Using an undergraduate research pool: Feedback from introduction to psychology students

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INTRODUCTION

Many psychology departments in the United States have an applied research requirement for students enrolled in introduction to psychology courses. One way to fulfill this requirement is to participate in research conducted by faculty and students in the department. Sieber and Saks (1989) surveyed 366 psychology departments and 74% had subject pools consisting mainly of undergraduate psychology students. Ethical considerations have suggested that in the absence of educational benefit, student participation in research studies should be voluntary (Leentjens & Levenson, 2013). Survey literature shows that students who participate in research do report educational benefit. For example Miles, Cromer and Narayan (2015) found that students, in general, viewed research participation as a benefit over and above a cost. Similarly, Cromer, Reynolds and Johnson (2013) found that 72% - 77.4% of students generally viewed research participation as a positive or educational experience and 71.7% - 89% thought the experience was fair. Even though the majority of students perceived their experience as positive or educational, educational benefits and experience of research participation could still be enhanced. For example, Miles et al. (2015) found that although students perceive benefit from research participation, reported perceived benefit decreased as the requirement for research hours increased. Similarly, Cromer et al. (2013) also found that when adding an integrative assignment, students reported lower levels of having felt exploited by mandatory research participation. The aim of the current study was to add to this knowledge by asking students enrolled in introduction to psychology courses if they believed they learned about the research process by participating in research studies and to respond to an open-ended item asking them what they learned specifically.

Procedure and Measures

Participants completed an online survey containing items related to their perceptions and experience of research participation to fulfill their introduction to psychology course requirements. The study has two samples (Spring 2019, n = 78 and Fall 2019, n = 195). Items were developed by the researchers to assess participants' experience and perception of participating in research in the psychology department.

METHOD

Participants

Sample 1 (n = 78)

- 58.2% female, 40.5% male, 1.3% nonbinary
- Mean age: 21.41 years (*SD* = 5.74)

Sample 2 (n = 195)

- 69.7% female, 29.2% male, 1.0% nonbinary
- Mean age: 22.58 years (*SD* = 7.19)

Figure 1

Student responses from Sample 1 and 2 for the item, "I learned about the research process by participating in studies this semester."

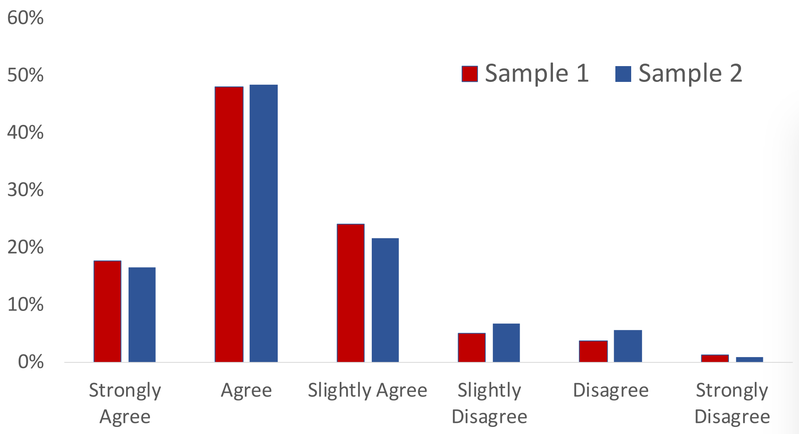


Figure 2

Student responses from Sample 1 and 2 for the item, "My understanding of psychological research has increased as a result of participating in research studies this semester."

