FGI Webinar Transcript: How to Reduce Stigma w/Madison Ashworth
July 7, 2022

[00:00:00] **Michelle Day:** Good afternoon, everyone. And welcome to The Fletcher Group Rural Center of Excellence's webinar series. Today's session is scheduled to run from 2:00 PM to 3:00 PM Eastern Standard Time. My name is Michelle Day, and I am your moderator for the session, along with Janice Fulkerson and Erica Walker. A couple of brief housekeeping items

and then we'll begin. You entered today's session on mute and your video was off and will remain so for the entirety of the webinar. Your chat feature is located at the bottom right of your screen. Use the dropdown feature to communicate with either the panelists only, or panelists and attendees. Please direct all questions regarding the webinar content to the Q and A section.

Be advised that this meeting is being recorded and will be available to you on our website once it has been transcribed. You can access our website at www.fletchergroup.org. Also at the conclusion of [00:01:00] today's session, there will be a short survey regarding the webinar content. Your participation in that survey is greatly appreciated, and will only take a few moments to complete.

Today's speaker is Fletcher group's own Madison Ashworth. Maddie is a Research Associate with The Fletcher Group and a PhD candidate in economics at the University of Wyoming. Her research focuses on the intersection of health and behavioral economics, specifically in designing and testing different policies to determine their efficacy in changing individual behavior and public health outcomes.

In her research career, she has been involved in some of the first studies looking at the effect of COVID 19 social distancing policies on public health, economic, and environmental outcomes. Recently, her research has focused on examining interventions to reduce stigma around recovery housing, and evaluating smart recovery curriculum within recovery housing.

[00:01:56] **Madison Ashworth:** All right. Thank you. There we go. [00:02:00] all right. So today I'm gonna be talking about a study that The Fletcher Group research team with, um, some collaborators at the University of Wyoming did on facts and personal recovery stories, um, reducing SUD stigma and increasing support for recovery housing. Um, so this is not gonna come as a surprise to anyone on this audience, but we know that substance use disorder, um, is a really big problem across the U.S.

And so these are some of the statistics that really kind of encouraged us and motivated us to really do this study. Um, we know that substance use disorder impacts over 40.3 million Americans. Um, that's the latest estimate from 2021. And we also know that latest estimates from the CDC, um, suggest that over a hundred thousand individuals, um, have died from drug overdose in 2021.

And this is a 16% increase from 2020. So it's a problem that's kind of only getting worse right now. And so coming up with some important, um, treatment [00:03:00] options and expanding those treatment options is gonna be really important. Um, we also know that SUD's imposed pretty substantial costs on society via healthcare costs and, uh, productivity losses and increased crime rates and, uh, criminal justice costs.

Um, some latest estimates of hospital costs alone in 2021 suggest that we're spending over $13 billion just in those hospital costs alone. So of course, any expansion that we can do of recovery housing or any kind of, um, substance use disorder treatment is going to be especially important. So just a little background on kind of the recovery housing piece of this.

We're really gonna be talking about stigma today. Uh, community stigma around those with substance use disorder and specifically towards recovery housing is that's kind of our focus. And so we know that recovery housing is a really important aspect in the continuum of care. And so that's going to be [00:04:00] all about recovery

housing is really just a safe, sober kind of housing environment for individuals in recovery, um, to live in. And it's a pretty long term, can be a pretty long term, um, living situation. I mean, it can be pretty bare bones where it really is just that living environment, but it can also include a lot of other kind of recovery support services in it.

Um, it can have different programming related to education, employment, things like that. Um, but it can also just, like I said, be more of a housing situation. And so recovery housing is a really important part of the continuum of care for, um, substance use disorder. And it really helps us create that recovery ecosystem that's really going to help individuals in recovery.

And so we know that recovery housing is effective, right? We know that it's really effective at improving abstinence from substance use employment and incomes. It improves mental health, especially mental health outcomes related

to anxiety and [00:05:00] depression. Um, it can also reduce criminal justice involvement.

And then of course I am kind of the economist. So I also care that it's cost effective. And of course this cost effective part is going to come into play. When we're looking at, um, recovery support services and treatment options in rural areas where sometimes the financial resources might be a bit more limited.

So here we're looking at. The Recovery, Kentucky annual report, their estimated tax savings of their recovery housing program. And so you can see here that just in 2021, they were able to, they estimated that they saved, um, Kentucky residents about $6.2 million in tax savings. And so that really comes about because recovery housing has a relatively low cost of care, but it has some really great benefits and really helps individuals on their recovery journey.

So now the part that we're kind of interested in is really looking at stigma. Stigma around recovery housing itself. And of course those [00:06:00] with SUD. And so when we're talking about social stigma, what we're really talking about is kind of a characteristic that a person has that's kind of been marked with disgrace by society as a whole, right?

And so the characteristic that we're talking about right now is substance use disorder. And so there's a lot of stigma kind of at the community level around the treatment resources used to treat those with SUD and specifically around recovery housing. And we have at The Fletcher Group, Outreach and Engagement Specialists that work across the country.

And when we were designing this study, um, we were really talking with them about kind of what stigma is and how it's affected their work in providing technical assistance to recovery housing across the country. And they found that stigma around recovery housing was a significant barrier in establishing recovery housing in those local communities.

Right. And we also know that stigma has some pretty detrimental effects on the residents within as well, right. It can reduce treatment seeking and once residents are actually in the [00:07:00] recovery house, it can reduce their success within that recovery house as well. And there's a lot of literature and like studies out there that have looked at how we can reduce stigma, right?

