Background and Methodology Overview

We recruited undergraduate students from all sections of Research Methods in Psychology (PSY 3001) and several Capstone classes offered by the Psychology Department. All students completed an assessment battery comprised of multiple choice items and a single short-answer question. The composition of the assessment battery was similar to the Psychology Department’s major assessment in 2016, although modifications were made to better link the assessment test to our major learning goals which were updated during the 2016-2017 academic year. These revised goals are designed to capture outcomes pertaining to content (Goal 1), process (Goal 2), and context (Goal 3).

More specifically, our Department’s learning goals require students demonstrate knowledge of core concepts and theories in at least four separate areas (e.g., Social, Cognitive, Abnormal, and Developmental), how research is conducted in those areas (e.g., methods and data analyses used; ethical conduct as researchers and practitioners), and finally how psychological findings are embedded in cultural and social contexts (e.g., cultural similarities and differences in psychological functioning, how social, political, and cultural factors have influenced the field of psychology).

These three learning goals are enumerated below:

**BA in Psychology Learning Goals**

1. Demonstrate knowledge of the major theories and methodological approaches associated with at least 4 of the following 6 fundamental subareas of psychology (i.e., abnormal, developmental, social, personality, cognitive, physiological).
   a. Define and apply the major theories and methodological approaches associated with these subareas of psychology
   b. Compare and contrast in written and/or oral form the major theories and methodological approaches within and across these subareas of psychology

2. Design and interpret the results of a psychology study
   a. Explain statistical methods of organizing and analyzing quantitative and qualitative data
   b. Conduct statistical analyses and accurately interpret the findings
   c. Conduct and apply psychological research in a manner consistent with ethical standards used in the field

3. Demonstrate the ways in which psychology is affected by social and historical contexts
   a. Explain how issues of gender, race, ethnicity, sexual identity/orientation, culture, religion and other aspects of human diversity affect psychological processes
   b. Evaluate the historical development of the different theories of psychology and how the field has evolved over time.

The assessment instrument was created by taking questions from past versions of the Psychology GRE Subject Test (these are made available by ETS), with the exception of questions about I/O Psychology and Ethics, which were created in a collaborative process by the Psychology Department’s Curriculum Committee and I/O faculty members. Driven by our learning goals, we selected ten items from the larger
pool of ETS questions pertaining to each of the following subject areas: Abnormal Psychology, Social & Personality Psychology, Developmental Psychology (child and adult), and Cognition/Physiological Psychology. All items taken from the GRE subject exam were equated for difficulty based on normative data provided by ETS. The other content areas consisted of 12 questions for I/O and 7 for Ethics.

Out of this bank of questions, participants were presented a random selection of 7 questions per topic area, with the exception of the Ethics section where participants responded to all seven questions. Questions were blocked by topic (e.g., all Abnormal Psychology questions were presented together), however block order was randomized. Moreover, within each block the presentation of questions and answer options was also randomized.

In addition to the MC questions, students were also asked to respond to a short answer item shown in italics below:

Describe and compare any two research methods used in psychology. Discuss how the strengths of each method can compensate for the weaknesses of the other method. Then, provide examples of how psychologists in different areas (for example, developmental and social psychology) use these methods in their research.

Students were instructed to write enough to thoroughly address the question, but were otherwise not given specific instructions regarding the expected or ideal length of their answers. The two parts of the question were designed to specially measure students’ ability to “compare and contrast in written and/or oral form the major theories and methodological approaches within and across these subareas of psychology” i.e., learning goal 1b.

The final component of the assessment asked students demographic information and to indicate (1) which Psychology classes they had taken (2) whether they entered Baruch College as a freshman or transferred (3) to enter their current major GPA (or to enter “I don’t know my GPA”). Finally, students were asked whether they had ever been a research assistant in a faculty member’s lab or completed an independent study in Psychology.

