COVID Information Commons (CIC) Research Lightning Talk

Transcript of a Presentation by Anna Johnson (Georgetown University) January 30, 2024



Title: Succumbing, Surviving, and Thriving: The Development of Low-Income Students in the Long Shadow of COVID-19 Anna Johnson CIC Database Profile NIH Award #: 1R01MH130705-01A1 YouTube Recording with Slides Winter 2024 CIC Webinar Information Transcript Editor: Lauren Close

Transcript

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So unlike the presentations that have happened already, I am in a very much 'stay tuned', 'this is a preview' mode. We're just getting started, we're in year one, I have no actual data. So I'm excited to hopefully spark some questions because we're at the beginning. We can be influenced by what other people think we should be looking at. Also, I'm excited to make connections with students and mentors of students and just talk about the data we're building on an ongoing study. We do have a good amount of data, it's just not the data that's relevant to the CIC. So the title of my talk is: "From a Longitudinal Pre-K Evaluation to a Study of COVID Impacts on Childhood Development." I'm Anna Johnson, I'm an Associate Professor of Psychology at Georgetown University.

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I will of course start by acknowledging my team and study partners. So the first part of the study, the part that was focused on Pre-K, was funded by the NICHD and multiple foundations. Then, we got NIMH funding to fund the COVID part, which is the kind of prospective future part of this. I'll make those two legs more clear in a moment, but I have both current and former co-investigators. I'm the PI of both the original and HD study and the NICMH study, but of course we don't do anything alone in science, and for good reason. We're definitely stronger together. My co-investigators are Deborah Phillips from Georgetown University, who's emeritus now. Seth Pollack at the University of Wisconsin, Madison, and Gaby Livas-Stein at UT Austin. Diane Horm at the University of Oklahoma, Tula, and Gigi Luk at McGill University were also co-investigators on the earlier part of the study. This is a research practice

partnership, so very, in many ways, unlike some of the presentation's we've already heard, this is very applied research. So we are partnered with the largest school district in Oklahoma, which is the Tulsa Public Schools, and also with community programs that provide services to low-income individuals in the community. That's the Community Action Program of Tulsa. They administer eight Head Start locations. Head Start is a free early childhood program for families whose incomes are at or below the poverty line. They are also partnered with Tulsa EduCare, which is very similar to Head Start in its model. They are targeted to families in poverty with little kids. We've partnered with the Oklahoma State Department of Education.

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So here's some context about the actual study. What I mean by the first chapter, second chapter - the study is called the Tulsa School Experiences and Early Development Study, or Tulsa SEED. We started in 2016 when the children were 3 years old. We sampled low-income children from low-income communities attending early childhood education programs that exclusively or predominantly provide services to families with poverty level incomes. So children that we sampled across those different partners that I just mentioned in Tulsa were 3 years old in 2016. The first part of the study was funded to follow them through fourth grade, which was, you know, last year, the calendar year 2023 which just ended. We sampled approximately 1,300 kids and we're still following about a thousand of them. Some of them have left the state of Oklahoma and we're not able to track them anymore, but if they're still in Oklahoma, we're still following them. Every year from 2016 forward, we do what we call a 360 degree data collection. This is surrounding the child and all the primary caregivers the child comes into contact with both in school and at home. We directly assess children using a bunch of NIH approved measures like paper and pencil measures, maybe some of the neuro measures that Juddy Ford talked about, neuroeducational measures, psychoeducational measures, math, literacy, language, things like that. We also administer measures of executive functioning directly to children and then we observe their classrooms. We use validated instruments to observe the quality and measure the quantity of their classroom experiences. We interview their teachers and collect data about the teachers. We interview the parents and then we scrape data administratively from the program's school district and state that the children attend. We've done this every year from 2016 forward. Of course, what happened in the spring of 2020 when our kids were two-thirds of the way through first grade is that COVID closed schools. In Tulsa, as in most of Oklahoma, despite being a red state, they actually closed their schools and stayed closed and did remote learning for almost a year and a half. Kids spent almost all of second grade in remote school and then returned to the classroom in the fall of third grade, which is the fall of 2021. They just completed fourth grade last year and are now a few months into their fifth grade school year.

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So the study sample, just to give you a sense, was again destined to be a study of low-income students and their long-term development. Those 360 degree measures that we collected, again not necessarily really relevant to the CIC environment, but as a developmental psychologist who studies education policy, we were measuring things so that we could capture the effects of their early education experiences on their later outcomes. It was designed to be a sample that informs public education policy that is particularly relevant for low-income and minoritized and minor marginalized youth. The sample reflects the purposeful sampling technique. It's a majority non-white sample, about 80% Black, Hispanic, or Native

American. We have adjacent tribal lands in Tulsa so we have a decent Native American sized population. 11% of the sample is White and then a multi-racial or other race ethnicity category. We have about 50% of our sample is dual language learning, mostly Spanish speaking. As designed, they are all low-income households. Their household incomes are mostly at or below the poverty level.

