## Probable Causation, Episode 24: Logan Lee

**Jennifer** [00:00:07] 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** [00:00:17] My guest this week is Logan Lee. Logan is an Assistant Professor of Economics at Grinnell College. Logan, welcome to the show.

Logan [00:00:24] Thanks. I'm excited to be here.

**Jennifer** [00:00:27] We are going to talk today about your recent work on the effects of providing residential housing for parolees when they're released from prison, an important topic, a policy relevant topic. Could you start us out, though, by telling us about your research expertise and how you became interested in this topic?

**Logan** [00:00:44] Yeah, so I'm broadly just sort of an applied microeconomist. I like to study weird things like marathons and maritime piracy. But over the last few years I've gotten increasingly focused on incarceration and thinking about how we can make it so that people who get released from incarceration don't come back. And so I've been working specifically with the lowa Department of Corrections for the last 5 years, ever since I came to Grinnell College, and this is something that they actually requested that I look into. They wanted to know whether their halfway house residential facilities were working well. And so that struck me as a really important question. And as I delve into the literature review, I realized we didn't know as much about it as we maybe should. And so we just kind of went from there.

**Jennifer** [00:01:35] Yeah. So people often do raise access to housing as a barrier to successful reentry for people coming out of jail or prison. So people with criminal records might not have the financial resources to secure stable housing or landlords might not want to rent to them because of their criminal history. But then on the flip side, not having a safe place to live could in turn make it more difficult to build a stable life and avoid falling back into criminal activity. So what had we previously known about the effects of housing access on recidivism?

**Logan** [00:02:05] Yeah. So there are a number of sort of correlational studies that were suggesting that not having good access to stable housing was, you know, a big barrier to successful reentry. In terms of real good causal stuff, I think that it's only been really recently that we've seen some real progress there.

**Logan** [00:02:27] There's an interesting paper - it's actually a job market paper by Timothy Young - I think that looks at vacancy rates when people are released and shows that if you get released into an area with higher vacancy rates, you're actually much less likely to recidivate, which is really neat. And so because of this sort of evidence, I think, of stable housing being a problem - there's also, I should say, a lot of good evidence that just comes from qualitative studies asking prisoners what barriers do you face? Often they will say stable housing is a real concern. And so I think in response to that, you know, that's driven a lot of the move towards these residential housing programs to try to solve that problem.

**Logan** [00:03:12] Unfortunately, we don't know a lot about how the residential programs themselves are working. The best evidence probably actually comes all the way back from

1977. There was an experimental paper that actually randomized people into residential housing or not after prison, and they found no effect, but they only had - they had less than 300 people in the sample, and so picking up, you know, kind of a rare event like new crime or recidivism makes things challenging. And of course, the world has changed a lot since 1977.

**Jennifer** [00:03:46] Yeah. So why don't we know more than we do? What do you see as the main constraints on research in this area.

**Logan** [00:03:53] Yeah. So I think there's two big ones. The first one and this is, you know, a recurring theme I think on your podcast is just data challenges. Individual level prisoner data is really necessary to do this kind of work and that is hard to come by. And even if you have individual level prisoner data, you really need to then be able to track it forward through their time in residential housing and then, of course, have a long enough sequence that you can see whether these people show back up in prison later. And so, you know, just being able to put all those things together, I think is really, really challenging and something that has really limited the research in this area.

**Logan** [00:04:35] The other problem and the reason why, you know, most of the stuff that has been done in this area, I would argue, is correlational, is that there's a huge selection bias issue. We don't randomly choose who to send to residential housing. It's actually different states select in different ways. But always you'd be worried that people sent to residential housing instead of parole or some lower form of supervision are going to be at higher risk of recidivism. They're going to have less family support. They're going to have fewer other stable housing options. And all of those things, right, are directly going to tie into the outcomes that we care about. And so, you know, finding ways to get around that selection bias in what is, you know, a process explicitly designed to have selection bias is a real challenge.

**Jennifer** [00:05:25] Yes. I think it'll help to get into the weeds a little bit of what these programs actually look like. So your new paper is titled "Halfway Home? Residential Housing and Reincarceration." And you're using a natural experiment that you found in lowa to study this topic. So tell us about that natural experiment in the program that lowa was running?

**Logan** [00:05:43] Yeah, absolutely. So in lowa, when prisoners are first assigned to prison, right - to an individual prison facility - they're also assigned a case manager. And these case managers are just randomly assigned. It's literally just a rotating system, right, where it's like, okay, it's your turn for this prisoners as they come in. And the case managers then are sort of their go-to-person while they're in prison. But because case managers have really large caseloads, they're going to be dealing with more than a hundred prisoners at any given time. And they're also in charge of running all of the programing within the facility. They're only actually going to meet with these people a couple times a year - 2 or 3 times on average.