Overall, students were given approximately 60 minutes to complete the assessment, although this was not a hard cap and the instrument was not timed in a formal capacity. The average time taken to complete the battery was 48.3 minutes. A small portion of test takers completed the test in a lab setting on campus (N = 58) and all others completed the assessment outside of a lab on their own time. Analyses revealed no overall differences between these two groups in time taken or overall performance, so results collapse across testing location.

Changes from 2016 Major Assessment

As noted above, several modifications to the assessment procedure were introduced for the 2018-2019 round of testing. These changes reflect revisions to the Department’s learning goals and efforts to refine and improve the testing process. The changes are enumerated below:

1) Separate assessment instruments were created for students earning a BA in Psychology (housed in the Weismann School of Arts of Sciences) and BBA in Psychology (housed in the Zicklin Business School). The results reported here are exclusive to the BA students. The assessment outcomes for the BBA program can be found in a separate document.
2) Short-answer questions to assess learning goals about written expression and communication were built into the assessment test. In our previous assessment written work from Research Methods courses was sampled, but this was challenging to score consistently due to variability in the assignment guidelines across sections of the class. To eliminate this difficulty, assessment specific writing prompts were designed and included along with the multiple choice items. This also allowed for the writing prompt to be closely tied to learning goals.

3) To accommodate the inclusion of written responses to the short-answer questions the number of multiple choice questions per content section was reduced from 10 in 2016 to 7 in the current test.

4) To ease the burden on test-takers, students were given the option of completing the exam in lab setting or at home (cf., 2016 when all assessment tests were taken in a lab). This was done partially to accommodate students taking fully online classes who may not be able to easily come to campus to complete the assessment, although all students were able to freely choose taking the assessment in or out of the lab.

Basic Findings

Participants: The final sample\(^1\) consisted of 74 (54 female, M\(_{\text{age}} = 23.77\)) Psychology majors working toward a Bachelor of Arts (BA) degree. All students completed the multiple choice portion of the test, although not all students answered all demographics questions. The sample was diverse, with 28 Asian students, 14 Latino/a, 32 White, 29 Black, and 5 “other”. The average self-reported GPA was 3.21 (SD = .61). The sample was comprised of 43 non-transfer students and 31 non-transfer students. There were nearly equal numbers of junior (n = 29) and senior (n = 32) students in the assessment. Notably, the majority of students reporting being in their 3\(^{rd}\) year or earlier were enrolled in Research Methods (PSY 3001), with senior students primarily coming from capstone courses\(^2\).

Below is a visualization of the sample, separately out by year of study.
Elective choices:

Seen below is a Figure representing the number of students enrolling in particular 3000-level (i.e., intermediate) electives. The x-axis reflects the total number of students who had completed or were currently taking a given class. In brief, Abnormal Psychology (PSY 3055) was the most commonly taken course (63% of student), followed by Social Psychology (PSY 3056; 62%), and Child Development (PSY 3059 51%), Personality and Individual Differences (PSY 3064) was taken by 42% of students, with all other classes taken by less than a third (i.e., 33.3%) of the sample.

Descriptive Statistics and Overall Performance: Performance across all participants is shown below in Figure 2. The maximum score for any Subject is seven (7) and values here show the total number of questions correctly answered per section of the assessment test. Students’ cumulative assessment scores were positive correlated with self-reported GPA, $r = .410$, $p = .002$, providing some evidence for convergent validity and accuracy in self-reported GPA.

Figure 2. Overall performance of Psychology Majors on the MC portion of the assessment. Error bars depict 95% confidence intervals.
Written Assessment: The following rubric was designed (by the assessment coordinator) and used to code a random sample of 30 short answer responses. A graduate student coder was provided with this rubric and trained on how to apply these standards to the written answers provided by students. The assessment coordinator and student coder separately scored 10 essays and inter-rater reliability was satisfactory. The remaining twenty short answer responses were therefore coded by the assessment coordinator only. Table 1 shows the number short answer responses falling into each answer category for separate components of the question.

