



Why should we focus on equitable access and participation?

Evidence from the East Asia-Pacific Early Child Development Scales.

Ben Richards and Nirmala Rao
The University of Hong Kong

Presentation to The Asia-Pacific Regional Early Childhood Development Conference, March 1st – 3rd 2017



Background

- Socio-economic gradients in child development exist all over the world
- Studies have shown that family socio-economic status (SES) is positively associated with cognitive, language and socio-emotional development
- SES gradients in learning prior to school tend to persist as children mature; test scores at early ages predict scores at later ages and adult wages



Background

- However, much of the evidence is from high income countries; less is known about Low- and Middle-Income Countries (LMICs)
- Evidence is lacking from studies that consider child development holistically
- We need to know more about why SES and ECD are related (e.g. mechanisms, factors that can mitigate SES disadvantages)
- So: we use data from the East Asia-Pacific Early Child Development Scales to investigate SES gradients



Key research questions

1. Does the relationship between SES and child development vary across different domains of development?
 - Hypothesis: cognitive & language development strongest
2. Does the SES-development relationship vary depending on the type of indicator used (wealth, maternal education, paternal occupation)?
3. Is attending preschool beneficial for development; and can it help reduce SES inequalities in early child development?
 - Hypothesis: it helps, but which groups the most?



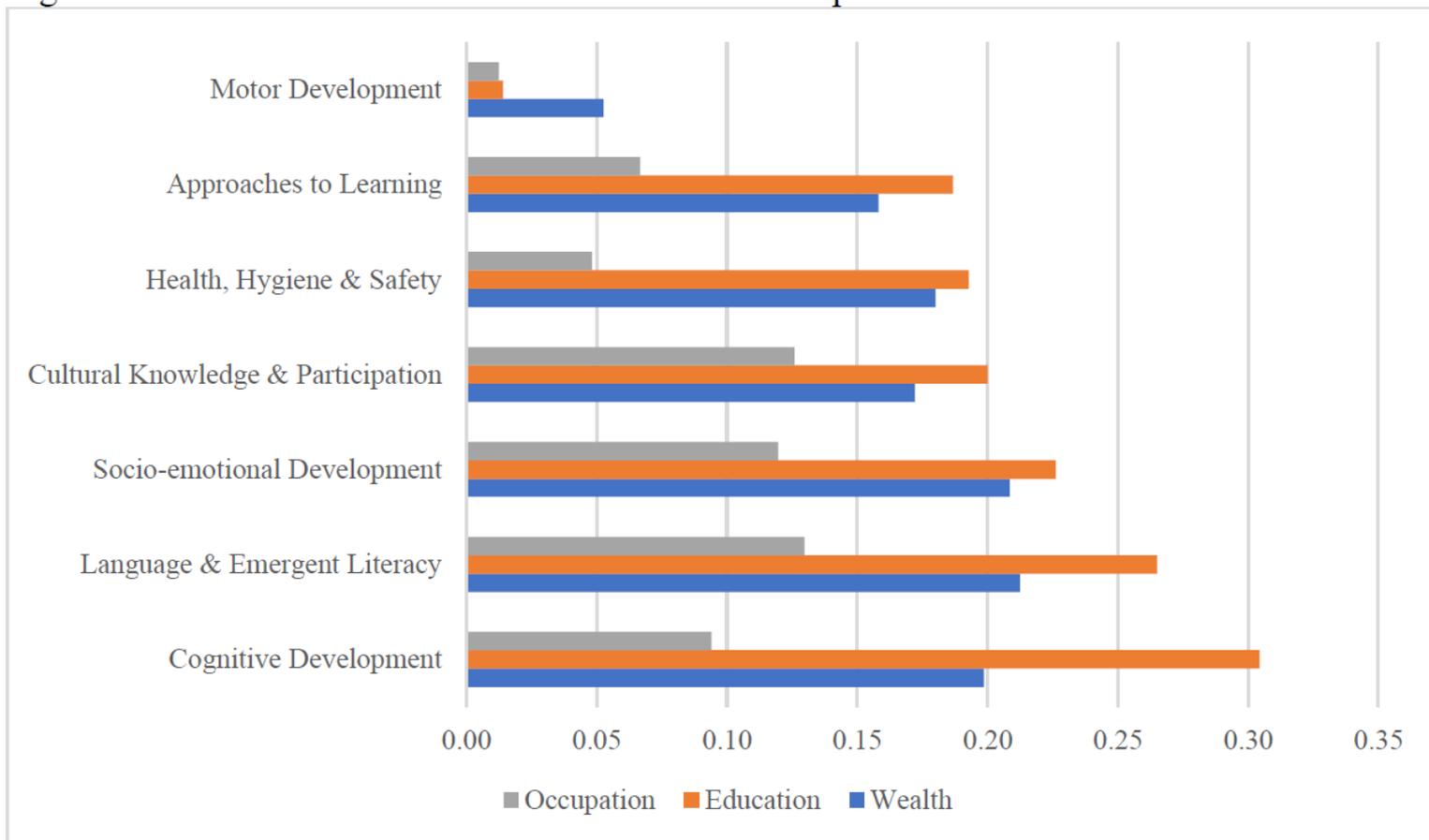
About the EAP-ECDS survey

- The East Asia-Pacific Early Child Development Scales (EAP-ECDS) is a survey designed to measure early child development in the region
- Currently, data are available for 6 countries: Cambodia; China; Mongolia; Papua New Guinea; Timor-Leste; and Vanuatu (this paper: 7,588 children 3-5y.o.)
- 7 domains of development: Cognitive Development; Language & Emergent Literacy; Socio-emotional Development; Cultural Knowledge & Participation; Health, Hygiene & Safety; Approaches to Learning; Motor Development



Does SES-development relationship vary across domains?

Figure 1: Associations between SES and seven developmental domains





Maternal education is the strongest predictor of development

Table 3: Effects of occupation, education and wealth on development, with and without additional controls