**Logan** [00:06:29] The reason these case managers are so important is that at the end of a prisoner's time, when they're approaching release, the case manager is going to be the one that recommends either residential housing or parole. Technically, that has to be approved by the parole board, but their recommendation is approved more than 93% of the time. And so mostly that recommendation is going to be the thing that really makes this determination. It's important to note here that the case managers don't have any influence

over whether the prisoner is released or when they're released, just conditional on being released, where they go.

**Logan** [00:07:05] And so then just to follow up with what residential housing looks like a little bit. If you are assigned to residential housing, you're going to something that is basically - think about like college dorms - in terms of 2 to 4 people in a room. You're usually going to be there 2 to 6 months. And there's a large common area, I should say, where people are going to spend most of their time. You can participate in programing like drug treatment stuff. You're going to have meals there. But it really is sort of like incarceration in that you have very little freedom. Everybody in work release or residential housing in lowa is required to work. And so they're given time to go to their jobs. But they'll have like 15 minutes to get to work, 15 minutes to get back to the residence. And that's it. The rest of the time they need to be at the residence. And so it really is sort of like incarceration in some ways. They just leave during the day to go to work.

**Jennifer** [00:08:05] And so, yes, a typical program, as you mentioned, there'll be a lot of selection in terms of who gets assigned to this kind of program. So you're going to use randomization across case managers to deal with that so that - this type of identification strategy is going to measure the effect of being assigned housing upon release for those on the margin of receiving housing access. So that is those for whom a different case manager might have made a different decision. So talk us through who we should think of as the relevant population here. Who were the marginal offenders that your analysis is able to tell us about and how do they compare to the broader pool of all parolees?

**Logan** [00:08:43] Right. Yeah. So this is an important question for sure. As you point out, because I'm using instrumental variable type strategy, I'm really cozying up to kind of a judged fixed effects literature, just doing it with case managers, instead. There are - there are people who all of the case managers in my sample would have assigned to residential housing. And there are people who all of the case managers in my sample would have assigned a parole. And I can't say anything about whether residential housing is good or bad for those people. And so I think that's a really important thing to keep in mind, especially as we get through the results and into thinking about policy.

**Logan** [00:09:18] So I do have quite a bit of variation in terms of the actual case manager behavior. Case managers who are less likely to send people to residential housing - at about the 10th percentile of the distribution are only sending 24% of their cases to residential housing, whereas people at the 90th percentile are assigning more like 50% of their cases to residential housing. And so I'm looking at a pretty big chunk of the population. In terms of who the - that marginal prisoner is, it's actually really interesting. The averages for the people sent to residential housing look a lot like the averages for the overall population or for the population that didn't get sent to residential housing. And that's because they're pulling very much from the middle of the distribution. These marginal prisoners are kind of at the middle of the regular distribution.

**Logan** [00:10:08] So some things I can say. You're going to be marginal if you were incarcerated about 2 years on average. Most of the people who are marginal didn't commit a misconduct while they were incarcerated during that whole period. More than half were not visited at all. One of the things we'll talk about that's really important in sort of getting assigned to residential housing is just whether you have stable housing and family support on the outside. And so not getting visited is a big sign that you don't have that kind of support and that you might have trouble getting stable housing. And so these marginal prisoners often were not visited at all. They're also a little bit older than the general

population. They're about 36 old on average. And right at 50% had previously served time in prison. So that's who I'm thinking about. I will say, too, that the race and crime don't seem to affect whether you're marginal. There are marginal people who've committed all sorts- at least of broad crime types. Right. So people obviously who committed murder or rape or these really long term offenses are never going to be marginal because typically, the longer you spent, the more likely you are to go to residential housing at the end. But I will say that minorities are just more likely to be sent to residential housing all the time. So conditional on all these other things, just being black makes you more likely to be sent to residential housing, but not necessarily more likely to be marginal, if that makes sense.

**Jennifer** [00:11:39] Yeah. So what should we think of as the counterfactual here - as you just brought this up. So if someone doesn't receive housing through this program, what happens to them?

**Logan** [00:11:48] Yeah. So there's basically three ways that you can leave prison. It's of course it's more complicated, but there's three sort of major channels. One is to go right into residential housing. The second is to go right into parole. And then the third would be you actually serve your whole sentence in prison. And in that case, the case managers don't have any discretion. It's just, you know, you're free and clear. You're not on parole or residential housing. So I'm going to mostly ignore those people who served their whole sentence in prison. That's going to be determined by stuff that, you know, the case manager has no discretion in, and it doesn't really interact at all with what I'm trying to look at. And so my comparison is going to be people who got sent to residential housing versus people who got sent to parole.