It's a big topic. We wanna make sure that we can provide services for everyone and make everyone kind of successful in their recovery journey. And so tackling stigma and those stigmatizing beliefs is a big part of it. And a lot of times we, the literature and other kind of academic sources have really looked at examining, um, stigma related to serious mental illness.

But we know that we have to look at stigma relating to substance use disorder kind of on its own, because there are some differences that we found in the stigmatizing beliefs towards substance use disorder compared to severe mental illness. Right. And so generally when we're looking at stigma around substance use disorder, we've found that contact interventions, which are really just

an individual kind of meeting up with an individual, whether that [00:08:00] be in person, which in the zoom world these days seems a little, um, exciting and a little unique, but you can meet with a person, um, with an SUD talk to them, kind of hear their story, or these contact interventions can really just be written stories, written testimonials or written stories of people's journey with substance use disorder and their recovery.

But we found that these contact interventions are going to be most effective when they really humanize those with SUD and they convey a message of hope, right. So if we're able to create those stories and kind of disseminate them, um, we really wanna make sure we're kind of portraying those with SUD um, very hopeful and kind of really focusing on that recovery aspect.

We've also seen that education about what substance use disorder is, its treatment, things like that has pretty mixed results on the effectiveness of reducing stigma, right? Sometimes, if we give people information about what alcohol use disorder [00:09:00] is, that can reduce their stigma, but other times it's it can't.

So it's a little more unclear to us, whether education about substance use disorder is gonna be really effective for us at reducing stigma. But we have seen that information generally about the treatment effectiveness seems to be most impactful. But in a lot of these studies that we've been looking at so far, none of 'em have really linked reductions in stigma to actual behavioral change.

And that's what we wanna do here with this study today that I'm gonna talk about is we really wanted to link changes in stigmatizing beliefs to actual behavioral change. A lot of times we kind of look at our validated stigma scale

and we say, oh, we reduce stigma. We wipe our hands and we walk away. But oftentimes we know that actually getting people to kind of mobilize in a community, either politically, financially, any kind of behavior they might do in support of recovery housing,

um, it's a lot harder to get that behavior than it is to kind of change their beliefs [00:10:00] about substance use disorder. And so that's really one of the main purposes of our study here is to link stigmatizing beliefs to behavior. And so here's a little, that's kind of a little background of like where, why we're doing this study and where it fit kind of in the literature.

And so here's a really basic experimental design that we ran. So we ran a randomized controlled trial with five different treatments. So you can see here that these five treatments included a controlled treatment where individuals got no additional extra information. A data treatment where individuals received some information about the effectiveness of recovery housing. And then three kind of contact interventions that varied in the medium, in which it was told. It was either a written story or a video, um, of the individual telling their story.

And of those two written stories, one was anonymous and one was identified. So individuals saw in our survey, they saw one of those [00:11:00] five, um, randomly saw one of those five treatments. And then they went into, um, our outcome measures. So we had measures of political behavior, measures of financial behavior, and then of course, measures of stigma and then some additional follow up questions about the beliefs and experience with SUD. And we'll of course, talk about all of those in a little more detail in a minute. But we ran this randomized control trial, um, through an online survey company called Qualtrics.

And we recruited just over 2,700 individuals to take our survey. So the data was collected, um, earlier this year, between January and February. And it is going to be a nationally representative sample in age, income, education, and race. Um, we did oversample rural participants because we are really interested in looking at how stigma

and, um, kind of our treatments work across rural and non rural individuals. Um, and then we also oversampled Oregon participants. We wanted to ask them some questions about, um, [00:12:00] Oregon Measure 110 and everything. That's not really the focus of this study, though. We're really gonna be looking at whether or not these treatments could reduce stigma and increase support for

recovery housing. Or if, and if these kind of treatments and messages had different effects across rural and non rural individuals.

So that's an overview of the experimental design. That's the really high level. So now we can get into what these actual messages look like and what we tested. So the first message we're gonna look at is this data heavy message, or what we're kind of using as our education message. So. In a lot of conversation with our Outreach and Engagement Specialists, we found that kind of confusion and just not knowing what recovery housing is and how effective it is, was a pretty significant barrier when they were kind of providing assistance and helping houses get established in communities.

People just don't know about recovery housing and how effective it is. So of course your immediate response to that is, let's tell them. So let's tell them all about [00:13:00] what recovery housing is. Show them some really effective programs and they'll see that recovery housing is good. It'll reduce their stigma, it'll increase their support.

And of course, that sounds good in theory. But again, we wanted to actually test to see if that was the effect that we ended up finding. So in this data heavy message individuals were shown this little infographic that came from the Recovery Kentucky program. They were told a little bit about recovery housing, and then they were given a little bit of background about like what Recovery Kentucky is, how many people it serves, et cetera.

And you can see on this infographic, the kind of statistics that we're really gonna be talking about in that infographic are related to improvements in drug use, improvements in anxiety and mental health, criminal justice involvement, employment, homelessness, and mutual aid group attendance. And so that's really gonna be what our data heavy message was.

It was a pretty short little infographic with some blurb about [00:14:00] what recovery housing is. So a pretty simple one. Then we can get into what our contact interventions were. So if you remember that picture of the broad experimental overview, individuals were getting randomized into either the control, that data message, I just showed you, or one of three contact interventions.

And so these contact interventions were either a video of an individual telling their story and experience with recovery housing, or a transcript of that video.

And so that transcript, our written story, either was identified or anonymous. And we really wanted to include that kind of difference, whether it be an identified, written story or an anonymous written story, because we know that individuals who are, especially in rural communities, but in any community really, kind of coming out as an individual in recovery can have some societal implications, community implications, um, sometimes even professional implications.