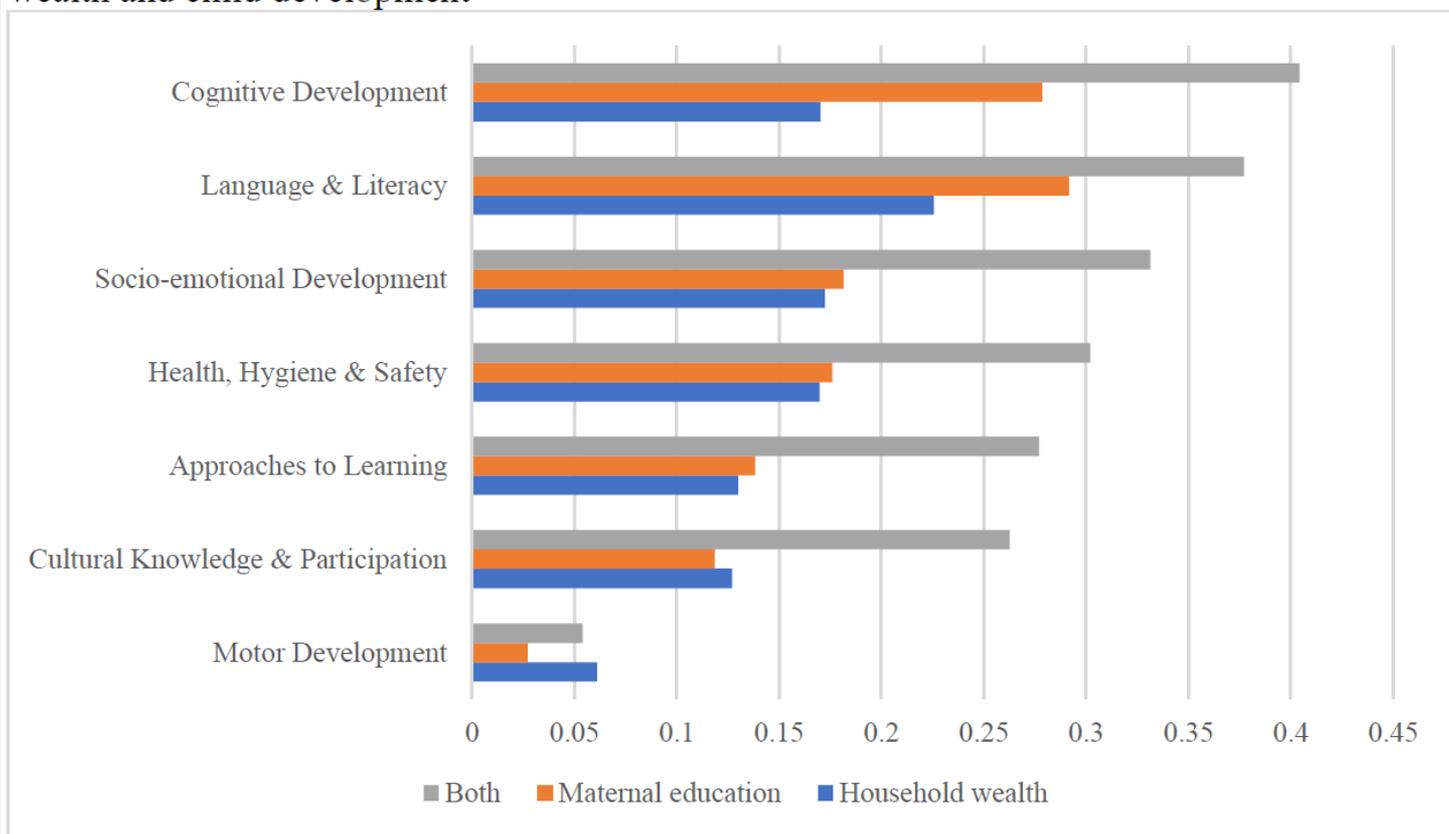
| | Wealth | Education | Occupation |
|--------------------------|----------------|----------------|---------------|
| Only this variable | .229 (.028)*** | .280 (.056)*** | .118 (.038)** |
| With control: wealth | | .237 (.054)*** | .087 (.038)* |
| With control: education | .197 (.024)*** | | .090 (.037)* |
| With control: occupation | .206 (.028)*** | .244 (.049)*** | |
| All controls | .182 (.027)*** | .211 (.049)*** | .066 (0.037) |

- The effect of paternal occupation is explained by wealth and maternal education
- But wealth and maternal education are both important for development independently



