

## Probable Causation, Episode 72: Manasi Deshpande

**Jennifer** [00:00:08] Hello and welcome to Probable Causation, a show about law, economics and crime. I'm your host, Jennifer Doleac at Texas A&M University, where I'm an economics professor and the director of the Justice Tech Lab. My guest this week is Manasi Deshpande. Manasi is an assistant professor of economics at the University of Chicago. Manasi, welcome to the show.

**Manasi** [00:00:25] Thank you so much for having me.

**Jennifer** [00:00:27] Today we're going to talk about your research on how access to welfare benefits affects crime, but before we get into that, could you tell us about your research expertise and how you became interested in this topic?

**Manasi** [00:00:37] Yeah, so I've been studying U.S. disability programs for about a decade now, and about ten years ago when I was a graduate student, there was a spate of news articles about Supplemental Security Income, a program that is for individuals with disabilities, adults and children who have disabilities and who have low income and assets. And these news articles were covering the, as I said, program with kind of anecdotal information about potential good ways and potential bad ways that this program could be affecting children's outcomes and it was clear from that coverage that we have very little rigorous empirical evidence about how this program affects recipients and families. And so I decided as a graduate student that I wanted to help develop some of that evidence.

**Manasi** [00:01:34] And so one of my earlier papers looks at the effect of SSI on children who are removed from the program when they turn 18, looking specifically at their labor market outcomes. And in that paper, I found that 18 year olds who are removed from SSI, they earn slightly more in the labor market than those who stay on SSI, which is what we would expect, given that they've lost income, but they don't earn enough in the labor market to make up the SSI income that they lost.

**Manasi** [00:02:07] And so it's likely that their total level of income is falling as a result of being removed from SSI. And it was also clear from that paper that the levels of employment were very low we're talking around 10 to 15% employment rates for youth who had been removed from this program. And so a natural question coming out of that paper was how are they supporting themselves if they aren't working in the formal labor market? Some of the answer could be that they're working off the books, some of it could be that they are getting support from family members, and some of it could be that they're engaging in criminal activity to get by. And so I started talking to Mike Mueller Smith, who had founded the Criminal Justice Administrative Record System about this possibility and we decided that it was worth investigating more.

**Jennifer** [00:03:00] So your paper is titled "Does Welfare Prevent Crime The Criminal Justice Outcomes of Youth Removed from SSI" as you said, it's coauthored with Mike Mueller Smith and it's forthcoming in the Quarterly Journal of Economics. Congratulations on that. So let's start with some background. What is the SSI program and who is eligible for SSI benefits?

**Manasi** [00:03:19] Yeah, so SSI stands for Supplemental Security Income. It was founded in 1972 as a way to kind of consolidate the patchwork of state and local programs that provided assistance to individuals with disabilities. And it provides cash benefits and

Medicaid eligibility to adults who have a disability and have low income and assets, as well as children who have a disability and whose parents have low income and assets. And the types of conditions that are covered by the program has changed since since it was founded. So they now include mental and behavioral conditions.

**Manasi** [00:04:01] So for adults, that could be things like depression and anxiety, and for children that could be things like ADHD or autism spectrum disorder.

**Jennifer** [00:04:14] So in this paper, you exploit a change to SSI eligibility rules that was implemented in 1996. I think this is the same change you were exploiting in that previous paper you mentioned. So tell us about what changed in that year and what the motivation was for that reform.

**Manasi** [00:04:29] So 1996, as you know, was the year of welfare reform, so that family, that's the personal responsibility and Work Opportunity Reconciliation Act, but we commonly known as welfare reform and that legislation did a lot of things, probably the change that is most well known is that it changed the AFDC federal entitlement program into the state block grant program that we know as. But it also made important changes to the SSI program and as background, what happened back in 1990 is that the Supreme Court ruled that basically children and adults had to be treated comparably under the SSI program. And in effect, this meant that children could now qualify for SSI based on mental and behavioral conditions, provided that those mental and behavioral conditions were severe enough.

**Manasi** [00:05:24] And so after that Supreme Court decision, there was a large spike in enrollment in the SSI children's program, especially from these mental and behavioral conditions. And so in 1996, as Congress is putting together welfare reform. They're concerned about this increase in child SSI enrollment, and they've made a number of changes in that legislation to try to limit who could qualify for the children's program. They also required that all children who receive SSI as children have to requalify for the program as adults when they turn 18. And so that then resulted in many children being removed from SSI when they turned 18, which is the same system that we have now, where when children who get SSI reach 18, they have to be reviewed as adults and about 40% of them will be removed from SSI found ineligible for assessment.

**Jennifer** [00:06:21] And the eligibility for adults is about being able to work basically is that right?

**Manasi** [00:06:26] That's right. Yeah. So for kids, you know, disability is more thought about as age appropriate activity. And that's why conditions like ADHD or certain delays, age delays, for example, might qualify a child for SSI. But for adults, disability is defined in terms of your ability to work. And so it's going to be disproportionately children with those behavioral conditions, for example, ADHD, where they might qualify as a child, but unless they can demonstrate that their condition is so severe that it prevents them from working entirely, it's going to be hard for them to qualify as an adult.

**Jennifer** [00:07:06] Okay. So before this paper, what other research was out there about the effects of SSI benefits on other non crime outcomes? There was your paper that you've told us about. Was there anything else?