And so we wanted to really see if a message that was anonymous would be just as [00:15:00] effective as one that had a person's name with it, for that written story. Just to see if we could use kind of an anonymous recovery story. And so this story that we ended up using as our contact intervention, um, we got an individual named Jade Hampton with the Recovery Kentucky program.

He is doing absolutely amazing work. Uh, he's actually a director of some centers, um, in Kentucky. And he sat down with us and he told us all about his recovery story. And so that story included his history with substance use disorder. Um, how recovery housing kind of helped him. Um, a lot of it was kind of the touching on the secret sauce of recovery housing, which really is kind of that peer led, social model.

So he talked about that and how that's a really helpful aspect of recovery housing and how it really helped him. And then of course, because Jade is absolutely amazing, we did wanna highlight some of what he's doing now in terms of directing some of the centers, going back to school, et cetera. And so that's kind of the basics of what [00:16:00] that story included.

Um, the video itself was about three and a half minutes long, so it wasn't an overly long video. Um, but it was a little bit for people to sit down with. And so that transcript of the video was about, um, kind of half a page long as well. And so that was the contact intervention. Like I said, it could be an anonymous written story, an identified, written story, or a video of them, of Jade actually sitting down and talking with us.

So those are the messages that we wanted to test. That data message. And then these three contact interventions to see if they would be effective at reducing stigma and increasing support for recovery housing. But then we also wanted to have our outcomes, right. And so this is where we get into kind of the unique aspects of this study that we ran.

Um, the first thing that we actually got a measure of both political and financial behavior, um, in support of recovery housing. And so here, this is how we measured political support or political behavior regarding, um, recovery [00:17:00] housing. So we gave participants of the survey, the option to sign, um, this, either one of these petitions. They could sign a petition supporting investment and recovery housing in their state, or they could sign a petition against recovery housing in their state. Or they didn't have to sign any of these petitions at all.

And where you see that little state, um, word there, we did actually pipe in what state they were in. So it was a little more customized. And we did make sure that participants knew that we really were gonna be sending these petitions. So if they clicked on, I would like to sign that petition supporting recovery housing in their state.

They knew that a petition with their name on it really was going to be sent to their state governor. So that's how we kind of made sure that we got an actual measure of behavior and not just kind of a hypothetical or just beliefs about, um, recovery housing. And so the first thing you can see that they could sign either petition or they didn't have to sign either petition at all.

They could just kind of go on with their day. They didn't have to sign [00:18:00] anything about, they didn't have to sign any petition. So then if we let them, if they chose to sign a petition, supporting recovery housing in their state, they went ahead and got another question about signing a petition to support recovery housing in their zip code.

And we wanted to kind of get this second piece of political support because you know, I'm from Wyoming and Wyoming is a very big state. If I want to support recovery housing at the state level, there's a good chance it's going to be across the state. I'm never gonna interact with that recovery house.

See it, anything like that. But if I actually support recovery housing in my zip code and a recovery house goes in my zip code, I'm more likely to interact with it and see it. And because we know that recovery housing is generally subject to *Not My Backyard* beliefs, or NIMBY beliefs, we really wanted to differentiate between that kind of broad state support and that more localized zip code support.

So if we see a discrepancy between the percent of individuals signing that petition for [00:19:00] recovery housing in their state and those who then go ahead and sign that zip code petition, we'll be able to disentangle kind of, a little bit more of how much NIMBY there is around recovery housing. So they got the exact same really petitions.

All it kind of specified was I would also like to support it in my zip code and we had them input their zip code there for us. So then we also wanted to get a measure of financial behavior. And so this is where we randomly selected half of our participants to get an additional $5 for completing the survey.

And then we kind of told them a little bit about the National Alliance for Recovery Residences. That's the nonprofit that we selected for this. Told them a little bit about what NARR is, what it does, how many individuals it supports, how many recovery houses it certified. And then we asked them if they wanted to donate an additional $5 of that, of that $5 that we gave them.

If they wanted to donate any amount of it to NARR. So their option there, they could [00:20:00] donate $0. They could donate a cent, they could donate all five. And that's going to get us a measure of how kind of financially supportive of recovery housing they are. And we did make sure to order both the petition and donation questions.

We randomly ordered those so that there were no ordering effects. You don't wanna see that if everyone signed that petition, then they were less likely to financially support recovery housing or anything like that. So those are our behavioral outcomes, but then of course we did want to include some validated scales to track individual stigma and their stigmatizing beliefs.

So we, our kind of main stigma scale of interest is going to be this community attitudes and mental illness scale or the CAMI Scale. And this scale was, we adapted from severe mental illness, that's what it was kind of designed for. We adapted it to measure stigmatizing beliefs around substance use disorder, substance use disorder, treatment, and recovery housing.[00:21:00]

And so it's going to measure really four aspects of community stigma. The first scale that we're interested in here is going to be this community treatment scale. And this is really gonna touch on whether or not, um, substance use disorder treatment and recovery housing should be in residential areas or kind of in the community itself.

So it's gonna touch on beliefs about whether recovery housing should be kept out of residential neighborhoods. If it poses a danger to residents. If it downgrades neighborhoods. Um, and also a little bit about whether or not substance use disorder treatment more broadly should be in residential areas.