**Logan** [00:12:30] And an important thing to note, residential housing in lowa usually last 2 to 6 months. The average is just over 100 days. And once you're done with your time in residential housing, you just matriculate to parole. So after something like 100 hundred days on average, people in the parole initial treatment and people in the residential housing initial treatment are going to be basically in the exact same place. They're both on parole.

**Jennifer** [00:12:54] Is there any element of the residential housing that's aiming to kind of transition people into other housing? Is that part of the programing here or not?

**Logan** [00:13:03] Yeah, absolutely. So the staff at the residential housing facilities are actively trying the whole time to get you into other stable housing options. They're also trying to get you into a position where the employment that you have in work release can be something you continue afterwards, or at least you can find another similar job afterwards. And so they really are actively trying to sort of set you up for success once you leave. And part of the reason - it's not the whole reason because there are regulations and there's programing needs and that kind of stuff. But you certainly can get out of residential housing faster if you can show that you are going to have a stable housing option. So that's going to matter both at the margin of do you get sent to residential housing to begin with and how long are you in residential housing?

**Jennifer** [00:13:54] Okay. So this gets us into the mechanisms here. So what mechanisms do you have in mind for how being assigned housing through this program might affect parolees outcomes?

**Logan** [00:14:05] Yeah. So I think - this is definitely an area where it's sort of theoretically ambiguous whether residential housing is going to be a good idea or not. On the one

hand, giving people stable housing, we think is definitely a big positive. And, you know, many people, economists are maybe more skeptical of this, but there's certainly lots of support for getting former prisoners job training and into jobs. Right. So residential housing also helps with this by finding employment and that kind of stuff. It also - one of the things that talking to the people in the IDOC that they talked about some is that it gives you more opportunities to actually offer programing to these people or require programing for these people. So if they didn't get all the way through their drug treatment program in prison, it gives them a chance to kind of finish that out. And to the extent that those programs are useful and positive, you're going to see those effects more significantly.

**Logan** [00:15:02] On the other hand, one of the things that being assigned to residential housing definitely does is it's going to increase your monitoring. So people on parole, right, have lots of time where no one is really watching their behavior. And that just isn't true to the same extent for residential housing. One of the things that we do know from the prior literature that's been pretty well established is that generally these more intensive supervision regimes, where you're being watched more closely, they tend to lead to more reincarceration just because, you know, you have more opportunities to fail. The rules are stricter. And if you break a rule, you're going to get caught for sure.

**Logan** [00:15:43] In addition, I think it's worth thinking about negative peer effects. So on parole, you're sort of out in the world and you can be interacting with, you know, largely whoever you want. Sometimes there's rules about, you know, former accomplices and whatever. But in general, you're pretty free. In residential housing, obviously, you're primarily interacting with other people in residential housing. And so those are former prisoners and probationers who've been put into that setting. And so certainly there's a lot of potential for negative peer effects, especially because you sort of have one foot in the real world. And so there's more chance, I think, of spillovers maybe than you'd have in a full incarceration setting.

**Logan** [00:16:25] Related to that, I think there's real concern about conflict within the residence. So one thing that's a little bit interesting that happens in this setting is that if you are in prison, let's say, and you get into a fight with your cellmate, that's going to lead to misconduct citations. It might lead to solitary confinement, these kind of things. But almost never are you actually going to generate a new conviction for that. It's not going to go into the general court system. If you're in a residential housing facility, which again feels in some ways like prison, and you get into a fight with your roommate, well, now it's a new assault charge potentially, or it's at least going to be a technical violation that pulls you back to prison. And so I think, you know, the same type of conflict all the sudden has dramatically different consequences.

**Logan** [00:17:14] And the last thing I'll mention just quickly is that one of the nice things for residential housing is that - and you mentioned a little bit with the transition to not being in residential housing - one of the things they try to do is as people approach release, they start to get these weekend furloughs where they're allowed to basically not be there Friday night, Saturday and Sunday, and then they come back Sunday night. And that is important in the sense that it's giving them a chance to have some freedom and be out in the real world where they're going to be soon. But it also creates, I think, the sort of intense period of it's a - it's more of an intense period of freedom, knowing that you're going to go back to some version of incarceration. And so that might have some interesting behavioral effects. And I can talk to some of those a little bit more later on or try to anyway.

