Opinion Science Podcast

Hosted by Andy Luttrell

Taking Social Science into the World with Neil Lewis Jr.

July 5th, 2021

Web: http://opinionsciencepodcast.com/
Twitter: @OpinionSciPod
Facebook: OpinionSciPod

Narrator:
Why are we Americans on the march? Is it because of Pearl Harbor?

Andy Luttrell:
World War II was a turning point in the history of social psychology. I mean a turning point in everything, but also social psychology. It was the kind of major event that shook the lives of so many people. And that's the thing. It was a fundamentally people-oriented event. The kind of thing that social science is all about. There were concrete issues affecting real people's lives and there were scientists ready to use their tools to understand them. In October 1941, the United States Army officially established its research branch. The goal was to use the research methods of social science, which were actually pretty new at the time, to understand soldiers' attitudes, which would inform various administrative decisions. Prominent researchers from all over the place joined the cause and developed studies that were fielded among more than half a million actual soldiers. It all led to this four-volume series of books released by a special committee of the social science research council, and they're still being cited today.

Another influence of the war was that Jewish academics in Germany were forced to flee. And one of them, Kurt Lewin, left the Berlin Psychological Institute in 1933, and ended up establishing important social psychology research programs in the United States. And the thing that makes Lewin especially notable was that he was of the mind that a problem was only worth studying if addressing it would make a difference with regard to real-world problems. I mean, his biography was titled The Practical Theorist. For example, during the war the U.S. government wanted to convince people to eat more organ meats, things like kidneys and hearts, because they were less expensive, more readily available, but also rich in protein. Everyday citizens, though, were resistant to the idea. You know, because of course they were. So, Kurt Lewin began a program of research on how to overcome this resistance.

My point in all of this is that social science has the ability to respond to real human problems, to examine these things as they happen in the actual world, but we don't always do it. By the late 1960s, some psychologists were reflecting on their field, thinking that it sure seemed a lot more like fun and games than the ideals that Lewin had been espousing a few decades earlier. In fact, one of these critics wrote, "Clever experimentation on exotic topics with a zany manipulation seems to be the guaranteed formula for success. Whoever can conduct the most contrived,

flamboyant, and mirth-producing experiments receives the highest score." This discontent seems to have persisted at a low simmer over time, occasionally bubbling over into claims that the field is in a crisis. The feeling was that the field was lost, no longer knowing what to study and how to make a difference. And now some of this seems to be due to this prominent view that science's chief concern should be building theories of basic principles and that the work applying these insights in the world is somehow less valuable, but I think we're starting to see a change in this.

I want to just read what I think is a really useful insight by the social psychologist Daniel Katz, who was writing about the work coming out of the Army's research branch. This is from 1951. "The strategy of social research should not be a complete concentration upon pure science and a postponement of all effort until we have a full-spun theoretical framework. The interaction of basic and applied research should prove more productive than the concentration upon the one or the other with resulting isolation of theory from practice. As the research branch has shown, we can make progress in the immediate future by utilizing the resources so readily available for applied social research in as broad a scientific framework as the development of the field permits."

You're listening to Opinion Science, the show about our opinions, where they come from, and how they change. I'm Andy Luttrell, and this week I'm excited to share my conversation with Neil Lewis Jr. He's an Assistant Professor of Communication at Cornell University and he studies social inequities as they relate to health, education, and the environment, and as you might guess from my introduction to this week's episode, Neil also is a vocal advocate for doing social research in the places where social stuff is happening. By going into the field, getting natural data, and working with community partners, he's intent on doing research that'll make a difference. As you'll hear, he also values bridging across the social sciences, both in his own work and in the writing he does for general audiences. So, let's jump right into my conversation with Neil Lewis Jr.

You know, in terms of the broad strokes of what you do, I wondered what your perspective is on what are your goals? You're a social scientist who has lived in different worlds within the social sciences, and who's dabbled in different areas, from health and education to other forms of communication. What is at the heart of it? Has it changed for you over time? And if it has, what was it and what is it now?

Neil Lewis Jr.:
Yeah. I mean, what I do has changed over time, but there is a sort of common core of really trying to understand how inequities work and how to address those, reduce those. So, yeah, and by way of quickish background of how I got here, so I have bounced around the social sciences a bit, and that really started in undergrad, so I studied economics and psychology then. But my research career began in sociology, actually.

Andy Luttrell:
Oh.

Neil Lewis Jr.:
And so, that's what I did my undergrad research in. And I think if I look back, that's part of why you see me draw mostly on those three fields. It's because of growing up in the three of them,

between the three of them. But that's where I started and then went to graduate school in social psychology, but really the big issue that I was passionate about then and continue to be passionate about is the issue of education disparities, right? So, that's what I went to graduate school to study, but as I worked on that and trying to think about interventions to address education disparities, the further you read into that literature the more you get to health disparities, right?