And so while I'm we care about the CAMI Scale as a whole, that community treatment subscale is really going to be of interest to us. Cause that's going to touch on more of the recovery housing aspect. We also have a subscale here, benevolence. Um, and this kind of touches this scale touches a little bit more on

the kind of custodial beliefs we feel, um, we should have around substance use disorder, how much [00:22:00] money we should be spending on treatment. Just generally, um, kind of how nice and caring we should be about those with SUD. And then those two other subscales, the authoritarianism and social restrictiveness

subscales. Those both touch on kind of the right that those with SUD should have, whether or not there should be any restrictions on the responsibilities they have, things like that. And so all of those subscales together create, um, one big scale, the community attitudes, a mental illness scale. That's going to give us a pretty, um, detailed measure of the community stigma that people have.

So then we also wanted to measure participants perceived emotional response if they were to encounter an individual in recovery from a substance use disorder. So we kind of talked about earlier how effective recovery housing is. And so it goes to reason that if we put a recovery house in a community,

people will be encountering individuals in [00:23:00] recovery more often. And so we wanted to include this Affect Scale to really get a measure of their emotional response to an individual in recovery, rather than an individual say an active addiction, cause we really wanted to get that recovery piece. And so in this scale, it was composed of 10 questions where we asked participants to rate how they would feel in 10 opposing emotional sets.

So, for example, the question would be, if you were to encounter an individual recovery from an SUD would you feel more pessimistic or optimistic? And then they would go through all of those different emotions. It could be supportive or resentful, apprehensive, or comfortable, calm to nervous. And one thing we really wanted to test with this scale, is really the idea of kind of how dangerous and fearful, um, people perceive those in recovery from an SUD to be. A lot of

stigma around substance use disorder really revolves around that dangerous piece and how blame worthy the individuals with [00:24:00] an SUD are.

And so with this scale, we're really able to measure that and see if we can target those beliefs around fear and danger. Okay. So that's the boring overview of like what we did, but now we can actually get into the exciting stuff of like what the results actually are and what they're gonna tell us. And how you can use them.

So, this is just a, a kind of brief sample overview again. Um, just a reminder we had about 2,700 individuals across the us that took this survey. So if we look first at that political behavior, we found that 75% of our sample signed the petition to support recovery housing in their state, 3% signed against recovery housing, and 22% just didn't wanna bother with our petitions and didn't sign anything.

Um, so that's kind of telling us that there's generally high political support for recovery housing at the state level. Um, of those kind of 25% that didn't sign or signed against. You can see that it's a pretty high share that were just more ambivalent towards recovery housing as opposed [00:25:00] to actively against it.

And then we can also see here that we do have some NIMBY associated with recovery housing. So of those who went ahead and signed for recovery housing in their state, we had about 85% who went ahead and signed that petition for recovery housing in their zip code. And then we have 70 or 7% who sign against recovered housing in their zip code.

So there is that 15% or so that are, are happy to have recovery housing at the state level, but might not necessarily want it right in their zip code, right in their backyard. And so that 15% isn't a huge amount, but it is still a significant chunk of people that did not want recovery housing right next door to them.

And that were exhibiting some of those NIMBY beliefs. And then if we can look at the financial behavior. So of those random, uh, random half of the sample that we gave that additional $5 to, we ended up giving about six, just over $6,200, um, [00:26:00] $6,295 potentially to be donated to NARR. Of that money about $2,278 were donated to NARR.

So 26% of our sample donated all $5 that we gave them. And about 46% donated nothing. Right? So it's a little easier to sign a petition to support

recovery housing. Um, but people are less willing to kind of put their money where their mouth is and actually fork over some of the money that we gave them.

And then we can see here with our stigma. So with all of our stigma scales, both the CAMI Scale and the Affect Scale, um, higher numbers are going to indicate less stigma. So if we have a number for the CAMI subscales above 30, that's going to indicate that we have relatively less stigma. And for the Affect Scale, if we have a score above 35, that's going to indicate more positive feelings and you can see that across our whole sample pulled across all the treatments.

We generally have less stigma and a little bit more positive feelings towards [00:27:00] individuals in recovery. So now we can get into some of the really exciting stuff, which is whether or not our messages worked to reduce stigma and increase support for recovery housing. So this graph here is gonna show you the share of participants who chose to sign a petition, supporting recovery housing in their state.

And you can see first off that we did combine both the identified written story and the anonymous written story into one kind of, uh, treatment. The written story to increase some of our statistical power, but also because there was no difference. The identified written story was just as effective across, um, all of our different measures as the anonymous written story.

So one of the first takeaways there is really those written stories don't have to have a name attached to them, to kind of get the effect that we wanna see. So that could be pretty impactful when looking at messaging in rural communities or more tight-knit communities where kind of putting your name out there might not be [00:28:00] something you wanna do.

So here, one of the first things we can see with the control, remember that control treatment is gonna be where individuals didn't get any extra information about recovery housing. We see that 71% of individuals in that control treatment were willing to sign that, uh, petition for recovery housing in their state.

And then you see that the data message and the video message kind of had no effect on the willingness to sign that petition. We're pretty much at the same share there. But we do see a 5%, uh, five percentage point increase in the share who is willing to sign that petition with that written story. So those, we, it looks

as though there is a small, small effect, um, from that written story, um, on that political behavior.

But after we correct for multiple hypothesis testing and do all this fun statistics, um, we see that that effect isn't actually statistically significant. So what that's all gonna tell us is that none of our messages really [00:29:00] increase political beha, or political support or change the political behavior of our, um, participants.

Oh, and you'll notice that I didn't even mention anything about donations there. Um, that is because none of our treatments were at all effective at increasing, um, financial donations and support of recovery housing. So we couldn't affect political behavior and we couldn't affect, uh, financial behavior with our, um, contact interventions or our data message.

