



Early Learning  
NETWORK

# Preschool Attendance and the Transition to Kindergarten

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# Preschool Attendance in Ohio

- Although preschool attendance is increasing in Ohio, many children do not attend preschool in the year prior to kindergarten.
  - Relatively few public options
- Little understanding of who attends
  - Geography, demographics etc.
- Critical to understanding how to implement expansion efforts



# Preschool Attendance and the Transition to Kindergarten

- Well-established literature documenting associations between preschool attendance and children's academic skills at the start of kindergarten
- Less is known about other outcomes
  - Psychological—school liking etc.
  - Transition-related—challenges adjusting to kindergarten



# Current Questions

- The goal of this work:
  - Examine the potential differences between kindergarten students who did and did not attend preschool in this sample
  - Focused on the transition to kindergarten
- Research Questions:
  - 1) Are there demographic differences between preschool attenders and non-attenders?
  - 2) Are there academic and social skill differences between preschool attenders and non-attenders?
  - 3) Do the associations between preschool attendance and children's skills vary by demographic characteristics?



# Sample

- 796 children in 64 classrooms
  - 539 PreK Attenders
  - 157 PreK Non-Attenders
- Demographic information:
  - 88% spoke English at home; 51% Male
  - 77% White, 15% Black, 15% Asian, AK, Other;
  - 15% Latinx
  - Median household income 30-40k