And so, that's how that became my second thing.

Andy Luttrell:
Well, so, could you explain that a little more? Like what's the dividing line in the tree where health and education have the same origin?

Neil Lewis Jr.:
Yeah, so it goes back to that inequality issue, right? That when you look at things that affect student learning, and when I started working in education, I was really focusing first on early childhood education, so some of the work I was doing was actually looking at what is learning like in elementary schools, for instance. And so, you run into things like how poverty affects health outcomes and also educational outcomes. Free lunch becomes a variable that matters a lot in education studies and education researchers use it as a proxy for poverty level, but free lunch also tells you something about what are health opportunities or lack of opportunities for students and their families, right?

And so, that's how I started moving in that direction too, is really thinking about the broader health landscape that would affect students' abilities to learn. And so, yeah, went into health as that second thing, and then eventually that also led into environment. That's how that became my third domain because many health issues can also be traced, at least in part, to issues of environmental injustice. So, that's how then those three became my three big domains that I continue to sort of bounce between.

Andy Luttrell:
So, it's interesting, because if there's this… You can't separate health from education from environment, and nor can you really separate sociology from economics from psychology from communication, even though we all try to live that way.

Neil Lewis Jr.:
Right.

Andy Luttrell:
So, what do we gain from thinking holistically about how all these things come together that maybe goes under the radar when people are a little too siloed off into one of those domains?

Neil Lewis Jr.:
Yeah. I mean, I think if you're trying to… So, the reason I talked about the intervention focus a lot is that I think if that is a goal of yours, right, trying to make changes in some of these outcomes, then you really need that holistic understanding that focusing on one set of variables, psychological variables only, or the economic variables only, or the sociological variables only, or the messaging

only, and you miss how it's connected to the others, it becomes harder to develop effective interventions. And so, that's why I find it helpful to draw on all those fields.

And then increasingly, I haven't talked about political science yet, but… Yeah, I mean just given how politicized this country is and how politics is racialized, frankly, you have to attend to that, too. And so, that's the other area that really towards the end of graduate school is where I started thinking more about that. I spent a lot of time in the Center for Political Studies at Michigan too, and that's where I began my peek into American politics and how that plays up in these other factors that I'm interested in, too.

Andy Luttrell:
Yeah. So, it's not just that you're drawing on these fields, but you're actively working with folks in them is what it sounds like.

Neil Lewis Jr.:
Yeah.

Andy Luttrell:
Which does strike me as important because I've had a couple experiences where you have a… There's a very particular way that I think about things, just of course based on everything that led to me being where I am now, that when then you start to work with someone either in a different discipline, or even who just does something slightly different within social psych, your assumptions become so much clearer because they'll go like, "Oh, well, why are you doing that?" Or like, "Obviously we need to control for this." And you go, "What are you talking about?"

Neil Lewis Jr.:
Yeah. Yeah. Exactly.

Andy Luttrell:
I've never done that before. Or you try to publish in a public opinion journal and they're like, "Well, obviously you need these covariates." You try to publish in a social psych journal, and they go, "Get those out of the model."

Neil Lewis Jr.:
Exactly. So, that's actually one of those funny things that when I started working with political scientists was a point of debate at our meetings, was like, "How many things do you actually need to control for?" The way that I was trained in social psychology, like that's a kitchen sink model, and you… That's the wrong way to do it. And political scientists are like, "No, but these are important features of people's political life. You have to account for those." And so, there is this back and forth, different ways of thinking about how to do research. Which is sort of another thing that I've really come to appreciate over the years is what are the strengths and drawbacks of different methodological approaches, and when is it appropriate to use some things versus others.

Andy Luttrell:
This puts you on the spot a little bit but are there examples of… Let's even just stick with interventions, where because they stayed within one field, were less effective than they could have

been? Like is there anything that comes to mind where you go, "Well, if only they had incorporated these other features, this could have actually had more impact."

Neil Lewis Jr.:
So, I won't call out particular studies, but I'll answer the question a different way, which is-

Andy Luttrell:
And I don't mean… By the way, if you're calling out a study, it's not to say that it's bad. It just means it was appropriate for what it was trying to do, but if we had added this extra layer, we would have extra mileage.

Neil Lewis Jr.:
Well, so let's talk about messaging studies for now and even thinking about health messaging studies, which is… You know, we're still in a pandemic and so there's been lots of interest in that from psychologists. So, the social psych way, anyway, of thinking about those health messages… You run your experiment, test, what is the effect of message A versus message B on let's say intentions to wear a mask or something. And you get beautiful, significant results, and so you're like, "Well, this message is great."