High wealth and high maternal education: the effect of having both

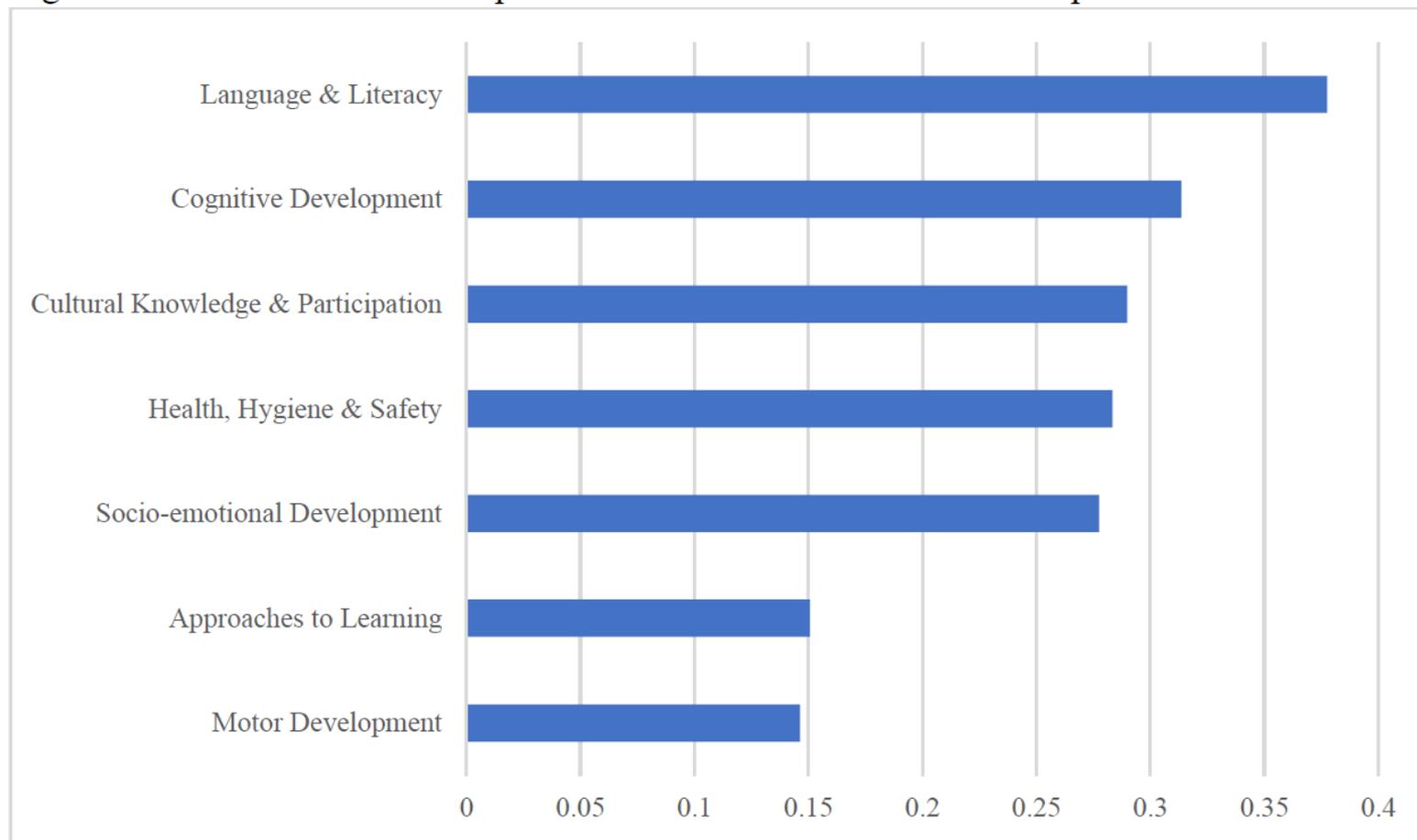
Figure 2: Coefficient magnitudes for associations between maternal education, household wealth and child development