**Jennifer** [00:18:05] Yeah. It's really interesting to think about just how complicated this gets very guickly when you start digging into the details of the program. As you imagine, you know, we have this - the basic issue we're trying to solve is that people coming out of jail in prison don't have anywhere to live. And so - we sort of imagine, well, let's wave a magic wand and give everyone a nice one bedroom apartment with, you know, with running water and, you know, all the necessities they need. And that way they can get to work on time and have a safe place to sleep and all of that. But of course, in practice, the logistics of how we actually give people housing is not that magic wand method. It's through some other program and we, you know, their budgets and all of that. And so you wind up with these programs that are part group housing, part extended incarceration in a sense, in the way that you described, where we're like, well, let's take advantage of having everyone here for a little while longer. We'll have rules; we'll have curfews; we'll give them additional programing. But that means we're watching you for longer and we could catch you for bad behavior and notice if you get into a fight with your roommate. And so that all then means that the net effects of this program are going to be much less clear than if we just put a roof over their head.

Logan [00:19:19] Right. Right, exactly. Yeah. You said it quite well.

**Jennifer** [00:19:23] Yeah. So, okay, so you're working closely with lowa, as you mentioned, which I gather made administrative data access a bit easier. So tell us about the data you're using for the study.

**Logan** [00:19:34] Yeah. So it is exactly as you suggest. It's the lowa Department of Corrections administrative data. And one of the things that benefits me in this particular study is that the Department of Corrections, which runs not only the prisons, but also these halfway houses or the residential housing facilities, there are many states where that isn't the case, where there'd be a separate branch or where these residential facilities are actually privately run. And so lowa is a really excellent opportunity to be able to follow these people kind of all the way through and have high quality data the whole way. So I've been really, really fortunate to work with them. They've been really - they're just really interested in sort of getting the right answer and trying to make things better as much as they can.

**Logan** [00:20:14] The administrative data is great in most things. I have lots and lots of detail about prisoner characteristics and what happens to them while they're incarcerated. My files are going to be very, very similar to what a case manager would be looking at when they're actually making a decision about whether to send somebody to a residential housing or not or to recommend this. And so my sample is going to be looking at male prisoners released between 2011 and 2014. Obviously, that's a little bit back in the past. But because I wanted to have a nice long window for them to be reincarcerated, you kind of need to be looking a little bit in the past. And as I mentioned briefly before, for most of the analysis, I'm going to be only looking at prisoners who were eligible to either go to residential housing or parole. And I'm going to be largely ignoring these people who spent their whole time in prison just because I don't - the natural experiment doesn't really apply to them. And again, they're going to be a selected sample just selected in a different way.

**Jennifer** [00:21:21] All right, and then recidivism is a somewhat vague term, so we should define that. So since you have Department of Corrections data, you'll be defining it as reincarceration, which, of course, is not the same thing as reoffending. So talk us through the outcome measures that you're interested in here. What outcomes are you able to look at with the data that you have?

**Logan** [00:21:40] Yeah. So as you mentioned, I only have data from the lowa Department of Corrections, so I don't have things like police reports or arrests or things like that that, you know, might paint an even fuller picture of whether people in these different programs are actually committing offenses. So what I can see is, do you actually return to prison? And for most of the analysis, I'm looking at a 3-year window. So do you return to prison within 3 years of being released from prison? And then I go on and I break out and think about, okay, well, is that because of a technical violation? Right. Which maybe we don't care about as much from a policy standpoint. They're certainly still important and it's something that the lowa Department of Corrections thinks about a lot is how they can reduce these technical violations, but they tend to be much less costly to society as opposed to people who are reincarcerated because of a new crime.

**Logan** [00:22:39] One complication I should mention there is that that is sort of subject to negotiation, whether you are convicted of a new crime or a technical violation. Not in all cases if you murder someone, it's going to be a new crime. But there's lots of incentives kind of all the way around to avoid a new court case, to just sort of say, okay, we're going to give you this technical violation. You're going to go to prison and serve the rest of your original sentence. But you're not going to necessarily then have to, you know, have extra time because of this new crime conviction.

**Jennifer** [00:23:11] Right, and just to argue in favor of reincarceration as a valuable outcome measure here, a little bit more, this is an extremely costly outcome from the state's perspective. Right. So, like, locking someone up is expensive. And so, as you said, it would be wonderful to also have arrests and everything else. But of course, that's really hard. And knowing - keeping people out of the prison system, keeping people from cycling back through the system is a goal that a lot of people are really focused on.

**Logan** [00:23:40] Absolutely. That's an important thing. I would just highlight - there was a study done by the Illinois Department of Corrections a few years ago, and they found that this reincarceration, each time it happened, was costing taxpayers \$151,000. So these are big numbers we're talking about, even for offenses that don't seem like they're necessarily super costly to society just because court fees and incarceration costs and all these things add up really, really fast.