From a comm perspective, you also have to think about things like, "Well, how many times do people need to see the message?" How much exposure do you need? How is that exposure… If you want to bring that to a population level, what is that gonna look like in the different media markets and how things operate there? So, that's one of those things that… You know, I've done health messaging work for a long time but didn't really… I didn't fully appreciate what that meant to scale it until being in a comm department where I'm working with health comm people who… that's the way that they started their training and thinking about it, was like looking at differences in media markets and how exposure functions work and the like. So, that perspective I think has changed the way that I think about designing messages now and how I'd even go about designing a study to test them and figure out where and when we should use them, what are the tradeoffs associated with them and the like.

Andy Luttrell:
And that kind of brings up the other point of applied versus what has… we'll call it basic research or whatever people want to call it. And the different things you might find when you go from sort of a proof of concept to actually looking at things in the field.

Neil Lewis Jr.:
Yeah.

Andy Luttrell:
So, you've done some work doing actual field research, is that right? Am I getting that right?

Neil Lewis Jr.:
Yeah. Yeah.

Andy Luttrell:

Could you give an example of what… Just sort of a glimpse into one of the projects that you've done that you would call an applied or field study?

Neil Lewis Jr.:
Yeah, so have this study, this is with Allison Early, one of my advisors from University of Michigan, that… It's a study looking at attention to HIV prevention messages, right? So, these messages that were developed to be really resonant with particularly Black and brown audiences, and message works really well when viewed sort of in a lab and other private settings, but in a public health clinic, one of the things we tested was… Well, how well does this work if it's being played in the waiting room of a public health clinic? And it turns out that in that context, it really matters who else is around at the time. For our Black audience especially, if you're the only Black person in the clinic at the time, it's fine. You'll watch the video. But if there are other Black people around, you become concerned about what they might think if they see you watching the video, and so you're not gonna watch it in the clinic.

So, this is one of those cases where you can develop the message and find that it works great in the lab, but without also modeling the field and what other dynamics come up in the field, in that case it seems to be really this stigma concern issue that's coming up in the field, if you don't take that into account then you might miss some crucial information about where and how you can use that message to change behavior.

Andy Luttrell:
So, for that, how much of that was… Like was this fully like, "Yes, this is the thing that we think matters in this context," because I could see an argument for exploratory field work that there are certain things where, like you said, it works great in the lab. Throw it in the field and just to say, "Didn't work." You go, "Well, but this is now an opportunity to be like what was different in the field that was changing the way people viewed things?" So, it's sort of a two pronger. One is how much of that was built on a theory of identity in context and then also what are the bonuses we get from exploratory field work?

Neil Lewis Jr.:
Yeah, so all of that was sort of necessary, right? And so, one thing that was essential for even doing this work in the first place was Dolores Albarracin, Allie Earl and others had found, and there were studies that said that Black audiences really wanted this information, but there was this gap in attention to it. Like outside of the context of controlled, highly controlled intervention settings, there's lack of attention to it. So, they declared that before, and so the question is like why, like what is happening in these more public settings that would lead to sort of this gap in attention?

And so, that's when you can sort of go back and really draw on, as I was talking about before, insights from all these fields who have studied things like HIV, things like stigma, and how those work, and how they've been racialized over time. So, there's this book by political scientist Cathy Cohen, actually, on the politics of HIV and how that's become racialized over time and changes the way that Black Americans think about that disease. So, that leads you to then generate the hypothesis about, "Well, if this is a concern, then that might… that concern should play out in a

public setting, right?" So, that might explain why when the videos are viewed privately, there's no problem. But in a public setting, there might be a problem.

So, then you would design a study in a public setting to see if that's actually playing out, and so that's what happened with that project.

Andy Luttrell:
I'm also curious about the logistics of applied work and it's one of those things where I have books on field experiments, I've read the work on interventions, and I go, "That sounds great, but I don't even know where to start." Like, what… So, even to get granular on just that study, what were you looking at in the wild to know that these messages were getting through to individual people, like what is the data point and how did you get it?

Neil Lewis Jr.:
Yeah, so in that study it was having RAs sit in the waiting room and observe behavior, so that's a study that mixes observational research techniques with experimental methods, so we got to manipulate… So, in terms of logistics, you have to work with the clinic directors to get permission to randomize what videos they're playing in their waiting room, and then sit and watch whether or not people pay attention to it. But more broadly on the logistical question, it really depends on the nature of that study.

So, the education studies, you often need buy-in depending on whether it's a public or private school, you either need buy-in from principals and in private schools, that's usually enough. In public schools, you need to go the layer up usually, get buy-in from superintendents. With all the health stuff that's in clinics, it's either clinic directors or if it's the work we're doing these days, there are groups of clinics that are all managed by the same administrators that if they say yes, then you can run the studies in their clinics. So, there is a lot of relationship management with partners to be able to run these kinds of studies.

Andy Luttrell:
So, how do you pitch this to a clinic and say, "We want to take your TV hostage, decide what to put on it, and just sprinkle people in your waiting room who are just gonna kind of be eyes and ears."

