

Probable Causation Episode 87: Emily Nix

Jennifer [00:00:08] Hello and welcome to Probable Causation and 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. My guest this week is Emily Nix. Emily is an assistant professor of finance and business economics at the University of Southern California's Marshall School of Business. Emily, welcome to the show.

Emily [00:00:29] Thank you so much for having me. I've been a fan of the show since its inception, so it's fabulous to be on love listening when I run, so.

Jennifer [00:00:36] Awesome. Well, today we're going to talk about your research on how violence between work colleagues affects perpetrators of victims and firms. But before we get into that, could you tell us about your research expertise and how you became interested in this topic?

Emily [00:00:50] So I am a labor economist, so I'm very broadly interested in all sorts of things related to people's experiences in the workforce and a good chunk of my research also looks at gender income gaps and so what sort of things determines women's experiences in the workforce. And so, of course, harassment and violence against women at work might be important and making women's work experiences potentially very different than men's. And the paper I'm going to talk about today, I became particularly interested in it at the height of the MeToo movement. So I'm sure everyone remembers this this time period back in late 2017, but I just remember sitting down with female friends and female family members and talking about our own experiences and it was just astonishing how many of us had experienced harassment and even groping and assaults at work. So I just remember people talking about these stories and how it impacted our careers and how it impacts, you know, the women around these careers and some extreme events people went through in some less extreme events people went through.

Jennifer [00:01:50] But it was just crazy to me how little research there was on this topic at the time. And it turns out it's very hard to research this topic, which helps explain why there wasn't as much research on it. But as an economist, my obvious, you know, point of view was if we could have better, more rigorous research on this topic, understanding how costly these events might be, understanding broader impacts on the firm, we need that sort of understanding in order to really move forward on this phenomenon in order to address it. So I got started on really interested in it during this time period when I realized that everyone around me is experiencing these events, but of course, ambitious research too often takes a lot of time, and so it would take many, many, many years before I figure out we as a team figured out a way to get at this question and they would take more years still before we can get the data together to answer this question in a rigorous way and so I had a dream team of Abi Adams-Prassl, Kristiina Huttenen, and Ning Zhang to help me kind of go at this paper and go out this question and finally be able to answer it a number of years later.

Jennifer [00:02:48] Your paper is titled "Violence Against Women at Work" and as you just mentioned, it's coauthored with Abi Adams-Prassl, Kristiina Huttenen and Ning Zhang. So when you say violence at work, what types of incidents do you have in mind in this paper?

Emily [00:03:01] So I think let me start by when when I was approaching this issue, I was thinking of violence at work. We can think about, say, the MeToo movement. There's a

whole range of things that can happen, particularly to women at work and you can think of low level harassment, which is extraordinarily common. We can talk about some of those statistics in a bit, all the way down to more serious incidences. So these more serious incidences are what we're going to focus on in this paper, given the data we were able to put together. And so here's what you should be thinking about.

[00:03:27] If you think of, say, the MeToo movement is you can think about, for example, Ambra Gutierrez and so she had a horrible groping incidents with Harvey Weinstein. She actually did report this incident to police in 2015, but of course, they had a very small investigation, didn't decided not to pursue it. Now, I was you know, Harvey Weinstein was very much guilty of these events, but they just declined to pursue it any further. But that's the sort of event you should think of us being able to study in this paper, these kind of groping assaults, these more serious events that are going to end up being reported to police. And that's what we'll focus on this paper right. Now I will say these these more minor forms of harassment are just rampant and very prevalent when you look at survey data. Unfortunately, we can't study those, but I do think they're super important. And there are some a few other papers that I really like that are looking at those more minor cases.

Jennifer [00:04:14] Yeah, major, major data constraints here that we will talk about. So despite these data constraints, what do we know about how common these types of incidents are and about how often they reported to police?

Emily [00:04:27] So I think going into this paper, I you know, we're coming off of the MeToo movement, so I think it should make people aware that these are important incidences, but it turned out for me when I really started digging into the data, I think these events are much more common than people realize and effect a lot more people than people realize. So, for example, let me just go straight to our data and then I'll talk a little more broadly. So in our data we're going to be looking in Finland and then because of where we could get the super unique data and what we find in our data is we find that survey evidence suggests that 10% of say all assaults are reported to police. And so if we take our police reports very seriously and if we multiply that member by ten, what it looks like when we take that to the labor force participation in Finland when we look at the number of people in the labor force, it looks like approximately 4% of people are involved in these workplace violence incidences as either a perpetrator, a victim, and this is both male and female and male on male violence.

Emily [00:05:21] So this is all sorts of violence incidences between two colleagues. So that 4% number is already quite large to my mind, or was larger than I expected going in, but what I would say is we're also going to show that there are these really important spillovers on other people in the workplace, so other workers. And so that 4% doesn't even include the potential spillover to other workers. So this is a real salient, important and prolific labor market issue that affects a lot of people. We haven't had much rigorous research on. Now, I'll also add that unfortunately, I think, you know, we know we've heard a lot in the MeToo movement, which happened in virtually every country and I think this is a phenomenon that affects women disproportionately, but it does also affect men in countries across the world and in industries, all sorts of industries, all sorts of professions.

Emily [00:06:09] But I would also say, especially given the nature of this podcast, that this isn't just an issue that affects other women in other industries. We've had a bit of our own MeToo move in economics, a very serious one that's come to light another round of it in the last few months. And so I think we've seen and if you look at the American Economic Association Climate Survey, we see that a lot of women experience very uncomfortable

and full on inappropriate illegal actions within economics from their colleagues and so we've seen in the past few months that this is an issue that affects women and our own profession. And so I think, you know, at this point, it should be pretty clear, hopefully to most people within our profession and also, you know, more people in general that violence at work is not just a niche issue. It's a really important phenomenon that's really changing people's work experience and it's an issue that women in general seem to grapple with very regularly. And so I think this is a really important issue for us to understand and better address.

Jennifer [00:07:03] Yeah, we were chatting a little bit before we started recording about the econ MeToo movement, and I've been very involved with that, as you know and yeah, it is just it's been heartbreaking. My email inbox has just been full for months with just really terrible stories from colleagues, right? From women in our profession and this is not an econ issue specifically. I think this is really an academia wide issue and as you say, it's it's ultimately just a workplace issue. I think this is you know, it's about power and their power dynamics everywhere. Yes, very important topic. Okay, but also, as you say, just really hard to study and we haven't had that much research evidence. So what had we previously known about the effects of violence against work colleagues on the various people and organizations involved?

Emily [00:07:47] So there has been a really limited literature on this, and it's hard to pinpoint why. I think a big problem was data and we'll talk about a little bit why I think that's so hard it in a few minutes, I'm sure, but I think there's a limited literature and psychology and sociology and a little bit in economics as well. And the issue is a lot of these studies have, you know, the big I think that one of the big roadblocks has been lack of really good data to study this. So a lot of this previous research in sociology and psychology and economics has focused primarily on surveys. And the thing is, this allows you to look a little bit about what happens to victims, but it doesn't allow you to really look at perpetrators. And like you just mentioned, one thing we're going to focus a lot on in this paper is that relationship between perpetrator and victim.