**Manasi** [00:07:18] Yeah. So we've known for some time that children who receive SSI have poor outcomes in adulthood. There is work, for example, by Jeffrey Hemmeter,

Jacqueline Kauff and Dave Wittenberg, showing high dropout rates from school and high arrest rates in adolescence for children receiving SSI, especially for those kids with mental and behavioral conditions. There's also some work by Kalman Rupp, Jeff Hemmeter and Paul Davey, showing that these cohorts of children who receive SSI have very low unemployment rates in adulthood. What's been less clear is how SSI itself affects these outcomes because as you know, SSI is a very means tested program, is intended to serve children who were very disadvantaged, who have both a disability and who live in poverty or near poverty with very few resources. And so we don't know if their outcomes would have been better or worse without SSI. And so in that previous paper that I mentioned, I provided some causal evidence of the effect of SSI in young adulthood on labor market outcomes, and found that when these young adults are removed from SSI, they modestly increase their earnings in the labor market, modestly increase their employment levels. But both earnings and employment levels are still very low.

**Jennifer** [00:08:46] And so why might we expect SSI benefits to affect criminal behavior? What are the various mechanisms we should have in mind?

**Manasi** [00:08:53] Yeah, so Mike and I thought a lot about this as we were writing the paper. You know, we're going to look at the effect of being removed from SSI on criminal justice involvement in adulthood. But we wanted to make sure that we understood all of the channels through which SSI receipt might affect criminal justice involvement. I think are probably the most obvious one is an income effect that we know from that previous paper that when these young adults are removed from SSI, they are working a little bit more, but they're not working enough to make up the SSI income that they've lost. And so what's likely happening is that their total level of income is falling. And we might think that when they lose this income, they experience this income loss that could lead to more crime, and especially crime that sort of intended to generate income.

**Manasi** [00:09:48] On the other hand, that paper also found some modest increases in earnings and employment. And so if we think there are some good effects of this increase in work right, so if working more builds good habits, builds your attachment to the labor force, or just keeps you busy, we might expect to see a decrease in crime among those who were removed from SSI when they turned 18. So there are two types of income effects that they're sort of intentioned possibly going in opposite directions. I think there are some less, maybe less obvious channels as well. So one is what we might call an incentive effect in the sense that the rules of SSI say that a person's benefits will be suspended or permanently terminated if they are incarcerated.

**Manasi** [00:10:37] And so it's possible that if you're receiving SSI as an adult, there is an extra incentive to avoid going to prison or engaging in any activity that could lead to incarceration. Maybe for your family who relies on this income is sort of putting pressure on you to make sure that you don't lose those benefits. And so that might be a deterrent to criminal activity and possible that when you lose those benefits, when you turn 18, there's no longer that deterrent effect. And so we call that an incentive effect. There's also the possibility that there's an effect operating through Medicaid. So as I mentioned before, SSI comes with Medicaid eligibility in most states and Medicaid could have effects on criminal justice activity. Right. We have some evidence from recent papers that Medicaid could have an effect. And so it might be similar to the income effect where when you get Medicaid, that might reduce your involvement in the criminal justice system through just the fact that you have more income in some sense.

**Manasi** [00:11:45] Or there could be just an effect of health, right. If Medicaid is providing treatment that improves your health, you know, especially for mental health conditions, for example, we might think that getting Medicaid could lead to better treatment, which could reduce crime, especially among individuals with with mental health conditions. And then finally, the last channel that we consider is what we call long term effects or spillover effects. And this is the idea that, you know, any of the previous effects that I mentioned, the income effects, the incentive effects, the Medicaid effect, in addition to having short term effects immediately after somebody is removed from SSI at 18, that could also lead to long term effects on criminal justice involvement.

**Manasi** [00:12:31] So it could be that because of this initial increase or decrease in criminal justice involvement, you now develop some human capital in the criminal activity in which you're engaging. It could be that you now have a criminal record, and so that prevents you from getting a job and so you turn to criminal activity again to get by. And so there are some reasons to believe that these shorter term effects, like an income effect or incentive effect, could lead to more long term persistent effects. And in practice, that's what we're going to find. We're going to find that these effects are very persistent.

**Jennifer** [00:13:15] So this is the first paper on SSI and crime, but we there are some other papers on the effects of public benefits on criminal behavior. What did we learn from those other previous studies?

[00:13:25] I should say here that my my coauthor, Mike Mueller Smith, is very much the crime expert between us, so I feel slightly unqualified, but I can tell you what I've learned. So what I've learned in terms of the effect of the public assistance programs on criminal justice outcomes, there's quite a bit of work on the effect of in-kind programs on criminal involvement. So things like food stamps, public housing, summer jobs, Medicaid, preschool and in general papers on those programs find reductions in criminal activity. I think there's less evidence on the effect of cash benefits, especially in the US. So some some papers are, for example, Crystal Yang, finds less recidivism among ex-offenders as a result of public assistance. There there's a paper by a Palmer, Phillips and Sullivan that finds that one time charitable assistance reduces violent crime. As I mentioned before, I think one of the things we're going to contribute to this literature is evidence on the persistence of criminal effects.