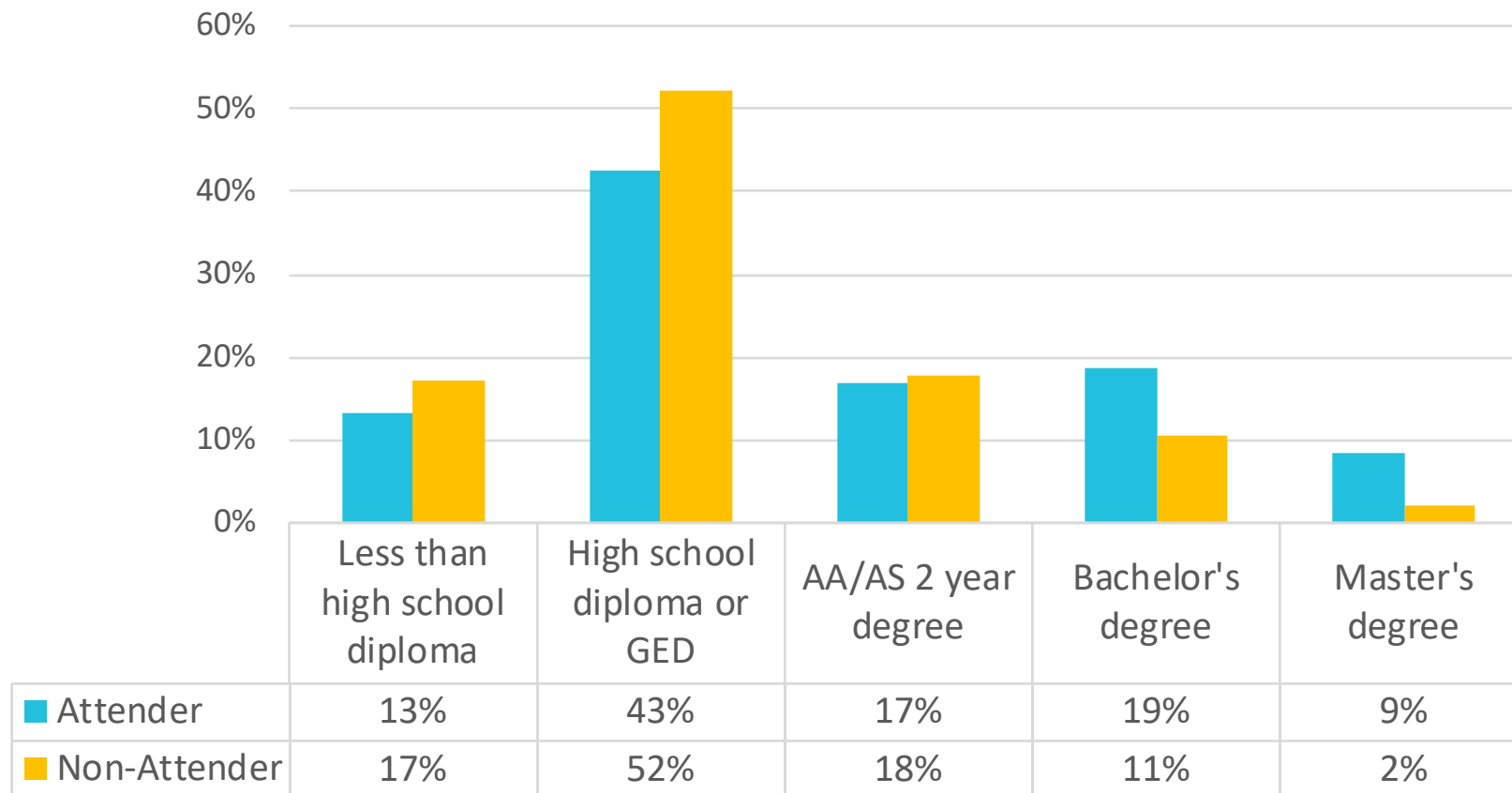
# Measures and Models

- Examined a comprehensive set of ways children who did and did not attend preschool might differ:
  - Academic outcomes: *Woodcock Johnson Applied Problems*, Letter Word ID, Picture Vocab, Head-to-Toes
  - Social outcomes: *Teacher-Child Rating Scale*: Behavior Control and Social Skills. School Liking, Disliking, and Loneliness.
  - Kindergarten Transition: Teacher-reported measure
- Analyzed using Hierarchical Linear Models in SAS Proc Mixed controlling for Income, Mom Ed, Gender, & Race.



# RQ1: Who attended preschool?

- Non-Attenders had significantly lower levels of mother's education:



# RQ2: Preschool attenders and non-attenders: Academic skills

- Scores from fall of K:

		Applied Problems	Letter-Word ID	Picture Vocabulary	Head-to-Toes Raw Score	
Non-Attender	Mean	97.55	94.77	94.77	28.05	
	SD	12.47	11.75	11.73	16.76	
Attender	Mean	100.60	98.21	97.40	30.60	
	SD	12.73	12.43	9.52	16.65	
Effect Size: Attender vs. Non Attender		<i>d</i>	0.24	0.28*	0.26*	0.15

\*significantly different from zero,  $p < .05$ , in hierarchical linear models





# RQ2: Preschool attenders and non-attenders: Social skills

- Scores from fall of K:

		Behavior Control	Social Skills	School Liking	School Dislike	Loneliness	
Non-Attender	Mean	22.03	22.76	5.29	1.84	1.95	
	SD	6.35	6.92	1.31	1.72	1.91	
Attender	Mean	20.65	22.73	5.04	2.06	1.72	
	SD	7.31	6.97	1.45	1.73	1.91	
Effect Size: Attender vs. Non Attender		<i>d</i>	-0.18*	0.00	-0.18	0.13	-0.12

\*significantly different from zero,  $p < .05$ , in hierarchical linear models



# RQ2: Preschool attenders and non-attenders: Transition challenges

- Teachers answered five questions about children's transition to Kindergarten:
  1. Difficulty making friends and interacting with classmates
  2. Difficulty following schedule and routine
  3. Difficulty adjusting to academic demands
  4. Difficulty working in groups in the classroom
  5. Difficulty being organized
- Overall:
  - 29% of students had no difficulty in *any* of the domains.
  - 30% of students had some difficulty in *all five* domains.



