The Teacher-Assistant Dyad:
Understanding how pre-k classrooms balance instruction, emotional support, and management across the teaching team

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INTRODUCTION

In pre-k programs, teaching assistants (TAs) meet ratio requirements, but are increasingly taking on instructional responsibilities.

Teachers and assistants are expected to work together as a teaching team

Past research on effective classroom behaviors has looked at the lead teacher almost exclusively

The question is how do teaching teams handle these expectations.

Behaviors of teachers and assistants in pre-k classrooms were assessed and compared in three key areas: instructional support , emotional support, and classroom organization.

STUDY AIMS

- To explore patterns of lead teacher-teaching assistant behavior within and across pre-kindergarten classrooms
- To examine the extent to which teaching team and classroom characteristics are different by latent group

PARTICIPANTS

Lead teachers and assistants from 80 public pre-k classrooms participating in a large-scale curriculum evaluation.

Lead teachers had an average of 7.58 years of experience. All teachers had at least a bachelors degree.

Assistants had an average of 4.92 years of experience. Experience ranged from high school diploma to graduate level work.

Assistants and teachers had been working together an average of 3.18 years.

METHOD

Lead teacher and assistant were observed for up to 20 three-second snapshots per day for 3 day-long visits across the school year.

Examine four behaviors of interest related to measures of effective classroom behaviors. Each variable was observed for both the lead teacher and teaching assistant.

Quantity of Instruction: Proportion of snapshots when individual was observed in instruction.

Quality of Instruction: Average level of inference during instruction.

Quantity of Behavior Management: Proportion of snapshots when individual was observed in behavior management (approving or disapproving).

Tone: Average tone/affect across snapshots

ANALYTIC APPROACH

Correlations examined the relationship between teachers and assistants within a classroom.

Latent Class Analysis (LCA) (MPlus software) was used to explore patterns of behavior for teaching teams across classrooms.

- Separately for teachers and assistants, independent variables were dichotomized along a median split.
- Models run for 2-4 latent classes; selected model based on model fit criteria (BLRT and BIC) identified 2 latent groups of classrooms.

RESULTS

Patterns Within Classrooms

For the four behaviors of interest, the correlations between teachers and assistants in the same classroom were positive and moderate (r's ranged from .28 to .47)

Patterns Across Classrooms

In this sample, two latent groups were identified. Group 1 was more likely to have higher quantity of instruction and more positive tone for both teacher and assistant. Group 2 was more likely to have higher quantity of behavior management by both teacher and assistant (see Figure 1.)

Differences in Team and Classroom Characteristics

No statistically significant differences were found on any teaching team or classroom characteristics between the two latent groups (see Table 1.)

The *Higher Instruction* group displayed a trend towards greater teacher experience, a higher proportion of ELL students, and children with lower entering academic skills.

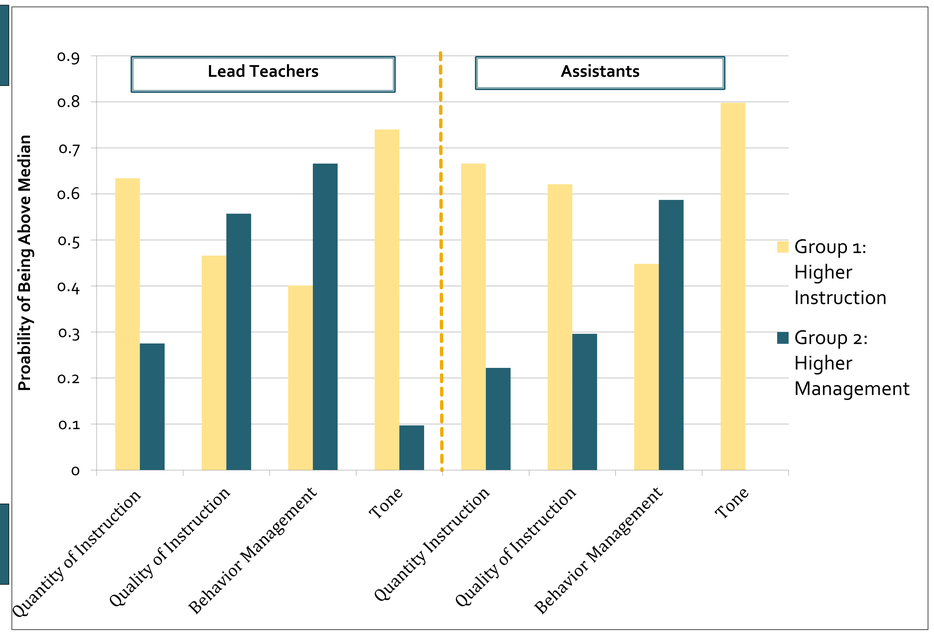

Figure 1. Probabilities of the two latent groups of classrooms

Table 1
Group Differences in Teaching Team and Classroom Characteristics

	Higher Instruction (n=48)		Higher Management (n=32)	
	Mean	SD	Mean	SD
Teaching Team Experience				
Teacher experience	8.20	5.75	6.64	4.82
Assistant experience	5.14	3.31	4.60	3.65
Experience together	3.34	3.26	2.94	2.38
Classroom Demographics				
Number of students	16.96	2.03	17.31	2.13
Proportion ELL †	0.36	0.24	0.27	0.25
Proportion IEP	0.10	0.09	0.10	0.07
Proportion Boys	0.53	0.10	0.56	0.10
Classroom Skills				
Entering academic skills	-0.10	1.05	0.15	0.92
Entering self-reg. skills	-0.01	1.09	0.01	.86
End of Pre-K academic skills	-0.06	0.96	.09	1.07
End of Pre-K self-regulation skills	.01	0.93	-0.02	1.12

**p<.01; *p<.05; †p<.10

DISCUSSION

- Within a classroom, the teacher and assistant behave similarly.
- Latent class analysis is one way to model teaching team behavior to understand patterns of complex interactions across classrooms.
- Across classrooms, two modestly different patterns of behavior were identified (higher instruction and higher management).
- It is not yet clear what might motivate the different patterns of behavior. Teacher experience, proportion of ELL students and entering academic skills are promising possibilities.
- Additional patterns of behavior within and across pre-k classrooms may be identified in other contexts or more heterogeneous samples..
- Further research is needed on both the antecedents and consequences of the identified patterns of classroom behavior.
- Future research in pre-k classrooms should consider or include the role of the teaching assistant(s).

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