**Manasi** [00:14:34] So because of when the reform that we're looking at happened and the nature of our data, we can look out to decades after these individuals have either been removed or got to stay on SSI. And we can see that the effects on criminal justice outcomes is very consistent. So even even 20 years later, we're seeing effects.

**Jennifer** [00:14:57] Yeah, I agree. Those results are really striking. Okay. So we have some evidence in this area, but not a lot. And this is definitely contributing to what I think of as a thin literature. So why don't we know more than we do? What were the main hurdles that you and Mike had to overcome when you were thinking about measuring the causal effects of a policy like SSI?

**Manasi** [00:15:15] Yeah, so I think kind of as usual with this kind of research, there are both data challenges and challenges of identifying the causal effect of SSI on outcomes. And so in terms of data, the real challenge is linking information about SSI receipt to criminal justice outcomes at the individual level. We have a lot of papers on the effect of disability benefits, on labor market outcomes, and that's not necessarily because labor market outcomes are the most important outcome that economists or social scientists are

interested in, but it is the one outcome that's easily observable in administrative data. And so we have a lot of evidence on the effects of these programs on labor market outcomes, but much less evidence on other equally important outcomes like people's health or their well-being or their criminal justice involvement. And this is where Mike and I saw an opportunity to link the data that he's collected at CJARS to SSI records and so that's what's allowing us to look at these effects on criminal justice involvement is that we were able to emerge for the first time these two completely separate data sources.

**Manasi** [00:16:32] And then with identification the challenges we were talking about before is that it's just the classic correlation versus causation. The SSRI is intended to serve children who are very disadvantaged, who have disabilities, and who grow up with very few resources. And so it really shouldn't surprise us that on average these children have poor outcomes in adulthood. But in some ways, it's a sign that society is doing a good job of finding disadvantaged children, that we see them on average having poorer outcomes and what we really need is variation in who gets SSI. So ideally we want two people who are exactly the same, but one gets SSI and then the other doesn't for essentially random reasons. And that's really the only way that we will be able to isolate the causal effect of SSI from just the correlation on average, children who receive SSI have worse outcomes than children who do not.

**Jennifer** [00:17:33] Okay. So as I mentioned before, you used this 1996 policy change which established a strict eligibility review for SSI recipients when they turned 18. So how do you use that change as a natural experiment to get this degree of randomness you were just talking about that allows you to measure the causal effect of SSI benefits?

**Manasi** [00:17:53] Right. So as part of that 1996 welfare reform law, as I mentioned before, Social Security was required to reevaluate children who had turned 18 based on the adult criteria. So as we talked about before, right, the definition of disability changes between childhood and adulthood from kind of age appropriate activity to can you work as an adult. And so what happened as a result of welfare reform is that Social Security now had to reevaluate all of the children who received SSI benefits when they turned 18.

**Manasi** [00:18:29] Based on these kind of stricter adult criteria and so in the previous paper on labor market outcomes, what I discovered in looking at the data was that it was very clear how Social Security was implementing this change. They were implementing it by using August 22nd, 1996, as a cutoff for the 18th birthday. So basically any child who had an 18th birthday after August 22nd, 1996, was subject to the new regime where they had to be reevaluated under the adult standard for SSI. Whereas children who had an 18th birthday before August 22nd, 1996, for the most part were not reevaluated. They were sort of grandfathered onto the adult SSI program. And so this is going to create a sharp cutoff, what we call regression discontinuity, where basically kids on either side of that cutoff would have an 18th birthday before or after August 22nd, 1996, which is the date that welfare reform was implemented, are similar, very similar. The only difference between them is that the kids who had an 18th birthday after the cutoff are going to get this medical review and as a result are going to be more likely to be removed from SSI when they turn 18.

**Manasi** [00:19:55] And that is what's going to allow us to identify the causal effect of getting SSI benefits in young adulthood that we have two groups that are essentially the same and for arbitrary reasons, the group that's on the right hand side of that cutoff who have an 18th birthday after August 22nd, 1996, they get reevaluated, many of them get taken off, whereas the kids on the left hand side of that cutoff, for the most part, don't get a

review and don't get taken off. So that's the change that's going to allow us to estimate this causal effect.

**Jennifer** [00:20:29] Yeah and the strategies often are very visual ones it's always a little challenging to talk about in a podcast.

**Manasi** [00:20:34] Right.

**Jennifer** [00:20:34] But it lends itself to graphs where you have this like, you know, if birthdays on the x axis, you have this like sudden just drop in the likelihood that people have or are on SSI as adults. And if that big drop matters, if that big difference in SSI receipt matters, then we should see a similar jump or drop in criminal behavior. That's kind of what we're looking for in the graphs.

**Manasi** [00:20:58] Exactly.

**Jennifer** [00:20:59] And you, of course, have all those beautiful graphs in your papers so people should go look for them if they want to see them. Okay. And so tell us more about this very cool data that you have.

**Manasi** [00:21:09] Yeah. So we use Social Security administrative records linked to records from the Criminal Justice Administrative Records system, which is the data that my coauthor Mike Mueller Smith has collected and made available to many researchers to use to study questions like this. And so we have criminal justice records, including criminal charges and incarceration records from about 20 states. And we're able to link that to the Social Security data using full name, date of birth and state. And so we can do a pretty good job with full name, date of birth and state. And what we get obviously from the Social Security records is that we know who received SSI in particular, who was on either side of that discontinuity that we were just talking about and who ended up being removed from SSI as a result of this age 18 medical review. We also see a lot of demographic information in the Social Security data, so we can see things like sex, race, parent earnings, family structure, do you live with a single parent or two parents or no parent? For example, if you were in foster care, we see things like the type of disability, how long someone has been on SSI.