**Jennifer** [00:24:09] Yeah, the rule of thumb number I usually have in my head is like a \$100 a day per bed. So, yeah, it adds up really fast. If you can keep people out of prison, out of jail or prison, that saves a lot of money. All right. So let's talk about the results. What are your main results - so the effects of assignment to housing on subsequent reincarceration?

**Logan** [00:24:29] Yeah. So the punch line version is that if you are assigned to residential housing instead of parole, we see increased incarceration of about 15 percentage points. And that is really an enormous effect. That's a 33% increase in reincarceration. And maybe to put a little more sort of perspective on that, that's going to be a larger increase than I estimate the increase in probability for having previously been reincarcerated. Right. So if you're a previous recidivist, this effect is actually even larger than that in terms of predicting future reincarceration.

**Logan** [00:25:09] And just to flesh that out a little more. One of the things I do that I think is really important in the paper is I go on to break that out by timing - how long it takes someone to be reincarcerated. And because, as I mentioned, after, you know, certainly

after 6 months, people assigned to residential housing are going to be treated much like the people who were initially assigned to parole. If there are these negative effects, they should be showing up really, really fast right within the first 4 to 6 months. And so I did test for that. And that's exactly what I saw. In fact, in months, 2 to 4, the reincarceration rate, just the raw reincarceration rate for people assigned to residential housing is more than twice as high as the reincarceration rate for people assigned to parole. And then as soon as you get past that sixth month mark, it's basically identical the rest of the way.

Jennifer [00:26:06] And so just to back up a little bit and go back to the, you know, natural experiment you're exploiting. So you've got, you know, very similar people who are randomly assigned to one case manager or another. The people, who are lucky in a sense to be assigned to a case manager that is more likely to send people to residential housing than just send them out on on their own with, you know, to fend for themselves, they are more likely to then wind up in residential housing as a result, even though they're very similar to people who were assigned to the different case manager. And - but then that means that they're much more likely - being assigned to residential housing, then increases their likelihood of winding up back in prison, which is not what lowa was hoping for, I gather.

**Logan** [00:26:50] Right, absolutely. That was not the - that was not the dream.

**Jennifer** [00:26:53] Yeah. And it's a huge effect. So then you can - you look at these results, you dig in a little bit. You consider whether the results differ across various dimensions. So tell us more about the heterogeneity analysis you run and what you're interested in there and what you find.

**Logan** [00:27:10] Yeah, so you did a nice job kind of laying out that this is this is a surprising result, right? We're explicitly sending people - we're paying a lot for this residential housing program because we think that it's going to have positive benefits for the people who are sent there. And so finding that it not only doesn't have positive benefits, but that it's actually a real negative is surprising and disappointing, to be honest.

**Logan** [00:27:34] And so I spent a lot of time trying to think about, okay, well, why is this happening? Right. What are the mechanisms? And so the first way that I got at that or tried to get at that was to break it out, as I mentioned, by technical violations and new crimes. And when I did that, I found big increases in technical violations. That's going to drive most of the reincarceration that I find overall, whereas new crimes, not so much. So the sort of initial pass, this is suggestive that what's happening is the increased monitoring and stricter rules are just leading to these technical violations, and that's leading to reincarceration. Again, as you mentioned, that's still a very costly outcome for society in terms of additional prison time and all these things. But it's not suggesting as much on the new crime front.

**Logan** [00:28:23] Before I abandoned that line of thinking altogether, though, I did breakout new crimes by the different types of new crimes. So lowa defines 4 really 5 - they have an 'other category' that's very rarely used - so there are really 4 broad categories of new crimes that they think about. And so those are drug crimes, public order crimes. Just in case your listeners aren't familiar with this, public order crimes are things like driving while intoxicated, traffic offenses, that kind of stuff. Then there's also violent crimes and property crimes. And when I broke out the results across these different types of crimes, what I found is that drug and public order crimes actually fall, although not in a statistically significant way and violent and property crimes go up. And that is statistically significant. I

see big significant increases in violent and property crimes. And then even within violent crimes, I'm finding that it's pretty much all assault. You see this big increase in assault like a 6 percentage point increase in assaults just because you were assigned to residential housing. And so then I obviously that was an interesting result to me and I wanted to dig into that more.

**Logan** [00:29:36] So within violent crime, I tried to understand what mechanisms were happening there. And I basically came up with two different stories. Both of these were things that I've talked to the Iowa Department of Corrections about, and they think that both of them are plausible. The first one is, as I mentioned a little bit earlier, that you're getting this interpersonal conflict within the residence. So well, I'm in my residential housing facility. I'm getting into fights. This is consistent with the property crime story as well. Right. So I might steal my roommate's boombox or whatever - an example that's from, you know, this millennium would be good, but I might steal something from my roommate and then, you know, they confront me on it and we fight. And then we both get assault charges, and I get a property crime charge. Right. Something like that is really consistent with the pattern that I'm seeing. The other possibility is that what you're seeing is bad behavior on furloughs. So actually, it was interesting when I was presenting this to the lowa Department of Corrections, the first thing that they thought might be happening is an increase in domestic violence. They thought that you were going home on Friday, you were celebrating your freedom and then you were getting into domestic disputes. I actually don't find any increase in domestic violence, specifically. I'm finding an increase in assault, but not domestic violence.

