

University of Alabama in Huntsville

LOUIS

RCEU Project Proposals

Faculty Scholarship

1-1-2019

How we see Race: Using Eye-Tracking Technology to Explore Racial Perception

Jennifer Patrice Sims
University of Alabama in Huntsville

Follow this and additional works at: <https://louis.uah.edu/rceu-proposals>

Recommended Citation

Sims, Jennifer Patrice, "How we see Race: Using Eye-Tracking Technology to Explore Racial Perception" (2019). *RCEU Project Proposals*. 177.
<https://louis.uah.edu/rceu-proposals/177>

This Proposal is brought to you for free and open access by the Faculty Scholarship at LOUIS. It has been accepted for inclusion in RCEU Project Proposals by an authorized administrator of LOUIS.

Proposal Title: How we see race: Using eye-tracking technology to explore racial perception

Faculty Name, Rank: Dr. Jennifer Patrice Sims, Assistant Professor

Department Affiliation: Sociology

Proposal Identifier: RCEU19-SOC-JPS-01

Project Description

Although skin color has traditionally been the major physical feature associated with race (cf., Herring, Keith, and Horton 2004), interview and experimental research shows that hairstyle is increasingly used as a racial cue as well (Candelario 2000; MacLin and Malpass 2001 & 2003; Khanna and Johnson 2010; Sims et al., under review). The Pupil Labs Mobile Eye Tracking Glasses in the UAH User Experience Lab are a new technology that will enable researchers to study for how long (fixation) and where a person looks (gaze points, such as face/skin vs hair) when observing others to determine their race.

During the spring 2019, Dr. Sims' project "How we see race" (currently in the IRB proposal development stage while awaiting the results of a grant application) will utilize this new technology to record the gaze points and fixation of study participants as they view photos of women of different races. The summer 2019 objectives will be to analyze the data and situate the findings within the emerging scholarly literature on eye-tracking and racial perception.

Student Duties, Contributions, and Outcomes

The student-researcher's duties will include preliminary data analysis and synthesizing eye-tracking research. The student-researcher will learn to use the eye-tracking device and *Gazepoint* software package while working with Dr. Sims to calculate descriptive statistics of the data. The student-researcher will gain practice with creatively arranging statistics into tables, charts, and graphs for use in presentations and publications. In this pursuit, the student-researcher will learn how to use the device, software and, more generally, how to communicate statistics effectively. These skills will be useful in future research courses, graduate school, and/or employment positions requiring data reporting.

Secondly, over the course of the first eight weeks, the student will read 15 peer-reviewed eye-tracking research articles (i.e., two per week) and make an annotated bibliography. During the final two weeks, the student will use the annotated bibliography to make an outline that the faculty

member can later use to write a literature review for the first paper reporting the research findings. From completing the annotated bibliography, the student-researcher will gain specific knowledge about eye-tracking devices and research as well as more generally learn how to read scholarly work and identify key findings. From creating a literature review outline, the student-researcher will learn how to synthesize research studies. Together, these skills will prepare the student to write their own literature reviews in upper level courses and/or graduate school.

Faculty Requirements and Mentorship

To work on this project, the faculty member requires that a student-researcher have an interest in race/ethnicity, at least sophomore standing by the end of spring 2019, and have passed the following courses: both EH101: College Writing I and EH102: College Writing II; at least one college math course; and either SOC100: Introduction to Sociology or PY101: General Psychology I. Junior standing, completion of at least one college statistics course, and completion of at least one college course on race/ethnicity are preferred.

Dr. Sims will provide the skills training and mentorship. Meeting two mornings a week in the UAH User Experience Lab, one meeting will be devoted to data analysis and the other to literature review. During data analysis meetings, Dr. Sims and the student-researcher will work together using *Gazepoint* and other computer programs to calculate descriptive statistics of the data. Dr. Sims will teach the student-researcher how to use *Gazepoint* and how to arrange statistics in different formats (e.g., tables, charts, and graphs).

During literature review meetings in weeks one through eight, the student-researcher and Dr. Sims will discuss the most recently read articles. Dr. Sims will ensure that the student is learning how to identify key information and synthesize the studies by listening to the student-researcher's summary of the articles read that week as well as reviewing the written annotated bibliography entries. Dr. Sims will give advice and suggestions for reading academic articles as needed to help the student learn to do so efficiently and effectively. Finally, Dr. Sims will teach the student how to make a literature review outline during the final two literature review meetings in week nine and week ten.

In addition to being able to work in the User Experience Lab on meeting days, the student-researcher will also have access to the computers, printing, and desk space in the Sociology Department Office Suite to work on campus during non-meeting days if so desired.