"Paying Attention Gets Twice the Result with Half the Effort": Teacher's Perception of Children's Attention in Chinese Kindergarten Classrooms

Xinyi Zoe Mao, Ruijie Peng, Mengru Luo, Jennie K. Grammer
UCLA School of Education & Information Studies, United States of America

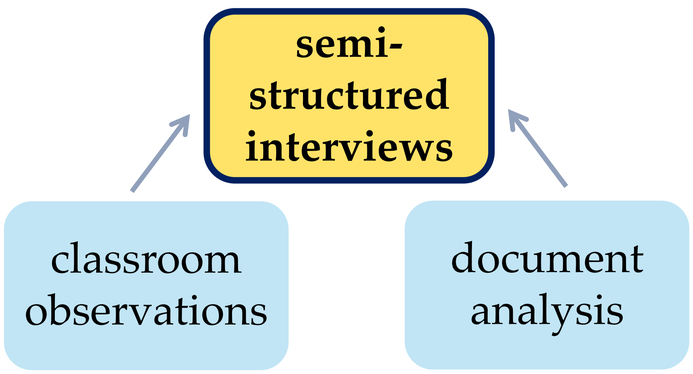
Background

- Attentional skills have implications for school readiness and academic success (Duncan et al., 2007).
- Chinese children have shown strong executive function skills in cross-national studies; classroom experiences may be one reason for this (Lan et al., 2009; Sabbagh et al., 2006).
- Teachers' perception of child attention and their classroom practices can influence students' (in)attention (Dobbs & Arnold, 2009; Rimm-Kaufman et al., 2005).
- But teachers' in-depth, first-hand perspectives are rarely heard.

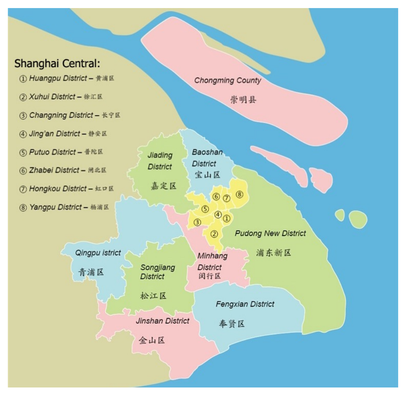
Research Questions

1. What do teachers know about children's attentional skills?
2. How do teachers perceive children's attention in kindergarten classrooms?
3. What approaches do teachers use to support their students' attention in kindergarten classrooms?

Methods



- **Sample:** 17 public school teachers of Kindergarten Year Three children (5- to 6-year-olds) from Shanghai, China were recruited across two cohorts.
- **Data:** inductive & deductive coding leading to codebook development + consensus coding among two pairs of researchers → on average, every interview received 96 codes.



Findings

Teachers' Understanding of Attention

- Defined attention as:
  - selective, sustained, and/or attentional control
  - volitional ("专注力") and automatic ("注意力")
  - related to other cognitive skills (e.g., listening, working memory)
- Assessed attention using *multiple* behavioral cues:
  - passive cues – gaze, body movement, mind wandering
  - active cues – responses to teachers' questions, execution of task directions
  - regulation-related behaviors – initiation of/reaction to distractions, task persistence

How do you define attention? Is there a difference between "注意力" and "专注力" (synonyms of "attention" in Chinese)?

Teachers' Attribution of Children's (In)Attention in the Classroom

Internal Attribution	External Attribution		
	Organizational Support	Instructional Support	Emotional Support
☑ developmental variations among neurodivergent and typically-developing students ☑ behavioral manifestations of attention can vary by temperament and gender	↗ noisy/quiet environment ↗ size of the learning group ↗ lesson lead-ins (stories, games)	↗ appropriate task difficulty ↗ alternating instructional formats ↗ hands-on practices	↗ teacher-child interaction/ relationships

What do you think of your students' attention in class? Why do you think they are more/less attentive in certain situations?

Teachers' Practices Supportive of Attention Development

Child-oriented	Class-oriented
♀ remind individual students ♀ arrange special seats ♀ work one-on-one	♀ elicit students' situational interests ♀ cater to individual interests ♀ adjust instructional designs ♀ modify organizational setups ♀ cultivate relevant skills

Bidirectional interactions between "individual" (children) and "context" (teaching and educational experiences)

Family-school partnerships can amplify positive development

Discussion

- Teachers had a nuanced understanding of attention, but most didn't distinguish its three networks (Fisher & Kloos, 2016; Petersen & Posner, 2012) and often discussed attention in relation to other cognitive and regulation-related skills.
- Teachers reported various opportunities to update knowledge: teacher preparation programs, online resources, published citywide guidelines, workshops/lectures, professional learning communities, etc.
- In an ongoing survey with PreK-12 teachers in California, USA, ~40% of respondents reported lacking effective methods to strengthen students' cognitive skills and having insufficient knowledge of brain development.

Opportunities for Professional Development: How can we effectively communicate brain science about students' cognitive skills to educators and support its integration into classroom practices?

ZoeMao7 zoemao@ucla.edu