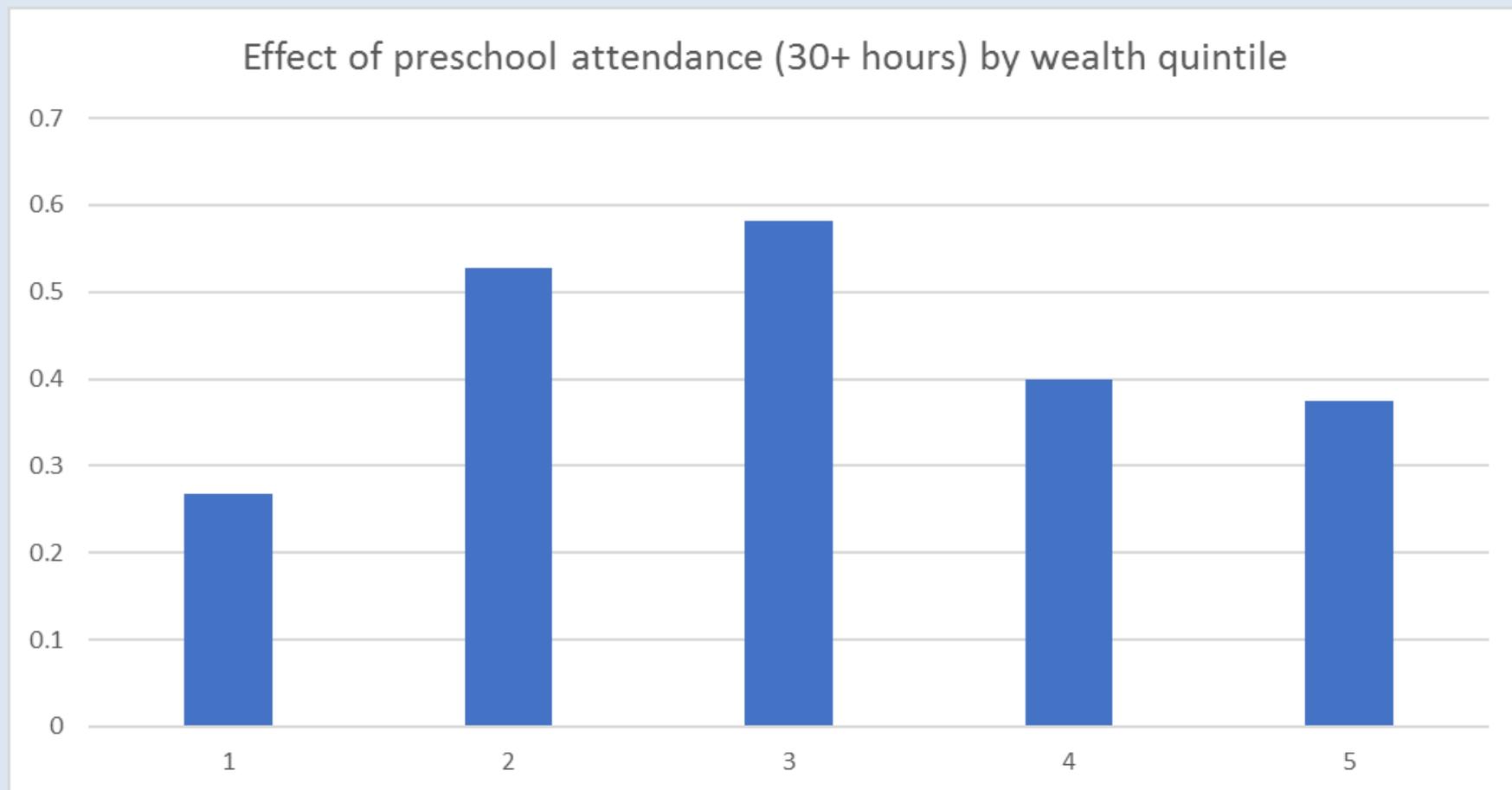
What can help mitigate SES disadvantages? The impact of preschool

