

Improving the student participant experience

Thomas L. Webb on ensuring students get more out of taking part in research

Psychology is the study of human behaviour and, often, the humans available to psychologists are undergraduate psychology students. As a consequence, a large proportion of psychological findings are based on research with undergraduate participants (Miller, 1981; Sears, 1986; Sieber & Saks, 1989). But what do participants get out of taking part? In many institutions taking part in experiments earns course credit, but this obligation can promote disaffection. For example, Coulter (1986) reports that when questioned about value 'a substantial number [of participants]... found the experience to be boring, irrelevant and a waste of time' (p.317).

Benefits

This attitude is a real shame; taking part in psychological research has the potential to provide a number of benefits.

Brings to life paradigms and procedures.

Being a research participant is to directly experience psychological research; to feel the ideas, effects and phenomena on which psychological knowledge rests. For example, it is only when one does the Stroop task that one feels the intense conflict between word meaning and ink colour.

Improves the design of research. Taking part in research allows the undergraduate participant to see the importance of clear instructions and appropriate debrief, and

possibly to experience the pressures of social desirability (e.g. 'Can I really admit that?') and demand characteristics (e.g. 'I know what she wants me to say now'). Each of these insights should make it easier when designing their own research (e.g. for a Level 3 project) to imagine how participants might respond.

Presents psychology in a good light.

Britton (1979) argues that experimenters essentially represent psychology as a science and profession. Thus, participants' opinions of the discipline may be shaped

by their experiences as a research participant. Fortunately, there is some evidence that experimenters are good ambassadors; when Britton asked 1698 participants to rate how polite experimenters were on a 1–10 scale, the mean rating was 9.6. However, being polite is not necessarily the same as presenting the profession in a good light; more research is needed here.

Solutions

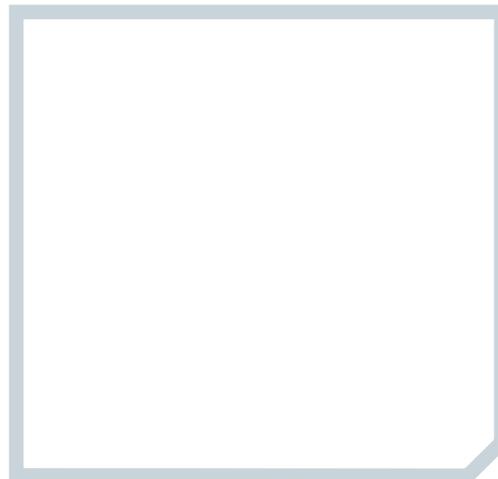
So how can we improve participants' experience and ensure that students are able to capitalise on the potential benefits outlined above?

Provide an informative debrief.

Explaining the purpose and method to participants immediately after participation fulfils ethical obligations (Coulter, 1986), but it can also be the most direct way to educate the participant as to the purpose of the study and, more broadly, the area of psychology in which the study is situated. Sieber and Saks (1989) argue that 'there should be an

appropriate quid pro quo between researcher and student. The student provides data that yield knowledge... the investigator should repay the student in kind – with interesting, worthwhile knowledge' (p.1057).

So what is the best way to debrief a participant? Britton (1979) points to the importance of avoiding technical terms and jargon and also suggests that debriefing includes reference to the potential impact of the research. Davis and Fernald (1975) go as far as to suggest that experimenters should relate their debrief to topics in the undergraduate curriculum. Clearly, however, these aims will be constrained in part by time; a busy researcher cannot



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spend 30 minutes with each participant (nor, probably, would the participant want this). The researcher should also be mindful that participants within a subject pool might talk to one another. Thus, revealing hypotheses should be accompanied by an explicit request that the participant does not discuss the research with other potential participants until the study is complete.