**Manasi** [00:22:39] The other thing that we get from the Social Security data is what I looked at in my previous paper, which is earnings and consequently employment. So we see annual earnings for all of these individuals. And a really nice thing about the earnings data is that you don't have to have stayed on SSI for us to be able to observe your earnings because we're linking the earnings data just using personal identification numbers that we can see employment and earnings for everybody who received SSI at one time who are in our sample. And so we're going to be able to look at kind of the joint outcome of employment and criminal justice employment. So from the Social Security data we get, the earnings and employment, and then from the CJARS data, we get criminal charges and incarceration. And one of the I think most compelling features about the CJARS data is that they have done an enormous amount of work to classify types of criminal charges. And so we'll be able to see not just did you have a criminal charge, but what specific type of criminal charge was it theft? Was it burglary? Was it a violent crime, that sort of thing? And that's going to allow us to think about mechanisms.

**Jennifer** [00:23:57] Yeah, we have talked on this show before about the CJARS data. I am a big fan. It's a huge public service that Mike has done making those data available. I will

post a link also in the show notes to the episode where he was on, just kind of talking about what that data system is and has more information for researchers if they want access to it because it is out in the world now.

**Jennifer** [00:24:17] Okay. So the outcome measures you're interested in are charges and incarceration, is that right?

**Manasi** [00:24:23] That's right. Yeah. So we were interested in charges of incarceration as well as, as I mentioned, earnings and employment to see at the individual level, how do people respond? Do people respond with criminal justice involvement? Do they respond with work and a response from work? Do they respond with both? And then we're also, as I mentioned, going to look at the specific types of charges.

**Jennifer** [00:24:46] Great. Okay. So since this is the first time researchers have been able to link data like this, even the summary statistics in this paper are fascinating. So what does the SSI recipient population look like?

**Manasi** [00:24:58] Yeah, absolutely. So one thing I should say before I get into specific numbers is that we should remember that this is the population that was receiving SSI in 1996 and there have been some changes to that population since in terms of the composition of types of disabilities as well as services that are available for children who receive SSI. So I do just want to put that caveat out there that the population is, I think in general looked quite similar in 1996 compared to today, but they're not going to be identical. So the stats I'm going to give you are for the sample that's in the paper, which is the in the sample from 1996. And so what we see in the data is that the vast majority of children who were receiving SSI before their 18th birthday have a mental condition. So about 70% have a mental condition. Some of that is intellectual disability, but most of that is other mental conditions. Things like ADHD, development or speech delay, autism spectrum disorder and the other 30% have physical conditions of various types.

**Manasi** [00:26:09] And we know that about one half of them are living with a single mother. Another 15% don't have a parent on the record at all. So that might be because for example they're in foster care or have some other living arrangements, as we know, just from the fact that the program is means tested these families are all low income average parent earnings are around \$10,000 or \$12,000 annually. And as you said, you know, one of the most exciting things to me about this paper is that this is the first time that SSI records have been merged to administrative criminal records. And so we can provide some just descriptive stats on criminal justice involvement for this population for the first time. And so what we find when we merge a large number of cohorts is that 30 to 40% of the population is involved in the criminal justice system in some form in adulthood.

**Manasi** [00:27:09] And we can see them up to up to they're about 40 years old, so 30 to 40% are ever involved in the criminal justice system. And in terms of which groups are more involved, that is going to be similar to the general population in the sense that we're going to see more involvement for young people who have who grew up in a with a single parent or no parent whose parents had low earnings when they were children, higher involvement among black youth compared to white youths, higher involvement among men versus women and higher involvement among youth with this kind of other mental condition, some mental conditions other than intellectual disability compared to either physical conditions or intellectual disabilities. But the other thing that we find is that criminal justice involvement is really high for everyone, right, for all of these groups.

**Manasi** [00:28:10] So even groups that tend to be tend to get less attention in the crime research because in general, their criminal justice involvement is low. For example, women, women do have lower involvement in the SSI population than men, but even for women, about 20% of them, 20% of women who received SSI as a child are involved in the criminal justice system. So 20% is still pretty high involvement rate and so one of the takeaways from these descriptive statistics is that it's going to be meaningful to look at criminal justice effects of SSI removal for all of these groups, even the groups that we don't traditionally associate with being involved in the criminal justice system. And in fact, we're going to find that the effects of SSI removal on criminal justice involvement are larger, much larger for women than they are for men.

**Jennifer** [00:29:08] And if I'm recalling correctly, you don't have access to juvenile justice data in the CJARS data. So those numbers are just adult system contact, which means that it could be even higher if some if some folks were involved in the juvenile justice system as teens, but then weren't arrested or charged again as adults. Is that right?

**Manasi** [00:29:26] That's right. And that's a that's a really good point that I mentioned earlier, a paper by Hemmter, Kauff and Wittenburg in which they're using self-reported arrest history and looking at adolescents who get SSI. And for this population of adolescents getting SSI who have mental and behavioral conditions and it was more around 30% of them self-reported having been arrested. And so you are absolutely right that it's very likely that a lot of these young people have been involved in the juvenile justice system. That's not something we're going to observe. We're only going to observe charges that are happening as adults. So there it could be under 18, but charged as an adult for any charges that happen when they are actually in adult.