Emily [00:08:29] If we looked at MeToo, that relationship really seemed to matter. So being attacked by a Harvey Weinstein is particularly problematic if you go through, you know, all the documentation journalists have put forth during the MeToo movement, these men who are in these positions of power, it really was hard for victims to hold them to account, especially individually. And so I think, you know, that to answer that question, you really need to have data on both perpetrators and victims. And a lot of the previous evidence, the previous literature has focused primarily on victims, savored surveys, which gives us a little bit of a taste of what might happen to victims, but usually it's kind of small survey evidence.

Emily [00:09:02] Now, one exception to this one paper that there's other papers as well, but one paper that I really love, that I think we really complement quite nicely is there's a fantastic paper by Johanna Rickne and Olle Folke that came out in the QJE last year. And what they use is they have this really beautiful survey data in Sweden and they link it to administrative data and what they show is it just a number of beautiful but really salient, really powerful descriptive statistics in the first half of the paper. And so, for example, they show that, you know, they talk about how, you know, half of all women are potentially impacted by harassment, including these lower level forms of harassment and they show that if you're in the gender minority of a firm so if you are a male nurse, for example, and nursing tends to be predominately female, you're much more likely to experience harassment as a male nurse than, say, maybe female nurses. If you are, you know, in the

female minority profession, for example, economics are quite male dominated. They show descriptively that women who are in a minority position within a field are much more likely to experience harassment.

Emily [00:10:02] And in second half of this paper, they do this beautiful hypothetical RCT where they do hypothetical wage offers to different workers and they basically solicit how much would you be willing to pay to avoid a manager or a firm where you're going to experience harassment. And they find that people are willing to give up quite a lot of their income to avoid these incidents. So they find workers would give up, victims would give up 10% of hypothetical wages to avoid harassment at work. So just a beautiful paper. I recommend everyone reads it. It's it's a great study with some great facts that we really needed to see. I think we add to this paper because we're able to look at realized actual violence, both like right before or right after what happens. We have information on perpetrators which they weren't able to get through their surveys so we can link the victims and perpetrators and see how the relationship might matter. And then we can also examine a lot of the broader spillovers in the firm, including the role of management, so what managers might be doing when these events happen or what could they do to maybe mitigate the broader impacts of these events.

Jennifer [00:11:01] Okay. So let's get to the challenges that have made this so difficult to get rigorous evidence on. What makes this topic so difficult to study? Is this mostly a data challenge or is it mostly an identification challenge or is it just both of those things?

Emily [00:11:18] So I think the biggest challenge that has really hindered research on this or constrained research on this topic to date is the data challenge. So I think the biggest innovation of our paper is really a data innovation. So I would I would actually place as also as a kind of a methodological innovation and so, you know, as you can imagine, if you go to a firm and you ask them, will you please give me some data on the harassment in your organization because I'd love to see what happens. Firms aren't really very excited to share that data all sorts of liability issues, the lawyers are absolutely telling them, do not do this. This is a terrible, terrible idea despite the need for the research on it.

Jennifer [00:11:51] That's even just the incidents that were reported to the firm that HR dealt with much less the ones that weren't reported.

Emily [00:11:56] Exactly. So I think that makes it really hard. And so that's why we've kind of in the preceding research, dealt with a lot with survey data, which is beautiful, really important because a lot of this is under-reported, something we can talk about later because it's something that is going to be it's not it's going to potentially be an issue with our paper, but we really wanted to have like a broad dataset of lots of incidences where we can then like map out exactly what happens after the incident and exactly who was impacted in a very broad way. And so the idea we had so it took many years to come up with this idea and it took, you know, years to put the data together, but the idea we had is if we could get with police reports, once we get police reports, if we can get police reports for a country then, if we can get unique perpetrator and victim IDs. So think if you're a U.S. person and think Social Security numbers are unique identifying numbers, if you can get these unique numbers and we can link police reports with perpetrator ID and victim ID to the tax records that show us where you're working, then we can see, did you work at the exact same plant so think McDonald's around the corner, not McDonald's franchised. Did you work at the exact same plant at the time of this incident? Were you colleagues right. And so that was the key innovation, because now we can suddenly see every incident

that's reported to police where two colleagues were working together and one of them attacks the other.

Emily [00:13:11] And what I also like about this is if you think of, say, the Harvey Weinstein scenarios and the MeToo movement, he did attack some people in an office space, but he also attacked plenty of people in hotel rooms. And we think of MeToo in economics if you go to the American Economic Association Climate Survey, if you talk to women who have unfortunately been victims of these types of events, a lot of these events happen at conferences. They don't necessarily happen within the four walls of the firm between 9 to 5 and so we're going to see all of those events in our data. So that was a key innovation.

Emily [00:13:40] Now, the downside of this data is that we're not going to see unreported events, so we simply can't see it. We're going to be focusing on police reports. So you should think of this the way we think of this, at least in our papers we think of this as the tip of the iceberg, like we talked about earlier, about 10% of assaults are reported to police overall. So you think of this getting 1/10 of the magnitude of this phenomenon, but what it does allow us to do is very clearly map out what happens after these events to your employment outcomes for victims and perpetrators what is the relationship between victims and perpetrators do in terms of determining how big the impacts are, what happens to the firm and so on and so forth. So I think the key challenge was definitely data and so that was the key one of the biggest innovations of this paper besides you know I think it's just been a really important question.

Emily [00:14:25] Identification is tricky, so I'd love to talk some more with you in maybe a little bit about how we try and overcome that. You're not going to run in an RCT on violence at work. No, no IRB this is why IRB was invented. I know we all have trouble with IRB sometimes, but its to prevent that type of research. So, you know, we're going to we could talk a little more in a bit, I'm sure, about like what we try and do to overcome that, so identification is hard in this paper what I would say if I'm being totally transparent is I we do a lot to make sure we're convinced that our results are true, but we're not going to all do like a quote unquote gold standard RCT style study. So so I'm happy to talk more about how we actually get at it, but, you know, I think the biggest innovation, the biggest challenge in this paper was was the data.

Jennifer [00:15:08] Yeah. And just to kind of walk through a little bit what the main identification concern would be with just like a correlational study is perhaps, you know, you were finding that women who report that they were harassed or assaulted by a work colleague are less likely to be employed or make less money that might not be because they were harassed. It might just be that lower earning women or women who are, you know, on the margins of labor force are more likely to be victims for other reasons. And so what you want to get at is like, what's the causal effect of that violent incident on someone's employment trajectory in this particular case, things like that, right?

Emily [00:15:46] Yeah, precisely. So, yeah, our big concern is like the type of data we have is going to be really helpful for that. So so just like you said, you know, if we just looked at it like if we just had raw survey data, for example, then we said, okay, well, let's sort let's do the average income of women who are assaulted in the average woman, income of men who are assaulted or the average, you know, income of women who are assaulted versus all other women. You might see, for example, that the average earnings of women who are assaulted is much lower. And you might say, oh, maybe that's because of the assault. Well, it turns out one of the first things we do when we have this data is, like

I said, we got this really unique data from Finland and so once we had this data in hand, one of the very first things we did is like, what are the descriptive statistics? And it turns out that women who are assaulted at work make a lot less than their perpetrators, and they're just, you know, they tend to be have slightly lower education, they tend to be younger.