<table>
<thead>
<tr>
<th></th>
<th>Absent or Unsatisfactory</th>
<th>Needs Work</th>
<th>Adequate</th>
<th>Very good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name at least two distinct research methods</td>
<td>2</td>
<td>N/A</td>
<td>N/A</td>
<td>28</td>
</tr>
<tr>
<td>Defines research methods correctly</td>
<td>3</td>
<td>7</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Compares strengths and weaknesses in a manner that demonstrates understanding of the selected research methods</td>
<td>5</td>
<td>7</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Understands how these methodologies are used in different areas of the field</td>
<td>4</td>
<td>7</td>
<td>14</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 1. Number of short answer responses falling into each scoring category.

Samples of responses are provided below that illustrate the full range of scoring options for

- **Very Good**: “Two methods that can be used are observational and quasi-experimental. The strengths and weaknesses are related between the two. Observational studies are low in internal validity and high in external validity. On the other hand, quasi-experiments are higher in internal validity, and lower in external validity. Applied psychologists are more likely to use observations because they are interested in external validity. Experimental psychologists might use quasi-experiments or true experiments to test theories and are interested in internal validity.”

- **Adequate**: “Researchers can conduct experimental research, where they have control over what they are studying and the questions they ask to their respondents. Meta-analysis can also be conducted to gather information from various studies to conclude results, which is cost effective. Different researchers will use different methods. Meta-analysis is used in clinical research to look at treatments. Experimental research is used in social psychology to understand behavior, like why people obey authority.”

- **Needs Work**: “Strength of Naturalistic Observation is that you get to see the subjects in their daily routine, and the limitation is interaction because if you interact there may be reactivity.”

- **Absent/Unsatisfactory**: “…I do not feel I am fully equipped to answer this question.”
**Additional Analyses**

To provide more finely grained information about learning outcomes, we conducted several follow up tests. The first of these was a straightforward comparison of students who had completed none, some, or all of relevant course work for each section of the assessment.

For example, a Psychology major could plausibly take PSY 3064 (Personality and Individual Differences) but not PSY 3056 (Social Psychology). Consequently, this choice of electives may impact performance on the portion of the assessment measuring social and personality content knowledge. Similarly, a student may elect to enroll in Mind, Brain, and Behavior but not Cognitive Psychology, thus affecting their score on the Cognition portion of the assessment.

To perform these comparisons, participants were sorted based on whether they had completed the relevant classes or not. In the case of, e.g., social and personality, where the assessment battery drew on content from two classes, students were divided into groups based on whether they had completed neither class, only one class, or both courses.

The impact of prior and/or current course work on assessment performance was analyzed separately for each section. Significant differences (p < .05) are noted. All students were either currently or previously enrolled in Research Methods, which explicitly covers ethical conduct. Thus, these two areas are excluded from the analyses below.

<table>
<thead>
<tr>
<th>ASSESSMENT AREA</th>
<th>NO RELEVANT CLASSWORK</th>
<th>ONE RELEVANT CLASS</th>
<th>TWO RELEVANT CLASSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABNORMAL</td>
<td>4.00 (1.41)</td>
<td>4.73 (1.69)</td>
<td>4.47 (1.63)</td>
</tr>
<tr>
<td>SOCIAL/PERSONALITY</td>
<td>2.85 (2.01)(^{a})</td>
<td>3.30 (1.99)(^{b})</td>
<td>3.54 (2.49)(^{b})</td>
</tr>
<tr>
<td>IO</td>
<td>2.38 (1.76)</td>
<td>3.46 (1.40)</td>
<td>N/A</td>
</tr>
<tr>
<td>DEVELOPMENTAL</td>
<td>2.04 (1.61)(^{a})</td>
<td>3.51 (1.77)(^{b})</td>
<td>2.63 (1.30)</td>
</tr>
<tr>
<td>COGNITION</td>
<td>2.00 (2.49)(^{a})</td>
<td>3.31 (2.02)(^{b})</td>
<td>3.62 (2.50)(^{b})</td>
</tr>
<tr>
<td>METHODS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETHICS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 2. Number of questions answered correctly in each content area, shown separately for students who have completed none, one, or two relevant classes in the respective content area. Standard Deviations in parentheses. Different superscript letters indicate significant differences.*

