

Probable Causation, Episode 2: Eric Chyn

Jennifer [00:00:08] Hello and welcome to Probable Causation, a show about law, economics and crime. I'm your host, Jennifer Doleac of Texas A&M University, where I'm an Economics Professor and the Director of the Justice Tech Lab.

Jennifer [00:00:19] My guest this week is Eric Chyn. Eric is an Assistant Professor of Economics at the University of Virginia. Eric, welcome to the show.

Eric [00:00:27] Thanks for having me.

Jennifer [00:00:29] We're going to talk today about a paper you wrote that recently came out in the American Economic Review about the effect of moving kids from public housing to better neighborhoods. But let's start out talking about you. Could you tell us a little bit about your research expertise and how you became interested in this topic?

Eric [00:00:46] So I'm an applied microeconomist, and so I would say broadly what I'm focusing in on in my research is trying to understand the impacts of government programs and policies on children. And in much of my work, I'm trying to innovate by using detailed administrative data that is often the best source to obtain reliable and comprehensive measures of important outcomes for large samples. And so using this type of data, my research also tends to focus on questions where I can clearly find a research design that is a way to compare people that yields convincing estimates of causal effects of different programs.

Jennifer [00:01:27] So in your AER paper called "Moved to Opportunity," you study the effects of moving to a better neighborhood on the outcomes of kids who are forced to move out of public housing. And you look at outcomes, including their involvement in criminal activity. So set the stage for us. What had we previously known about the effects of neighborhood on kids' outcomes?

Eric [00:01:48] So prior to starting my dissertation, there was a somewhat mixed picture on how neighborhoods affected children. So I want to start out by saying that there is a very large and interdisciplinary literature studying neighborhoods and kids. Within that literature, we have two stories. So on the one hand, we had a number of studies which compared outcomes for people who grew up in a high poverty area and compared them to people who didn't grow up in a high poverty area. And much of this research tended to show that the people from high poverty areas have relatively worse outcomes. And this suggested that living in a disadvantaged area, a place with a lot of crime, those that living in those places might have a negative impact on kids. And then on the other hand, what we had was some results where researchers had been comparing outcomes for adolescents who did and did not move as part of a major social experiment called Moving to Opportunity. And in that project, the research tended to find little evidence of positive impacts of moving. And this caused some people to question whether neighborhoods really have large causal impacts on kids. So just in summary, by the time I started my dissertation, I would say that there were open questions about the effects of neighborhoods on kids.

Jennifer [00:03:15] So what are the challenges that make this so difficult to study? So obviously that the correlational evidence is just comparing people who who lived in bad neighborhoods and people who didn't. But we think that there are probably a lot of other

things that could be could be different about them. So to talk a little bit about what makes this actually a really difficult question to answer.

Eric [00:03:35] Yeah. So this this is a the point you just brought up is this methodological concern that if we just compare people, you know, you have this correlational evidence and we're just comparing people in a high poverty area with a lot of crime. Those people are going to be different in many unobserved, unobserved ways from people who didn't grow up in those types of environments. And so any difference that you see between kids who are growing up in a disadvantaged area and other kids from a more advantaged areas, all of that difference might just reflect unmeasured differences in background and family characteristics, for example. And so that's just the standard omitted variable bias problem. And so we're always concerned about that in social science research. And we're going to try to you know, we're either going to use an experiment or a natural experiment to try to overcome that. But that's really the main challenge, is that experiments and natural experiments are hard to come by right there. So the methodological concern is, I would say, you know, number one issue going on for trying to tackle this topic.

Jennifer [00:04:35] That's obviously a challenge in a lot of different areas. Is there something is there something about the neighborhood effects that makes it even tougher? That you know, so I guess we do have this randomized experiment with the MTO, the Moving to Opportunity experiment. So so I guess this in some ways, the challenge has been has been overcome, but clearly not all the questions have been answered. Are there data challenges too here that that just make this tough or what's your what's your sense?

Eric [00:05:00] Yeah, I mean, I think, you know, while we had we had this one social experiment, Moving to Opportunity, and one thing to just mention about that is also, you know, it's very expensive to run an experiment like that. So clearly, we're only going to get a limited number of actual shots at doing a social experiment, moving people around to different neighborhoods given the costs involved with that relative to maybe some other type of intervention where costs of administering a program might be much less. Data constraints are absolutely another major challenge going on. It's going to be until recently, it's been fairly difficult to access administrative data in the United States. And so administrative data is usually something that you would think of as being really great to use to get, you know, accurate, reliable measures of what people's outcomes are. Typically, you don't have data on where someone was as a kid and then where their outcomes are. So maybe you get administrative data on people's employment outcomes, but you don't know where they grew up. So there's a lot of data challenges there and trying to actually figure out, you know, where you grew up. And then also something about long run outcomes is the data on that, those two pieces of information are usually separate things.