**Jennifer** [00:30:15] Okay. So for researchers listening, they might be wondering who the compliers are in this analysis. So so we're thinking about who your results are going to be applicable to. We want to know in which types of people are affected by the policy. That's going to tell us who the players are. So which types of recipients are removed from SSI at age 18?

**Manasi** [00:30:36] Yeah, that's a really good question. Right. And really important for interpreting the results because the variation that we're using here is who is removed from SSI as a result of a medical review and so there are going to be some young adults who are unaffected by this review. Right their condition is so severe that they wouldn't be removed even if they got a report. Right. And so our results are not going to reflect effects of SSI removal for those individuals who would just never be removed from SSI because of the nature of their medical condition. And so when we think about who is being affected by this variation, we should be thinking about people who might be removed as a result of the review, because the Social Security Administration decided that they are able to earn a living in adulthood, and that's disproportionately going to be children who have mental and behavioral conditions other than intellectual disabilities. So especially conditions like ADHD, anxiety disorders, personality disorders, affective disorders, autism spectrum disorders. There are some types of physical conditions that are more likely to be removed than the representative population. So children who have asthma as well as certain types of cancer and who might be in remission from that cancer, are going to be disproportionately represented in the population of children that were removed as a result of this review.

**Manasi** [00:32:12] In terms of other demographics, the compliant population is more or less representative on things like sex, race, family structure. So men and black youth are



slightly more likely to be removed than women and white youth, but they're more representative on those characteristics than they are on the types of conditions. So you should really think about the types of conditions as where this selection is happening, that this is disproportionately going to affect the kids with mental and behavioral conditions.

**Jennifer** [00:32:48] Okay, so let's get into the results. What are the effects of SSI removal at age 18 on those recipients? Future criminal justice contact?

[00:32:57] Yeah, so we find sort of surprisingly large effects. We think of SSI removal on adult involvement in the criminal justice system. So we see about a 30% increase in the total number of criminal charges in adulthood. And we find that those increase in charges is really concentrated in what we're going to call income generating charges. So we defined six charge types as activities that are primarily intended to be income generating. So that would be things like theft, burglary, robbery, fraud or forgery, prostitution, drug distribution and for those income generating charges, we see a 60% increase in the number of criminal charges. So most of the increase in criminal charges is coming from these income generating charge a very small fraction is coming from non income generating charges like violent crime. So there's very little increase in violent crime. It's mostly concentrated in these charges for activities that are intended to generate income. And as a result of the increase in charges, we also see a large increase in the likelihood of incarceration. So when we look at the annual likelihood, meaning the likelihood of being incarcerated in any given year, we see a 60% increase in the likelihood of incarceration.

**Manasi** [00:34:32] And so, as SSI removal is leading to more involvement in the criminal justice system, especially through these income generating charges and then that is leading to a large increase in the likelihood of incarceration. And as we were talking about before, these effects are very persistent. So we can look this reform happened in 1996. We can look more than 20 years later. And we still see elevated effects on criminal charges and incarceration for youth who have been removed from SSI versus youth who were not removed from SSI. So these are quite large and persistent effects.

**Jennifer** [00:35:12] Do the effects vary across groups in any interesting ways?

**Manasi** [00:35:16] Yeah. So I think this was one of the most interesting findings, as you know, going back to when we were talking about the different subgroups and how just how involved they are at baseline. We see large effects for both men and women, but actually larger effects for for women than for men and their effects on different types of charges. So for men, the increase in charges is mostly coming from theft, burglary. There are some drugs increase, some drug distribution. There's a little bit of an increase in violent crime, but not very much. For women we also see large increases in the charges, but we also for women, unlike men, see large increases in fraud and forgery charges. So that's going to be things like identity theft and also large increases in prostitution charges and we don't see any increase in violent crime for women. So both men and women are responding to the CSI loss by engaging in these illicit income generating activities. But the types of activities are quite different for men and women and in particular for women. We see large increases in things like identity theft and prostitution, and we think that was one of the most interesting results that sort of confirms some anecdotal information.

**Manasi** [00:36:44] So Matt Desmond has an excellent book that I'm sure you're aware of, "Evicted," in which he talks about eviction in general, but he also talked specifically about the SSI population, and he follows one young woman who lost SSI as a result of her age 18 review and she doesn't realize that she was going to lose this income when she turned

18. And it was kind of a surprise to her. And she has to figure out how to get by without this SSI income. And so in the book he reports that she turns to prostitution as a way to recover the SSI income that we that she's lost. And we're able to confirm that empirically using this data that we see large increases in prostitution charges when young women are removed from SSI.

**Manasi** [00:37:41] Yeah, I agree. That's super interesting and striking. Okay. Tell us a little bit more about how these effects change over time, if at all. So how does how does SSI removal at age 18 affect benefit receipts and criminal justice outcomes in the shorter run? In the longer run?