**Logan** [00:30:57] So what I tried to do to sort between these two things a little bit is to do kind of a pseudo difference-in-difference type analysis. And I should say that I'm dealing with very few observations here. Right. We start with everybody released from prison and then we get into just people sent to residential housing. And now we're thinking about just people sent to residential housing who then were reincarcerated with specifically a violent crime conviction. So we're not talking about a huge number of observations here, but just sort of the difference-in-difference pictures are pretty strongly suggestive that people assigned to residential housing in the first 6 months after they're released are seeing big increases in assaults on the weekends and not so much the rest of the time - during the weekdays defining weekend as Friday, Saturday or Sunday, relative to either also people who are in residential housing, but made it through those first 6 months or people on parole either in the first 6 months or after that. And so seeing this increase in assaults sort of isolated for just the group in residential housing while there's still actually living in residential housing - seeing that effect kind of spike on the weekends. I think is consistent with this idea that they're finding trouble while they're on furloughs. And it's not - it doesn't seem to be coming through a domestic violence channel. So it's more consistent with maybe going to the bar and finding trouble.

**Jennifer** [00:32:31] So some people might be wondering about the exclusion restriction from your IV design, the researchers out there. So a key assumption here is that the effect of being assigned to case managers that are more likely to send you to residential housing will only affect your outcomes through its impact on residential housing, not through some other things. And case managers might, of course, affect other things like what other programs you participated in or whatever else. So you run a really nice placebo check. That is a test that won't pick up any effect if your identification strategy is measuring what you hope it is. And I think this deals with that concern really nicely. So tell us about that test and what you find.

**Logan** [00:33:15] Yeah, thanks, I'm really glad you brought this up. The exclusion restriction is something that I spent a lot of time thinking about, partly because as you know, with an instrumental variable type analysis, you need relevance and excludability and then monotonicity. And monotonicity and excludability - or monotonicity and relevance were things that were easy to just sort of run statistical tests for and excludability less so since I only had the one instrument. So what I came up with was going back to these prisoners that I mentioned briefly who served their whole sentence in prison. And so these are people, you know, typically who are going to have some misconducts or maybe just committed a crime where you can't possibly get - you know, there is no good time, there's no early release, that kind of thing. The important thing, though, is that for these people, case managers have no discretion about when they're released, just like for everybody else, but they also have no discretion about what happens to them after release. But other than those two aspects, the case managers interact with them just like they interact with everybody else, so they're still going to be meeting with them 2 or 3 times a year. If anything, they're going to be meeting with them slightly more often because these are this is going to be a group that on average has slightly more misconducts. They're going to still be assigning programing and recommending programing. They're still going to be facilitating a lot of that programing.

**Logan** [00:34:30] And so what I did in the placebo test was to say, okay, are the counselors, the case managers who are most likely to assign residential housing, are they also having any kind of impact on this group where that decision, that residential housing recommendation can't have played a role? And what I find is that, no, there isn't any effect there. So the - it doesn't matter if you were assigned to sort of a nice or a mean case manager in terms of assigning residential housing, it's really just, it's really just coming through other channels.

**Jennifer** [00:35:09] Yes, it really seems like the - it doesn't say much for the impact that the case managers have on the other types of decisions they're making, but I guess really highlights the importance of this residential housing decision in their portfolio. So this paper's pretty new. Have any other papers been released on the topic of housing and recidivism since you first started working on this study?

**Logan** [00:35:31] So there have been a couple that are in working paper form I'm not sure if they're - one of them, I don't think is publicly available yet, but I know it's in progress and they will have one to publish soon.

**Logan** [00:35:44] The first one to mention, I think, is this Timothy Young paper that I mentioned that's a job market paper right now. But he is looking at these vacancy rates. Right, and finding that if you get sent back to a place with high vacancy rates, you're less likely to recidivate. So that certainly is speaking to housing availability generally. The other one is a working paper from France. They're actually looking at residential housing facilities, which they call semi-liberty over there. They're looking at these facilities as more of a front door to prison. So I'm thinking about residential housing facilities as a back door to prison. Right. As something that happens after prison is part of that transition. In France, it's being used as a way to avoid prison. So it's more of a residential housing or prison type comparison. They don't have - and they freely admit that they don't have a really strong causal strategy. So instead, they're trying to do more of a bounding exercise, thinking about a lot of different types of models and trying to bound what the effects might be. And what they find is that being assigned to residential housing instead of prison is actually going to be reducing recidivism by 22 to 31%. And I think that that's actually really consistent with kind of the broader literature and might result in that the - it seems like the

more intense the supervision you're receiving, the worse the outcomes seem to be in terms of reincarceration and recidivism. That was that was true, you know, kind of in the previous lit review. That's what I find. And there seem to be even more evidence of that going forward.