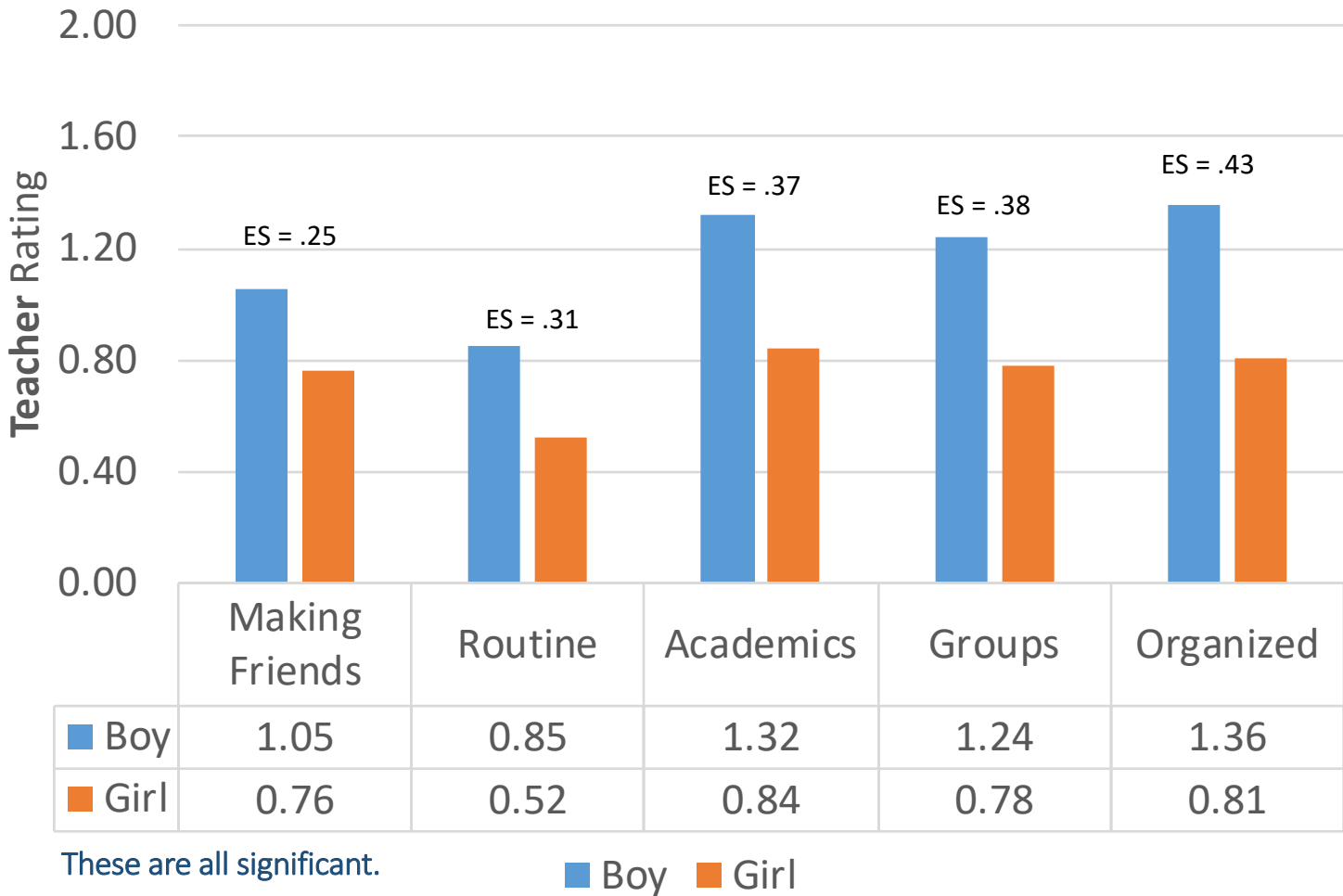
# RQ2: Preschool attenders and non-attenders: Transition Challenges

- Mean number of difficulties across the five items did not differ by attender status:

