. Ehrlich Loewe, NORC
1155 E. 60th Street, Chicago, IL 60637

This report is in the public domain. Permission to reproduce is not necessary.

Suggested citation: Ehrlich Loewe, S. B., Kyle DeMeo Cook, John Francis, Sarah Kabourek, Tamara Halle, Mitchell R. Barrows (2022). *Studying Combinations of Kindergarten Transition Activities Available to Children and Families*, OPRE Report # 2022-269, Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Disclaimer

The views expressed in this publication do not necessarily reflect the views or policies of the Office of Planning, Research, and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services.

This report and other reports sponsored by the Office of Planning, Research, and Evaluation are available at www.acf.hhs.gov/opre

Connect with OPRE



NATIONAL