Jennifer [00:06:13] And there's also, I imagine, the challenge of, you know, with a lot of programs you're giving, you're giving people something that that they want. You're giving them health care or yeah or, you know, money or something like that. And in this case, we're trying to move people to a neighborhood that they don't already live in. And with MTO, I think they basically were giving people housing vouchers right? And then, you know, then the take-up was not 100 percent, a lot of people didn't move. So talk about the challenge here even just you know, it turns out even if people are given the opportunity to move, they don't necessarily want to move. And so that's a problem here, too, right?

Eric [00:06:52] Yeah, I think that that's the sort of thing to keep in mind with interpreting the Moving to Opportunity study, which was, you know, incredibly important research. And

like any other experiment, what you're going to have going on there is the people in your sample are going to be opting to be there, right? So you've got to want to move in order to be part of that experiment there. And so there are going to be people outside of the experiment that you would like to learn about, you know, the impact of moving them or whatever the treatment is. And you're not gonna be able to find out what that effect is going to be because they wouldn't show up in your experiment themselves. So you're going to need to do something else other than use specifically Moving to Opportunity to study moving for other types of people that would never be in an experiment like that.

Jennifer [00:07:42] Right. So in sort of in economics or research terms we're basically, that MTO study is going to be measuring the effect of moving on the compliers. Right? On people who who can be shifted through this policy intervention, just giving people a voucher. And, you know, that will be different in your case. So tell us about what you do in your Moved to Opportunity study, what the context is, what the intervention is that you're studying, that sort of stuff.

Eric [00:08:09] Yeah. And so just bridging, you know, kind of we've already talked about a number of the a little bit of the motivation already. But so the main idea I had was I thought it would be important to go outside of the Moving to Opportunity setting and try to learn about impacts of neighborhoods for other types of samples. And I thought that that work would be interesting because, you know, it might have better external validity. And that was something that I thought would be important to try to do in a research project. And so with that in mind, I'd taken an interest in public housing demolitions, which have been going on over the past three decades in cities across the U.S. And the hope here was that I could use these public housing demolitions as a natural experiment to understand neighborhoods. So public housing, it tends to be located in some of the most disadvantaged areas in the country. And so when these demolitions come along, you are going to get this experiment because the authorities are destroying some buildings in an area in these disadvantaged areas and leaving other buildings around the around that site untouched. And so the residents of these demolished buildings, they're evicted, they're given housing voucher subsidies, and then they end up generally moving to better areas. And so in this way, I'm trying to compare kids who lived in these buildings that were being demolished and then the kids who are living in the buildings that were not demolished to try to understand something about the impact of moving out of severely disadvantaged areas. And my test case for all of this was in Chicago, which was one of the cities which had extensive demolitions during the mid 1990s, and these public housing areas were particularly disadvantaged. So getting out of public housing here in Chicago, that might really matter for generating benefits for kids.

Jennifer [00:10:00] So tell us more about the context of the public housing in Chicago. What were the poverty rates like in those areas? And I guess more specifically for your empirical strategy, how did the authorities decide which buildings were torn down and which ones weren't?

Eric [00:10:14] Yeah. So this is, you know, Chicago, if you are thinking of a place where public housing was particularly disadvantaged, Chicago would probably be one of the sites you would first name off. And poverty rates in Chicago's public housing were extremely, extremely high. So poverty rates, which just means like the fraction of people in an area that are living below the poverty line. So in Chicago's public housing during the mid 1990s, poverty rates were exceeding 80 percent. And that is extraordinarily high. So that's you know, we typically classify a neighborhood as severely disadvantaged if the poverty rate is over 30 percent. So these are very, very high poverty areas. In addition to having high

poverty, these neighborhoods have a lot of crime. So if you just look at crime rates in these areas, they're very different than anywhere else within the city of Chicago. And anecdotally and a lot of sociology researchers also focus in on this, too, just documenting that life, living in Chicago's public housing projects, a feature of that environment was having a lot of gang presence going on. So anybody living here and especially the kids was going to be exposed to these this poverty and high crime environmental conditions.

Jennifer [00:11:34] So in Chicago, how did they decide, you're going to be comparing people who lived in buildings where they were torn down and with kids whose buildings were not torn down. How did that how did Chicago decide which were going to be torn down and which weren't?