**Comparing Transfer vs non-transfer Students:** A 6 (Subject) x 2 (Student Type) mixed-model ANOVA revealed a main effect of subject area (p = .032), reflecting different levels of performance across subjects areas (see also Figure 2). As seen in Figure 4 below, there was a significant difference between transfer students and non-transfer students, F (1,67) = 11.87, p = .001 and the effect size was moderate, \(\eta^2 = .13\). There was no interaction between Subject and Student Type (p = .726). These results are shown in the Figure below.
Figure 3. Number of questions answered correctly in each content area, shown separately for transfer and non-transfer students. Error bars depict 95% confidence intervals.

This specific assessment battery did not contain an oral communication component. However, below is a brief summary of additional data that speaks to learning goal satisfaction and students’ achievement that includes information about oral communication.

### Additional Data

**Written and Oral Communication:** Oral communication skills were not directly assessed in the present assessment. However, a survey of courses taught over the 2018-2019 and first half of 2019-2020 finds multiple assignments requiring either individual or group presentations. This is a ubiquitous component of the Research Methods course, but numerous capstone classes include oral communication as a course-specific learning goal (e.g., PSY 4010; PSY 4012, PSY 4039). The curriculum map for the BA major is provided in an Appendix, and indicated 28 unique courses that address the written and oral communication learning goal (Goal 1b). Of these, 10 regularly include oral communication assessments, although some variable among instructors is noted (e.g., not all PSY 4012 syllabi examined included verbal presentations or related assignments).

**Ethical Conduct:** Per the revision to our BA major learning goals following the 2016 assessment, ethical conduct in research and practice was included as a learning goal. Aside from performance on the multiple choice items providing evidence of learning goal satisfaction, it is worth noting that all students...
who successfully complete Research Methods will have completed CITI research ethics and compliance training (specifically passing the Human Subjects Research for undergraduates training program), which provides tangible evidence for learning in this content area.

**Culture and Context:** There was no section of the assessment instrument explicitly designed to capture Learning Goal 3a and 3b. However, questions about culture, diversity, and gender were included in the Social/Personality section and also in the Ethics questions (e.g., questions about discrimination in employment settings). Moreover, we do provide course offerings in Cultural Psychology, Psychology of Gender, and History of Psychology. The latter is a popular and commonly taken capstone course and covers in great detail the historical and cultural trends that have shaped psychology.

**Experiential Learning:** Of the 74 BA majors that completed this assessment, we found that 6 students reported working as research assistants in a faculty laboratory. Of these, 3 also reported completing an Independent Study in Psychology. Two additional students who did not report experience as a research assistant also indicated completing an Independent Study project in Psychology.

**Actionable findings and next steps**

**Conclusions based on Multiple Choice Performance:** Importantly, this assessment was not designed with specific criteria in mind for what constituted adequate knowledge of subject areas of satisfaction of learning goals. Instead, the MC portion of the assessment allows for capturing relative areas of strength and weakness in our students, specifically revealing strengths in research methods, ethics, and cognition relative to developmental, social, and I/O psychology. However, a tentative *post hoc* benchmark could be cumulative scores that would earn a passing grade, i.e., 70%. Using this standard finds that 44.5% of students demonstrated an overall satisfactory level of discipline specific knowledge. When examining students who entered Baruch as 1st year vs transfer students, we again find evidence for performance differences, as the average transfer students cumulative test score (M = 20.50, SD = 6.23) was lower than students beginning college at Baruch (M = 25.59, SD = 6.33). In percentage terms, transfer students averaged 57.1% correct responses compared to an average of 73.1% correct in native Baruch students. Self-reported GPAs also reflected a similar trend, with transfers reporting an average of 3.1 relative to 3.33 in native Baruch students, although this difference was not significant, *t* (55) = 1.49, *p* = .153 (note that lower degrees of freedom, reflecting students who did not report or know their GPA reducing the sample size for this comparison).