**Manasi** [00:37:57] Right. So I think one of the most striking outcomes to us was the persistence of the effects of SSI removal. So we see initial increases in criminal justice involvement immediately after these young adults are removed from SSI, but I think what's most most striking is how persistent the effects are. So it's not just that we see an increase in criminal charges and incarceration in the years immediately following SSI removal, but we can look in more than two decades later and we still see an increase in criminal charges and incarceration. And one thing that's interesting is that all of these kids turn 18 by the nature of the empirical design, they all turn 18 in 1996.

**Manasi** [00:38:47] And so when we look at their outcomes in adulthood, their age is going to be correlated with calendar time, right? So when they are in their early thirties, that's going to be approximately when the Great Recession hits. And we can see in the data what appears to be an increase in the effect of SSI removal, interacting with the effects of the Great Recession. So what we see when we look at kind of year by year is that when these young adults are just removed, so in their early twenties we see a pretty large increase in criminal charges for criminal justice involvement. It starts to taper off when they're in their later twenties, but once the Great Recession hits in their early thirties, we again see a bump in criminal justice involvement. And some of that is from individuals who are already involved in the criminal justice system.

**Manasi** [00:39:45] Some of it is from individuals who were newly involved in the criminal justice system who might be turning to illicit activity to get by during the Great Recession. So one of the kind of interesting things is that the effect of SSI removal appears to be exacerbated by downturns in the economy, and we can see that in part because we have this correlation between age and calendar time that we can see sort of a tapering off in the early twenties. But assuming that there isn't something going on, people are in their early thirties, it appears to be an effect of the Great Recession that's interacting with having been removed from SSI.

**Jennifer** [00:40:28] So at first glance. I think the increasing kind of behavior that you're documenting here is somewhat surprising, given your earlier work showing that removing individuals from SSI at age 18 increase their employment in the criminal justice conversation. We often like there's so much emphasis put on increasing employment for people at risk of criminal behavior that we sort of expect that employment in criminal behavior will always go in opposite directions. And so some of which you just talked about, but you've got you and Mike do a bunch of work in the paper to understand this relationship and what's going on so maybe we just talk a little bit more about that and what you think of as the main takeaways as we think about why these two things are are actually moving together rather than in opposite directions.

**Manasi** [00:41:13] Yeah, we were really excited that we could speak to this question. And the reason that we can speak to this question is that we have both the earnings data from Social Security as well as the the crime records from CJARS. And so because we can link those at an individual level, we can see both people's formal work history as well as their criminal justice involvement. And so I think the way that we kind of reconcile these findings is that it is true, as I found in my previous paper, that some of these young adults respond to SSRI removal by increasing their formal work, their formal employment. Right. So there was an increase from about 10% to 14% of youth who are working in the formal labor market, you know, kind of \$15,000 self self-sufficiency levels. But what we find in this paper in the more recent paper is that that employment response is really second order to the fraction, fraction of youth who are responding with more involvement in the criminal justice system. And so if we think about the, you know, likelihood of having an income generating criminal charge, for example, right, that's going from 24% in the control group to about 33% in the treatment group.

**Manasi** [00:42:39] And so when you compare the response to SSRI removal in terms of criminal justice activity, so the response in terms of formal employment, what we conclude is that even though there is a small fraction of youth responding with more formal employment, a much larger fraction of youths are responding by being more involved in the criminal justice system. And again, nice feature about the data is that we can look at an individual level to see is it the same people who are doing both more work and more and are more involved in the criminal justice system? Right. That might be possible if, for example, some people just respond more to being removed from SSI in various ways. So they might respond on both margins. And so we can look to see are people responding on a one margin? Are they responding on both margins? And what we find is that for the most part, very few people are responding on both margins. Essentially, people are either responding by increasing their formal employment or they're responding by increasing their involvement in the criminal justice system.

**Manasi** [00:43:45] There are very, very few people who are responding with both more formal work and more involvement and in the criminal justice system. And so one kind of interesting thing that we can do in the paper is that we can look at the early period when they were first removed from SSI versus the later period. So several couple of decades after they were removed from SSI. And what we see mostly is a story of specialization, as I mentioned, that the most common response to SSI removal is to be more involved in the criminal justice system and then to continue that involvement. The second most likely response is to be to do more work in the formal labor market and then to continue doing work in the formal labor market.

**Manasi** [00:44:35] There are some people who increase their formal work early on and then later are involved in the criminal justice system. So it seems like they might be trying out work, maybe it doesn't work for them and then they are more involved in the criminal justice system. Maybe they're trying to illicit activity to get by. But one interesting thing is that there's basically nobody who first turns to illicit criminal activity and then does work. So it seems like the crime response is a one way street where if you were involved, if you respond to SSI removal with a criminal response early on, it is going to lead to more crime in the future. Some people who respond with work early on and then turn to crime, but basically nobody responds with crime early on is turning to formal work. So this is kind of a situation where we. We might see crime as an absorbing state where, you know, once you're involved, it's really hard to get out of that involvement and go back to formal employment or go to for one.

**Jennifer** [00:45:41] Yeah. As you said before, you and Mike do a bunch in this paper thinking through the various mechanisms, the channels through which this effect could be occurring, and you step through each one, one by one. I was particularly interested in the potential effect of Medicaid access here, since SSI eligibility typically qualifies you for Medicaid. And we now do have this other evidence that Medicaid access reduces crime, particularly through its access to medication for mental illness. I had Elisa Jacome on the show a while back to talk about her paper. I'll link that the show notes to. So you guys look at this specifically. So how do you test whether health care access appears to be driving your results or contributing to them in some way? And what do you find in your setting?