Emily [00:16:33] So if you just looked at correlational evidence, you would you might attribute a lot of that lower earnings to the assault and that would not be accurate, as we show in the paper. So precisely, we're going to like do something, do a number of things to try and tease out that actual causal impact of the assault itself. And technically, we'll get the combination of assault plus reporting, because, you know, they do they do also reported to the police and that's how we see it. And that's what we want to get, is that causal impact and not just, you know, these women make less because women are more likely to be assaulted if they're in a lower position within the firm, which is something we see descriptively.

Jennifer [00:17:06] Yeah. Okay. Let's talk more about this amazing data from Finland. So it has all this detailed information on violence committed against work, colleagues from police reports specifically. So tell us more about this data, what you see about the people involved and maybe a little bit more background on how you got your hands on it because I'm sure people are wondering where this magic data came from.

Emily [00:17:28] Yeah. So fortunately, this is true, I think across a number of Nordic countries, but especially in Finland, there's been a real willingness to engage with researchers to try and answer big, important questions. And so, you know, along with Kristiina Huttunen and we worked for a number of years to work with the courts, the courts across Finland, national court registrar, a number of different players across the country to kind of put together this really unique dataset, linking tax data to police data to court data. And so some of this is, you know, due to legal reasons why data has to be shared within Finland, which is helpful, but I also think to give a lot of props to policymakers within Finland, I think there's been a real willingness to engage with research and try and use that research to to do better, to have better workforce policies, to, you know, do better with more work or better things for workers and so on.

Emily [00:18:15] And so, you know, it was kind of there's there is a limit. So there are some things we have asked for where they've said, no, no, no, this is too far which is completely fair, but, you know, I think the priority here has to be protecting the identity of all of these people involved. And so you should know, everyone listening should know that, you know, they're very, very, very careful about the security of this data. So, for example, I have to travel there to work on the data. You log into a very secure data site. You never have the data on your own computer, for example. So there's an immense amount of security because obviously this is such a sensitive set of data and such sensitive questions and so they're doing everything they need to do to make sure that the privacy of the people involved is protected and that, you know, we're still able to get this good research out while also maintaining privacy and security.

Emily [00:19:02] Yeah. So this data so so that's why probably why it took quite a while to put it together to make sure that everything is done correctly and, you know, securely. But in terms of what this data actually looks like. So what we ended up getting, so the first task is just, you know, at least when you get such new data, I think the first part should be look at the descriptive. So we see is we find over just over 5000 cases and it turns out that 83% of perpetrators are men. It turns out men in general just are more likely to commit crime,

especially these slightly more violent crimes. The vast majority of cases, so well over 60%, are assaults or petty assaults. So, for example, you could think like the groping incident I talked about earlier with Ms. Gutierrez, with Harvey Weinstein and victims are about evenly split between men and women. So majority male assailants victims are evenly split between men and women.

Emily [00:19:48] Now, 17% of perpetrators in the data are women. You might wonder, should we look at them, too? We actually don't in this paper and the reason why is because when we look at women perpetrators, they're often also coded in the police data as a victim. So these are not very clear cut cases of this was a woman who attacked a man or this was a woman who attacked a woman, it's very fuzzy cases. Whereas with the male perpetrated cases, they're almost always perpetrated just by the man or his only code is the perpetrator.

Emily [00:20:16] So these are very clear cut male on female or male on male results. So for the paper, we're going to focus on male perpetrators who either have a male victim or male perpetrators who have a female victim. And the other thing that I think jumped out right at the page two to us is going into this project, I think a very reasonable hypothesis is that, you know, you might think that someone who is victimized at work, you might think that you're going to see a big earnings drop well before the reported violent incident. So let's say if you thought like there were lots of incidences and then they only report the final one once they're totally fed up and they've reached the end of their rope as a victim and so we initially thought we might see this like earnings increasing and then as the abuse starts, maybe earnings starts to decrease. And then finally we see a reported incident. So we see the final incident that that occurs that has been reported to the police.

Emily [00:21:05] That's actually not what we find. So really interestingly, which is going to speak to our empirical strategy later to try and like we talked about earlier, identify these causal impacts what we see in the data is two things. Number one, if we look at both perpetrators and victims, if all we do is look at all of the workers in Finland who have a similar education, gender and age, the earnings before the reported incident. So the earnings before that assault that we see in the police data, the earnings is indistinguishable from other workers in Finland it's identical and it's rising rapidly. So these people are doing well in their careers, rising in terms of an earnings, doing well, in terms of staying employed and so forth, they look indistinguishable for other workers in Finland of the same education, age and gender and then the event happens.

Emily [00:21:47] And as we'll talk about, we see things go really, really bad, really sour, especially for female victims. So that's super interesting like that. I think seeing these means for the first time with this really unique data was just fascinating and kind of changed my perception of how these events might look like. So that's kind of like the initial stuff we saw and then we started looking well. So I'll actually I'll quickly say then we started also looking well then what happens after the event, just descriptively before we even do anything fancy? And what we see is immediately employment just plummets. And for male on male crimes, we see that male employment plummets a lot for the perpetrator, less so for the victim, but then we see something interesting.

Emily [00:22:23] We see this really striking and really sad asymmetry where for male on female crimes, if we just look at raw means. So what's your employment after the event that you're after the event compared to the year before, we see that female victims have a larger drop in employment compared to their male perpetrators and men who attack women have a smaller drop in their employment compared to men who attack men. Now

this is just descriptive. So at this point we're not going to put too too much stock in this, but it started to suggest some really interesting patterns that we then explore more rigorously.

Jennifer [00:22:55] One quick clarifying question what's the time period here that you're studying the data from?

Emily [00:23:00] So we're actually mostly looking pre MeToo, so we have some data after MeToo, but because we want to look at your employment and earnings five years before and five years after the event, we're going to be looking like so now I'm going to blank on this, but we're looking at, I think it's like 2006 to 2014 is I think when we can do it.

Jennifer [00:23:21] Okay.

Emily [00:23:21] But yeah, so think about it, pre MeToo in a relatively short period post 2000.

Jennifer [00:23:26] Okay. So I think you said there are 5000 cases in.

Emily [00:23:30] Just over five thousand.

Jennifer [00:23:31] Over that time period. Okay. So the cases that involved male versus female victim. So I guess, you know, we've kind of got this groping story from, you know, Harvey Harvey Weinstein cases as the kind of classic thing we might have in mind for these assaults where the victim was a woman. If the victim's a man, I imagine it's more like a bar fight or something like that.

Emily [00:23:55] Yeah. So it is still true that for men, the majority of cases are assaults. There's actually a higher rate of petty assaults that's a lower level of assault in the crime statistics. So women are more likely to be full on assaulted men are more like assault is still the largest category, but petty assaults is a little larger relative to female victims. But speaking to what you just discussed, what we see in the data that's super interesting is for male on female, we see this prototypical MeToo notion of an economic boss like say think a manager. So someone who makes a lot more attacking a woman who's makes a lot less that is true in the descriptive. So it is striking that you see this massive income gap between male perpetrators of female victims. That is not at all what we see for male on male crimes. For male on male crimes, they make about the same. So, you know, I don't want to read too much into this because I can't actually like see what's it exactly a bar fight.