Eric [00:11:48] Right. And that's a key thing to keep in mind here. So in Chicago, they had this was the third the third largest public housing system in the country. So they had tons of these high rise, tall public housing buildings spread throughout the city. And during the mid 1990s, the city had sort of moved to this place where policymakers had reached the point where they thought that demolition of these public housing buildings would be a good idea. Now, given that they had decided to do demolition, they also realized that doing this demolition would be a large scale endeavor. So they have all these buildings. They can't possibly afford to demolish all of them overnight. And so they have to do a gradual process of doing public housing demolitions. They have to pay for demolishing the buildings and they also have to get vouchers. You raise money to have vouchers to give to the residents who are living in any building they selected for demolition. So they're sort of planning to do a limited scale demolition at first during the mid 1990s just due to feasibility constraints. They can't possibly destroy all the buildings. And what's going on in their minds is, well, now that we know that we're going to do some demolitions, but not all, which buildings do we choose for demolition? And a lot of what's going on, and this has been documented by others outside other people's research outside of what I've been doing, but I verified a lot of this myself. And what I was doing was there's a sort of haphazard process where authorities are sort of spotting buildings that they want to destroy because of maintenance issues that are sort of popping up over time. And so the thing to have in the example that you want to have in your mind here is something like, and this is actually a story of one of the buildings in the data, is a pipe will break in the middle of winter. And when this pipe breaks, it knocks out the whole heating system in the building. And when the whole heating system goes out, the housing authority knows that they're going to have to at least temporarily relocate the residents from that building because no one can be in the city of Chicago during the middle of winter with no heating system working. And so what they say to themselves is, well, we would have to temporarily relocate these people, what if instead of doing temporary relocation, what if we do a permanent relocation of people? And so that building there by having this pipe breaking, breaking in the middle of winter, that sort of naturally occurring event sort of identifies a building that authorities want to take out as part of the initial wave of demolitions.

Jennifer [00:14:24] So we can think about the pipe bursting in the middle of the night as being essentially random. It doesn't tell us, it's not correlated with like what kind of kid lives in that building. At least that's that's what you're going to argue in the paper. We might normally worry that buildings that are in disrepair are housing lower income people or people who are worse off. What determines who's living in those buildings in the first place?

Eric [00:14:46] Yeah, so the the thing two things keep in mind about this question, which, you know, the key heart of your question I think is about, you know, are these two groups

of people, people in a building that got destroyed. And then the people who were living in another building that was not destroyed. Are they comparable? Are they similar? And the thing that to keep in mind here is that well all these buildings are fairly close together and they've been built basically at the same time. So it's not like you're comparing an old building to a relatively new building. So most of them, by the mid 1990s, they're all in actually fairly rough shape. It's just there's some idiosyncratic maintenance events that are sort of a little bit more severe in one building at this particular time relative to another building. And that's one thing to keep in mind there about the housing stock and how old these buildings are. They're really very similar in terms of when they were first built. The other thing to keep in mind about what's going on between these different buildings is that residents themselves have very limited ability to control which building they end up in. And the thing to keep in mind there is the process for getting the public housing. It's actually fairly difficult to get into public housing because you have to sit on a waitlist because many people want to get this, this is a large subsidy that many people are eligible for, but there's just not enough units of public housing to go around. And so there are many there are thousands of people sitting on a waitlist trying to get into public housing. The way the waitlist works is when your name rises to the top of the waitlist, you have to take the first offer that's given to you, and if you don't, you have to go to the bottom of the list again. So people just usually when the when an apartment slot opens up, people have a very strong incentive to take that particular unit. They are not really caring that oh, this is the building on the corner in this one public housing project versus the next, you know, next block down. And so that sort of rationing in the system implies that there's limited ability of residents to say that they want to be in this particular building within a public housing project versus another building one block over.

Jennifer [00:16:53] Right. So we don't have to worry much about about people self-selecting into into buildings they they like versus buildings they don't like. You mentioned the subsidies so how big. So when we're thinking about the government moving people from public housing into or transitioning them into a housing voucher program, how should we think about the change in that subsidy for the families that are being moved?

Eric [00:17:16] Right. Yeah. I, this is a question that a lot of housing economists have spent a good deal of time on. And I my sense is that there there are a range of numbers that people might come up with when trying to answer this question. I think as a summary measure, if you're thinking about the question of, well, I can give this person a unit of public housing to live in or a housing voucher, that a conservative estimate would suggest that those are basically going to cost the same amount to the government's point of view. OK. So the housing voucher, obviously, you're giving these voucher recipients a subsidy, which they set up with their landlord and a portion of their rent is being paid for by the government. That's how the housing voucher works. With the housing, with the public housing system, the government is having to pay for, you know, maintenance of the building and all these other costs associated with running a public housing system there. My sense from looking over the housing economist literature is that at worst, when you are doing at worse, these systems cost about the same amount per person.