**Jennifer** [00:37:16] Yeah, that's really interesting. So what are the policy implications of your paper and the other work you've talked about? What did you tell lowa about its residential housing program and what would you tell other places that are considering similar policies?

Logan [00:37:32] Yeah. So, I mean, this is definitely something that is on people's minds right now. It was just in 2017 I think that President Trump decided to pull back on the federal residential housing program, which is by far the biggest in the country. They have very, very high rates of sending people to residential housing programs. And they just - it's a huge program. So that's been happening. What I told lowa and what I would tell other states is just, you know, there - these programs are expensive, and they don't seem to be doing what we want them to do. So in lowa specifically, they're spending about \$75 per person per day in residential housing. So you mentioned kind of a baseline figure of \$100 for prison. Right. And that's sort of what we should expect then, right. Where residential housing is a little bit cheaper than prison, but not a lot. Whereas if you send a person to parole, you're only being - you're only spending about \$5 per person per day. So this is a very expensive program and it's not getting us positive results. You're actually increasing recidivism. So often in my papers, I like to do, you know, a cost-benefit analysis type thing at the end. And this is a cost-cost analysis. There is not a lot of upside.

**Logan** [00:38:48] And so I do want to couch that. As you mentioned before, this is an important thing. I do have this local average treatment effect interpretation. Right. I can't speak to the people who nobody would have sent to residential housing, although I'm willing to go out on a limb and say they probably should not be sent to residential housing. Right. If none of the counselors think that and residential housing at the margin is bad. But it might be that these people who all of the counselors or, you know, 95% of the counselors would have agreed they need to go to residential housing. They might actually be getting some real benefits here.

**Jennifer** [00:39:25] Right. I mean, the point about thinking about on the margin here is going to be really relevant. So you're able to speak to like, should we be expanding this program or scaling it back? And your results suggest strongly that we should scale it back.

**Logan** [00:39:36] Right. Right. Absolutely. Absolutely. And that's - you know, even if you're not all that worried about technical violations, even just thinking about the new crime tradeoff that we might be making. Right. We'd be trading off fewer drug and public order crimes for more violent and property crimes. That seems like a bad trade-off for society generally. You know, generally where we're more concerned about violent property crimes are going to be more costly. And so there really aren't any dimensions of this that I was able to find that looked good for these marginal people being sent to residential housing.

**Logan** [00:40:11] And I think more broadly based, again, tying it back to the literature, less intensive supervision just seems to be like a good - just seems to be a good idea. You know, the more that we can get people into these less, less intense settings that seems to be generating - reduce - that seems to be reducing reincarceration.

**Jennifer** [00:40:31] Yeah, and then delinking - kind of going back to the magic wand scenario I laid out earlier and thinking about how we - if what we're really concerned about is giving people access to housing, maybe we could just try giving people housing without increasing the supervision tied to it. It is funny how we - there are a lot of programs out there, that kind of layer on additional supports. And, you know, it's all, I think, all well-meaning. But the additional layers of support often go hand-in-hand with additional layers of supervision, which then has these unintended consequences. So what's the research frontier here? What do you think of as the next big questions that need to be answered in this space?

**Logan** [00:41:12] Yeah. So, I mean, I think the biggest one that this sort of raises that this research and the other literature that's come out recently raises is you know how much can we reduce the supervision and still achieve these decreases in recidivism, or at least no cost in terms of increased recidivism. Right. So there must be a point, it seems like, right where you would start to see this bend back. And so, you know, I guess in the extreme example, just no supervision at all. Just you commit a crime and we just let you go. You know, that might be too far. But finding kind of the right inflection point here where you're balancing costs and decreases in recidivism, I think is really important and something that we don't have a very good sense of right now.

**Logan** [00:42:00] And I think something that goes really hand-in-hand with that is, are there actually important deterrent effects here that we're missing for the general population? Right. So, while any sort of specific deterrence would be picked up in individual level kind of reincarceration rates, you would expect, it might be the case that, you know, if we start doing less and less residential housing and instead you just serve a short prison sentence and then you go to parole, maybe that reduces the total cost of the punishment overall. Right. And so you see less general deterrence effect. That's probably unlikely because prison is probably the big deterrent. Right?