Neil Lewis Jr.:
Yeah, so this is part of working on projects that clearly also… Everyone recognizes a problem that needs to be solved, or at least to be figured out better. So, in education the problems I focus on are these achievement gaps, right? So, everyone is interested in trying to figure out what to do about them, so if there's buy-in about the problem, you can talk about why you would need to study certain set of processes and then why you think that design would be informative. And so, it's really having those conversations about the what are you trying to figure out, why this kind of design would be informative you think, and why you need to study in that way. In health it's the same thing. It's often a conversation about particular problems, so I mentioned the HIV study before. We had started doing some work around blood pressure, and attention to that kind of information, so another thing that you talk to doctors, they know that these are problems, and so

it's really these conversations about why your study could inform us about how to address those things.

So, from there, it's like if there's buy-in about the problem, then the harder hurdle sometimes is logistics. So, making sure you're gonna be doing the study in a way that you're not actually getting in anyone's way, so in a school that's making sure you're not being too disruptive. So, if you have to run the study where you're like pulling out of classroom one at a time, that can be really disruptive versus we're gonna come in and do this, everyone in the class is gonna do it at the same time, it'll take 20 minutes and then we're out. You know, you can figure out those kinds of logistics, but it's a conversation with a partner to figure out how you can do the study in a way that maximizes what you learn, but hopefully also teaches them something that would be useful for them to know.

Andy Luttrell:
So, in a case like that, I think we did a project years ago where we were having to go in residence halls and we were looking at social networks and that sort of stuff, and there was a clear interest in like what did you find. Could you please present this stuff at the end of it? And so, in cases like this, how much does that relationship still continue? Once the data are in, once the analyses are done, was there a meeting to sort of give a presentation? Or is it a little bit like we'll give you the keys for a few weeks and then we're done?

Neil Lewis Jr.:
Yeah, so there are different ways of doing this kind of work. I tend to operate in a way that I'm going to go back to the communities and partners and talk about what we found. And if there are ways to be helpful in the long run, also keep the door open so that it's not just extracting knowledge and then disappearing into the night, but also being a resource. So, most of the partners that I've worked with, we stayed in touch in some way, shape or form. And sometimes then future opportunities come up.

So, we were doing work in the environmental realm, so when I started at Cornell, my first field studies here were about environmental issues. And we were doing stuff all around the country, but a lot in New York City, and so that's what I built a lot of partnerships around in New York City, was studying environmental justice issues. But since the pandemic started, those same partners have then wanted help thinking about pandemic-related issues, right? And so, being available to them to work with them on those issues, as well, and maybe that will lead to future long-term studies around health, maybe not, but the point is this is an ongoing relationship that we can work together to do science and help the community at the same time, and sometimes that's going to be the scientific studies prioritized. Sometimes that's I'm going to be a sounding board for other issues they're thinking about and it's sort of a back and forth over time.

Andy Luttrell:
So, if we think about just to go from the mechanical part of how these things work to what we know from studies like this and messaging about health and related things, so you've done… Clearly, identity is a through line to this kind of work, and one of the things that I think we're very much aligned on is this notion of the same message and priorities for one audience is not necessarily gonna translate to another. I was gonna talk to you a little bit about that with science

communication, but in the health domain and this notion of identity-based motivation, what is the value of considering those motivations, right? And some examples of why we have to be attentive to that when we think about messaging in the health domain? You've given some examples, but I guess at a broader level conceptually, what does that mean, identity-based motivations? And what does it then mean for communication?

Neil Lewis Jr.:
Yeah, so the broadest way that I think about this is related to what we were talking about earlier, that people end up really taking away different things from even the same messages, right? And so, we have to really acknowledge and understand that I think to develop effective messages if one, you want to change behaviors, so I think in social psych we often try to find the message that's gonna resonate with a broad audience, and sometimes we can do that, but depending again on sort of the histories that people have had, some messages might not land well. And I'll use pandemic-related examples since that's really what I'm spending most of my time on these days, around vaccination.

So, vaccines came out in December, January, and continue to roll out, and initial messaging was about just here are these numbers. It's 95% effective. Everyone should take it. And there are some people who that number is enough, right? They see that number and they trust it because they've had good reason to just generally trust healthcare and the medical system. There are other people who've had long histories of distrust in that system, who've constantly been mistreated by that system, so when a new message comes out from that system, there's a moment of pause to ask, "Is that really going to work for me and people like me given how this system has historically treated people like me?" And they have to think about that.

So, that's come up in some of our discussions around vaccination, that… So, there's a group of healthcare workers, for instance, who they were among the first priority to get vaccinated, and it turns out that group had a lot of hesitancy. So, in long-term care facilities in particular, had a lot of hesitancy to get the vaccine, and one of the… So, I was part of a number of groups that have been working on this issue, and one thing that's come up over and over again was this concern of, "Well, you know, historically, and not even that far back in history, like in the beginning of this pandemic, we were always…"

Andy Luttrell:
Which feels like a long time, by the way, but yeah. Go ahead.