Jennifer [00:18:26] OK. So we'll talk a little bit more about kind of a cost benefit analysis later on. But it sounds like at this point we should be thinking about this as these are essentially equivalent intervention costs from the government's perspective. So your study reminds me a lot of a study by David Kirk who looked at the effects of displacement of parolees in Louisiana due to Hurricane Katrina. So basically, people are moved yeah, people are moved from New Orleans to to other areas in Louisiana. And basically, he finds that when people are moved to areas with fewer offenders, those individuals are less likely

to reoffend themselves. And that suggests that peer effects are really important in that context. So as I was reading your paper and thinking about the possible mechanisms here, that's one that jumped out at me, that we might think that the kids are moving from public housing where there are a lot of kids who are at high risk to areas where kids are at lower risk. So that's that's one potential mechanism. What are what are other mechanisms that we should have in mind here when we think about what what could affect these kids outcomes?

Eric [00:19:27] Yeah, so the setting of Chicago. You know, there's many different potential mechanisms, reasons why you could think that moving would matter. I'll just mention a couple of the ones that I think that people are most often have in mind when they come to a project like this about kids. And so first, many are thinking that relocating kids are could generate some benefits because these kids, they're going to move to an area that has better schools in that area. As a general matter, that is an entirely reasonable story. But in my particular context, when I turn to the data, that channel actually seems less relevant. So you end up seeing very few people moving to areas with better schools in my sample in Chicago. The second main mechanism, which is related to the research that you were talking about in Louisiana, is thinking that getting out of an environment with high poverty and high crime, that alone would matter because you're going to get a different set of peers and role models. And you know where it says we're dealing with kids, we also have this role models feature in mind. And, you know, that sort of takes me back to the part of this paper we're thinking about well this is in public housing in Chicago during the mid 1990s, you know, there's a lot of gang presence there. And so if you are getting kids out of the public housing project where gangs are very intensely active and you're moving them in some areas where gangs are either less active or they're nonexistent, then, you know, that peer and role model channel is something that you may have very strongly in mind when interpreting the results from my analysis. That's that's really what I when I look back at my results and think about what's going on, that's what I usually think of a lot.

Jennifer [00:21:08] OK. So let's get more into what you're doing here in this paper. So what are the data you're using? And of particular interest, obviously, to me, how are you measuring criminal activity as the kids are are growing up?

Eric [00:21:22] Yeah, so the data here is that is one of the major undertakings for this project. So it's just assembling all the different data sources and then creating a sample of public housing households and their children. And so at the outset, when I started this project for my dissertation, which is years and years ago now, I tried to find individual records from Chicago's Public Housing Authority to build a sample of displaced and non-displaced people. And this quickly turned out just to be totally infeasible. So I was told that, you know, this is in like around 2013, that no such records for the mid 1990s existed. And so that was not going to be a route that was going to be fruitful there. As an alternative, I was fortunate to find out that there is another way to obtain address-level information for low income people. And so what I found out was that social assistance, case files, these are records that keep track of whether someone is on a program like food stamps. Those case files have information on addresses. And so using social assistance case files from Illinois, I was able to get the historical version of these files. I can identify individuals living in public housing during the mid 1990s, just before the public housing demolitions began. And then I was able to create this sample of the people that were living in the buildings that were destroyed and then the people that were living in the other nearby buildings that were not destroyed. And that's what I'm working with for the sample. And then I link those people to other data sources, other administrative data sources from Illinois to measure outcomes for the kids, because that's what I'm interested in. And so I'm focusing on a lot of

different outcomes of the paper, things like employment. But then also, as you mentioned, I'm also very interested in criminal activity, criminal behavior. And so the best that I could do for this, which is, you know, a common measure in literature, is just using arrest data.

Jennifer [00:23:22] And so when we think about the sample that you're using then, so the people who are on some form of public assistance while they were living in public housing, I imagine with this sample that's most people living in public housing. Do you have any sense of how many? How what share of the total residents you're capturing here?

Eric [00:23:40] Yeah, so I'm getting about 80 percent of the people I should be getting. And so and the thing to keep in mind is that the vast majority of everyone in public housing, yes, they are on at least one form of one form of social assistance, whether it's food stamps or could be TANF, anything like that. There aren't, most people are on some form of that type of assistance. And as best I can tell, by matching up the numbers in my final sample versus the number of units of public housing and that were there at the time in these buildings, I'm getting about 80 percent of people that I should be getting.

Jennifer [00:24:15] And then on the flip side, I guess with especially with arrests, you're only going to see if someone's arrested, if they are still in Chicago. Is that right? And so do you have any sense of how many people are moving outside of Chicago versus staying in the area?

Eric [00:24:32] Right. So mine my data source is a little bit better than just Chicago. So it's actually all of the state of Illinois. So the arrest data covers the entire state. So the real concern is moving out of the state. And it's a little tricky to try to figure out did you move from one state using administrative data because you could still be in living in a state but have no you know, you have zero arrests. Right? Maybe that's because you moved or maybe it's because you're still in the state. As best I could tell, the vast majority of the sample is still in Illinois by the end of the sample period, which is 2009. And importantly, there's no there's no evidence of differential rates of attrition between the people who are living in the buildings that got destroyed versus the people who were not living in the buildings that were destroyed.