But what we do see here is that we can reduce stigma. So if we look at first, the CAMI Scale, we see that the written story both identified and anonymous, decreased, um, community stigma, especially, um, decreased stigma relating to the benevolent subscales, the social restrictiveness, and that community treatment subscale.

So we really couldn't affect any of the more authoritarianism beliefs, but we were able to affect beliefs in all of [00:30:00] those three subscales. One thing to note here is that in that community treatment scale, our messages, that written story was really able to tackle some of the beliefs about the dangerousness of individuals with SUD and the danger of having recovery housing, kind of in a residential neighborhood.

So those were some of the beliefs that we were really wanting to target, and that written story of an individual in recovery really did that. So that's, um, a good sign. But you'll see that the video and the data treatments had no effect. So actually having someone watch down, um, sit down and watch that video of the story being told or seeing a message about the effectiveness of recovery housing had no effect on their level of community stigma.

We can also see with that Affect Scale, that both the written story and the video increased positive emotions felt towards individuals in recovery. So the written story, um, increased feelings of relaxation, optimism, sympathy, and comfort. And [00:31:00] then that video also increased a lot of the same feelings, um, tranquility, sympathy, and comfort.

So again, we're kind of getting a little bit at that dangerousness piece. We're kind of reducing, people's fear towards those with SUD and those in recovery. And then unsurprisingly, we see that that data treatment really had no effect. Um, we weren't expecting it to, um, unless you're an economist or data person like me, data doesn't often get you super emotional.

Um, so we didn't expect them to have, um, kind of increase their positive emotions after seeing that data treatment. So that's what we were able to find with stigma. But one thing we also wanted to look at was whether or not there were differences in the treatment effects across rural and non rural, uh, participants.

So we wanted to see if our messages worked the same in non rural areas as they did in rural areas. So this is again [00:32:00] a, uh, graph showing the share of participants who chose to sign a petition supporting recovery housing in their state. So we're looking right now at that political behavior. And so the first thing to note here is the differences in the control groups.

So this is kind of like the baseline beliefs before we showed them any messages. Right. And you'll see that in non rural areas, only 69% of individuals chose to sign that petition as compared to in rural areas where 77% of individuals chose to sign that petition. Right. And so that's showing us that there's a,

a significant, um, difference in those kind of baseline beliefs across non, rural and rural areas. Without any kind of messaging those in rural areas are a little more politically supportive of recovery housing at that state level. The next thing to note is that our treatments really did not have the same effect across rural and non rural areas.

If we look first at that data message, you can see that it looks like it's somewhat effective in non rural [00:33:00] areas. A pretty small bump in the share who would sign that petition about a five percentage point bump from 69 to 74%. But if we look on that rural panel, we see that it actually decreases the share of participants who were willing to sign that petition by 11 percentage points.

And I will just preface this with, this is all kind of exploratory analysis. So these effects are significant before we control for multiple hypothesis testing. Um, but it is kind of hinting at a trend we're seeing, um, cannot, we're not, um, It's not, uh, a super big effect that we still need to do some more testing on it.

So all of this is really telling us that we really need to be careful with kind of our audience of these messages. Because they can have different effects across rural, and non-real individuals. You can see that that video treatment even backfired a bit as well and reduced the share of participants who are willing to sign that petition by seven percentage points.

So those [00:34:00] messages that looked relatively effective, or maybe just ineffective in non rural areas might actually backfire on us in rural areas. And you can see kind of why we saw that with the political behavior. If you look kind of how we were able to change stigma. And so that rural panel there on the left, you can see that we didn't do anything for stigma.

None of our treatments, none of our messages changed any kind of stigmatizing beliefs or positive emotions felt towards individuals in recovery among our rural participants. However, on our non rural participants, kind of like our whole kind of sample, kind of reflects what we found with the whole sample is that those written stories reduce stigma. And our a, our written story and our video significantly increased positive feelings towards individuals in recovery.

So we're not even able to effect beliefs among rural participants, let alone some of that behavior. So now we can look [00:35:00] at some regression results and look at who's more likely to sign a petition for recovery housing in our state. Who's more likely to donate more. And then eventually who is more likely to have higher levels of stigma.

So this is the output from a probate regression, looking at the, um, choice to sign a petition for recovery housing in their state. And what you're gonna notice here is that these are 95% confidence intervals. So if those little bracket bars on either side are not touching that red line, then that's going to be a statistically significant effect.

So if we look first at who's less likely to sign a petition to support recovery housing in their state, those who are low income, which we define as making less than, uh, $25,000 a year. Those, um, individuals are going to be less likely controlling for all those other characteristics, um, less likely to sign a petition about, um, 5% less likely.

We also see a pretty [00:36:00] interesting, um, connection between behavior and stigma here. So this is our CAMI Scale. So the way we would interpret this result is that a one point increase in the CAMI scale, or a one point decrease in

stigmatizing beliefs leads to a 0.06% increase in the likelihood someone will sign a petition for recovery housing, and all of that to say that kind of sounds like gobbledygook, but all of it to say is that, we have to change stigmatizing beliefs by a large, large amount before we're gonna get any meaningful change in the political behavior of an individual.

So we have to change stigma by a lot before we're gonna get anyone to go out and sign a petition. And one thing to note here is that signing a petition that someone else is sending to the state governor is a pretty low cost political behavior, right? We're not asking people to go to a community event and speak up at a community meeting or anything like that.