Neil Lewis Jr.:
But yeah, we were always at the back of the line. So, we were the last to get PPE, we were last to get support. Why do you want us to go first this time? And that's, when you think about that history of like being mistreated, being forgotten, it makes perfect sense to ask then why do you want us to be at the front of the line this time for this new thing that just came out, that there's a lot of conversation about how this was developed much faster than any other vaccine before? So, you can see why people might be skeptical of, "Oh yeah, you're saying it's fine, but is it really fine? And if it was fine, why don't you want the people who normally get things first to get it first this time?"

So, that's why I think it's so important to really think about these histories that people have had, because that's gonna shape how they make sense of these messages. So, that's what was going on in the beginning and why there was this initial concern. Of course, over time, as people see that lots of folks have gotten vaccinated, they're fine, those concerns have been diminishing over time and there's great acceptance and the like. But that's what I mean by really thinking about the histories and identities of people, how that shapes their understanding of the messages they're seeing, and how that matters for how we even talk about a variety of outcomes.

Andy Luttrell:
How do we identify those potential reactions? So, one is have diverse research teams who have lots of different kinds of perspectives, but even then, you're targeting communities who are unique in intersectional ways and other sorts of ways that you couldn't feasibly have a research team that has every perspective on it. So, are there like tangible activities one could do? Like is there some version of focus grouping? You know, I think… So, my work is in message tailoring in a lot of ways, right? In what ways do people's own psychologies affect which messages resonate more than others? And even then, we're still… We're just kind of going off of the variables that have already been identified, right?

I think there's a lot of strides that could be made that aren't and maybe could be if we just talked to people, but it's not what psychologists do, right? We just go, "Well, we know what we're testing. You read the message and tell us what you think."

Neil Lewis Jr.:
If people take nothing else away from this conversation, psychologists, talk to people. You can learn a lot of things from just talking to people. So, what I mean by that is one of the things I find really valuable is these partnerships I was talking about before, right? So, being in the room at the health department and hearing what the doctors are saying they're hearing from their patients, what the community health workers are hearing from the people they're working with, how the health policymakers are thinking about this and what they're hearing from their end, it provides a lot of information for doing the kind of mapping, like we have… You're right, there are lots of variables that have been identified, but identified among particular populations as well is something we have to remember.

And so, sometimes there's a mapping from let's say the college student sample to other populations, but sometimes there's not that mapping. And you only know that if you are able to get that information in some way. So, in a pre-pandemic world, going to communities and talking to people with focus groups and the like, that was a thing that we did a lot of. But there is Zoom versions of this now but having the partners who are also on the ground, still on the ground, who can provide that information is incredibly helpful. But then there are other efforts that we can also draw on, so I think there's another issue of thinking.

We, the scientists in the laboratory, have to collect all of the data ourselves. Lots of other people are collecting data that is also quite useful, so during the pandemic, for instance in thinking about vaccination, I have found the Kaiser Family Foundation's Vaccine Monitor project tremendously helpful. So, every two weeks they survey a nationally representative sample with oversamples of minority populations, and they do it in both quantitative and qualitative ways. And so, I am

constantly going to their site and looking at what are people saying in the qualitative responses and how are these numbers changing. That is incredibly informative for how I think about what are the concerns on people's minds right now, how are those concerns different than a month ago, or two months ago, because that's the other thing is that times are changing too, and so we have to be responsive to that, as well.

So, we can't think we're gonna run one study that's going to really capture everything we need to know. Having these kinds of partnerships and looking to other fields and other sources can also give us tremendous amount of rich information that helps us really figure out where our theories are relevant and where they're not, but then also develop practical messages and interventions to help.

Andy Luttrell:
Yeah. And you know, as you describe this, how things are changing so much from one survey to the next, it strikes me that part of the allure of doing COVID-related research and using psychology and other methods for it is that it's so important right now. We go, "Well, we have these tools. Let's use them and try to be helpful." But it's also such a moving target that I'm a little concerned that like how much can we really accomplish in the immediate, right? Like, "Tomorrow, let's run the study and then we'll know." It strikes me that a lot of this is building to be helpful next time and it's just that moving target.

So, we had a messaging COVID-related paper come out, and the first couple studies were right at the beginning of things, and we had these nice patterns, and so we submitted it, and then review takes forever and they came back, and they said, "We want another study." And we go, "It's a different world now. It's been three months." And as it turned out, it actually worked out just fine. We replicated everything in some ways to my surprise because things had changed so much, but it just highlighted for me, like I don't know what we can expect to accomplish in the midst of something like this. I don't know if you've thought about that at all, like what's the goal? Is the goal to be helpful now or is the goal to learn for next time?