Emily [00:24:48] But what I will say is they have really similar earnings trajectories. So their earnings are basically indistinguishable from each other, the male perpetrator and his male victim. And so it looks like what I can say is this these are crimes between economic equals within the firm, which would be consistent with this notion where this could be crimes between buddies. So potentially bar fights or or, you know, getting a fist fight at work or getting into a fist fight after work that looks to be like potentially more consistent with the type of earnings dynamics we see and potentially the type of cases crimes we see from male male crimes.

Jennifer [00:25:20] Okay, great. All right. So let's talk through what you do with this amazing data. How do you measure the effects of violent incidents on the perpetrators and the victims?

Emily [00:25:31] Yeah. So, like I say, we can already see in the raw dynamics. Like I said, we see this dramatic drop in employment and income and this dramatic asymmetry where female victims have larger employment negative employment outcomes than their male perpetrators and the opposite is true for male on male. Now, like we talked about before, though, that may not be the causal impact of these events. So, for example, a lot of people leave their job every year maybe these women victims who, like I just told you, they're the lower earning woman in the firm, maybe they were more likely to leave their jobs in general. And so maybe this big drop in employment is really just a natural separation rate that is higher for the type of women who end up being victimized. And so we can't really attribute it to the workplace violence itself. So to try and address this, what we're going to do is our main identification strategy, and then we'll do a bajillion robustness checks.

Emily [00:26:17] But we do is our main identification strategy is to put it, you know, very scientifically a bajillion robustness checks, but for our main identification strategy, we're going to take a massive difference in difference. And so with this really rich data we have, what we can do is we can carefully compare outcomes of, say, a woman victim, a woman who is assaulted at work compared to another woman who looks virtually identical so leading up to the event, she has the same earnings, same employment, you know, same age, same education level so she looks virtually identical. And the only observational difference between the two is that one is assaulted and one is not. And so we're kind of and then we're also going to have individual fixed effects. So what this means is any time invariant unobservable differences with the victim, we're going to be pulling that out with the individual fixed effects.

Emily [00:27:02] So think of this as like you have two workers, both women, both say 25, both say making \$20,000 before the event. We have the same wage growth in the five years before one is assaulted, one is not. Let's see what happens to them after the event compared to before, including the individual fixed effects and so, like, like I said, it's you never going to be able to run an RCT in this setting. So, you know, and if all and honestly, I'm not sure you would want to for two reasons. One is it would be totally unethical. We do not want to randomize people, to assault people and then see what happens, but the other problem with in an RCT is what we see in the descriptive statistics is there's this really interesting power dynamic issue with male and female assaults.

Emily [00:27:40] And so in order to really understand the average treatment on the treated so what happens to women in real life where assaulted that power dynamic might be really important and we actually show that it is and so you would want to replicate that in an RCT which is really hard to do. So unethical, can't do it. So this is what we do instead, which is this, you know, really carefully comparing the evolution of outcomes of observation, identical women before versus after the event. So in economic jargon, we call this difference in difference design. So doing a mass difference in difference, but what I say, I think really helps us believe in these results is one what we find is what we're going to find is be very consistent with descriptive results. You can see in the raw means, then you can see it in the matched dif and dif. And then what we'll do is we'll also run an array of robustness of placebo checks to make sure this is really what's going on that we're really getting the effect of these incidences.

Jennifer [00:28:27] Yeah. And so I'm often very skeptical of just matched just using matching as an identification strategy. I like these difference in difference strategies with the matched matched treatment and and comparison groups much more because it allows you to kind of see pre period trends that can convince you that the comparison group is a good counterfactual in research terms. Right it actually tells you or shows you what would

have happened to the treatment group in the absence of the treatment. And so and of course, like in your graphs you see these very nice flat lines where these two groups that look identical in all ways their employment, their earnings are trending almost identically before one of those people gets assaulted. And so the the identification strategy here, I guess, is that it is essentially random which of those two people was assaulted at a particular time is that right?

Emily [00:29:24] I would say, yeah. So I think that's approximately right what we're really trying to say is the employment outcomes we identify could they be due to anything besides the assault given we're comparing people who are otherwise identical. So, you know, just difference in difference the assumption we're going to have to rely on is if there had not been assault, would we have seen identical outcomes for these two groups? And so if you if you want, we can talk a little bit in a minute about the placebo check we run that I think is super convincing on that point that that that is true, that we would have had parallel trends absent the violence because I would I agree with you I think like, you know, matching could be really problematic the matched of diff in diff is definitely a much bigger step forward. What I would say with this topic, it's just a really hard topic to get perfect identification so I know.

Jennifer [00:30:06] For sure.

Emily [00:30:07] Because we're not going to have like an RCT style perfect gold standard identification here. We do a whole massive part of the paper which is talking to even with the match diff in diff, which already addresses a lot of concerns and even with the individual fixed effects, which together, if you put all that together, it already addresses a lot of concerns. And even given the really, really striking descriptive statistics just in the raw means even with all of that, you might still have some other concerns and so then we have a whole section of the paper we say, okay, well, given these other concerns you might have, here are some extra placebo checks, here are some alternative identification strategies we can use.

Emily [00:30:41] Here are some other stories you could tell that we can rule out. And so we go through each of those in turn just to make absolutely certain that we're really convinced that this is what we're finding is the true effect of the violence incidents. I think it's like an overwhelming preponderance of evidence type story here with multiple identification strategies, including our main one I just described.

Jennifer [00:30:59] Awesome. Okay. And we will dig in to some of those checks in a little bit. Remind me which outcomes you're most interested in here.

Emily [00:31:07] So I would say the outcomes that we were most interested in, I would divide them into three broad categories. So the first set of outcomes are perpetrator/victim related. So because we really haven't had this data before, I want to put down on paper what are the actual cost to victims of these events? Are these really costly to victims in a way in which we should take this extraordinarily seriously as a profession and with our own MeToo incidences or and more generally, if we think about managers across the spectrum of industries. And as part of those victim and perpetrator outcomes, I want to think about what happens to the victim, what happens the perpetrator, but we saw in me too, if you go through like so, for example, a really brave another really brave Harvey Weinstein victim, Rowena Chiu, she has an amazing quote in her New York Times editorial where she talks about how she felt invisible and inconsequential because she was the assistant and Harvey was a big power player and her boss. And so I think, you know, that power

differential might really matter for how costly these events are and as we described in the descriptive statistics, we see that women are just much more likely to be attacked by someone who is an economic superior, who makes a lot more money than them. And they're also three times more likely to be attacked by a manager when you look at stats statistics. So that's just a, you know, victim and perpetrator outcomes.

Emily [00:32:18] The second set of outcomes we'll look at is what happens to the broader firm. And in this paper, given the data we have, we're going to focus on what are the effects on recruitment and retention. So what happens to new hires and what happens to existing workers after these events. And the third set of outcomes that I was, you know, we were all really interested in is what role might management play in these events. We've already seen that managers are, you know, women are more likely to be attacked by their managers, but what role can managers play in terms of addressing them as events once they've happened. You know, can they force the perpetrator out? Do they force the perpetrator out? And in particular, we're gonna look a little about the role of gender, of the manager and how that might play out in terms of how these events are dealt with within the firm.