Jennifer [00:25:23] OK. So what do you find?

Eric [00:25:26] So the big headline finding is that the children who were displaced by demolitions, they went on to have notably better outcomes relative to those not forced to move. So specifically, I find that displaced kids are more likely to be working and they have fewer arrests for violent crimes. And this latter finding on violent crime is particularly important because crimes such as assault or battery, those are all very socially costly things. So really reducing, reducing that type of crime is important.

Jennifer [00:25:56] How big are the effects?

Eric [00:25:59] So the reduction in violent crime is like a 15 percentage, 15 percent impact relative to the mean offending rate in my sample, which is very actually high.

Jennifer [00:26:12] Yeah, that's huge. That does seem like a major cost savings to the to the city, is probably the the most economist-y way to put it. But yeah, that's a huge benefit. You also look at education outcomes and work outcomes. So elaborate a little bit more on on those other effects.

Eric [00:26:34] Yeah, so the this is a comprehensive analysis and like you said, I'm looking at things like employment, so kids are more likely to be working, they're about 9 percent more likely to be working and they have higher annual earnings as well. So there's about a 17 percent increase in annual earnings as a result of being displaced and and moving. In terms of education outcomes, I find less robust evidence that there are impacts there. The evidence I do find shows that for the kids who were young - when they when the demolition hit them and they were forced to move - those kids, it seemed like they were a little bit less likely to drop out of high school. So that's the educational outcome that we see some evidence of an improvement there as a result of these demolitions.

Jennifer [00:27:26] So they're probably getting a little bit more education, earning a little bit more. Is this making a difference such that they're no longer living in poverty or how how big is the effect on income?

Eric [00:27:39] Right. And so that, you know, one of the things to keep in mind in this sample, and I think that's particularly interesting about studying public housing, especially public housing in major cities in the United States during the mid 1990s, is that this is an extremely disadvantaged population. And so these effects that I have, you know, these are large effect sizes, but they are not sufficient to move people out of poverty. So you that none of the individuals here, a very small fraction of the sample is working full time throughout the year. And very few, a very small fraction of the sample's earning enough that, you know, you would be thinking that they would be even close to the threshold of, you know, categorical ineligibility for food stamps. So when I actually do do some analysis looking at welfare outcomes in my sample, I don't actually see any reductions on whether or not you're likely to take up food stamps or TANF or any of the other any other government social program. And that's not totally surprising, just given the fact that people are so disadvantaged here that they're just not even near that margin of being ineligible for those government benefits.

Jennifer [00:28:54] So that makes the crime effects that much more striking. Right? So you've got a huge drop in the likelihood of being arrested for a violent crime, which might be the result of maybe different peers growing up. Maybe you're more likely to to work, but it's not completely like your life is nothing completely transformed. How do you think about the link between the income effects and and this violent crime or other crime effects?

Eric [00:29:24] So I think a lot about the results of the paper. Something, you know, it's a little bit hard to distinguish the causal channel, you know? Is it because you have more income, you commit less crime, or is it because you have less crime that you are working more? I mean, a lot of times when I think about the project, the actual the violent crime results are something that I think about as potentially one of the reasons why I'm finding these employment effects in the paper. So just because you're less likely to have violent crime arrests for battery, assault, all the other types of things that would be categorized as violent, you're less likely to be incarcerated. And then because you're just not incapacitated, you are more likely to be working out there in the world. So that's a lot of the times how one of the things that I think is consistent with the pattern of results that I'm finding in the data.

Jennifer [00:30:14] Yeah, that's really interesting. And I think if I'm remembering correctly you're not finding any significant impacts on property crime, right? Maybe even a positive effect? Remind me.

Eric [00:30:23] Yeah. A positive impact there. Yep. You're. Yeah, exactly.

Jennifer [00:30:27] Yeah. And so it is interesting to think about. Yeah. Just the effect of keeping kids out of the type of trouble that might lead to a violent crime arrest means that, you're right, they're not locked up, so then they could actually physically be working. But they also are less likely to get a criminal record that might make it harder for them to get a job. And so the direction of causality there is really interesting. So let's talk about the heterogeneity in terms of whether there are differences in these effects by race or gender or age. You do a whole bunch with this in the paper, so talk a little bit about which kids seem to be benefiting the most.