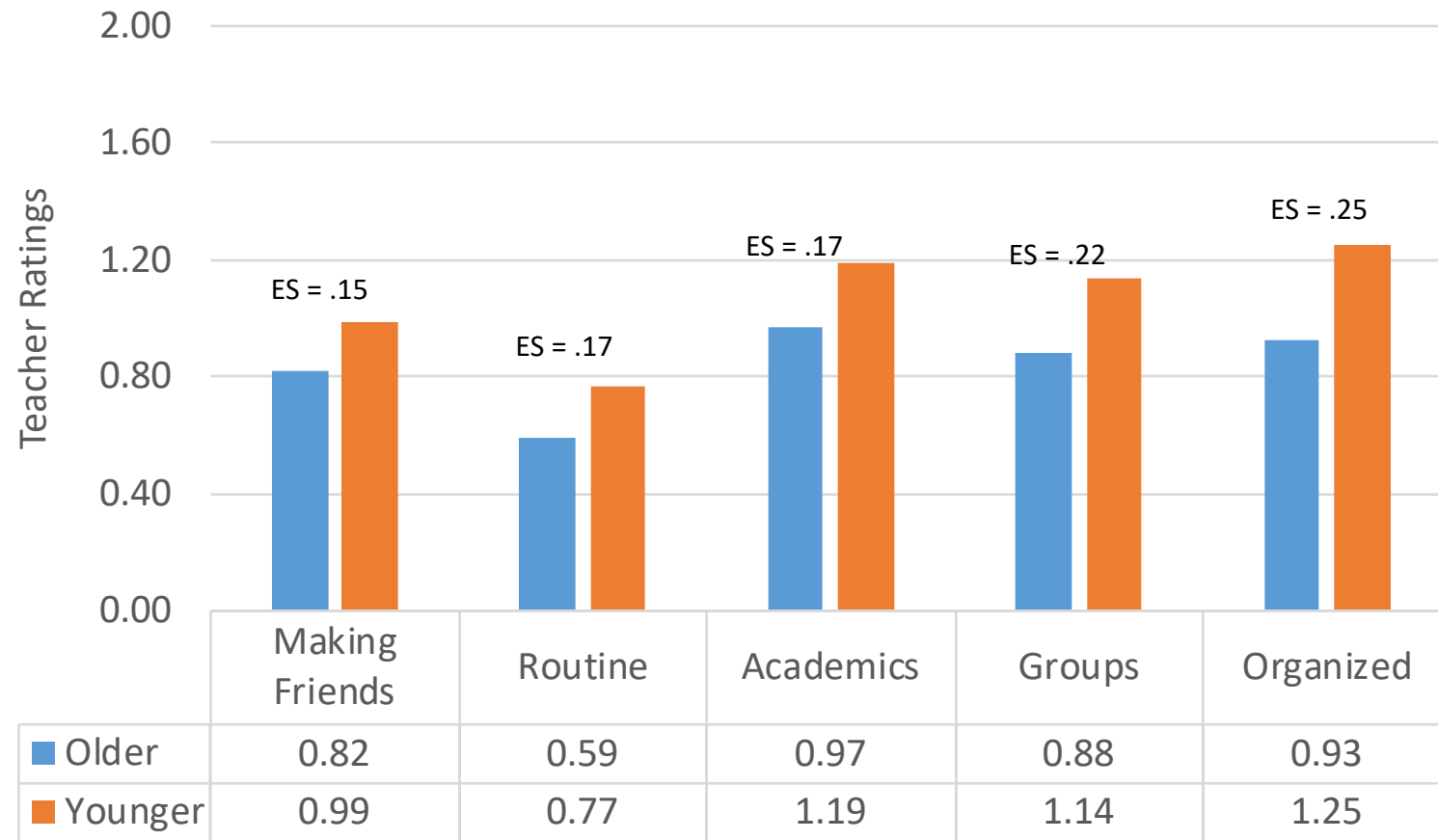
	Making friends	Following routines	Academic demands	Working within groups	Being organized
Non-Attender	0.95	0.65	1.05	0.94	1.01
Attender	0.93	0.71	1.12	1.06	1.15
Effect Size	-0.02	0.06	0.05	0.10	0.10



# RQ2: Transition challenges: Boys vs. girls



# RQ2: Transition challenges: Older vs. younger students



These are all significant.