**Manasi** [00:46:24] Yeah, we were interested in this question, especially because of Elisa's finding.

[00:46:28] Right. At least has a striking finding about the effect of Medicaid on criminal justice involvement, especially among young people who have mental health conditions. And she has some nice evidence showing this effect. And so we were especially interested in looking at the Medicaid scandal, in writing our paper. So we did a couple of things to look at the Medicaid effects. You know, I should I should start by saying, as we were talking about before, that this is a bundle, right. That SSI comes with cash benefits. So on the order of \$10,000 a year, as well as Medicaid eligibility. And so it's going to be hard to disentangle the effects of the cash from the effects of Medicaid. But we're going to try to do that in a couple of ways. The first is that we're going to use variation across states and years in Medicaid expansions to low income adults. So we all know about the Affordable Care Act and how Medicaid was expanded to low income adults in many states as a result of the Affordable Care Act. But even before the Affordable Care Act, some states had decided to expand their Medicaid programs to low income adults.

**Manasi** [00:47:44] And so we can use those expansions as variation in the availability of Medicaid to low income adults. And the reason this is important, right, is that if you're removed from SSI at the age of 18, you're going to lose your cash benefits. You're also going to lose your Medicaid eligibility through SSI. If you live in a state where Medicaid has been expanded to the general low income adult population. You might be able to keep your SSI and you would just lose the cash benefits. But if you live in a state or at a time when Medicaid has not been expanded to include low income adults, you're going to lose both your cash and your Medicaid.

**Manasi** [00:48:25] And so we're going to use variation in across states in years and in Medicaid expansions to low income adults. The other thing that we do is we look at variation in the availability of federal health centers. So these federal health centers have been shown in other research to improve outcomes and so we're going to be able to see, is there a federal health center in your county, in your vicinity that you might be able to go to even if you don't have access to Medicaid through SSI? So essentially going to look at heterogeneity in the effects of SSI removal by Medicaid availability and then also by the availability of these federal health centers. And we don't find an effect of either Medicaid availability or federal health centers. If anything, the crime response is higher in states in years when Medicaid and federal health centers are available, but those effects are not significant. But they certainly do not go in the direction that we might expect where having Medicaid available or having the sort of health centers available dampens the effect of SSI removal on criminal justice. And so that was sort of surprising to us that we didn't see strong evidence for a medicaid channel in our paper.

**Manasi** [00:49:51] The other thing that we look at is effects by type of condition. So we might think that Medicaid has the largest effects on youth with mental health conditions, that Medicaid is paying for either medications or some other kind of treatment that makes these conditions more manageable. And we can certainly debate whether that's true. It's possible, right, for especially for certain types of physical conditions that Medicaid looking for a treatment. So we could we could definitely discuss whether that is an appropriate assumption. But if we think that Medicaid should have the largest effects on youth with mental health conditions, if.

[00:50:29] Medicaid channel is especially important. We would expect to see the largest effects for SSI removal for youth with mental health conditions relative to physical conditions. And what we find instead is actually the opposite. We see the largest effects of SSI removal on youth with physical conditions compared to mental conditions. And so that suggests to us again that it's mostly the cash that is driving these results rather than the access to Medicaid. Certainly those those two empirical strategies approaches are not dispositive. We can't definitively separate the effect of the cash from the effect of Medicaid, but we think they are suggestive that Medicaid is not playing as big of a role here as the cash benefits are.

**Jennifer** [00:51:21] Yeah, that's super interesting. All right. So finally, you do a cost benefit analysis that compares the cost savings from reducing SSI eligibility with the increased social social costs from higher criminal activity. So what was the punch line of that analysis?

[00:51:36] Yeah, the punch line is and this is, I think was surprising to us that the government is breaking even on if we want to think about this as an investment in removing young people from SSI. So it is saving money because when these young people are removed from SSI, the government spends less on SSI benefits, it spends less on Medicaid benefits, and it also gets a small amount of tax revenue from the young people who were removed and who respond to being removed by working more. So basically the government is saving some money in terms of SSI, Medicaid, getting a little bit more in tax revenue. But on the flip side, as a result of SSI removal and the increase in criminal justice involvement, the government is spending a lot more on enforcement and especially on incarceration.

**Manasi** [00:52:32] Incarceration is just so expensive and we find large effects of this paper on incarceration. And so what's happening is that even though the government is saving money by spending less on SSI and Medicaid, it is spending more money on enforcement and incarceration and as a result is basically breaking even. And that doesn't even include a cost to the victims, which, you know, even under conservative assumptions are very large. And it doesn't consider, you know, the costs to the young people themselves for being removed and turning to criminal activity.

**Jennifer** [00:53:15] So what are the policy implications of all of this? What should policymakers and practitioners take away from your results?