Eric [00:31:00] So one of the most interesting aspects of this paper and then other recent work looking at neighborhood neighborhood effects, is trying to get a handle on the role of neighborhood exposure effects in kids' lives. And this just the whole idea here is that the length of time that you spend as a kid in a better neighborhood, that's what really matters for generating effects, effects on kids' outcomes. And so to get at this in my paper, one of the exercises that I do is to examine the effects of moving due to demolition separately for the kids who are relatively young compared to their older counterparts. And so, again, the idea here is that these younger displaced kids, they spend more childhood years in a less disadvantaged area. And if that really matters, then we're gonna see bigger benefits for them. And so while I find evidence that both the younger and older kids in my sample are benefiting from relocation due to demolition, the estimates also suggest that these this positive impact of moving is larger for the younger kids. And so that's consistent with this story, that exposure effects matter and that moving younger kids is particularly beneficial in terms of housing policies.

Jennifer [00:32:22] And just to clarify what what do you mean by younger here? Is this early childhood? Is this mid childhood? What are the ages?

Eric [00:32:28] Yeah. So I. Right. Yeah. So I have actually somewhat limited ability ability to get at this in my paper just because of the age that my sample is in my data sources. So in my sample I'm looking at I'm calling young kids, the kids who are less than age 13, and then, starting at age 5. Basically, I have no data to be able to study anybody under age five. So I can't even study super young kids who were super young when the demolition happened to them. But this group of kids that are between ages 13 and 5, I can study them, and that's my young group. And they they seem to be benefiting more relative to the kids who are between ages 13 to 18.

Jennifer [00:33:14] And then are there effects by gender or by race at all?

Eric [00:33:19] So there are so by race, the thing I should have mentioned the maybe a little bit earlier was in Chicago's public housing system during the mid 1990s, it is essentially all African-American.

Jennifer [00:33:32] So you have no variation in race. You can't look at that.

Eric [00:33:35] Yeah, there's no there's no way to get at that in the in the analysis. In terms of gender heterogeneity, and there's been many papers that have actually thought of lots of different interventions, either neighborhoods or schools or any other type of program. Do the effects of those interventions vary by gender? In my paper, I also try to look at the gender angle and I see some evidence that for labor market outcomes that there's some suggestive evidence that the impacts are a little bit bigger for for girls. But you couldn't reject that the effects for labor market outcomes are equal for boys and girls in

my data. For the crime results of the paper, the reductions in violent crime are perhaps not surprisingly, all being driven by reductions for boys who have the highest baseline rate of offending for violent crime.

Jennifer [00:34:31] And so how did these results compare with the MTO experiment, where the people were, you know, basically the government gave people housing vouchers, offered them the chance to move. Some people took them up on it, but certainly not everyone. In your case, basically, everyone has to move. So it's not where we get an estimate for a much broader population. What's the difference there in the results? You find mostly similar things or are there interesting differences?

Eric [00:34:58] Yeah. So I would say that in my sample, one of the key differences that I do find is that even older children who had spent most of their lives living in a very disadvantaged area, they are still appearing to benefit from neighborhood relocation in my context. And so that's a pattern that you never see any impacts of the Moving to Opportunity social experiment on any of the adolescents that they had in their sample. And so that's one key difference that I'm getting in my results. The second thing that I would say in terms of a comparison between Moving to Opportunity and then this demolition work that I had done is there is consistency in terms of these impacts for the younger kids in the sense that it appears that the younger kids are benefiting more than the older kids here in my sample as well.

Jennifer [00:35:52] So this would suggest that basically there were families in the MTO study that would have benefited dramatically in terms of the outcomes the researchers are looking at, but who didn't move. Is that is that a reasonable interpretation?

Eric [00:36:06] I think that's a reasonable interpretation. And I think it's also the other part of the interpretation to keep in mind, too, is there are people in so Moving to Opportunity is a social experiment. They do a recruitment. And when they do the recruitment into the experiment, there are many people that don't even show up to recruitment. They're just uninterested in being part of the experiment. And so those are people that just you would never learn anything about in Moving to Opportunity.

Jennifer [00:36:35] Right. And when we think about the policy implications of this work. And I think in one way, it's easy to say, well, obviously, these people are making a mistake and they should have moved. But that's not it's not obvious. Right? There might be other things, other reasons that people might want to stay in an area that the researchers are not capturing in the data. How you think about that?

Eric [00:37:01] Yeah, I think that I think about a lot of the interpretation of my results is that there are broad benefits, at least in this context, of Chicago's public housing, which was particular disadvantaged. There were broad benefits of relocating out of this environment. And if you were to think about housing voucher policy, one thing to keep in mind is that housing vouchers are somewhat hard to use. It requires an entire search process where you find a landlord who is willing to lease to you, given that you have a Section 8 housing voucher. And we have some research that suggests that landlords actually discriminate against Section 8 housing voucher holders. So in terms of thinking about the question of, you know, do people in public housing make a mistake by not trying to move out? I think one thing to keep in mind is that it's actually fairly hard to use housing vouchers as they're currently designed right now, where maybe they don't have a lot of support services in terms of the search process. They don't have housing counseling. They don't have an easy, ready way to find a landlord that would actually rent to them. And so there are many

households that might be discouraged from taking up the housing voucher because the search process is very uncertain and difficult to navigate itself. So I think in terms of making mistakes, maybe it's not just that it's making a mistake, maybe it's just that there are very high costs of actually using a voucher that people are that's suppressing demand for using housing vouchers relative to staying in public housing.