Neil Lewis Jr.:
Well, different people have different goals, and I think both are valuable, but there's studies that we can run now that, again, depending on sampling, and methods, and timing, and all of that, we might figure out patterns that we can use right now. If, I think, we have enough contextual information that helps us make those calibrations. But then there are other things that it's good to be collecting data now, that we will then just be able to archive, and think about, figure out these patterns later. In some ways, sort of as a historical analysis.

And that's something that… So, there's this paper from the '70s that was apparently super controversial at the time, but I now think it was just like way ahead of its time and it's this paper by Gergen on social psychology as history. And so, there are people that really don't like that idea, but I think it's incredibly important that we have to think about the historical moment that we're in and how that affects the processes in people's minds, and that's not just a pandemic thing. That was also true before the pandemic, and I think it will continue to be true after the pandemic. But I think that is why it's so important to have these multiple disciplinary perspectives to help you make sense of what that means.

One sort of COVID-relevant example of that I've been thinking about is just like the politicization of so many things, right? Like I, frankly, before it happened, I did not think wearing a mask would become a politicized thing. Maybe I was naïve for thinking that, but I was just like, "Well, it's a health crisis and wearing a mask is… that makes sense." And then it became politicized, and I was like, "What is happening?" And then vaccines, same thing. You know, we want to get back to normal, quote unquote. I thought, "Well, people will want to take the vaccine when it comes." And then now, political ideology is currently the biggest predictor of vaccine hesitancy. And yeah, it's wild to me, but it's something that we have to remember then, like, "Well, in this moment of everything being so hyper partisan, that's something we have to be really attentive to."

Perhaps there will be a future version of America that is less politically divided and then we might not have to worry so much about partisanship, but right now we have to document, like how much does things like partisanship matter for these variables that we're studying? And figure that out so that the next time we know, like if we are in a hyper-partisan world, well, these kinds of studies we'll be able to use, whereas things that… Yeah, if the world is substantially different, then maybe we'll be able to use some of the studies that we're running now. We need to document it in order to figure it out, though. And we're not gonna figure it all out right now.

And just quickly drawing on an example from another domain, this was another thing that's come up in sort of the history of studying climate change attitudes. Climate change was not always this hyper-partisan issue. Now it is. Now, you can't publish a paper without looking at political ideology on climate change, nor should you, because it matters so much. But there was a time that that was not the case. And so, we have to remember that these attitudes that we're studying have evolved in particular histories, and contexts, and so we have to remember that when we're interpreting our findings.

Andy Luttrell:
Yeah. The hesitancy I have with the strong, maybe strawmanny version of the social psych as history is one could say, "Look, we've documented a correlation between ideology and mask wearing, therefore ideology is important for decisions to take public health recommendations seriously." And we go, "Well, is that the finding actually? That ideology as a variable is correlated with public health acceptance?" You know, it's the content… The theory is just incomplete, right? And if we had a more complete theory, it would be as true 100 years ago as today. It's just that theory didn't have… It doesn't have all the pieces to it. And so, if we can develop those rich theories and say, "Yes, maybe, hopefully, cross our fingers, next time we have an enormous global health crisis we're less politically divided."

You know, it doesn't mean that we can't draw on the data we're collecting now. It just means that we have to be mindful of what has shifted, and we should build theories that go, "Well, when people incorporate into their identities, be it a political identity or any other, then those identities will matter, right?" But if our environment keeps those things separate from each other, then it won't transfer.

Neil Lewis Jr.:
And maybe it works differently if we were talking about masks versus something else, so that's the other piece, is there's the data of ideology and mask wearing, and the extrapolation to ideology and public health messages. Those are very different levels to say, "Well, I have this particular finding and therefore it means this more grand claim." That's the other place I think we have to be very careful.

Andy Luttrell:
Hey. Hello. I'm interrupting here for a second because it's at this point in our conversation that I actually kind of steer things toward talking about Neil's work in science communication, which is always something that I'm interested in exploring on this podcast, and I realized that I sort of reference something, but we never actually unpack it, so I want to make sure that things are clear here. So, a little bit ago Neil and a colleague released this paper called Communicating What We Know and What Isn't So: Science Communication in Psychology. And this is published in the journal Perspectives on Psychological Science and it's a very cool paper where they really just sort of explore the boundaries of what good science communication in psychology and sort of the social sciences more broadly could look like. You know, one of their points is that we're talking about things that matter to people and that we should be attentive to making sure that we're accurately conveying the information that we're getting from the research that we have.

But the part that I focus on in our conversation is this part that harkens back to a framework in persuasion science from many years ago which has come up on this show before. So, one of the ways we can think about persuasion is to think about the source, the message, the audience, and the context in which it's happening. And Neil, interestingly, with his colleague, applies that framework to thinking about science communication, right? How do we account for all of these variables? And specifically, they referred to this as the who needs to say what to whom with what effect, and I just want to unpack that just briefly here. So, the who in this situation is the source of the message. Who's doing the communicating? So, when we want to talk to the public about science when you're a consumer of science in the public, we're paying attention to where this information is coming from and who is it that's a credible source of information about science? Who are the people that really ought to be spreading this information more widely?