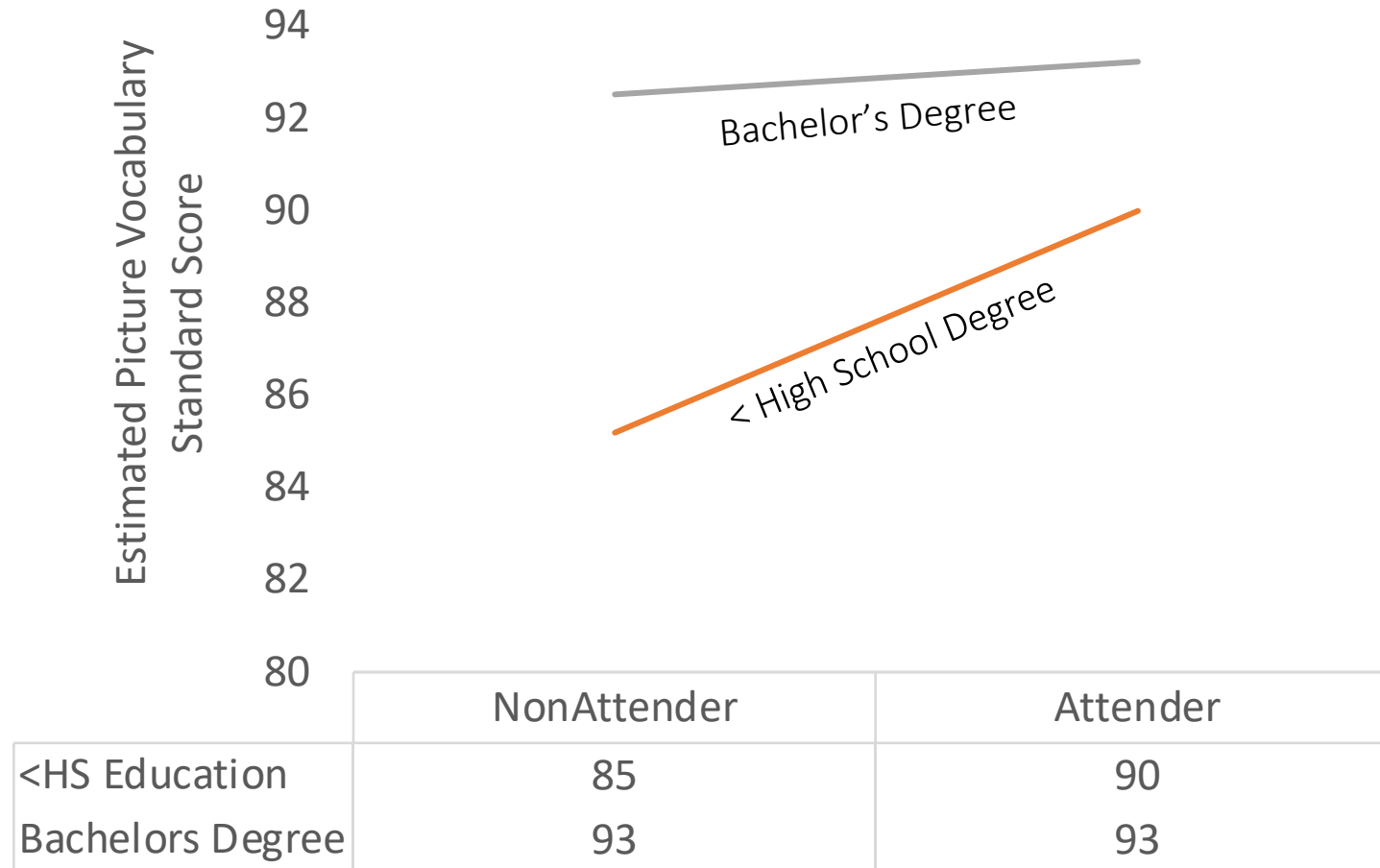
Older Younger



# RQ3: Demographic moderators of preschool attendance

- Gender: Only found effects for Letter Word ID
  - No difference between girls and boys who attended PreK
  - Girls outperform boys without PreK.
- Race: Only found differences for the HTKS
  - The gap between white and non-white students is smaller for PK Attenders than non-attenders
- Mother's Education
  - Gaps between PreK attenders and non-attenders narrowed for Picture Vocabulary, Social Skills, School liking, and Transition Problems

# RQ3: Gap narrowing example:



# Conclusions

- Ohio has relatively limited public preschool options
  - However, few demographic differences between attenders and non-attenders
- There were academic and social differences between attenders and non-attenders at the start of kindergarten.
  - Consistent with prior literature
- No differences related to challenges of transition
  - Need to consider dosage of preschool
  - Characteristics of preschool







Thank You!