Figure 3: Associations between preschool attendance and child development





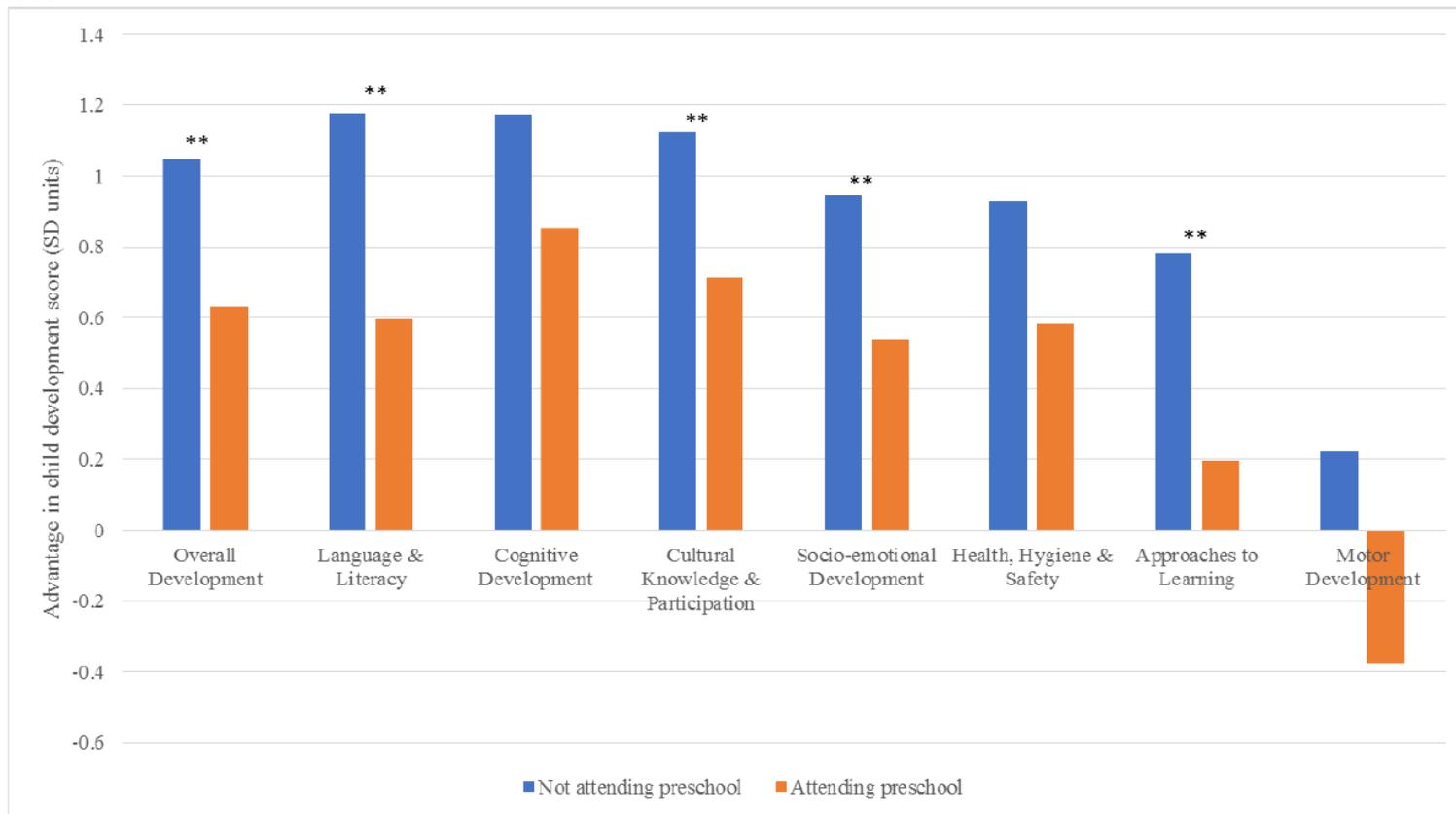
Which children does preschool help most? Wealth differences





Which children does preschool help most? Education differences

Figure 4: Variation in the effect of maternal education on child development, by preschool attendance





Conclusions

1. Does the relationship between SES and child development vary across different domains of development?
 - Yes: strongest for Cognitive Development then Language & Literacy, but quite strong for all except Motor Development
2. Does the SES-development relationship vary depending on the type of indicator used (wealth, maternal education, paternal occupation)?
 - Yes: maternal education strongest, but closely followed by household wealth; paternal occupation not independently important



Conclusions

3. Is attending preschool beneficial for development; and can it help reduce SES inequalities in early child development?
 - Preschool strongly beneficial for development in all domains, but strongest for Language & Emergent Literacy
 - Findings on reductions in SES inequalities are mixed:
 - some evidence of lower inequality, but only for highest maternal education level (postgraduate), and not for lowest wealth quintile
 - more evidence on preschool quality may be needed
 - supports the focus of Sustainable Development Goals of quality education in addition to improving enrolment