

# Studying People in Their Local Environments

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Psychological science is ostensibly interested in the behavior and mental processes of a variety of people, not just processes related to college students and Mechanical Turk workers responding to surveys over the internet. Gaining the generalizable knowledge we seek requires studying a variety of people in a variety of contexts; it is the only way to know whether and how generalizable our findings really are.

And if we want our research to inform social policies, then it should include a broader composition of people and situations. Only then can we understand how policies that are generated from our findings might differentially affect individuals and subgroups.

## Vehicles to Move Us Forward

The implications I've just outlined are the main reasons my colleagues and I have been shifting our scientific work to include more mobile research methods. In the Department of Communication at Cornell University, we have a mobile research lab that allows us to diversify both the samples and settings in which we conduct social scientific research. The lab was originally funded by the National Institutes of Health, specifically for the purposes of including diverse and hard-to-reach populations in research on health messaging.

The lab is the size of a small RV and is fully equipped with five private data collection stations. It enables us to recruit and study people in their own environments. To date, my colleagues and I have used it to study youth and adults from rural and urban settings throughout the Northeast region of the United States. For one set of studies, my colleagues wanted to examine how socioeconomically disadvantaged youth and adult smokers respond to different kinds of warning labels on cigarette packages. So they took the lab to a variety of urban and rural communities to recruit participants. They not only learned about how individuals attended to and processed the labels (via eye-tracking and surveys), but also how living in those different environments affects people's smoking decisions. These lessons are important for both the science and any policies that result from it.

My own ongoing research with the mobile lab is combining a variety of methodological techniques including geographic air-quality mapping, eye-tracking, and surveys to examine how people make sense of, and are motivated to respond to, information about the environmental health hazards in their surroundings. My collaborator in systems engineering used transportation data to develop fine-grained maps depicting levels of air pollution in different neighborhoods of the greater New York City area. Since we have rich information about people's differential exposure to pollutants, as well as data about the demographic composition of neighborhoods, we have been taking the lab to neighborhoods of differential exposure and composition to examine how residents of those neighborhoods respond to the information as functions of both their individual characteristics and features of their local environments. Conducting the study in this way allows us to learn about relevant psychological processes in an ecologically valid way.

As researchers, the mobile lab has had several benefits. First, it has forced us to think more critically about factors that influence participants, and their implications for both the theories we can advance and any practical knowledge generated from our work. It provides vivid reminders that people are embedded in broader ecological systems and that we must think carefully about how multiple dimensions of those systems interact with individuals when developing our models. That modeling and theorizing inevitably leads to important discussions about measurement, construct validity, and generalizability across samples and settings.

## **Human Rights Considerations**

Using the mobile lab has also reminded us of another important lesson. In the 1948 Universal Declaration of Human Rights, the United Nations General Assembly declared that "everyone has the right freely to...share in scientific advancement and its benefits" (UNESCO, 2005). When we take the mobile lab into (particularly underserved) communities, it provides opportunities for people to exercise that human right — to have their perspectives reflected in the scientific record ... a record that often influences the policies and practices that govern their society. That reality is not lost on our participants. I have been deeply moved by people's gratitude for being allowed to participate in our study because, to use their words, "no one usually cares what [they] think." It is as if they have learned from scientists that, to borrow from The Op-Ed Project (2017), "some people narrate the world; other people have their world narrated for them;" that there are some people who get to be part of the scientific record and others who do not.

To quote Audrey Squire (2015), "historical exclusivity often has a way of turning into present and institutionalized tragedy. Whose story gets told matters." What I've learned from using the mobile lab is

that when we make decisions about who to include in our studies, and which environments to study, we are (implicitly) making decisions about whose psychological processes matter to us. And those decisions have important implications for the knowledge we create, and the policies and practices that are developed as a result of that knowledge.

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