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A Rush to Judgment?

A Case of Research Ethics and Design

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Abstract: This case describes a study conducted by students in which a number of ethical issues arise, including the

treatment of research participants and the supervision of student research assistants by faculty. By examining the way in which the study was conducted, students explore the basic principles of good experimental design. The case was developed for a sophomore-level research methods course as an introduction to research ethics and design. It could also be used in an introductory psychology course or other introductory-level science

courses to illustrate the research process in science.

Objectives: Understand the fundamental ethical principles that apply to research with human participants: informed

consent, freedom from harm, freedom from coercion, anonymity, and confidentiality.

Understand the obligations of faculty and student researchers with respect to the participants, the research,

and each other.

Be able to identify threats to internal validity in a research project.

Be able to design an ethically as well as methodologically sound research project.

Keywords: Ethics in research; experimental design; independent variable; dependent variable; informed consent; freedom

from harm; freedom from coercion; anonymity; confidentiality

Topical Area: Ethics, Scientific method

Educational Level: High school, Undergraduate lower division

Formats: PDF

Type/Method: Dilemma/Decision, Discussion

Language: English

Subject Headings: <u>Psychology</u> <u>Science (General)</u>

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A Rush to Judgment? A Case of Research Ethics and Design



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The Players

Stefanie Perry originally planned to major in English but changed her mind after enrolling in Dr. Lee's Gen Psyc class. She thought Dr. Lee was a wonderful teacher and asked Dr. Lee to serve as her academic adviser. Noting Stefanie's enthusiasm, Dr. Lee asked Stefanie to work in the psych lab this semester. Stefanie knew it would really help her in her research methods class, plus she figured it wouldn't hurt to bond with any professor, especially one she liked as much as Dr. Lee. Stefanie was excited about the job in the psychology laboratory even though at this point her only real jobs had been setting up the equipment for Dr. Lee's experiments and distributing and collecting informed consent forms. Last week, Jolene, Dr. Lee's senior lab coordinator, had asked Stefanie to help her with her senior project. She also invited Stefanie to the rush party for her sorority. Stefanie was very excited about the invitation. It meant that, in all likelihood, she would receive a bid for Beta Alpha Delta.

In consultation with Dr. Lee, *Jolene* designed her senior project to examine the effects of gender and test administration format on spatial abilities. Male and female undergraduate students signed up to participate in the study for extra credit in their introductory psychology classes. The experimental protocol called for students to be tested in one of two formats, either traditional paper and pencil (TPP) or via computer administration (CA). In the paper and pencil format, students would be presented with two parts of Vandenburg and Kuse's Mental Rotation Test (MRT). Each part of the MRT contains 10 items, five items per page, and administration is timed. Participants are presented with one target and four choice answers for each item on the test. Their instructions are to select the two choices that are mentally rotated versions of the targets and mark their answers on the test itself. In the computerized version that Jolene developed for this project, participants would be presented with one problem at a time and indicate their choices on the numeric keypad.

Something of an over-achiever, Jolene was juggling the research project and her coursework with being recruiting chair of Beta Alpha Delta, president of the psychology club, and secretary of the outdoor recreation club. Jolene has a 3.82 GPA, participates in the Honors Program at her university, and has been accepted into a PhD program in neuropsychology at State, Dr. Lee's alma mater.

Dr. Lee also has a very hectic schedule and is eagerly anticipating the end of the semester. This busy assistant professor is currently teaching a course overload and is not looking forward to grading four sets of upcoming final exams; there are also those three senior research projects and Jolene's senior honors project to supervise. Dr. Lee has established a close relationship with Jolene and considers her to be one of the best students the department has ever had. This has made it easy to place increasing reliance on her to handle administrative duties related to lower-level classes. In anticipation of the upcoming tenure review in the fall, Dr. Lee has

been trying to finish two research papers, but is no closer to this goal than in January. It doesn't look like that book will get finished this year either.

The Case

Jolene had to meet with the chair of the Honors Program on the day she was to test group CA. Stefanie was in the lab when the group to be tested arrived, but had not heard from Jolene and was forced to let the understandably upset students leave after 10 minutes. Jolene knew that her friend Matthew had a computer science lab on Wednesday afternoons, so she asked the professor of the class if she could talk to the students about her research project and recruit participants. Students who agreed to participate filled out the consent forms, and so she tested those students in the computer lab on campus. Nineteen of the 22 students who participated were men. The quiet room made Jolene yawn on this rainy afternoon, and she was happy when the last student completed the project so that she could go home and take a nap.

That Friday night Stefanie arrived at the rush party a few minutes early. When she walked into the formal room, she found about 20 young women who were rushing the sorority all filling out the MRT with pencils bearing the sorority insignia. Some of the women had written their names largely at the top of their sheets, most likely in an attempt to help Jolene remember their names. Quite a few of the women were laughing about the test and calling out the answers to one another. Jolene was not present when Stefanie arrived, but returned shortly thereafter and seemed surprised to find Stefanie in the room. Although she was carrying a folder full of consent forms in her backpack (she'd run back to the lab to grab them because she realized she'd forgotten to give them), Jolene decided not to hand them out because she didn't want Stefanie to notice her mistake.

The Dilemma

Two weeks later, Stefanie attended the Psychology Club meeting where the seniors were presenting their data to psychology faculty and students. Stefanie became increasingly confused during Jolene's presentation. Jolene's description of her research methodology did not accurately reflect the procedures Stefanie had observed. Jolene reported that her data confirmed her hypothesis that men would outperform women regardless of the type of test administration. Furthermore, Jolene reported that scores in the TPP group were better than scores in the CA group. Stefanie knows that Dr. Lee and Jolene were planning to present these data at the annual meeting of the American Psychological Association in August.

Questions

- 1. What kinds of problems are inherent in Jolene's research project?
- 2. How would these problems affect the research results?
- 3. How would you solve these problems?
- 4. What should Stefanie do?
- 5. What would the consequences of these actions be for Jolene? For Dr. Lee? For Stefanie?

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