We're really [00:37:00] asking them to do a very low cost political behavior. So getting any kind of action for even bigger, um, uh, political like actions and behaviors, we're gonna have to change stigmatizing beliefs, even more likely. We also see that those who are familiar with SUD or familiar with recovery housing are more likely to sign a petition to support recovery housing in their state.

So if you know someone you're a friend or a family member with an SUD, you're about 5% more likely to sign that petition. Um, if you're familiar with recovery housing, you're about 8% more likely to sign that petition. Um, but you'll note here that when we control for the beliefs and stigma that people have a lot of those demographic characteristics like age, um, gender, things like that, a lot of those don't really become significant predictors of who's going to sign a petition.

So we can also look at who is more likely to donate to NARR, our nonprofit. And I like to [00:38:00] look at these results as really who you should invite to your fundraisers if you're hosting fundraisers. So the first, um, result here is that you probably don't wanna invite younger people. So those who are 18 to 34 or 35 to 54 are going to donate, um, less money to NARR than those who are over the age of 55.

Okay. So on average, it's for those 18 to 34, they're going to donate about 50 cents less than those who are 55 plus. And those who are 35 to 54 are going to donate about 25 cents less than those who are over 55. We also see our relationship between stigma and behavior again. So I know that this dot looks like it's right on that zero line, meaning it has no effect, but I just had to make the dot big enough that you could see it.

So we interpret this result as a one point increase in, uh, the CAMI Scale, or a one point decrease in stigmatizing beliefs. Leads, um, [00:39:00] means that someone is, um, on average, going to donate 1 cent more. So that's not a big effect. So again, we're kind of showing this result that we have to have very big changes in stigmatizing beliefs before we can change the financial behavior of someone.

And then we also see kind of on the flip side, who's more likely to donate more. We have those who identify, um, have liberal beliefs, more likely to donate more money. Those who generally trust people more likely to donate money. And then social workers and counselors are way more likely to donate more money.

So they are on average, donating a dollar more than those who are not social workers and counselors. So generally for your fundraisers, I would suggest inviting social workers and counselors and anyone over the age of 55. That's generally going to be the people who are donating more money. And then we can also look at who is more likely to have higher community stigma.

So the first thing I wanna point out [00:40:00] here is that those who are on that right hand side, they're going to have of that red line. They're going to have less stigma. So a higher number is going to be better in terms of less stigma. If you're on that left hand side, you're in the negatives, that's going to indicate more stigma.

So you can see here that criminal justice professionals and medical professionals both have significantly more stigma than those who are not in those professions. And that's obviously not a good sign, not something we wanna see as we know that that is often the people that those with SUD are interacting with and getting referred to treatment through.

And so this is really telling us that we need to be working on, um, some, you know, stigma reductions specifically for these kind of professionals in the criminal justice profession and medical professionals like doctors, um, nurses, physicians, anything like that. And I will say we, um, criminal justice professionals in our sample was made up of police officers, um, lawyers, [00:41:00] judges, prosecutors, and corrections officers.

So we kind of lumped them all together to be criminal justice professionals. Um, on the other side of that, you also see that those who are conservative or

have a high income, as defined as making over a hundred thousand dollars a year, they're going to have relatively more stigma than those who identify as moderate or who have moderate incomes.

And then on that other side, you see that those who are female, those who are familiar with recovery housing, who have a friend or family member with an SUD who generally trust people who are liberal or who have an SUD themselves are going to generally have less stigma as well. So that's our results in a nutshell.

So now we have a couple key takeaways. The first being that there are pretty high levels of political support for recovery housing, right? We saw 75% of individuals signed that petition to support recovery housing at the state level. We also saw that we can lower [00:42:00] stigma with our written stories of an individual in recovery. And that we can increase positive feelings, felt towards individuals in recovery with the written stories and the video.

But we did see that messaging has pretty limited ability to actually change behavior, either political or financial. Um, so that's, you know, just something to keep in mind when we're running these kind of messaging campaigns. We also saw that messages don't work the same across rural and non rural areas.

And so we have a couple theories for why that data message didn't really work, um, for our rural participants. Um, the first thing is that we really were kind of this anonymous messenger, right? We're not a trusted community member. We're not, um, none of our participants knew us. And so our message might not have the same effect as if it were to come from a very trusted community member or someone who's kind of in that rural area doing the work.

And so that kind of [00:43:00] anonymous academic source of the message might have kind of backfired among those rural participants. Um, our data message also included kind of before and after of those in recovery housing. So it really did make salient who was going into the recovery house in the first place with, by telling kind of the, you know, the 75% of individuals, um, used, um, illegal drugs versus the 15% who used illegal drugs after going through the recovery housing program.

So we wanted people to look at how great of a change that was, but we also might have made more salient who's actually in the house itself. And then

finally we see that familiarity with recovery, housing and substance use disorder are going to be the biggest predictors of behavior and beliefs.

Obviously, if you work in this kind of area, you are going to be more supportive of recovery housing and have less stigma. So there are some limitations to our stor, our, our study here. Um, the first thing that we did only really [00:44:00] include one storyteller. Um, it was a white male with a Kentucky accent, so that might have, might not have, um, kind of vibed with every, all of our participants.

It might not have connected with them. Um, the way that other storytellers might have. Um, we also looked at just short run effects. So we showed individuals these messages, and then we asked them about their beliefs and behaviors right after it. So there's no telling if these messages would have more long term effects on behavior or beliefs.

Um, really importantly too, is we did just test a single intervention. So we just gave these, um, participants one message at one time and measured their beliefs. So repeated messages might be more effective, things like that. Um, we also just examined substance use disorder um, stigma in general, we didn't look at stigma specifically relating to specific types of SUD.

