



THE DENVER PRESCHOOL PROGRAM: CHILD OUTCOMES

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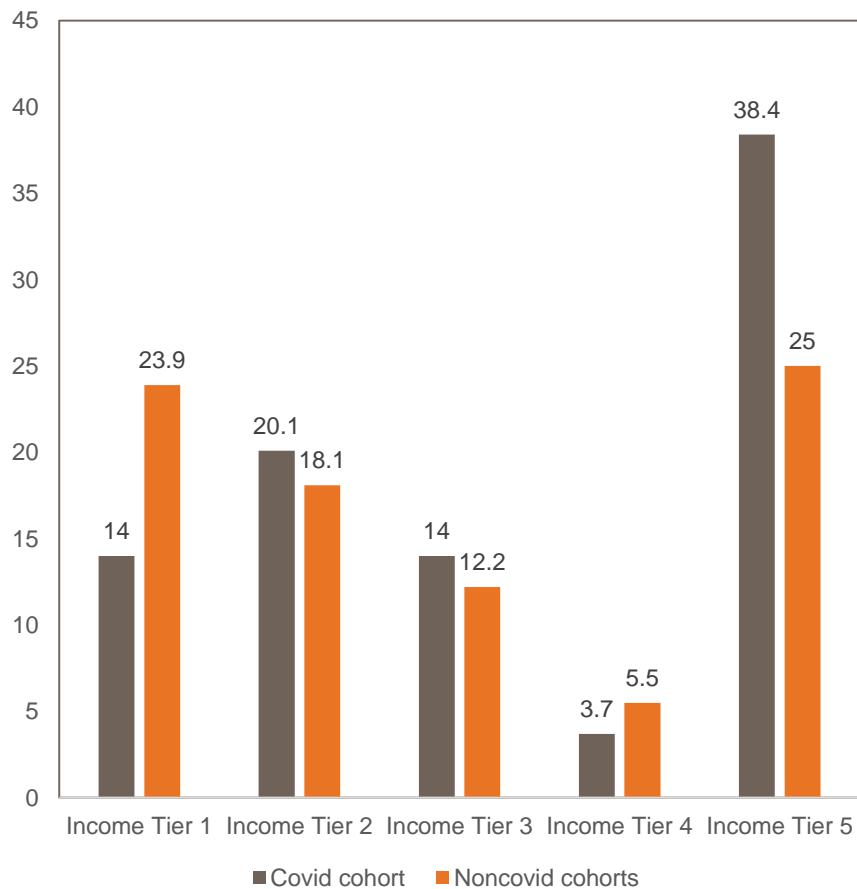
Primary goal of the COVID-19 analysis

How does the kindergarten readiness of the COVID-affected DPP cohort compare to the previous DPP cohorts?

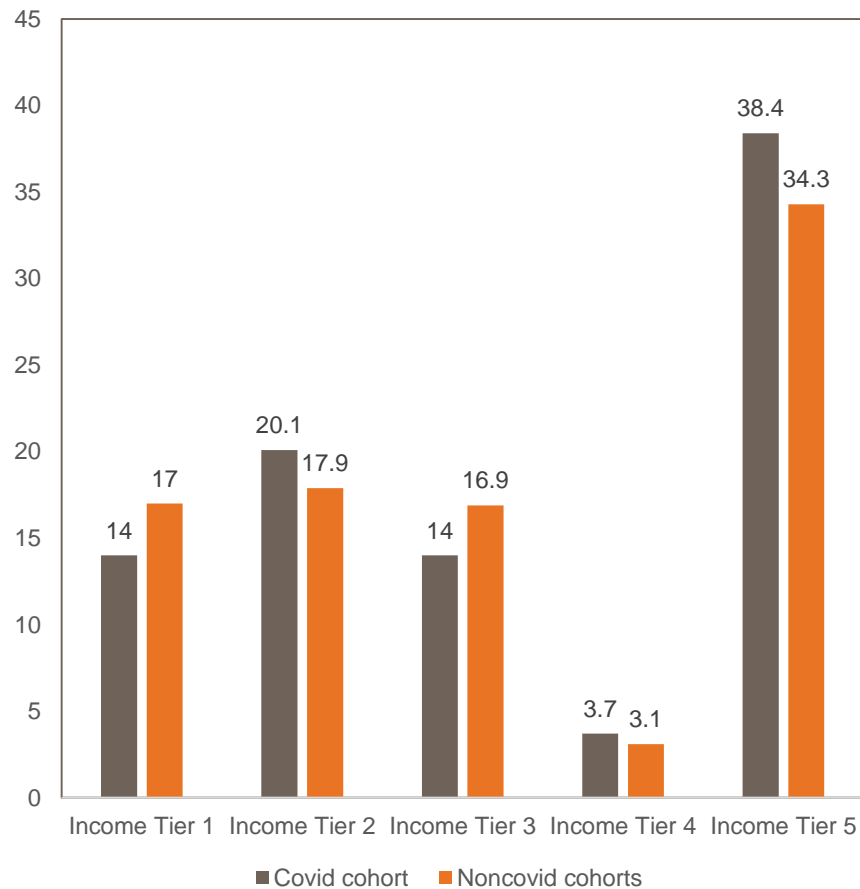
- Executive functioning:
 - Working memory – e.g., when asked to do several things, the child only remembers the first or last
 - Inhibition – e.g., when something needs to be done, the child is often distracted by something more appealing
- Social skills:
 - Protective factors – initiative (e.g., shows persistence), self-regulation (e.g., shows patience), and attachment/ relationships (e.g., trusts familiar adults)
 - Behavioral concerns – e.g., fights with other children
- Cognitive: receptive vocabulary, letter word identification, applied problems

How do we make the COVID and non-COVID cohorts “equal?”

Before Weighting



After Weighting



Laying the groundwork to interpret the findings

- Learning loss – the extent to which the COVID-affected cohort are not reaching the same levels of kindergarten readiness as the previous DPP cohorts
- Statistical significance – the likelihood that the observed differences are not due to chance
- Effect sizes (ES) – emphasizes magnitude of the difference
 - ES of 0.20 and larger are considered substantively important

COVID Learning Loss

Measure	Significance	Effect Size
Receptive vocabulary		.05
Letter word identification		.04
Applied problems	✓	-.21
Working memory	✓	-.21
Inhibition	✓	-.17
Protective factors	✓	-.17
Behavioral concerns		-.05

Negative ES denotes potential learning loss

Our analysis is the first known study in the nation to...

- Evaluate the effects of the pandemic on children who were in preschool when the pandemic started
- Examine young children's math skills development during the pandemic
- Assess executive functioning and social skills using a before- and after-pandemic design

What are our next steps?

- Examine subgroup variations
- Explore how child resiliency and the home learning environment can mitigate loss
- Larger question: What can we do to get children back on track?

Questions? Please email us at: le-vinhuan@norc.org

Thank You!



NORC
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