

Traffic Stops and Race: Police Conduct May Bend to Local Biases

March 30, 2022

New research covering tens of millions of U.S. traffic stops found that Black drivers were more likely than White drivers to be stopped by police in regions with a more racially biased White population. Pierce Ekstrom, a researcher at the University of Nebraska and lead author on [one of two concurrent papers](#) in the journal *Psychological Science* talks about how these studies shed new light on how countywide attitudes toward race correlate with local policing. Read the news release and watch the video segment [here](#).

Automated Transcript:

Charles Blue ([00:11](#))

Traffic stops happened approximately 500 times each day in the United States, and they are the most common interaction between police and the public. Stops can result in nothing more than a friendly warning, or they can escalate to a use of force arrest. All other factors being equal, Black drivers are more likely to be stopped by police than drivers who are White. Two independent articles published in the Journal Psychological Science looked into this issue from a unique perspective, the racial attitudes across the United States on a county-by-county basis. This is Charles Blue with the Association for Psychological Science and to tell us more about these findings and what they mean for law enforcement. I have with me Pierce Ekstrom with the University of Nebraska and lead author on one of the papers. Welcome to under the Cortex.

Peter Ekstrom ([01:05](#))

Thank you so much for having me, Charles. I'm looking forward to talking about this research.

Charles Blue ([01:10](#))

Might as well start right at the top. Can you briefly summarize your findings for our listeners?

Peter Ekstrom ([01:16](#))

Sure. So basically, we found the more common racial prejudice against black people was in a county, the more often state troopers tended to stop black drivers relative to white drivers.

Charles Blue ([01:28](#))

That seems like an almost intuitive thing considering the fact that statistically, black drivers are more likely to be pulled over. But what makes this particular finding unique or interesting or brings us knowledge we didn't have before?

Peter Ekstrom ([01:44](#))

Sure. So really, we know these disparities exist, right? People before us have demonstrated that, and they've also done some work to demonstrate that these disparities do seem to reflect real inequalities and discrimination. They are more pronounced when the driver's race is visible, as opposed to when it's less visible at night. When we look at like, red light cams or something to estimate real traffic offense rates, we see that there is still above and beyond that, more black drivers were stopped. Our goal with this study is more focused on trying to explain where these disparities might come from. And our study, along with Dr. Stelters, found that one variable that does seem to be related to them is this regional prejudice. The attitudes that we see reflected not just in individuals' thoughts or feelings, but taking a step up into how prevalent or intense those biases are at the county level. So trying to get it more of at least possibly a cultural variable there. And we do find that whatever you want to call it, culture, region level attitudes, that that is at least associated with the extent of the disparities.

Charles Blue ([03:01](#))

People may think of biases and prejudices as a very personal individual problem, something that you could tackle one on one, perhaps if they were persistent. What you're saying is that may not be the whole story, that there is something about the community that may impact the way people behave. Is this something that has been shown in other areas or is this one of the initial local regional studies that has really taken a look at how the people you live among can influence your behavior in situations?

Peter Ekstrom ([03:37](#))

So certainly other people have looked at this. I'd love to say we were the first people to have this idea, but people have been looking at county level variation and racial attitudes to predict all sorts of racial disparities. For example, these county level attitudes predict racial disparities in infant health, in school, disciplinary practices, in mortality rates from circulatory disease, mortality rates in general, and even police use of force. Now police use of force is obviously the most closely related to what we're examining here. We were interested in traffic stops because there's so much more common than overt use of force. So we thought that we could kind of expand our data set and look at more every day, if you will, type disparities in people's interactions with law enforcement.

Charles Blue ([04:25](#))

I do have a question about the methods. I can understand how there are databases and there are organizations that track police behavior, police interactions, the make up of police stops actually going down and trying to find information about racial biases on a county to county level, that seems like a bit more of a challenge. How did you come up with that data?

Peter Ekstrom ([04:47](#))

So there too, we did benefit a lot from other people's hard work. So we use data from the website Project Implicit, which is home of the Implicit Association test. If you've heard of that, they're just sort of a publicly open website that people can go to and take surveys or whatever, and they've been open for years and years doing a lot of studies on racial attitudes and their effects and their correlates. So a lot of people have reported their racial attitudes or taken the Implicit Association test there and as part of their demographic questionnaire, sometimes they ask people to give general information about where

they live, Zip code or something like that. So using the Project Implicit data, we were able to what's called geocode the data. Right. We could figure out where people were with this or that racial attitude. And during the time span we covered. So 2011 to 2015, there were over 800,000 respondents to Project Implicit during that time. And that allowed us to cover get at least some racial attitude data for a large number of counties, a little over 3001, 300 of which we had some stop data for.

Charles Blue [\(05:55\)](#)

Just to help the listeners, again, really understand the impact of this study. How confident are you in these findings? They seem, maybe perhaps subjective. Have they been applied to other studies that have been borne out?

Peter Ekstrom [\(06:09\)](#)

So we tried to be as thorough with the paper as we could, of course. So anyone who looks at the raw data will see that the data are weirdly distributed in some ways. There are some really wild outliers that we're aware of that in some counties, you see counties with very small populations that stop people a lot and that can skew the data. So we've run the analysis with and without those. So we estimated the models in as many ways as we could and got basically the same result most of the time. And so that builds our confidence in the results. But bottom line is that the Project Implicit data, which is the source of our estimates of racial attitudes in the counties, is what we call a convenient sample. Anybody can participate. There's not a systematic sampling procedure. We don't know the probability that any given type of person will participate in those studies and become a part of that data set. And so the major question and the major real limitation that I see in our paper, specifically in terms of estimating racial attitudes of accounting, is that we don't know for a fact how similar the Project Implicit respondents are psychologically to the people who live in those same counties but didn't happen to learn about Project Implicit and take a survey there.