We also saw their sample had a higher proportion of females and individuals from Oregon and rural areas. [00:45:00] Um, so that is something to keep in mind as well. But now I wanna talk a little bit about what you could do next, if you are trying to decrease community stigma, um, in your area. Um, and so there's kind of five key things that I had thought of that this story, or this study kind of informs.

And the first is that you should really develop your communication strategies with your audience in mind. Right? It's really important to think of who you're talking to. And how that message that you're trying to get across, how it's gonna come across with different audiences. We saw that rural and non rural participants didn't respond to messages in the same way.

And so it stands to reason that your audience's one message kind of isn't gonna fit every audience. Um, the second is that you really can share those personal recovery stories. They are going to reduce stigma, even if they are anonymous. And I think that's a really key takeaway from our study is that you don't have to

put a face and a name to those recovery stories for them to be effective at reducing stigma.

They can be an [00:46:00] anonymous written story, um, of someone's personal recovery story. We also know that addressing stigma is going to require kind of a socioecological approach, right? It's gonna require interventions across all different levels. One person, um, at one level, sending out these messages, trying to reduce stigma, isn't gonna be enough.

We saw that criminal justice and medical professionals both had pretty high levels of stigma. So we're going to need to address stigma at the community level, the personal level, and those more professional levels. We also wanna make sure that we're testing our communication to make sure it's having the desired effect, right?

Some of those messages in non-rural areas that looked like they might have been a little effective or not effective at all, actually backfired in rural areas. And so we wanna make sure we're testing our communications, seeing the reactions to them, um, to make sure that they are doing what we hope that they are doing.

And then we also wanna keep our messaging consistent and recognize that it will take time. [00:47:00] Um, like I said, in our limitations, we really did just test one message at one time. And so constant barrages of messages, of course, not too constant, but some repeated messaging, um, has been shown to be more effective at changing behaviors and changing beliefs more in the long term.

And so we wanna keep our messaging consistent and just recognize that it will take time. Um, it's not gonna be something that we send out a, a message and we write these stories and immediately everyone has less stigma. It's gonna be something that we have to work at, um, for a little bit of time, for sure.

Um, so that is all I have for you today. Um, here's my contact information and I'd love to open it up for questions and to have a little bit of a discussion. So thank you so much.

[00:47:49] **Janice Fulkerson:** Madison. We do have a couple of questions. Um, one participant wants to talk about the stories and the impact of recovery. [00:48:00] Do you think the story in, if, if the story included a locally identified person that the impact, uh, the results would've had a different impact?

[00:48:11] **Madison Ashworth:** Yeah, I definitely do. So we saw there with, um, the individuals, when we were looking at the predictors of kind of who had higher stigma, um, that knowing kind of a friend or a family member with a substance use disorder, um, generally those people had less stigma were more financially and politically supportive.

And so anytime that we can kind of create that connection with a family member or even a community member, anytime that that connection is a little closer to home. Um, I think that we would see that that would have less, um, be a little more impactful. Um, it's always, I think a message is always a little more impactful if it's someone, you know, versus

some random guy across the country. Um, but if you're looking at kind of a broader reach of a message, it's going to be hard to identify who's in what community. [00:49:00] Um, so if you're working across multiple communities, you know, still having even just one anonymous written story of personal recovery can be effective.

[00:49:10] **Janice Fulkerson:** Thank you. Uh, follow up question from another, uh, person. Do you think the messages that you tested would reduce stigma around different types of SUD treatment?

[00:49:24] **Madison Ashworth:** Um, yeah, I think we did have a pretty specific focus about stigma towards recovery housing. Um, but we did include in some of those, um, CAMI subscales questions about just SUD treatment in general.

And so I do think that we saw some changes in stigmatizing beliefs around treatment in general. And so I think it is fair to say that we likely could use similar messages to reduce stigma towards other, um, treatment options as well. Of course, there are different beliefs and different stigma, stigmas associated with, um, different treatment [00:50:00] options.

So you may have to target and kind of craft your message a little more specifically for those.

[00:50:07] **Janice Fulkerson:** Thank you. Um, any, uh, thoughts that you wanna share with the group around the criminal justice professionals and medical professionals who have higher stigma, uh, perhaps, um, how messages or, um, discussions might work specifically with those groups?

[00:50:24] **Madison Ashworth:** Yeah, definitely. Yeah. And of course that wasn't, um, totally the purpose of our study. We really were focused on that social, um, community level stigma. But of course we saw that the medical and criminal justice professionals had higher levels of stigma. And the literature really shows that those contact interventions are really, really effective for medical professionals and, uh, criminal justice professionals.

So a couple studies have tested whether kind of sitting down and talking with an individual with a substance use disorder, um, can reduce stigma among medical students. [00:51:00] And they found that just kind of sitting down with a person, meeting a person with a substance use disorder, um, can be really effective at reducing stigma and kind of increasing the willingness of that medical student to work with individuals with SUD in the future.

Um, With criminal justice professionals, those contact interventions are again, probably more effective. Um, most of the ones that have been tested with criminal justice professionals are more in person kind of meeting an individual with a substance use disorder that's in recovery. And those have been shown to have short term effects.

Um, but again, some of those long-term effects of a lot of these interventions are relatively untested. And so I think that's kind of the next area that a lot of research has to focus on is, what are these long-term effects of these campaigns. Um, but we have seen that really just meeting people, humanizing those with SUD is gonna be effective, um, across all different kinds of people, whether it be the local community, [00:52:00] doctors and physicians, or criminal justice professionals.