The second component is the what. What should we be communicating? And this is a big question about what's the point we even want to make, right? As science communicators are people trying to make particular points, what kind of research are we drawing on, et cetera. The next component is who or to whom are we communicating, which is the audience of the message, and interestingly, I'm just gonna kind of pull out this quote from their paper, which is that it's not useful to think of communicating to the public as an exercise in which one's job is to share the gospel of psychological science with a monolithic audience. Instead, they write that there are multiple publics that have varied interests and vary substantially in their understanding of science, right? So, science communication needs to be attentive to the audience and just sort of like, "Oh, I just kind of want to share this information," is almost too broad in their view.

And then the final part that I really… You're gonna see when we jump back into the conversation that I start to focus on, is communicating with what effect, right? Which is, what's the point? What are we gonna gain from talking about science with the public? As consumers, what do you want

to gain from communicators who are talking about science with you, right? Ultimately, are we trying to change policy? Are we trying to change minds? Are we just trying to educate? And so, this is an interesting wrinkle. So, basically, point is… Because we're gonna return to this framework in a little bit. Who says what to whom with what effect is this framework for science communication that Neil, among others, has written about, and it's the framework that we're gonna turn to now, so I'm gonna jump right back into our conversation where we pick up with this idea.

Andy Luttrell:
And if we can start with to what effect, that was the part that I realized I had not spent enough time considering. So, I've always been someone who enjoys science communication. This podcast is an example of trying to do that, to get social science out to the world. But I haven't thought enough about what the goal is. In some ways for me there's just like a, "I think it's interesting. Other people probably could find this interesting and so let's try and get it out there." So, for you, in your multiple roles in science communication, what are the effects you're looking for, right? What… maybe should, I shouldn't use, but what should be the impact of good social science communication?

Neil Lewis Jr.:
Well, I think there are multiple impacts and that's part of the broader point that on this podcast we can talk about the nuances of the research process and the like, and because that's the audience is really interested in that stuff. In the articles that I write for FiveThirtyEight it's mostly really bringing this broader social science lens to think about contemporary problems we're wrestling with in society, right? It's not like, "Here's this study," but it's like, "Well, drawing on what we know from across social sciences, here's how we can understand this broader moment that we're in." In the Letters to Young Scientists column the goal is about helping early career researchers figure out this weird world of academia that we're in and how to navigate that.

So, I would say I guess my role in each of these things, it's a little bit different. And Twitter is sort of this like intersection of all of these things where I think I'm me, and sometimes I'm gonna talk about racism in America, and sometimes I'm gonna talk about this meme I think is funny. So, I do think it's useful to think about like what are you trying to achieve in these different realms, and then tailor what you do accordingly. When I am talking to public policymakers, for instance, that's a very different conversation of figuring out what is a problem that they are trying to solve, and then going and figuring out what information do we have that would be useful for that problem. That's very… That can be different than… Yeah, a longform podcast where we're really talking about the history of science and how we've gotten to these different approaches studying these things.

I don't know if that answered your question but that's the way that I think about it.

Andy Luttrell:
So, to think about this maybe a little more concretely, I'm curious about the work that you do for FiveThirtyEight, so I wondered if you could talk a little bit about where that opportunity sprung from, and then also as a fun little game, to take that who says what to whom with what effect and talk about for you, when you contribute to that particular medium, just using it as an example, how do you think about who, what, to whom, and the effects?

Neil Lewis Jr.:
Yeah, so the history of that was last summer, in the first pandemic summer… I mean, I ended up writing a fair amount on Twitter. I mean, Twitter's my primary medium for talking about work with broader publics, but I'd been talking about sort of this issue of what role social scientists should play and what can we say, what can't we say, and the like, and I guess there are people at FiveThirtyEight that had been following for a while, and so they were trying to expand at the time their team of academics who write for them periodically. And so, they reached out and asked if I was interested in that, and I had been thinking about writing more for the public in sort of long form ways because the way that I had done that in the past was largely Twitter threads, right? When there's something that I felt like I had a lot to say about, I'd write a Twitter thread. But even a Twitter thread could only go so long, right?

My general rule is to try and keep Twitter threads under 10 tweets because beyond that point it just feels long.

Andy Luttrell:
If I see one… Sometimes they get like… Not yours, but I see them that are like 20, 30, and I go, "I'm not reading that."

Neil Lewis Jr.:
Yeah. Exactly.

Andy Luttrell:
Though I did manage a six post Twitter thread about donuts today, so you can stretch ideas pretty far.