In light of these results, several areas of improvement can be identified. For example, relative weaknesses in Developmental, Social Psychology, as well as professional ethics are noted. Examination of the elective courses chose reveals that both Developmental and Social Psychology are popular amongst undergraduate majors. This indicates that as a department we may need to more carefully monitor learning outcomes in these classes. For example, due to student demand and strong enrollments, several sections of Social Psychology have recently run as “jumbo” sections with at least 80 students. Perhaps students would be better served with additional smaller sections being offered in place of jumbos. With respect to Developmental Psychology, our department offers two courses, emphasizing child and adult development, respectively. This is somewhat atypical. Note that the current major only allows students to count either child or adult development as an elective, so students generally only take one of these classes, missing the content taught in the other. With this limitation to course selection in mind, it is not surprising that performance was comparatively poor on MC questions
assessing a combination of child and adult development. Based on these findings, a revamped course that covers life-span development within a single semester may be beneficial for students.

**Written Assessment:** With respect to the sampled written answers, performance was again not staked to an a priori benchmark. However, the modal response was “adequate”, per the rubric devised for this assessment. Put plainly, students were largely able to describe, define, and compare and contrast - in written form - the methodological approaches within and across subareas of psychology. This is a success worth examining in more detail. One factor to consider is the specific question students answered. It required comparing and contrasting research methods AND explaining how they are used in different areas of the field, a construct valid measure of the relevant learning goal. Students may have been well-prepared to construct strong responses due to either currently being enrolled in Research Methods or having completed the class within the past year. If so, the satisfactory performance on the written assessment reflects strong grasp of research methodologies and their use within subareas of psychology that is taught effectively across sections of PSY 3001 (Research Methods) and reinforced elsewhere in the curriculum. One specific practice that may have supported students writing is shared across Research Methods classes: students’ final papers are completed in stages, with first and second drafts receiving feedback from instructors and/or graduate teaching assistants. This iterative writing processing is designed to improve students’ capacity to express theory, research design, and statistical results in writing. The results of the current assessment are evidence this practice has been successful.

Although the current assessment did not directly measure oral communication, it is still possible to comment on this learning goal based on the examination of syllabi in 3000 and 4000-level courses. All sections of Research Methods require group presentations based on the results of a research project. Consequently, all majors will have completed this assignment, given its ubiquity in a class all majors must complete (granting the potential for rare exceptions e.g., students who transfer to Baruch after completing Research Methods elsewhere). Nevertheless, a cursory glance at syllabi suggests that more frequent inclusion of presentations or other forms of oral communication (e.g., debate) would be valuable. A limiting factor is that growing demand for hybrid and fully online modes of instruction – demand coming from both students and Baruch College and CUNY administration. These modes of teaching limit opportunities for verbal presentations, with this limitation experienced most acutely in fully online courses. Inspection of syllabi in hybrid and online classes suggests reflect this limitation. However, it is not impossible to have students video record presentations or engage in other forms of oral communication in online learning environmental. With this in mind, the Psychology Department plans to make resources available to online instructors in order to encourage presentations or spoken communication in online classes. In addition to this step, the Center for Teaching and Learning at Baruch College will also be consulted. Most (if not all) of our online instructors have completed training in teaching online from the CTL. It would be valuable to know whether this training includes instructions about how to teach and measure oral communication in online classes.

**Transfer Student Underperformance:** One notable finding is that transfer students generally underperformed relative to their peers who entered Baruch College as first year students. A similar effect manifested as a non-significant trend in our previous assessment, indicating that this may be a consistent finding (although the effect was of a much small magnitude in the previous assessment). Conducting a mini meta-analysis (weighing the effect size associate with this effect in 2016 and 2019 by the respective effect sizes) reveals a modest but significant effect ($Z = 2.48$, $p < .05$).
This finding highlights an area for intervention. Transfer students appear to need additional support in their major classes. Importantly, these results have already been presented at a Department-level assessment workshop attended by most full-time Psychology faculty. During this meeting the relative underperformance of transfer students was highlighted and given particular attention. Collectively, the faculty are motivated to revise our advising and outreach efforts in order to better support transfer students’ learning. Follow up discussions within the Psychology Department are underway regarding how to better support our transfer students.

