Do socioeconomic, biological, and parenting factors contribute to individual differences in infant motor development?

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Research Aims

- Use a broad parent-report measure of infant motor development to examine sources of individual differences
 - Early Motor Questionnaire (EMQ)
- Examine impact of:
 - Socioeconomic status
 - Gestational age
 - Parenting factors
- Closer look at components contributing to socioeconomic status
 - Education vs. income

Method

- 99 infants ages 1.1 25.5 months (50.5% female) and their caregivers
- Total of 158 survey responses
- Parent-completed EMQ with 3 sub scales:
- Gross motor (GM)
- Fine motor (FM)
- Perception-action (PA) development.
- Predictors examined:
- Household education and income (SES)
- Gestational age
- Parent perceptions

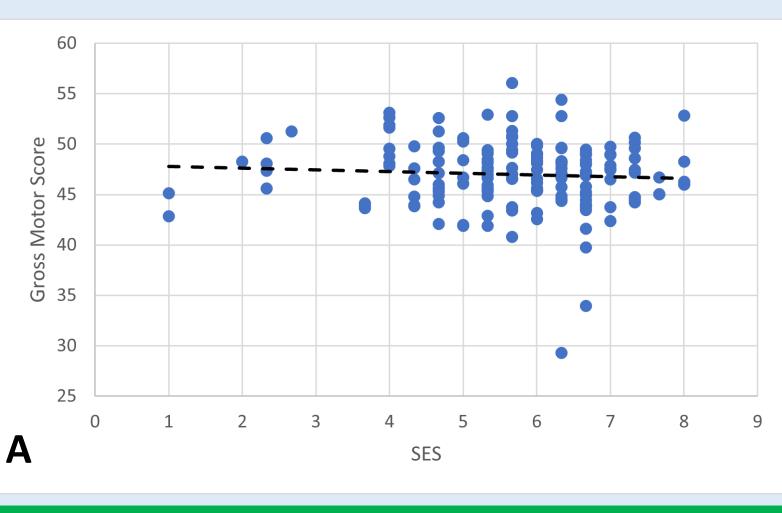
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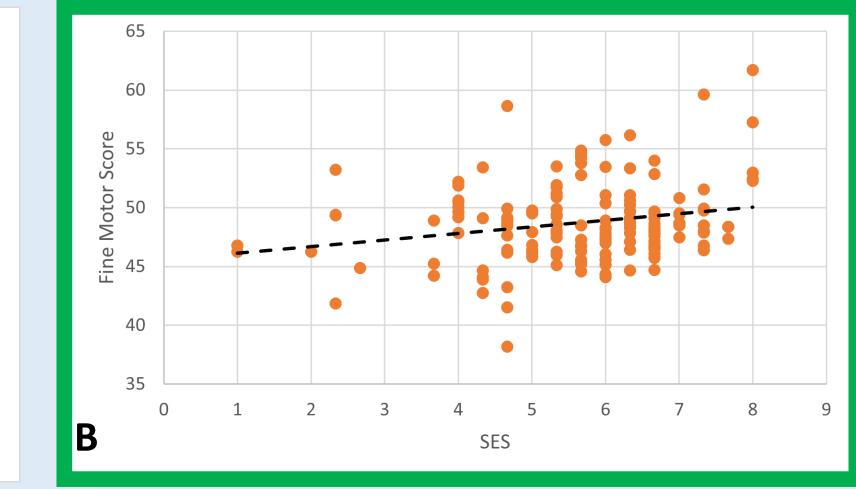


