

Comparing Outcomes for Undergraduate Psychology Research Assistants and Nonresearchers

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Undergraduate research assistants (RAs) in psychology engage in literature review, experimental design, IRB submission, data collection, entry, and analysis, as well as craft summaries of results. Faculty mentors also typically serve as informal advisers on such issues as career paths, graduate school, and professionalism. This study investigated whether psychology RAs were distinguishable from undergraduates who did not serve as research assistants (non-RAs) and utilized a pretest-posttest design and a control group, which is relatively rare in the assessment of undergraduate research outcomes.

A total of 178 psychology students completed the department's Curriculum Assessment Battery (CAB) both as a pretest (within one semester of declaring as a major) and a posttest (during senior year). The multiple-choice questions measured Career Knowledge (CK), Statistics/Methods Knowledge (SM), Core Knowledge from required courses (Core), Critical Thinking in Psychology (CT; modified from Lawson 1999), and Writing for Psychology (WR), as well as two self-report Likert questions that measured knowledge of PowerPoint (PP) and SPSS.

Forty-two percent of the sample had participated as RAs. RAs did not significantly differ from non-RAs in gender, age, or race but had significantly higher ACT scores and cumulative GPAs. Mixed-model ANOVAs revealed that both groups performed significantly better at posttest than pretest. In addition, RAs significantly outperformed non-RAs on the variables of SM, WR, CK, CT, and Core ($p < .01$ for all significant effects). However, no significant interactions were found; that is, the gain from pretest-posttest was similar for RAs and non-RAs. Additionally, follow-up analyses to determine whether the benefits of research participation across time were greater for low- than for high-ability students (dichotomized ACT scores and GPAs) again revealed no significant interactions.

These data suggest that undergraduate researchers have overall higher academic abilities and knowledge than non-researchers, suggesting that either more academically able students self-select into RA experiences or that faculty choose such students based on their academic records.

This may suggest that faculty should open their labs to students with a broader ability profile if the benefits of participation are to be spread equitably among all students. However, these data also suggested no direct benefit of serving as an RA on psychology skills/knowledge, thus challenging previous research that demonstrated academic gains directly related to research participation (e.g., Lopatto 2009). It is important to note, however, that these findings may be unique to this particular, psychology-based assessment tool, which may not capture more generalized research-based skills and knowledge as more commonly reported in the literature.

References

Lawson, Timothy. 1999. "Assessing Psychological Critical Thinking as a Learning Outcome for Psychology Majors." *Teaching of Psychology* 26: 207–209.

Lopatto, David. 2010. "Undergraduate Research as a High-Impact Student Experience." *Peer Review* 12(2): 27–30.

Undergraduate Research and Student Success: A Model for Cultural Competency as a Mediator

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Undergraduate research (UR) has proven to be a high-impact educational practice that contributes to student success. Additionally, teaching cultural competence is an important factor in enhancing students' academic and behavioral outcomes. Although there is a wealth of knowledge on the benefits of UR participation, there is a lack of information about incorporating cultural competencies in UR experiences to further enhance student success. The University Assistantship Program (UAP) at Georgia State University wanted to explore the effects of an undergraduate research experience focused on developing cultural competencies on student success. The UAP matches students with faculty and staff to work on research and career-related projects in alignment with students' professional goals. In 2016, the program partnered with the Multicultural Center, a unit of Student Affairs, to establish University Assistant (UA) positions within its office. The partnership set out to (1) explore the relationship among undergraduate research, cultural competence, and student success; (2) intentionally develop cultural competence among students through programming and mentoring; and (3) develop a model for other UAP partners to follow. The Council on Undergraduate Research's