Jennifer [00:32:59] Okay, so let's get into the results. What was the effect of violent incidents between colleagues on the employment of perpetrators and victims when let's start with when both colleagues were men.

Emily [00:33:12] All right. So if a man attacks a man, their results were look how I expected them to look when I went into this project. Namely, we see much bigger employment, unemployment effects for perpetrators than victims. So to put some numbers on this, for perpetrators, we see a ten percentage point drop in employment and this is statistically significantly larger than the impact on their victim. So perpetrators ten percentage point drop in employment victims have a 4.2 percentage point drop in their employment, so about half the size of the employment effect for victims.

Emily [00:33:40] So really costing just to put this to give you a bit of a scale, the cost of a mass layoff event, which we have a massive literature on in economics, the size of the employment effects for perpetrators when a man attacks a man is about the size of mass layoff event, now mass layoff events are very different. We might be okay with perpetrators having a big unemployment effect if they attack one of their colleagues. This is probably not an acceptable thing to most people, hopefully the majority of people, but for male on male violence, you know, we see big unemployment effects for perpetrators, smaller unemployment effects for victims.

Jennifer [00:34:11] Okay. So then what happens when the perpetrator was a man but the victim was a woman?

Emily [00:34:15] Now, this is where the results got really depressing for us because, you know, when we see a man who attacks a woman, we actually see much smaller unemployment effects for these men who attack women. So remember men who attacks man ten percentage point drop in his employment rate and this is going into unemployment. So not just leaving the firm fully into unemployment that is statistically significantly larger than the effects for men who attack women. So for men who attack women, there's a 5.2 percentage point drop in their employment. Right. So that's still a drop in that, some of them are moving into unemployment, but it's much smaller for men who attack women. What's even more depressing still is that number is smaller than the employment effects for their female victims. So the female victims have about an 8.4

percentage point drop in employment following these incidences. And so, you know, that's pretty depressing it's more depressing, still, when I remind you that that 8.4 percentage point drop in employment for female victims who are assaulted by a colleague, that's almost the size of the effect of a mass layoff event and so this is just enormously costly for women.

Emily [00:35:20] Now, I'll take a step back and I'll say we also find a similar asymmetry in these impacts of male on male versus male female crimes we look at earnings, as you would expect, given the employment effects, but to me, this is just really depressing. It seems like men who attack women, they just are much less likely to leave the workforce, much less likely to be fired. And women who are attacked just seem to have huge, huge impacts to their employment. And these impacts are really persistent. So we show the overall difference in difference five years post compared to five years pre the event, but we also, so what, but we also show it over time yearly and we find that these effects persist at least five years past the incidents. So this really big drop in employment it last for at least five years.

Emily [00:36:03] And so and I think this speaks this puts down on paper and shows rigorously across the board that these anecdotal cases we heard about in MeToo, for example, going back to Rowena Chiu, who talked about her assault, she went on in her New York Times editorial to talk about how costly this was for her career and how hard it was for her to get back into gear professionally. And I think what we're seeing in the data here with this research, as we're seeing in our paper, that that's just true in general, even with these less famous cases, we see that even in the less famous cases, men who attack women have smaller impacts in their employment, and the women have long term persistent and very large negative effects on their labor market outcomes.

Jennifer [00:36:44] So you're focused here on being employed versus unemployed overall. Are you able to look at all about at how often people maybe are fired but moved to a different firm?

Emily [00:36:55] Yes. So we do do that buried in an appendix figure. So I'll tell you what we find and then I'll tell you my interpretation of it, but there's a limit to how much we can do with the data on this question so we can look at conditional on staying employed so not going into full unemployment, like not having a job at all. So conditional on keeping your job, keeping a job during this period. What happens to do you stay in the same firm or do you move firms? So we've already seen a lot of people move into unemployment, but what about the other people who don't move into unemployment? And what we see, which is interesting, is we see for perpetrators, actually perpetrators who attack women are more likely to remain in the same firm and so I think there's two kind of explanations for that.

Emily [00:37:34] One is that we saw that men who attack women are much more likely to be managers. They're more high income in the firm. And so, you know, if you're a manager, you might just not fire yourself and then you're much managers are more likely to stay with the firm anyways. We can talk more about the power differentials in a minute. We also see for women victims who don't go into unemployment, women victims who do not go into unemployment are less likely to move firms. And that was surprising to me because you might have thought, oh, I would like to just switch firms so I don't have to work with this guy anymore, especially if he doesn't leave, but you have to remember that we're looking at women who are assaulted and also reported.

Emily [00:38:11] And the problem is we can't see this in the data. But one story that could be consistent with that result that I can't test explicitly, but that we've talked about amongst the research team. But we don't make too much of it again, because we can't test it is what if you have a world where when you are a woman who reports an assault at the hands of your colleague, and especially when he's a manager, what if he then refuses or your firm refuses to give you a positive reference and that would make it harder to leave your firm. So then your choice becomes, do I go into unemployment or do I stay in this firm potentially, where my harasser or the person who assaulted me is still employed? And I think, you know, if you look at all the evidence, I think a lot of women have had to make that very difficult decision. So it's an interesting result that we don't take too much in the paper again, because we can't prove that, you know, what story is at work here, but that is what we find in the data.

Jennifer [00:38:58] Okay. Yeah, Super interesting. Okay. So let's talk about those power differentials. To what extent is this a story about what happens when, you know, a high status perpetrator attacks a low status victim versus a gender story?

Emily [00:39:17] So it seems to really be the former. So one thing that came out of me, too. So it seems to be the former with a caveat, which is that in the raw data, women are much more likely to be attacked by a manager three times, more likely to be attacked by a manager when we have a colleague on colleague case of violence and when we show look at the raw statistics, they are much more likely to be attacked by someone with who earns a lot more than them, even if they're not the manager.

Emily [00:39:40] And so then we look at the data and we can say, okay, we can explicitly test this is being attacked by a manager particularly problematic. And so what we do technically is we can interact. The fact that you were attacked with whether you were attacked by a manager and test the effect of that separately from just being attacked and so what we find is that if you are a manager and you are a man and you attack a woman, you are 5.9 percentage points less likely to lose your job to fall into unemployment. If you are a woman who is attacked by a manager, you are 5.6 percentage points more likely to become employed following that victimization compared to a woman who was attacked by a man who is not a manager. And so this power differential, the fact that this being attacked by a manager or being a manager attacking someone plays a really huge role in how these events play out. Men who are in positions of power much less likely to be held accountable in terms of falling into unemployment. Women who are attacked by men in positions of power have much more negative employment outcomes.

Emily [00:40:39] Now, what's interesting is we find that this is true also for male victims who are attacked by male managers. So male victims who are attacked by male managers are also much more likely to fall into unemployment. Male managers who attack male victims are also much more likely to remain in their jobs. So it really seems to be that power differential that's key, but the caveat here is that women are just disproportionately much more likely to be attacked by men in positions of power than men are.

Jennifer [00:41:07] Yeah. So my question was a bit unfair there in terms of, you know, whether it's a power differential story or a gender story, it's a fundamentally a gender story because that's where the power differentials are and just in practice, in the real world.

Emily [00:41:20] Exactly.