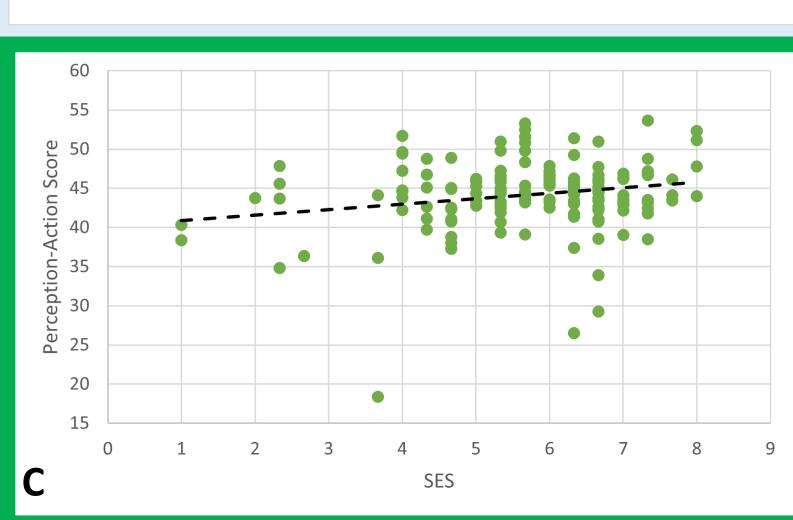


Individual differences in motor development may be explained by:

1) SES for fine motor and perception-action skills

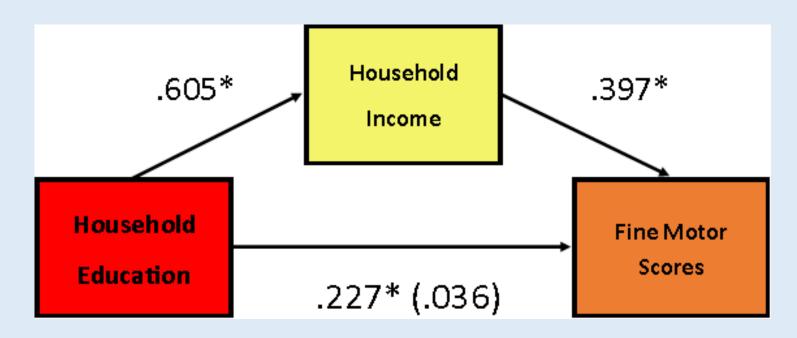


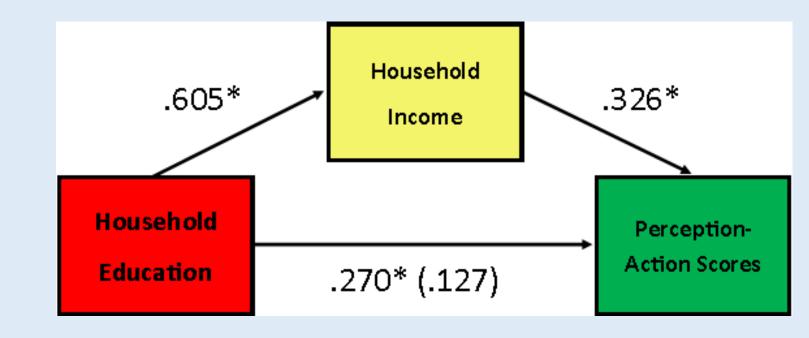




Scatterplots show a direct effect of composite SES on (B) fine motor and (C) perception-action development, but not on (A) gross motor development.

...but income mediates the effect of education





2) Gestational age for gross and fine motor skills



3) No observed influence of parent perceptions

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Background

- Socioeconomic, biological, and parenting factors have been identified as possible predictors of early motor development₁
- Previous research has identified effects of socioeconomic factors on specific motor skills₂ but has not explored effects on broader motor domains.
- Research on effects of biological factors across motor domains have reported contradictory results₃
- The current study explores effects of SES, gestational age, and parenting factors on motor development in a larger sample of infants.

Conclusions

- A child's home environment and their gestational age shape development differently depending on the motor domain being examined
- Impact of parenting experiences may be limited to certain period of development and the current study was too broad to find those specific periods
- Researchers, practitioners, and parents should avoid taking a one-size-fits-all approach to motor development

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