**Logan** [00:42:45] I don't think that the average person is thinking too much about what's going to happen on the back end of a prison sentence. But, you know, to the extent that we're thinking about things like electronic monitoring instead of prison or residential housing as a front door to prison, as a way to avoid prison, we're going to have to be a lot more careful to think not just about the recidivism effects, but to also think about the deterrence effect.

**Jennifer** [00:43:10] Yeah. I think this is a space where - reentry in general, I think of as a space where there's just a tremendous amount of work to do and a lot of experimentation to do. And we need different jurisdictions to just try different types of programs and test them to see if they work. Because it turns out this question is really hard.

**Logan** [00:43:30] Yes. Yeah. And I would even add a couple of other sort of future research things that I think could be really important. One of the things that I wanted to really dig into in this paper but just didn't have the right data set up is to understand whether, you know, the role that peer effects are playing in these residential housing facilities. I mentioned that that might be a problem and it's something that I tried to look at. But my residential housing facilities are about 100 people each. And I don't know which room you're in. I just know that you're in that facility. And so, you know, our are tools for peer effects analysis don't work very well when you have 100 roommates because everything ends up kind of muddled and average once you try to figure out what your average roommate looks like. But I think if somebody could do a deeper dive into that, that would be really, really beneficial.

**Logan** [00:44:18] I also think that there are a number of residential housing programs across the country that are actually a voluntary system. So in lowa, of course, you're being assigned to residential housing, but many states have moved towards a system where you actually select into it. And in some cases you apply for it because there's more demand than actual, you know, then supply of these houses. And I'd be really interested, obviously, you'd have to you have a totally different identification strategy in a different state, but it would be great to know whether these prisoners are able to sort of select in when they need it. Right. And maybe provide this stable housing in a way that is less problematic, although the increased monitoring in some of those effects are still going to be there. It might just be that having some autonomy and having some personal buy in makes a difference. So that would be an interesting thing to to look into, I think, as well.

**Jennifer** [00:45:14] Yeah. I'm struck here by the link to the transitional jobs literature in this space, too. And so there's been a lot of research showing that randomly assigning people to be given a job, you know, just - if you show up every day for 8 hours a day, you'll get paid minimum wage for those who are on the margin of the labor force, has no impact on their long-run employment outcomes and doesn't seem to improve their recidivism rates for the most part. And one possible mechanism for that that people have raised is that giving people a job where they're working side by side with others who are also struggling in the labor market is not the same thing as landing a job in a good economy in the private sector. Right.

**Jennifer** [00:45:58] And so these peer effects are also potentially a real problem there and just a real hurdle when we think about policy solutions. It just it really complicates, again, going back to this, like we'd all love to wave a magic wand, but that's not actually possible. We have to create a policy and implement an actual program. And so how do we - what's the program that we'd implement? And these are the types of programs that we're discussing today and these transitional jobs programs. These are the actual programs that are possible on the ground. And it just strikes me that we're going to have to get much more creative when we think about the peer effects and how they can cancel out any benefits that we might have gotten from the service we're providing, which is really interesting. But also, let's not be discouraged by it. We'll just call it interesting.

**Logan** [00:46:46] Yeah, no, that's good. I mean, I do think that there's lots of reasons for optimism going forward. And I'm basing that mostly just on when I talk to - even in the last - so I've been doing - I've been working with State Department of Corrections for 8 or 10 years now. And even just over the last 10 years, I've seen a big, big shift towards more focus on, you know, what works empirically and thinking about, well, thinking about not just warehousing people, obviously, but then trying to really use evidence rather than just, you know, this seems like a good idea. Right. And residential housing and getting job training or these transitional jobs, those are all things that, yeah, they sound like a good idea. Right. And there probably is some real value there. And so hopefully going forward, we can find ways to disentangle what certainly is a positive thing, getting people stable housing, getting people into a job. Those in some ways have to be positives. Right. But disentangling them from the negative things like the peer effects, like the increased monitoring, yeah, hopefully we can figure out ways to do that. But I think if we can figure out ways to do that, at least the states that I've been in communication with are very open to that at this point.

**Jennifer** [00:48:05] Hear, hear. My guest today has been Logan Lee from Grinnell College. Logan, thanks so much for doing this.

Logan [00:48:11] Absolutely. Thanks for having me.

**Jennifer** [00:48:18] 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 and thanks also to our Patreon subscribers. This show is listener supported. So if you enjoy the podcast, then please consider contributing via Patreon. You can find a link on our website. Our sound engineer is Caroline Hockenbury with production assistance from Elizabeth Pancotti. 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.