Jennifer [00:41:20] I guess we should also note that men can also be victims of sexual harassment and assault. That could be a share of the the the especially the the incidents where it's a male manager, a male subordinate who's a victim. It's not necessarily the bar fight story I was throwing out there earlier all around.

Emily [00:41:39] Exactly.

Jennifer [00:41:40] Okay. So next, you measure the effects of these violent incidents on the firm. So what do you find there?

Emily [00:41:47] So, like I said earlier, we're going to focus on recruitment and retention. So think about the effects on the workforce. And so what we find as we first look at just the composition of workers. So do you have a change in whether your firm is more male or more female. And what we find is that there's no impact on gender composition of workers for male on male violence. On the other hand, when we look at incidences where a man attacked a woman, we see a little over a two percentage point decline in the women hired in these firms and this is beyond just the fact that the victims more likely to leave. Now, if you look at male managed firms, we find a whopping six percentage point decline in the share of women employed at the firm when you have a male manager. And this amounts to a 25% reduction in the share of women in those firms, which is quite large. We also show, which I think is really interesting, is it really the men attacking a female colleague that matters in terms of this drop in women in the firm? Or is it just you hire a man who attacks a woman who's not a colleague? Does that matter, too? And it turns out it's really the former.

Emily [00:42:44] And what we do is we have a what we call a placebo, where we look at when a firm is employing a man who attacks a woman who's not also employed at that firm or at that plant. Do we also see a reduction in the share of women in the firm and we don't. So it's really uniquely colleague and colleague violence, male colleague on female colleague violence that explains these effects. Now we go a little bit further. We say, okay, where is this coming from? Is it recruitment or is it retention? And it turns out it's both. So we find at the 10% level, we had a significant drop and the share of women remaining in the firm. So we see that women leave the firm, but we also find a significant drop in the number of the share of females, women amongst new hires.

Jennifer [00:43:22] Finally, you consider whether firms with more women managers might handle these incidents differently and thus have different results. So how do you approach this question and what do you find there?

Emily [00:43:35] So I want to start by motivating why we decided to look at this. It also why look at the gender of management. And this might seem a little bit contrived if you haven't read the research. Well, it turns out I mean, we know that management matters a lot. There's a huge economics research agenda. Think Oriana Bandiera, Nick Bloom, John Van Reenen. And there's a huge number of very influential researchers who have written fantastic papers showing that managers really, really seem to determine the direction of the firm. More recently, when we think about gender of management, there's been a number of very nice papers that have showed that the gender of management might matter, especially when we think about how management reacts to these kind of big events or these, you know, criminal events that happen could happen within firms.

Emily [00:44:14] So, for example, we were motivated by this paper by Egan, Matvos and Seru that was published in the JPE. And what they show is following financial misconduct,

people do lose their jobs following financial misconduct, but women who commit financial misconduct are a bit more likely to lose their jobs, but this is isolated to male managers, so male managers are much more likely to fire women who are, you know, caught for financial misconduct. And so that motivated our approach that and a few other papers, but of our approach, well, maybe the gender of management matters here as well. And so what we do first is we say, okay, well, do we see a difference in composition? And I already alluded to this, but it turns out that that drop in women in the firm is isolated to male managed firms. We see no impact on the share of women within the firm following male and female violence when we have female management and here we're defining female management is the above median share of women in the top 20% of earners, similar to some preceding papers in the list.

Emily [00:45:07] So then we ask okay, well, what are women management what is women management doing differently? How is it that they're avoiding this kind of out flux of women employees? And how is it they're, you know, managing to, you know, not have a reduction in hiring of new female employees as well? And so one thing we thought of going back to the early results we discussed, which is we saw that following male and female violence male perpetrators are very unlikely to lose their jobs and maybe this is where the key differential is between male management and female management. So what we do first is we look specifically at the perpetrator employment depending on the gender of the management.

Emily [00:45:44] And what we show in the paper and what we found in the data, as we we see that when you have a female manager, you are more likely to lose your job if you attack a colleague, both if you attack a man or if you attack a woman. So in both cases, having a female manager means you're more likely to not be employed following the incident. And so women in general seem to be very intolerant of these events, and they're much more likely to make sure the perpetrator either, you know, is fired or leaves the firm voluntarily. So they're much more likely to find a way to get rid of the perpetrator.

Emily [00:46:16] Male managers do fire male perpetrators on average who attack men, but it turns out on average, they don't really fire men who attack women. So that's where the key difference is, but, you know, women managers are more intolerant of perpetrators of violence in general, but they are seen to be the only ones who are letting go or forcing out or firing men who attack women. And so that seems to be the key distinguishing factor, which I think that speaks to like, well, what you know, the bigger question which we can't ask in the papers, you know, how are they managing this? Why are they doing this? What is going through their brains that allows them to kind of make this leap and say, you know, you did this, there's some credible complaints against you and I'm going to take action. I'm not going to let you, you know, continue at this firm. And I think this is a really important ongoing debate in terms of policy, because I think right now, you know, think about the economics MeToo movement.

Emily [00:47:07] You know, I think no one wants to see someone receive a false accusation and I think that's an important thing to think about in these events, but we see in our paper as female management seems to take these events arguably more seriously. And so you can imagine these female managers and I can't do this in the data, but, you know, just speculating here, you can imagine this trade off between, you know, what we would call type one and type two errors putting that in layman's terms, you know, we don't want to have false accusations, but we also want to make sure that when someone really does something, that we hold them accountable and that we make sure that they, you know, can't go on to commit more crimes or, you know, even just holding them

accountable for this one crime. If it's a one off, it's it seems really important to me because as I've shown you in this paper, as we find, these are extraordinarily costly events for the female victims. And it seems like having your perpetrator remain in the firm with you is really problematic.

Emily [00:47:55] So I would say that, you know, women seem to be more likely women management seems to be more likely to take these events seriously. And then what we do in the last part of this analysis is we say, okay, well, is it this specifically making sure the perpetrator leaves the firm? Is it this specific action that is stemming the loss of women after these events at female managed firms? And so we do a triple interaction where we say, okay, if you interact having an assault of a man assaulting a woman in the firm or having one of these violent incidences interacted with, whether you have a female manager and interacted with whether the perpetrator stays employed at the firm, and we find that that has a big positive effect on the share of women that remain in the firm, so really helps women stay in the firm.

Emily [00:48:37] Then we do a separate exercise. So in the same regression where we say, okay, interact, whether there's a violent incident with female management by itself and we actually don't find anything significant there. And what that suggest, if you interpret those regression results, what that what that suggests is that it's really this perpetrator leaving that stems the tide of women leaving the firm. It's really taking holding the perpetrator accountable that seems to help mitigate the impacts on the broader workforce. Now, I should point out that female management making sure the perpetrator leaves actually doesn't have a significant impact on the victim outcomes. So it doesn't seem to directly help the victims in our analysis, but it does help the broader women in the workforce.

Jennifer [00:49:17] Interesting. Okay. So you run a bunch of additional tests, as you have alluded to, to kick the tires on these main results. So tell us about maybe one or two of your favorite robustness checks and what they tell you.