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This is the first part of the study. This is how the study was designed. We were collecting these key constructs, trying to understand how children's Pre-K education experiences when they were 3 explain their long-term outcomes in upper elementary school. Measuring these mediators and moderators and classroom context experiences - trying to essentially get this big perspective on child functioning. These were our primary measures for this study as it was planned.

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Then school closes in first grade and we decide we have to keep going with this study. We have to start to see what we can say about the effects of COVID on children's learning environments. What was obvious to us right at that moment was we have this unique ability to talk about resilience. What many people in education policy and public health have talked about is learning loss and response to school closures. But you can only really track trajectories post-disaster if you know something about what the kids were doing before. Otherwise you are maybe making some assumptions about the kids who may have already been in crisis or continuing to be on the edge. So we had this unique ability to use multiple waves of pre-COVID data to understand which kids were on a trajectory of success, which kids were on a trajectory of struggle, and how did this unforeseen, massively disruptive event that closed their schools and put many of their families into crisis affect their learning and emotional, social executive functioning outcomes. We pivoted during COVID and immediately started collecting data on families' experiences of disruption. We had already been interviewing parents and teachers. We added items about loss and change in terms of family members, health status, income, employment, household size, things like that.

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And we've produced a few publications that were rapid responses, designed to understand, for instance, predictors of both parents' and teachers' depression and food insecurity during COVID-19 distance learning. We used the data we had during COVID to try to get some information out there that predicted what first grade teachers did when they had to pivot to online learning. Were the teachers who were rated to be very good instructors in a classroom when classrooms were in person also very good instructors when they took their instruction online? What were the barriers to participation, particularly for low-income and Latinx families? We tried to really build up what we were collecting on COVID so we could say something meaningful about the impact of this massively disruptive event on children and families.

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We also tried to put out newsletters and fact sheets, and briefs and things that might be a little more digestible for a popular audience, for policy makers, and reported on families and teachers' experiences

during school closures. We noted how that might affect certain marginalized subgroups who are intersectional with racial, ethnic minority status, or those with special needs who are overrepresented in the poverty population.

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We tried to reframe this language of learning loss. Like I said before, a lot has been made of learning loss. Well, loss can be defined in different ways if you don't know where you came from before. How do you know if you've lost or just continued to be lower performing? We used our rich pre-COVID data to talk about how you might define learning loss and why we might see bigger losses in math than reading, for instance.

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Somewhere in 2022, our other funding allowed us to continue doing our pre-evaluation research as we had planned. We also had this moment to propose a new study and that's where the work that I'll hopefully be able to present in another year or two comes in. We added measures and wrote a new grant which is in its first year right now to measure COVID disruption during school closures. We had already started to collect this kind of data during our original project alongside family disruption which we expect to continue after schools reopen. I think everyone understands that COVID isn't over, there's this long shadow. What it has done to families who are already in situations of instability and continue to have interactions with COVID - it has not gone away in our lives. We added this dimension that I've highlighted in green - a protective factor. We also recognize that some families bounced back more quickly than others and some families are showing surprising patterns of recovery. Some children are showing surprising patterns of recovery despite all these obstacles, so we added these new measures that we started collecting just this year. These are what we might think of as protective factors that would help children bounce back more quickly from the disruptive effects of COVID at the family, school, and peer levels.

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The model that we are testing is not mine, Ann Masten is a developmental psychologist and resilience researcher who has proposed this idea. I added the word COVID but this idea that there's an acute trauma or disaster that sets children who might have previously been on varying paths of development into wildly different paths. Some of them may experience survival, which is a kind of continuing. Some may experience thriving, and some may succumb to the effects of COVID. We're really interested in this zone of recovery - which is explained in these post-COVID, waning years. Which children are following which path? Because we have lots of data from before COVID, we can draw the whole line and really understand what's going on.

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I know I'm pushing my time so I'll just say that these are the data we've collected along the way, the data we've added, and the data we will add and continue to collect. Our original project focused on that first window, we're picking up there and going forward we have funding to follow children into 10th grade.

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The study will have gone from age 3 to 10th grade and will allow us to test these questions about whether COVID disruption impacts child functioning, whether pre-COVID children functioning moderates the association between disruption and post-COVID functioning, and whether disruption has a long-term effect on children and whether that long-term effect can be moderated by these protective factors in children's school and home environments.

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So stay tuned - I hope to have more to say. The title of the study is Succumbing, Surviving, and Thriving: The Development of Low-Income Students in the Long Shadow of COVID-19.

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I look forward to updating you on our work as soon as we have more of them.