Britton's (1979) survey, however, found only a modest correlation between the quality of explanation provided by the experimenter and the participants' rating of the educational value of the experiment. He concluded that 'judgments of educational value are partly based on some factor other than the adequacy of the debriefing' (p.198). The next two ideas for improving the participant experience, therefore, aim to go beyond traditional debriefing:

Ask participants to describe the research design and purpose. Davis and Fernald (1975) suggest that participants be asked to write a one-page laboratory report on each experiment covering issues such as the area of psychology, statement of problem, hypotheses, variables, and implications of the research along with a subjective evaluation of clarity and value. It was also suggested that reports be evaluated by the experimenter and credit awarded for satisfactory completion. Davis and Fernald found that writing such reports took an average of 50 minutes and 47 per cent of the students found preparing such reports to be a positive learning experience. However, a word of caution: If participants know that they will be quizzed on the research following participation, then they may be more inquisitive – something that could potentially undermine the experiment. For example, many studies on automatic perception and behaviour are dependent on participants being unaware of the true purpose of the experiment (e.g. Chartrand & Bargh, 1996). It is clear that any effort to improve the participant experience needs to strike a careful balance between preventing both indifference and over-interest.

Ask participants to reflect on their experiences. In a recent project at the Department of Psychology in Sheffield (see <http://bit.ly/c8s4nj>) we asked undergraduate participants who took part in research to reflect on their experiences as part of a Level 1 methods course. After completing initial questions (e.g. What were you asked to do? How did you find the experience? Did you understand at the time why you were doing what was

asked?), students were asked to look at a 'detailed debrief' document provided by the experimenter and to consider whether the information changed their views of the experiment. To help them to complete the assignment a 'personal journal' was set up on their online learning environment. Students could use the journal to record their thoughts following each experiment that they participated in. The reflection exercise proved a success among staff and students. Over 80 per cent of students agreed that the exercise helped them to understand (a) the research design process and (b) why they are required to take part in experiments. About half of the students felt that the assignment helped them to develop their reflective skills. Staff feedback was also positive. For example, an initially sceptical module organiser was 'somewhat won over about the benefits of this exercise academically'.

In short, research participation can be a valuable learning experience that, with a few tweaks to current practice, could form a useful part of training to be a psychologist. Hopefully, this article provides some useful – if not definitive – ideas on how this might be achieved.

Issues

Finally, I would like to draw attention to three pertinent issues that may arise through attempts to improve the participant experience.

The 'unwanted participant'. If taking part in research becomes an important part of the educational experience for undergraduate psychologists then issues may be raised about experimenters selectively isolating particular groups of participants, such as non-native English speakers (Palij, 1988). One possible solution is to require that experimenters run groups of non-selected participants through a full, or reduced, procedure so that they can benefit from the experience (Aronson, 1987, cited in Palij, 1988). Alternatively, Palij suggests that these participants could be run individually and their performance compared with selected participants as a means of testing the impact of the inclusion criteria on findings.

Increasing coercion. Although participation in research is rarely compulsory, and most departments offer an alternative means to gain credits

(Miller, 1981), increasing the educational value of participation could be seen as coercive, as abstainers now have more to lose. One partial solution is to provide sufficient choice of experiments along with adequate description of what participation will involve. Most psychology undergraduates are not opposed to taking part in research *per se*, but may prefer not to take part in some types of research (e.g. that involving exposure to distressing images).

Overuse of participants. There is evidence that the repeated use of participants can affect experimental outcomes. For example, Holmes (1967) found that seasoned participants were more likely to become aware of a reinforcement contingency in a verbal

conditioning experiment and perform differently as a consequence, yet reported fewer attempts to determine what the experiments were about.

Silverman et al. (1970) found that taking part in a single experiment that involved false performance feedback followed by debriefing influenced performance on ostensibly unrelated subtests from the Wechsler Adult Intelligence Scale. Administrators of participant pools and experimenters need to be mindful of creating the 'professional participant' and, where possible, monitor the relationship between number and nature of experiments participated in and experimental outcomes. Perhaps a reciprocal relationship with a (non-psychology) department could serve to widen participant pools?

Conclusion

The nature of our discipline means that undergraduate psychologists tend to be actively encouraged – in some cases, coerced – to take part in research. This article has tried to argue that participation should not be seen as an obligation, but as a valuable opportunity to experience psychology 'in action' and to further understand the principles of research design. For this to happen, however, we all have a part to play; experimenters need to give some thought to the participant experience and new students embarking on their psychology programmes need to see research participation as the opportunity it can be.

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