Emily [00:49:30] So one of my favorite that we did is with this massive difference in difference, one of the main assumptions is that absent the assaults, the employment outcomes, when we look at employment or earnings, if we look at earnings, but let's stick with employment, the employment outcomes would be identical if there wasn't an assault between the matched control, the counterfactual here and the actual victim or the actual perpetrator. And so what we can do to test that is we can say, okay, well, take the victim who's going to be a victim of a violence at the hands of a colleague, move her or him back five years when no violence took place redo the matching, redo the difference in difference analysis.

Emily [00:50:07] So do the same matching in diff. And if there are some kind of unobservable differences about the victim, we should see their outcomes diverge after the event even when there's no violence. And so when we do this, when we take that victim moving back five years with no violence occurred, do the same analysis matched dif in dif we see zero impact. So we see no impact in the post, which is what you would expect to see if this parallel trends assumption is holding. So that was really reassuring. And we do that for both perpetrators and victims, for both male, a male and male and female violence.

Emily [00:50:39] Another one I really liked is you could think, well, maybe there's still some time invariant unobservable about these female victims that's causing the outcomes we're documenting. And so what we can do is abandon the matched dif in dif approach and let's

instead say, okay, take a woman who's victimized in 2007 and let's compare her outcomes to a woman who's going to be victimized all the way out and say 2014. All right. And so this is still going to be a stark difference. A difference. So we're still coming to someone, at least within the panel, at least plus or minus five years. The future victim hasn't been assaulted yet. And we're just going to do compare their outcomes before and after. And we find is really interesting as we find, again, flat pre trends and we find if anything, our estimates of the impacts on the victim are even larger when we use the future victim as a counterfactual. Now there are some reasons why I think that could be because they age profiles, things like that, but to me that's really reassuring those two robust insights together, really reassuring that our results are really capturing the true effects of the assaults, the assault by the hands of a colleague versus some other thing.

Jennifer [00:51:40] Awesome. Okay. So what are the policy implications of all of this? What should policymakers and practitioners and, you know, people who work in a workplace and might care about this issue or what should they all take away from this?

Emily [00:51:56] So one of the immediate takeaways that I had is I expected there to be impacts of these events. I mean, I think anyone going into this research would say, I would be shocked if there aren't impacts, but they are astonishingly large, at least to me and so these are not small events. These are huge events in a woman's career. When a woman gets assaulted by a man, the impact on her employment is almost as large as the impact of a mass layoff event which you've seen in other literature, we have written an entire mass of beautiful literature on the effect of mass layoffs. We should probably have a similarly sized, large and rigorous literature on the effect of workplace violence. So these are hugely costly events when it comes to workers careers, and especially disproportionately women's careers.

Emily [00:52:38] So I think that's just a starting point. These are these are not negligible. We cannot ignore these. These are really, really important in terms of women's labor force trajectories. The other thing we've seen in the paper, I think, is, you know, power differentials really matter and that makes this a really hard issue to deal with. People in power seem to be able to get away with attacking a colleague in a way that people don't. And people in power are also often very hard to hold to account because they have such power in the workforce. So I think we need to go into this with open eyes and realizing this is going to be a hard issue to solve.

Emily [00:53:07] However, what we've seen is that there are some managers who are addressing these issues, and we talked about this a little bit, and this is an incredibly hard thing. I cannot imagine being a manager who's faced with this really horrible incident and thinking about how do I manage this? How do I, you know, make sure that I hold someone to account for bad behavior while also doing my due diligence and making sure I'm not firing someone who hasn't done anything wrong and that is a horrible, difficult trade off to make and a very hard decision to be in, but if you're a manager, that is your job. And what I would say is that managers let workers go for all sorts of other misbehavior from financial misconduct to fraud, to just not working hard enough. And I think managers cannot push this off to the justice system. I mean, they can. That's one option, but I think managers do have a place here to play and we see that with female managed firms, they are taking these events. You know, they're going a step further in terms of dealing with these events. And we will have to have a debate as a society about how we're going to trade off that really difficult balance between holding people to account while also, you know, protecting people's rights. I'm not saying that's not hard, but I am saying the costs are so large that I think we need to have a very serious discussion about those trade offs and how we're

going to start weighing them and how we can make sure that that should be our goal. It's a very hard goal to achieve, but that doesn't mean it's not something we should be moving towards.

Jennifer [00:54:35] Yeah. And I think what's also striking here is just is the consequences for the firm right there, sort of bigger societal questions about how we trade off type one versus type two errors, these false positives and false negatives and who gets the benefit of the doubt and how much and what the evidence standard should be for punishment and all of that. That's you know, there are no right answers there and that's really difficult, but for, you know, a profit maximizing firm, if suddenly it's much harder for you to hire women or you're going to essentially the consequences are that like a bunch of your female workforce leaves because you're not taking action in these cases. That has real consequences for your firm and presumably for the bottom line of the firm. And so I guess I would hope that that results would also be motivating to people who are, you know, who are in charge of making sure they're recruiting top talent and retaining top talent that they need to be taking these issues seriously.

Emily [00:55:30] Absolutely. I think like the broader impacts of women in the workforce is very, very salient in this paper, and it's something we've seen anecdotally that now we can show rigorously does occur, but it is a difficult I don't want to like underplay how difficult this is and we're going to have to have a frank ethical discussion about how we deal with these things and some of that, you know, as as you know, putting all my economists had I can't say anything about that, putting on my personal hat. I can obviously, you know, have my own thoughts and opinions on it, but I would say as rigorously putting all my economists hat with this paper, we show that these are extremely costly and there's broad repercussions to women in the firm in general, in the workplace, in general.

Emily [00:56:03] And one last thing I'll return to is, you know, I started we started talking about the earlier literature and there's like I said, there's this beautiful paper by Johanna Ricke and Olle Folke, and I told you about this result they have where if you're in the gender minority in a profession, you're more likely to experience harassment and abuse is something they show descriptively. And what we're seeing in this, this paper, is that might be an outcome of the dynamics of these events, because what we've shown in this paper is that when you have male and female violence, women leave the firm and they're less likely to be hired. And as you can imagine, what that can lead to is workplaces that are increasingly male, increasingly permissive of harassment and assaults on women in the workplace and so that you see the cycle where women continue to leave, the environment becomes increasingly permissive, increasingly, you know, don't hold people to account and so on and so forth. And that can, you know, could be problematic for lots of reasons.

Jennifer [00:56:52] Have any other papers related to this topic come out since you all first started working on the study?

Emily [00:56:56] Yeah. So I would say I think this is such an exciting place to work because it's, you know, such a big research frontier to to work in because there just hasn't been an immense amount of research on it yet to date. One paper I absolutely love that I find fascinating, I think everyone should read is a paper called "Monitoring Harassment in Organizations" so this is by Laura Boudreau, Sylvain Chassang, Ada Gonzalez-Torres and Rachel Heath apologizes if I messed up anyone's name, but what this paper looks at is they look at what they're trying to get at is how do you increase reporting of harassment? So one thing I talked about in the beginning is, you know, we're going to see assaults that are reported to the police and we can, you know, map out what happens for those events.

Emily [00:57:33] We do not see lower level harassment because those are simply not reported to the police and reporting is a huge issue in this space. And so what they do is they look at this really cool technique called garbling. And it's the idea here is you have a worker who actually experience violence and they might be hesitant to report because they'll know the other manager might know it's them or something like that. So what they do in this, you know, in this experiment is they say if we garble responses, if we kind of give you some cover by taking some people who report that they weren't victims and coding them as a victim instead so that it gives you some cover to report, does that include increased reporting of harassment and what does that tell us about how prevalent harassment is in organizations?