Peter Ekstrom [\(07:21\)](#)

Right. And that's just by the nature of the problem, that's an unmeasurable issue. And it could mean that our estimates of racial attitudes in those counties are in exact are off in some ways that they could be biased. And by biased, I mean systematically higher or lower than they ought to be. That said, I am made a little bit more confident by the fact that we are, as I mentioned already, one of multiple studies that have found these kinds of relationships. Right. If we were the only studies that have found our county level racial attitudes predict this important racial disparity, then I would wonder why is that other data sets that have used the Project Complicit data have found that they predict these health disparities, disparities in education and things like that. And as these findings continue to accumulate, I think it becomes more plausible that we are measuring something in the proverbial water in those counties.

Charles Blue [\(08:17\)](#)

This may be a little hard to answer, but of course, it's just speculation on why local attitudes seem to correlate with policing in these areas. Do you have any insights or ideas or is that just not part of the data?

Peter Ekstrom [\(08:33\)](#)

Well, first, thank you for asking about that in exactly the right way. I am speculating because we are correlational study and I don't want to oversell our causal conclusions. So there are a few stories we could tell here. Right. So it could be the case that local attitudes tap public opinion in the area, for example, which could put pressure on legislators or police departments or individual officers to behave in a certain way to pass policies that have racially disparate impacts or to over police predominantly black areas, things like that. Or public opinion could tolerate those kinds of policies and practices or discrimination by individual officers. Now that would be basically saying that racial attitudes are at least contributing to these disparities at the county level. That said, racial attitudes in the area could be a consequence of police behavior. For example, if civilians in the area, particularly black drivers, feel these disparities, and it seems likely that they would they may choose to move. And if black Americans move away from a county, that county will have fewer individuals with less ProWhite antiblack attitudes. Right. And so that will change with the culture of the county as it becomes more racially homogenous.

Peter Ekstrom ([09:51](#))

Of course, there could be some other third variable that we didn't measure and control for that. We did try to control for racial segregation county average income and education and things like that. And those don't seem to be the one variable that are capturing these effects.

Charles Blue ([10:08](#))

As I said when we began, this is something that seems almost intuitive, at least based on what we understand as far as racial prejudices and criminal justice system. But was there anything in your research that genuinely surprised you when you came to these conclusions?

Speaker 2 ([10:27](#))

Yeah. So I think probably the biggest surprise for me was how consistent counties were in their racial attitudes. Now this is one where I'd encourage anybody listening to really check out the differences between Doctor Stelter's paper and ours, because I'm not 100% positive that we got the same result here. But at least by our estimates of racial attitudes, individual respondents varied a lot. We had some black and some white respondents at both ends of the scale with super anti black ProWhite attitudes or at the other end of the spectrum with anti white pro black attitudes. And we had individuals sort of all over the place. But when we aggregate to the county level, every county in our data set estimated that the average white respondents showed at least slightly pro white antiblack attitudes at the explicit and implicit level. There was a very consistent county level bias among white respondents, in particular in favor of their own race over black Americans. And the consistency of that bias, I found really striking. And I don't want to downplay the importance of the fact that individuals do differ in their attitudes and they are diverse in that respect.

Peter Ekstrom ([11:40](#))

But I do think that the consistency of the bias that we estimated speaks to what a pervasive problem racial prejudice can be and the difficulty of shifting an entire culture away from that prejudice.

Charles Blue ([11:57](#))

It seems like an almost intractable issue or something that's difficult to address, but we're actually inching toward a better understanding of the biases in the criminal justice system. Would you say there's some important gaps in our understanding today if you could extract additional information? What would help us better wrap our heads around the causes and the possible approaches to improving the situation?

Peter Ekstrom ([12:28](#))

Boy, a big question. So I do think it helps to have data. Right. Of course, that's what a researcher says. Right. Like, is data really the most important? But in terms of understanding. The Stanford Open Policing Project that we derived our stop data from is, as far as I'm aware, the best and most thorough and largest data set of these police traffic stops and what happens after them. And still there are a lot of gaps to be filled. Anybody who opens our papers will see all the counties, all the States that we didn't have data for. I think we had data from like 24 States. It's easy for me to say like, oh, somebody else should foil all these police departments and collect all these data. But as more information becomes available, we will better understand the extent of the problem. Right. Speaking more broadly from the perspective of psychological science. Right. How do we deal with these disparities? Where do they come from? What can we do? I think that we are all of us really struggling to grapple with the question of how much of these disparities come from individuals thoughts, feelings and behavior and how much of them come from broader structural problems.

Peter Ekstrom ([13:40](#))

Now, of course, those two things are related. Individuals have responsibilities and they shape the cultures they're part of just as their cultures shape them. And this is not like the kind of question that another study in this area is going to definitively answer a year from now. This is sort of the exercise that I think the whole field is engaged in. But understanding how structural discrimination and inequality combines and interacts with sort of individual thought, feeling and behavior to shape these big inequalities is I think sort of the grand enterprise that I think a lot of researchers in the space are engaged in and trying to cast more light on over time.

Charles Blue ([14:21](#))

Absolutely fascinating and some important research. Your paper is one of two that has been published in Psychological Science. The other one was by a team led by Marlene Settler from the University of Hamburg. And using the same data sets, both teams found similar results. So if anyone is interested in reading these studies or learning more, please go to our website, psychologicalscience.org. This is Charles Blue with APS and I have been speaking with Pierce Ekstrom with the University of Nebraska lead author on one of the two papers. Thank you for joining me for today's conversation.

Speaker 2 ([14:56](#))

Thanks, everybody.

Feedback on this article? Email apsobserver@psychologicalscience.org **or comment below.**