Jennifer [00:38:37] Yeah, that's a really good point. It also strikes me as similar to a lot of ongoing conversations about why people stay in areas where there are just no economic opportunities and thinking about Appalachia and in those areas. And I think a lot of people stay because, you know, your social network is valuable to you, right? And so if you're worried about, like, getting on your, you have a neighbor right now who watches your kids every day. And if you move to a new neighborhood, you have to start all over. And you can imagine parents really valuing that kind of short term benefit and not thinking about the longer term benefits or to them, you know, it's a wash or there is just the net benefit to stay. And we wouldn't capture that in these kinds of studies.

Eric [00:39:20] Yeah. No, you're completely right. Social networks are obviously a big reason why, you know, if an experiment comes along like Moving to Opportunity, maybe there are some households that say, I would rather just stay here in my current public housing project where I have all my friends and relatives and etc. You're told-

Jennifer [00:39:36] Right and some of that could just be risk averseness which or, you know, fear of the unknown or something which which would lend itself toward interpreted interpreting it as a mistake, but a part of it is true value coming from that social network. So you mentioned that this was you know, it's part of your dissertation. You've been a professor for several years now, and this paper just came out in the AER because of the huge publication lag in in Economics. So what other work related to this topic has been done since you first released the study? What else have we learned since since this paper came along?

Eric [00:40:10] So I think that this it's worth highlighting right now that there's been a tremendous amount of research on neighborhoods since I started, you know, when I first started up my dissertation research as a PhD student. Big picture, we just have a much clearer, clearer idea of how neighborhoods matter for kids. And I'll mention a couple of things that are the most prominent, most prominent pieces of recent research. So first, as I talked about a little bit, one thing people have been trying to do is understand exposure effects. And that's really something that a number of different papers besides my work has really tried to tackle. And the research that I would say most forcefully highlights this is some work done by Raj Chetty, Nathan Hendren and several of their coauthors. And one of their key projects is a reevaluation of the Moving to Opportunity social experiment that we've already talked about. And the thing that they're doing that was new in this particular project was doing the first long run analysis of the very young kids in that sample. So previously, the only thing people had studied in the Moving to Opportunity social experiment was longer run outcomes for the adolescents there. They hadn't gotten to the young kids yet. And so what they ended up finding in this most recent reevaluation work of MTO, they find that, you know, evidence that these younger kids benefited from relocating. And that actually contrasted with what happened for the adolescents in Moving to Opportunity in that in that sense there. And then second, outside of Moving to Opportunity, another area, another study that I think comes to mind that really made a big impression on the neighborhood effects world, it has been some work from Denmark that examines refugee immigrants who are quasi randomly assigned to different neighborhoods. And that work by Anna Damm and then Christian Dustmann, they find that kids in these refugee

families, when they were assigned to neighborhoods where a higher share of the young people in that area had been convicted for crimes, those refugee kids grew up to later themselves be convicted for more crime. And so some more evidence about how in the crime dimension, neighborhoods really matter.

Jennifer [00:42:35] We talked a little bit about the costs of the demolition versus vouchers in your context. More broadly, it sounds like all of these all of these studies suggest that these types of programs would pass the cost benefit analysis. Is that is that accurate? Do you have numbers off the top of your head for for your study and the MTO study?

Eric [00:42:56] Yeah, I think I mean, so off the top of my head, just to keep in mind my paper, as we mentioned, you know, from the housing economist, the best variable to estimate it, it seems like at worst, putting people on housing vouchers costs about the same amount as running the public housing system and giving them a unit of housing to live in. So the cost really to do these demolitions is really the relocation costs. This one time relocation costs about 1,100 dollars. So they're supposed to when they relocate you, they're supposed to pay for all of your relocation. So that's around about 1,100 dollars. So you're not really netting out any additional costs by switching people on the vouchers. There is this one time cost of moving households and paying for their moving expenses there. In terms of benefits, you're easily getting very large benefits on terms of earnings. So there is these higher annual earnings for these kids that are important benefits that you're going to be getting there and then you're also going to be getting reductions in violent crime. And that can be, you know, monetarily valued to the government as well. If you just want to think about this in terms of maybe tax revenue, you would probably even still with reasonable assumptions, pass that type of cost benefit test. And so specifically, if you say that you translate my impacts of relocating kids due to demolition, you translate those gains on earnings. And say that only a small fraction of those are going to be going into the government's coffers as part of additional tax revenue, you'd still be able to beat the cost of the government in terms of that one-time relocation cost there. So it even looks like, on multiple different dimensions, that the government is going to be doing well by doing a policy of public housing demolition in, for high rise type of high public housing because you're gonna be able to generate some additional tax revenue here through the impacts on people's lifetime earnings.