The undergraduate curriculum committee will discuss strategies for improving transfer student performance during upcoming meetings. Additionally, proposals will be solicited from both full time and part time instructors in the department and discussed during both smaller curriculum committee and larger department-wide meetings.

Possible interventions include: (1) increased advising, including requiring regular meetings with faculty assigned as major advisor (2) Improved communication with the Baruch College Transfer Center in order to better coordinate the supervision of transfer students (3) Departmental events designed to foster connection with transfer students and faculty (4) Increased advertisement of Psychology Club meetings and activities to foster a greater sense of belonging and commitment to the major amongst transfer students.

Beneficial Impact of Classwork: Not surprisingly, completing relevant classwork proved beneficial. In fact, in two content areas (Developmental and Cognition, respectively), students with no relevant class experience scored near chance (i.e., 2 out of 7 questions answered correctly). However, in these same areas completing at least one relevant course led to statistically significant improvements. Similarly, students who reported taking at least one of Social Psychology or Personality and Individual Differences significantly outperformed their peers without relevant coursework.

Focusing directly on Developmental Psychology reveals an interesting pattern (beyond finding that students taking at least one of the department’s developmental classes performed significantly better than those who had not taken at least one course). Specifically, inspection of Table 1 shows that students who reported taking two developmental classes performed relatively worse than those taking only one developmental course. This pattern likely results from the small number of students taking both child and adult development (N = 8). As noted elsewhere in this report, only one of PSY 3059 (Child Development) or PSY 3060 (Adult Development) may be counted toward completion of the major. Thus students who enrolled in both course may have done so due to unusual circumstances e.g., doing poorly on PSY 3059 and opting to take PSY 3060 in a subsequent semester, taking a class in Child Developmental prior to transferring to Baruch and then taking Adult Development after transfer).

Finally, the assessment found that prior course work did not affect performance in Abnormal or I/O psychology, although performance was reasonably strong in these areas among students who had not taken Abnormal or I/O Psychology. One reason for this may be that relevant content is covered in other classes e.g., Introduction to Psychology syllabi unanimously cover clinical topics and courses such as Motivation and Learning (PSY 3071) and Personality and Individual Differences (PSY 3064) may touch on material tested in the I/O section of the current exam (e.g., personality testing and assessment, Self-Determination Theory, Stress and Coping).
This finding indicates that the Department may need to refine the content taught in Abnormal and other intermediate courses to avoid redundancy with content learned in lower-level classes, although some review of material is unavoidable and likely beneficial. Moreover, expanding the content of intermediate (i.e., 3000-level) electives too far may further disadvantage transfer students whose lower-level classes may not have been as comprehensive as those offered at Baruch. Thus, any response to this particular finding must be measured and implemented with caution so as not to disadvantage particular groups of students, particularly transfer students.

Other Observations: The Psychology Department’s mission statement and learning goals both emphasize student involvement in scholarship. However, at least among students sampled in this assessment, relatively few have experience as research assistants or have completed an independent study in the discipline. One the one hand, this may be sampling artifact. The students who took the assessment while also taking Research Methods are unlikely to have either been in faculty labs or conducted independent research, as these experiences typically only occur after taking Research Methods. Thus, it is possible that these students will go on to engage in these valuable forms of research experience.

That said, it also appears that the Psychology Department could better advertise opportunities available to students. For example, we offer both Research Practicum (PSY 5030) and Independent Study (PSY 5000) options, which appear on official transcripts and count as either a major elective (PSY 5030) or a capstone class (PSY 5000). Both of these options are designed to incentivize and recognize student scholarship and are promoted on our webpage and through printed materials available in the Department office. However, a focused effort by faculty to recruit undergraduate more students into their labs and to recommend such experiences during advising would likely boost the number of students acquiring research experience.