[00:52:05] **Janice Fulkerson:** Thank you, Madison. That, um, leads into one of our final questions, um, which you, uh, have provided a good overview, uh, around, which is, do we have any other options for stigma reduction besides education and data or storytelling? So as you've outlined, uh, you know, humanizing, uh, having the opportunity to meet people in active recovery, you know, that engagement at the community level in a very positive way, um, is also, um, one of the opportunities to help reduce stigma.

Whenever we think about, you know, positive community engagement, the outcomes in the economics of it all. Do you have anything else you might wanna share?

[00:52:51] **Madison Ashworth:** Yeah, I mean, generally speaking, those are the ones that have been tested because they're easier to, to test and kind of look at, but I know that there [00:53:00] are a lot of, um, Just that community engagement, meeting people and just having conversations, um, I think can be really impactful in terms of stigma reduction.

Um, I know that there are quite a few, um, resources out there about how to kind of have those difficult conversations, but a lot of times that conversation and community work, um, is also really effective at reducing stigma. Of course, that's harder to test in a study like this, but I think we, um, still has been proven to be effective,

anecdotally.

[00:53:36] **Janice Fulkerson:** Thank you. The questions keep coming in Madison, um, has ethnicity or race been included in this study?

[00:53:45] **Madison Ashworth:** Yeah, so we did ask individuals, um, the participants themselves, their race and ethnicity, and in all of those kind of probes about who has more or less stigma race, um, wasn't really a factor, in terms of who had more or less stigma who was more or [00:54:00] less

willing to support recovery housing, and all our, um, results are robust to the inclusion of race and ethnicity in those kind of figures. Um, they were already pretty long, so I didn't wanna give you the full figure that had all the different characteristics. Um, but we also didn't find any, um, differences in how our treatments worked across race.

So our messages were kind of equally effective across all, um, our participants in terms of those racial groups.

[00:54:30] **Janice Fulkerson:** Thank you. Um, alright, one more question. Um, do you plan on doing any follow up studies in this area?

[00:54:41] **Madison Ashworth:** We do have quite a few follow up studies planned. Um, one of, a couple really kind of looking at why we found some of the results that we did.

So kind of tying in a little bit of that, um, racial aspect. We do wanna test. Whether or not who the storyteller is, who that [00:55:00] person in recovery is

matters to how the message works. So we wanna see if kind of how you connect with that storyteller matters about kind of who it looks like. Is it a man or a woman?

Is it a person of color or not? And we wanna test whether that contact intervention is more or less effective across, um, different kinds of storytellers. And then we also really wanna dig into the rural result that we found about it kind of backfiring a little bit on us, that data message. And we wanna test kind of who the messenger is.

So, you know, maybe my, um, kind of, you know, our academic messenger wasn't the best, most effective one. But if we could have included, um, say the message coming from a local public health agency, a more trusted community member, a religious leader, we wanna see if that would've changed the effectiveness of that data message, especially in rural areas.

So that's just some of the research we're doing, but hopefully we can do quite a bit more. [00:56:00]

[00:56:01] **Janice Fulkerson:** Thank you. Um, was certified versus non-certified recovery housing options looked at in this particular study. Was there a feeling about, you know, whether a house was certified or not, um, uh, included in this study?

[00:56:17] **Madison Ashworth:** Um, yeah, that, would've, that's a really good, um, question there. And we have, we did not, um, specify whether it was support for certified recovery housing versus non-certified. Um, because it was a pretty broad community sample. We weren't positive that individuals would kind of have that knowledge about kind of the certification process with recovery housing, what the differences are, et cetera.

And so we kept it pretty broad just about recovery housing in general. Um, but I would imagine that, I would think that, um, support would be higher for maybe certified recovery houses, make it more formal. But, um, that was [00:57:00] not included in our study.

[00:57:03] **Janice Fulkerson:** Thank you Madison. We are, uh, going to need to wrap up here pretty quick. Um, so a couple of reminders for the audience as we close out the slides, um, from this, uh, webinar will be available on our website at FletcherGroup.org uh, next week. Also research is something that

The Fletcher Group does a lot of, as you can see by this work and other work that Madison and her team are going to be working on. We have a contingency management research project underway.

Um, if anybody's interested in, um, looking up more at participating in that, I'll put the information in the chat. Um, and then also Fletcher Group, um, does technical assistance around the expansion of capacity and quality of recovery housing in rural communities across

the U.S.. So I know one of the questions in the chat box was how can anybody get involved? And in what states are we [00:58:00] working in? And it is all of them. So I would encourage everyone to go out to our website, check out the online technical assistance, research, the forward facing materials and, uh, reach out anytime.

Next month we will see Stacy Hanson. Who's gonna talk about nonprofit 501c3 versus LLC.

The following month in, uh, September. We'll have Lori Baier talking about workforce development. So thank you everyone for participating. That concludes our webinar for

today. Thank you, Madison.

[00:58:39] **Michelle Day:** This concludes our webinar session. Thank you so much for joining us today. Also, please tune in on the first Thursday of each month from 2:00 PM to 3:00 PM Eastern Standard Time where we will be hosting subject matter experts from across the nation to bring you valuable tools and resources for rural recovery house operators and SUD professionals.

If you [00:59:00] would like information on technical assistance, you can go to our website again, www.FletcherGroup.org, which I have also copied in the chat, and submit a technical assistance request. Lastly, please take a moment to respond to the survey questions once they become available on your screen.

Your feedback is very important and greatly appreciated. Thank you and have a blessed day.