

Social Connections

CCSN Research Initiatives were created to organize Center members into interdisciplinary groups that address “big questions” in the areas of cognitive and social neuroscience. Members of each initiative strive to employ complementary methodologies and identify opportunities for new research programs. Joshua Correll, Assistant Professor of Psychology at the University of Chicago, was interviewed about the current work of the Social Connections Research Initiative.

What is the focus of your work with the Social Connections Research Initiative?

Much of our work involves a first person shooter video game used to assess people’s reactions to threats. In our task, participants sit down at a computer and a series of people appear on screen. The people in the game are black or white and unarmed or armed. Participants must decide, as quickly as possible, whether or not to shoot the target. In this task, if the target has a gun, the participants are supposed to shoot him, but if he is unarmed, they are not supposed to shoot. For the average participant, we see a pattern of bias. Participants are faster to shoot an armed target if he is black rather than white, and they are faster to not shoot if an unarmed target is white rather than black. We can also look at bias in the kinds of mistakes that they

make. Typically, we see that people are much more likely to shoot black targets whether they are armed or unarmed, and much less likely to shoot white targets.

Our current work pursues different lines of research stemming from these initial findings. In one line of research, we are exploring the psychological processes behind racial bias in these decisions. In another line, we are investigating the applied side of this question, testing police officers and examining the efficacy of police training.

How are you applying the results of this research?

Unlike most of us, police officers receive training in how to respond in shoot/don’t-shoot situations. We have conducted several studies with thousands of police officers, and in general, they seem to show bias in their response times, but not in the errors that they make. In other words, police are still faster to shoot a black target with a gun than a white target with a gun, but they are no more likely to shoot a black unarmed target than a white unarmed target. We believe that this divergence between speed and accuracy might reflect the initial activation of stereotypes followed by the implementation of more controlled processes.

The most direct application of our work involves the Denver Police Department and the New York Police Department. We are examining the specific methods these departments employ in police officer training, and hope to address issues of bias and executive function. In one line of research, we test new recruits at three points in time: as they enter the police academy, when they graduate, and then again six months later, after they have had time on the streets. We have also been developing a more realistic version of the first person shooter task. In that project, we have been working with a company called Meggitt Defense Systems. They develop simulation-

based training systems for the police and for the army. Debbie Ma, a doctoral student at the University of Chicago, leads a project employing one of these simulators. In these studies, the participant stands in front of a large video screen and interacts with a video suspect. For example, an individual in the video tries to open a window and enter a building, and the participant can question them about their intent or ask for identification. This interaction is much more similar to a real scenario a police officer might encounter. Throughout the process, the participant carries a modified Beretta nine-millimeter pistol. It does not fire bullets, but is heavy, metal, and sounds and feels like a real gun when fired. If, during the course of the video, the suspect presents a deadly threat, the participant is supposed to shoot. This is a substantial improvement over our initial task, in which the participant controlled the firing mechanism using a button. We have recorded approximately forty video scenarios, in which black and white suspects reveal harmful and harmless objects in more and less ambiguous ways. Now, we can test for bias in decision-making in a more realistic, less decontextualized way.

How are you exploring the psychological processes behind racial bias in these decisions?

In a collaborative research project with the University of Colorado and the University of Missouri, we are looking at four different tasks that measure racial bias: the first person shooter task, a similar task called the weapon identification task, the Implicit Attitudes Test (IAT), and the Extrinsic Affective Simon Task, or the (EAST). During each task, we also assess behavioral responses and ERPs (Event Related Potentials). The participants also perform a battery of nine different executive function tasks designed to look at the ways people inhibit a prepotent response, update information, and engage in task switching. These components have been characterized as central to executive function. By examining the data from this

BELOW: Joshua Correll, Assistant Professor of Psychology at the University of Chicago.



study, we hope to learn more about what implicit measures of bias are actually measuring and how executive function moderates implicit bias.

How does your work relate to social neuroscience?

I think that the neuroscience lens could provide a great deal of information about how the brain works to solve these problems, and this has real implications for how we train police or how we attempt to “undo” bias. Police regularly work long shifts and overtime. They may get fatigued and they almost certainly get scared, and in those situations their ability to exercise control may be compromised. Accordingly, they may fall back on easy-to-process racial cues. If we can formulate a clear picture of the processes that allow police to mitigate their biases in the first place, we can hopefully make accurate predictions about the situations in which that control is likely to fail. If we can do that, perhaps we can take steps to prevent those failures in the first place, either by providing different kinds of training or by preventing officers from ending up in those situations. ■

NOW, WE CAN TEST FOR BIAS IN DECISION MAKING IN A MORE REALISTIC, LESS DECONTEXTUALIZED WAY.

JOSHUA CORRELL

UPCOMING EVENTS AND RESOURCES

Coming Soon: An Updated CCSN Website

Enhanced features will include:

Calendar

This new feature will highlight upcoming CCSN events as well as events in other departments, and will be accessible via RSS feed.

News and Publications

News and publications related to each Center member will be pulled from existing web sources (e.g., PubMed, Google News) to ensure that the website features up-to-date information.

People

Each member’s profile page will aggregate related news and publication information in one location, as well as link to the member’s main homepage. A powerful search filter will allow users to view Center members by many categories, such as academic affiliation, location, and research focus.

Resources

Site users will have access to grant preparation and management resources, databases, and Center information. Affiliated organizations will be highlighted. Videos of Center presentations will be posted for streaming.

Upcoming CCSN Events

for additional information, please visit ccsn.uchicago.edu

Job Talks

4pm, Location TBD

Andrew D. Engell, Yale University, 1/4/11
Joseph M. Moran, Harvard University, 1/6/11
Mina Cikara, Princeton University, 1/11/11

fMRI Analysis Workshops with George Monteleone

4:30 pm, Beecher 102

Friday, 1/14/11
Friday, 1/28/11