Strengths and Limitations of this Assessment

In addition to reflecting on the results of the assessment, it is valuable to reflect on the assessment process as well, beginning with the assessment battery itself. While the assessment instrument used was carefully designed and linked closely to the department’s current learning goals, improvements are possible.

First, although we helpfully tracked whether students transferred to Baruch or entered as first year students, more class-specific information would be highly valuable. In brief, we did not ask students which specific classes they took prior to arriving at Baruch. Future rounds of assessment testing should record this more granular data to help better understand how to support and improve transfer student learning. For example, we do not currently know if transfer underperformance is limited to classes taken prior to studying at Baruch or whether it extends to classes taken here after transferring. The answer to this question will provide important knowledge about how best to improve learning outcomes in this population of students. If shortcomings are primarily limited to content learned outside Baruch, then remediation will likely be beneficial. However, if underperformance persists in classes taken at Baruch then intervention should emphasize additional monitoring, mentorship, and support.

Similarly, we did not ask students to indicate whether they had taken particular courses in an online or hybridized form. However, while this information was not measured part of the current assessment, a separate research project funded by the Society for Teaching in Psychology is ongoing in the
department. This project is examining both objective learning outcomes and also subjective feelings of identification with psychology and beliefs about learning (e.g., whether performance is viewed as fixed and immutable or can be improved through effort). Data collection is underway and although the results are not a formal component of this assessment report they will provide a supplemental source of information about student learning outcomes in the Department.

Beyond gathering more nuanced information about class experiences, there are many other factors that could be enlightening to measure. For example, nearly all of our students are employed. It may be worthwhile to measure how many hours students work during the semester and whether this impacts learning outcomes and opportunities for experiential learning (e.g., completing internships, participating in research experiences). Although there is only much that can be done at the department-level to address students’ extracurricular burdens, we may nevertheless be able to design improved advising and mentorship practices to help our students balance academic and employment responsibilities. On this front, several full time Psychology faculty have recently begun offering virtual office hours, allowing students to use Skype (or similar platforms like Google chat) to meet with advisors in a convenient and flexible manner. We believe this innovation will help our most burdened and vulnerable students.

An additional improvement would be increasing the number of multiple choice questions per topic. Although the current number was chosen to avoid participant fatigue, accommodate the inclusion of a short answer question, and in light of time constraints (e.g., limiting testing to a single session), the small number of items per section is a limitation. One solution may be to separate the multiple choice and short answer components in future assessments. For example, the multiple choice component could be expanded and conducted outside of class. Then, a standardized short-answer writing prompt could be administered either as a separate online assessment task or embedded in final exams in all Research Methods classes.

It is of course feasible to rate written assignments that are already completed in courses (e.g., final papers in Research Methods). This possibility was considered before conducting this assessment and remains on the table going forward. However, while there is a high degree of consistency across section of some courses (most notably Research Methods), the exact nature of the written work nevertheless differs slightly across instructors. Moreover, as assessment coordinator I do not wish to impose shared syllabi or assignments on instructors of Research Methods (a class I happen to regularly teach) or any other course. Consequently, having a shared writing prompt that is embedded in the assessment, rather than embedded in coursework, remains my preference.

Finally, in terms of better measurement of learning outcomes, it would be beneficial to more directly assess the “context” based learning goals (i.e., Goal 3a and 3b), perhaps by including a set of questions that directly tap into outcomes on these dimensions and that can be scored separately (rather than being folding into a larger section on Ethics or Social/Personality Psychology).

\[\text{In total, 298 students completed the assessment test. The results here are exclude Psychology minors and BBA students majoring in Industrial/Organizational Psychology.}\]

\[\text{This is notable because our previous assessment, conducted exclusively in Research Methods (PSY 3001), found the vast majority of students were seniors. In response to this, the Department redoubled our effort to advise majors to take Research Methods earlier in their studies, instead of in their final year. The finding that most of our participants taking Research Methods were in fact 3}\text{rd} \text{year (and not 4}\text{th} \text{year) students indicates success on this front.}\]