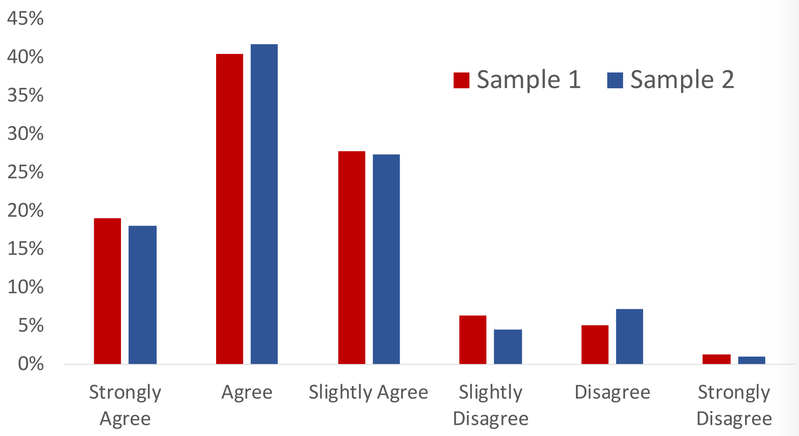
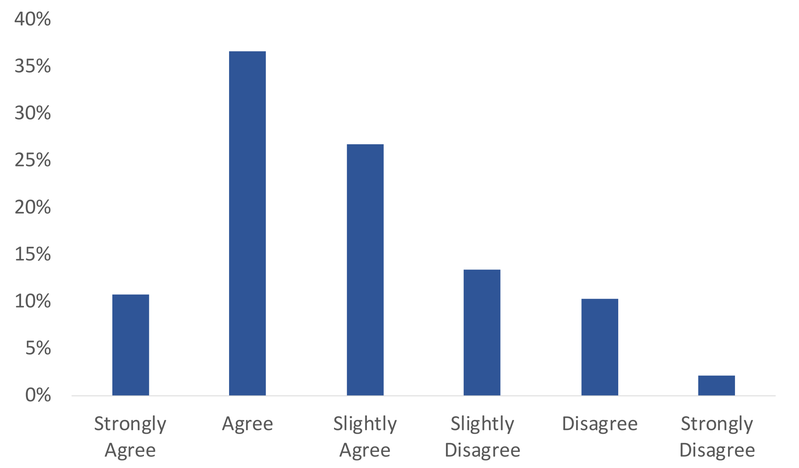


Figure 3

Student responses from Sample 2 for the item, "Participating in research studies this semester added to my knowledge of psychological research above and beyond what I learned about research in my introduction to psychology class itself."



RESULTS

Preliminary Examinations

Because the aim of the study was to assess students' experience and perceptions of participating in research studies as a way fulfill their applied research requirement for their introduction to psychology class, data was only utilized by students who reported participating in at least one study prior to the current one. Approximately 110 undergraduates participated in the first study. Approximately 32 students were not included in the analyses for failing to meet the criterion above, leaving the first sample with 78 participants. Approximately 238 undergraduates participated in the second study. Approximately 43 students were not included in the analysis for failing to meet the criterion above, leaving the second sample with 195 participants.

Likert-style items. Participants responses to three items assessing the educational benefit of research participation. See Figures 1, 2, and 3.

Thematic analyses. Thematic analyses (Braun & Clark, 2006) were conducted for the following question: "What have you learned by participating in research this semester?" for both samples. Approximately 77 of the 78 participants responded to this item in Sample 1 and 188 out of 195 in Sample 2.

Table 1

Thematic analysis for what students reported learning in Sample 1

Theme	Number of Participant Responses	κ
Nothing or not much	11	.90
Participating helps others	10	.85
Learned about the research process	9	.84
Learned something about themselves	9	.89
Learned about item wording or researchers use repetitive questions	9	.84

Table 2

Thematic analysis for what students reported learning in Sample 2

Theme	Number of Participant Responses	κ
Learned about the process of research and how to conduct a study	32	.85
Learned something about themselves	27	.92
Learned about the importance of questions wording or different types of questions	23	.83
Learned something specific to the subject matter of a study or multiple studies	20	.85
Nothing or not much	17	.97
Participating in research enhanced what I learned in class	15	.97
Learned that people have different perspectives or experiences	13	.86
Learned that it is important for participants to answer questions carefully and honestly	11	.87
Learned what it is like to participate in a research study	10	.90
Learned that a lot goes into conducting research or it takes a lot of time to conduct research	10	.90
Learned that you are helping others (society or researchers) by participating in studies	9	.89
Learned about the research being conducted in the department	8	.88

DISCUSSION

Approximately 65-66% of students agreed or strongly agreed that they learned about the research process by participating in studies for their introduction to research methods course. Alternatively, 27-28% of participants slightly agreed or disagreed that they learned about the research process by participating in studies. Furthermore, thematic analysis revealed that 11 participants in first sample and 17 in the second sample reported learning "nothing or not much" in an open-ended item. The top three themes of what students learned in Sample 1 were: nothing or not much, participation helps others, and learned about the research process. The top three themes of what students learned in Sample 2 were: learned about the process of research and how to conduct a study, learned something about themselves, and learned about the importance of questions wording or different types of questions.

Future studies can extend the work of Miles, Cromer and Narayan (2015) and Cromer, Reynolds and Johnson (2013) by examining ways professors, instructors, and psychology departments can enhance the educational benefit of research participation.

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