Neil Lewis Jr.:
Yeah. You can stress them. But there is a limit. And so, that's a place where I'm like, "I need to keep it under 10 tweets." But sometimes I have things to say that are longer than 10 tweets, and so I was like, "Well, should I start a blog?" And there were a number of people who were like, "Yes, you should start a blog." And I'm like… It sounds like a lot of work to manage yet another thing. But FiveThirtyEight reached out, and so that did seem like a good opportunity, in part because they are open to and welcome the nuance in thinking about complex social problems.

So, the first piece was about what are the methods that we've used across social sciences to study things and how does that impact what we understand and therefore what we can and cannot do to intervene in the pandemic? And then the most recent piece, there was a piece about how do different groups of people think about the vaccines, right? That was after Johnson & Johnson came out and we were trying to figure that out. And then the most recent one was about pandemic inequality, like there's been lots of headlines about the various forms of inequality during the pandemic. That's not actually surprising given the long history of inequality research in the social sciences from many disciplinary perspectives, and so this latest piece was, "Here's actually what we've known since at least the '70s," and I was sort of weaving that research together to help us understand like why these things are happening now during the pandemic and how if we don't want them to happen again in the future, we actually need to address these underlying core issues.

So, that's the role that I've been playing there. And in terms of the who is that speaking to, the audience there is quite broad and much broader than I even realized at the time that I agreed to do it. One way of thinking about it is like lots of people who are just really interested in data, and data journalism, that's like a big part of their audience, but that's also led me to be connected to other organizations that are doing policy work, right? That use a lot of data.

So, one of the things that struck me after my first piece, there was the number of organizations that are like, "We're actually trying to think about this problem." As we build these dashboards, COVID dashboards, and we're trying to make sure that we're presenting information to people that would not reinforce inequality, but also have more equitable outcomes. So, writing there also ended up connecting me with all these other organizations that I didn't even realize would be reading this in the first place, so that's another… I've been keeping that in mind as like there's the casual reader who's just really interested in learning more about data, but also lots of people who are trying to figure out how to use data better to inform their decisions. So, that's sort of who I'm speaking to.

Andy Luttrell:
And so, how deliberately does that affect how you go about the writing process?

Neil Lewis Jr.:
Yeah. It does affect how I think about the writing process because I try to balance those audiences. I want to explain things in a way that people can read it and get the gist of what we know about that particular topic area, but then also have details, lots of details when possible, when some people want to get into the nitty gritty, right? So, like the latest piece, I did talk about some of the work on how much money you make and happiness, and there's some variability around that because things like where people live and the like, and so the foot… They have a nice footnote section where you can click that and get those details if you want it. And if you don't care, you don't have to read that, so that's fine.

But then it's also making sure I have the links to the underlying academic papers and open access papers when possible so that… because there's scholars that also read this too, right? So, after that recent piece came out, a lot of psychologists that have read it were like, "I'm really interested in this inequality and social trust piece that I read about," because the other parts were for more familiar to them, but that inequality and trust piece was really coming more out of political science and economics. And so, they're like they wanted to know more about that, and so I had cited one paper in there, but I had in my back pocket from the early drafts many more papers so I could easily point them to that.

So, it's really trying to write in a way that there's something there for everyone that's gonna read it. If you just want the gist, you can read it as it is. If you want more details, there are places you can get that. And the nice thing for that medium is that they have these different ways of doing that. Whether it's with the footnotes, they also have a great data visualization team that there are times when they will put together nice graphics. You can send them the underlying data and they will make nice graphics for the articles. Yeah, that's another fun thing there is the data viz. And also, the fact checking. One of the things I find really great is before any piece is published, there's

a team that goes through and every paper that I cite, they go through and read those papers to make sure what I said about the paper is actually true. And so, I'm emailing the original .PDFs of the papers. They will also go through-

Andy Luttrell:
And you're citing a lot of stuff. I mean, in some of the ones that I've read, there are lots of links.

Neil Lewis Jr.:
Yeah. But that's I think another cool thing there, too.

Andy Luttrell:
Yeah. Very cool. Well, I don't want to take any more of your time. Neil, thanks so much for chatting with me about your work in research, in science communication. This was all very cool to hear about.

Neil Lewis Jr.:
Yeah. Thanks for having me. It was great to talk to you.

Andy Luttrell:
All right, that'll do it for another episode of Opinion Science. Thank you to Neil for taking the time to talk about his work. You can find him at NeilLewisJr.com and he's a good one to follow on Twitter @NeilLewisJr. Links for that stuff and the research that we covered are in the show notes. Oh, and here's the part of the show where I kindly but firmly ask you to leave a review of the show. If you like what you hear, you can take just a few seconds to leave a nice five-star rating and a quick comment about the show on Apple Podcasts or wherever else you can review podcasts. I always appreciate that. OpinionSciencePodcast.com, @OpinionSciPod on Twitter, that's where you can find more about the show and get in touch with me, but you know, whatever. That's all for now. Get outside and be nice to each other. See you in a couple weeks for more Opinion Science. Bye-bye.