Jennifer [00:45:08] Right. And of course, even, you know, we do care about those those much bigger social benefits also, even if the government accountants aren't factoring them into their spreadsheets. And so you'll yeah, the reduction in violent crime is certainly going to be a huge cost savings. So so what are the policy implications here? Do we just forcibly move everyone into better neighborhoods?

Eric [00:45:29] Well, I think I mean, along the lines of something that we have talked about a little bit earlier is I think that this is pushing in a direction that says that well housing vouchers have a lot of benefits associated with them relative to other ways of providing people with housing assistance, especially, you know, in my narrow sense. The the strict reading of my paper is that it's saying that housing vouchers are better than high rise public housing. OK. And I think one of the things to think about in terms of policy is not necessarily saying like, well, we want to forcibly move every single person that's living in public housing. But I think we could do other things to try to incentivize moves out of public housing outside aside from demolition. Right. Like, we can do things where we can make it easier to use a housing voucher either because we provide housing counseling, we provide more support in the search process that helps people be able to find landlords who

are willing to rent to them. And by making housing vouchers easier to use, we would be able to stimulate a lot of demand there and get people out of public housing.

Jennifer [00:46:33] Could probably even make the housing vouchers bigger and more appealing to landlords and still still come out way ahead. Have there been I think you alluded earlier to studies specifically looking at these housing vouchers and you know what makes them easier to use? Do we have any experiments trying to adapt those programs to get more people to take them up?

Eric [00:46:56] I think we're doing I think more recent research has started to get together researchers and housing authorities to conduct some experiments where they're going to try to provide vouchers, but also layer on top of, you know, not just giving you a voucher, but also providing you with information and other sort of support services to try to help people move to a better area. So I think we're on that road. There's no study that's been that's out yet that specifically has any results yet. But I think that people are in the works, Raj Chetty being one of them. I think that's trying to go down this road of thinking about ways of helping people use vouchers to move into better areas.

Jennifer [00:47:43] So stay tuned on that one. So more broadly, thinking about the neighborhood effects literature, what's the research frontier? What do you think of as being the next questions that we need to answer?

Eric [00:47:56] So I think there's two main areas that are that are extremely interesting for all future research in this area. So first, much of what we have been talking about today, in the neighborhood effects literature, all concerns, studies, where you're trying to look at outcomes for people who are moving to the better area. Um, what we know less about is how this relocation of those people is affecting people living in the area where the resettlement is occurring. So we don't know a lot about how much incumbents are being affected by the new arrivals who are coming into these areas. And so this comes up. This is sort of a topic that comes up with housing vouchers, is that sometimes there is a lot of controversy over, well, we have you know, we're going to expand housing vouchers. And some people in different cities are saying like, oh, they're concerned about the people that people with Section 8 housing vouchers might move into their neighborhood. And we actually don't have a lot of evidence or research that tries to do anything with trying to estimate the impact on how those receiving areas are being affected by the new arrivals there. So that's something I think we're gonna see more research of in the future. Second, I think that there's still much research to be done looking at the precise mechanisms that drive causal impacts associated with the neighborhood. So usually, you know, in my paper and in other papers, you have some sort of variation where people are being moved out of a disadvantaged area to a better area. And when we say that this is a better area, it means that it's better on many different characteristics. So it's better because the poverty rate is lower. It's better because the crime rate is lower. It's better because there are more role models, whatever. Usually people can't precisely tell which of those mechanisms or which of those features of the neighborhood really matters for kids' outcomes. And so I think we're going to see more research that's going to try to get at these precise neighborhood features that really matters for kids' outcomes. I think we have seen a little bit of this. That Denmark study that I mentioned is particularly interesting because I think that paper was really, really focused in on precise mechanisms in neighborhoods that might matter. But that mechanism story is something I think that more that more of the recent research is going to really start going after.

Jennifer [00:50:18] My guest today has been Eric Chyn from the University of Virginia. Eric, thanks so much for doing this.

Eric [00:50:24] Thanks for having me.

Jennifer [00:50:31] You can find links to all the research we discussed today on our website, probablecausation.com. You can also subscribe to the show there or wherever you get your podcasts to make sure you don't miss a single episode. Big thanks to Emergent Ventures for supporting the show. Our sound engineer is Caroline Hockenbury. Our music is by Werner and our logo is designed by Carrie Throckmorton. Thanks for listening and I'll talk to you in two weeks.