**Manasi** [00:53:21] Yeah, I mean, when we talk about policy implications, we definitely want to be careful to say that the SSI population is not the general population. Right. SSI again is targeted at a specific group of very disadvantaged children who have disabilities and who grow up near poverty or in poverty. And so, you know, that's important to say upfront. Even so, we think that there are some there are some policy implications, in part because of what we were talking about earlier with the compliance. R Right. The compilers

for this variation are going to be more similar to the general population than the average SSI recipient. They're going to be young people who are kind of on the margin between being able to work and not being able to work. You know, many of them have conditions that are common in the general population, even if they're not as severe in the general population conditions like ADHD. And our work suggests that welfare or welfare benefits have large effects on criminal justice involvement and that those effects are very persistent. When we learn about welfare benefits and in economics class, we generally learn about income effects in the context of welfare benefits, reduce employment through income effects and possibly through incentive effects.

[00:54:54] The idea being that as people, when people receive income from welfare programs, they are less likely to work because they they don't need the income as much. Right. What we find in this paper is that the more salient income effect here is actually criminal justice involvement, that when individuals receive welfare benefits, they might work less, but they are also much less involved in the criminal justice system. They're much less likely to turn to the illicit. Income generating activities like theft, burglary, prostitution, fraud, forgery in order to generate income. And so the effect of welfare benefits may be to discourage work to some extent. But at least in this context, what we find is that that discouragement of work effect is second order relative to the discouragement of criminal activity.

**Jennifer** [00:55:54] So as I was reading this, it seemed like one takeaway could be we should scale back this eligibility review or be much more lenient in it at age 18. But you also mentioned that the eligibility rules have changed a bit since 1996. So I'm curious if they've changed enough that that's not the take away. What would you advise someone who's thinking, well, we should just be we should be much more lenient in these in these medical reviews.

**Manasi** [00:56:19] Yeah, it's a great question. Right. What what can we learn from this policy change about what's happening right now? And it is important to say it's not so much that the eligibility rules have changed, is that the composition of types of conditions has changed just because the the Supreme Court decision was in 1990. This reform that we're using is in 1996. And so, you know, the composition has changed just as a result of more mental and behavioral conditions, qualifying from that 1990 decision that have now been kind of fully realized in the child population.

**Manasi** [00:56:54] Some things that have changed are resources that are available to children who receive SSI. So there has been federal legislation in the last decade that requires states to spend a certain amount of vocational rehabilitation funds on young people with disabilities. So there has been, you know, somewhat more attention paid to the outcomes of these young people. You know, my sense is that the first order is still that these are young people who have disabilities and who grow up with a lot of disadvantages. Right. It's a very means tested program. They may not go to great schools. They may not have the skills to succeed in the labor market. And so I still think that there is a lot that we can learn from this paper, even though it happened, even though the reform happened in 1996 relative to today, keeping in mind that some of the context may have changed. But my sense is that to first order these effects are likely pretty similar today relative to what they were in 1996.

**Jennifer** [00:58:00] Got it. Are there any other papers related to this topic that have come out since you all first started working on your study?

**Manasi** [00:58:05] Well, we talked earlier about Elisa's excellent paper on Medicaid, and that paper really pushed us to think more in our context about the Medicaid channel, that Medicaid the loss of Medicaid at 18 could be affecting involvement in the criminal justice system. And in our paper, we don't find a lot of evidence for the Medicaid scandal. We we find more evidence for the direct cash effect. But I think that's a very important paper that's going to affect our thinking about access to these programs, especially for young people with disabilities.

**Jennifer** [00:58:44] And what's the research frontier? What are the next big questions in this area that you and others will be thinking about going forward?

**Manasi** [00:58:50] Yeah.

**Manasi** [00:58:51] So, you know, I think in the SSI space, I think an outstanding question from the previous paper as well as this recent paper with Mike is that it's still the case. You know, we do find that more of these young people are responding with crime than are responding with formal employment. But it's still the case that most most of these young people don't seem to be responding on either margin. Some of that might be an observability problem that we can only observe charges. Right. And so we can't see actual criminal involvement. And so it might be that there is more of a response on criminal involvement, but we always see the involvement that results in criminal charges.

**Manasi** [00:59:34] But it still seems to be the case that we don't know how a lot of these young people are getting by. How are they supporting themselves after they lose SSI? Is it that they are working but they're working off the books? Is that there? Is it that they're being supported by family members and friends? And then even in terms of the crime response, I think an important question is to what extent is this their living right? Are they making a living off of this criminal activity or is it something that they're engaging in once in a while because they're really in dire straits? I think we just don't know the answer to that question again, because what we observe in this paper and really in most papers on on crime is we observe charges and incarceration. We don't observe all of the times that somebody engages in criminal activity. And so it's a little hard to know, is this person making a living out of this activity or is it something that they turn to just once in a while. And so I think that's a pretty important question.

**Manasi** [01:00:39] And then also, again, try to disentangle these channels of income versus Medicaid versus incentive effects. We try to do that to some extent in this paper, but I think there's more to be done trying to isolate each of those effects.

**Manasi** [01:00:56] My guest today is the Manasi Deshpande from the University of Chicago. Manasi, thank you so much for talking with me.

**Manasi** [01:01:02] Thank you for having me. It's been great to discuss this work and think a bit more about how it could affect policy going forward.

**Manasi** [01:01:15] You can find links to all the research we discussed today on our website- [probablecausation.com](http://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 patrons, subscribers and other contributors. Probable causation is produced by Doleac Initiatives, a 501(c)3 nonprofit, so all contributions are tax deductible. If you enjoy the podcast, please consider supporting us via Patreon or with a one time donation on our website. Please also

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