Emily [00:58:11] And so they find that this does you know, if you you know, they have a method to kind of pull out the true harassment, taking out the garbling and they find that this approach really increases the reports of harassment not only for female victims, but also for male victims. So, you know, because they're looking not only at sexual harassment but also at, you know, other types of inappropriate and aggressive behavior that, you know, managers and others might take. And so they find, you know, this really increases reporting. And they also find a result that I find quite interesting, which is in a lot of cases and a lot of teams, there's only one victim of harassment and I think I've always had in my head that there's kind of it's a lot of repeated offenders. And I think, you know, if you talk to them even with their paper, I don't think we can really nail down. Is it a lot of one offs or is it a lot of repeat offenders? But I think that's still, to my mind, a little bit of an open question that I don't know the answer to yet.

Jennifer [00:58:59] Yeah, I agree. That paper's so cool cause it's also yeah, I mean, to some extent it's a matter of like who's doing this data collection and if you, if the workers were if it's the firm then the worker is thinking, well like my boss is asking me if I've been like, my boss might see these data directly and if like but also you could imagine just more ethically as researchers, if the data, wherever you know, if you get your laptop is stolen or the data is just sort of it's hacked or something. And so basically they go in and say, we're going to recode 20% of the zeros as ones. And so statistically, they can pull out what the numbers like, what the share of people who are harassed is. I think the caveat with this is they can't tell you who they were right, because that's the piece you're giving up is a sense of like who the individual victims were. That's the way you're protecting their identity and their confidentiality, but it's it's super clever and I'm really excited. I'll be really excited to see how it's applied in various settings. It's just fascinating. I agree. This is just this is a space where it seems like there's been a bunch of new creative work recently and it just it's very exciting to see people kind of get over these major research hurdles that we've had for so long on the data front.

Emily [01:00:11] Yep absolutely agree.

Jennifer [01:00:12] All right. So as we continue forward, what's the research frontier here? What are the next big questions in this area that you and others are going to be thinking about in the years ahead?

Emily [01:00:21] Yeah, because I think this is an area, an area that's been relatively understudied compared to some others in economics. The research frontier is pretty broad, so I think it's a great place to be working. I'd love to see lots and lots of papers coming out. In terms of our specific future directions for things that we're really interested in one thing is we've been trying to get some health outcomes data, which we should

hopefully get maybe soon, fingers crossed. And so we would be really interested in looking at the mental health outcomes of people who are victimized by a colleague, the physical health outcomes after these events. I think there's also some really interesting questions like going back to the male management versus female management results, just thinking about, you know, how do we why do male managers fail to fire or force out perpetrators who attack female colleagues?

Emily [01:01:05] One potentially really depressing possibility, which, you know, we might be able to study a bit is what do you do when your highest performing worker is the one who attacks a female colleague? We should all probably think this in and let's assume we have good evidence and we think this is really happened. We should all think this is unacceptable, but you can think of a manager making a very, very cold calculation and saying, this is my most productive employee, and so I'm just going to let him stay in because I'm going to have him stay I'm going to stop hiring women and then a lot of the existing women will leave, but I'm going to take his productivity over the ethics. And that could be a calculation people are making. And so there's some ways we can maybe get at that using our data that maybe female managers are making a very different calculation, which is, you know, maybe, you know, I lose women and that maybe dings my profits, but I keep this really productive employee and know I'm not perfectly it sometimes that might be profit maximizing sometimes it might not.

Emily [01:01:56] And I think that makes it an even harder question because it's easy as a manager to make win win decisions. It's harder as a manager to grapple with the fact that you might have to fire someone who's a very good employee in terms of bringing in money, bringing in clients, but is very bad in terms of actions he's taken against other colleagues. So I think that's something we can look out. You take go back to Harvey Weinstein. He was a very productive producer, even if he was a very bad human being in terms of how he treated women in the workplace.

Emily [01:02:24] I'd also like love to see some work on how we could mitigate these impacts on victims, how prevent these events from happening in general. I don't have any amazing ideas at the moment, but I'm constantly thinking about that. How do we prevent lower level harassment that is just so pervasive across professions. And unless I would say a slightly different direction, but we're actually in the middle of writing up a new paper right now on domestic violence. And the reason I think this is quite related is I think, you know, more broadly, when you think about violence against women, this is an economics issue and here we've shown that it's an economics issue in the workplace when a colleague attacks another, but in this paper we're writing up, we're showing the dynamics of abusive relationships and looking at the idea, of course, controls the idea of, you know, economic outcomes of this type of abuse in the household as well. And so I think, you know, violence against women is a pervasive issue. It's something we need to take more seriously as a society, in my opinion, because as I've shown within this research, it is very costly and so we'll have that out, hopefully coming to a theater near you, hopefully coming soon.

Jennifer [01:03:24] Fabulous. Yeah, I will double down on the wanting evidence on what interventions change some of this. It's something I've certainly been brainstorming with colleagues about a lot in recent months, and it's just really tricky to think about what institutional changes you can make that are legal, that might be effective and the reality is we just have absolutely no idea. And so one thing I'm looking at, which I guess is something more relevant in academia specifically, but will be relevant to academic workplaces for faculty is this technology called Callisto that basically allows you to save a

timestamped report of any sort of harassment in escrow, as they call it. So it's it's all encrypted and everything, and basically you just save it as a timestamped report in case you want to do anything with it later, but then it also allows you to be notified if anyone else files a report or saves a report against the same perpetrator. And then I think that the company will can facilitate actually putting you in touch with the other victim if you want to be, but basically, it sort of helps get at the serial perpetrator issue. Like to the extent that it's the same guy who's bouncing around from university university and harassing people, which happens, this could be a way to try to increase reporting and increase consequences if we kind of have that timestamped evidence saved and help victims connect with each other. So I am there expanding to all individuals with a .edu email address. I believe their goal is for fall of 2023, so I am super excited about that and hope to see lots of papers about it. So if you're a grad student looking for research ideas, I think they're already in a few different colleges and might be interested in working with researchers, but I'm psyched to see how this plays out in the years ahead.

Emily [01:05:10] I'm super excited about that.

Jennifer [01:05:11] Yeah.

Emily [01:05:11] I mean, I would say as I got into research to try and address big questions like this and I think, you know, this is a huge question that affects so many women. And so I think, you know, having this you know, I think it really is does matter to have rigorous research to kind of help people understand, help us understand this issue, to see how costly it is to see what we could do to change it. So I'm super excited to hear that and very looking forward to all the new research that will come out in the future.

Jennifer [01:05:35] Yeah, my guest today has been Emily Nix from the University of Southern California. Emily, thank you so much for talking with me.

Jennifer [01:05:41] Thank you. It's been fantastic chatting with you.

Jennifer [01:05:49] 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 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 consider leaving us a rating and review on Apple Podcasts. This helps others find the show, which we very much appreciate. Our sound engineer is Jon Keur with production assistance from Nefertari Elshiekh. Our music is by Werner and our logo was designed by Carrie Throckmorton. Thanks for listening and I'll talk to you in two weeks.