SAINT LOUIS UNIVERSITY.

Program-Level Assessment: Annual Report

Program Name (no acronyms): **Industrial & Organizational Psychology Program**	Department: **Psychology**
Degree or Certificate Level: **MS/PHD**	College/School: **College of Arts & Sciences**
Date (Month/Year): **10/2023**	Assessment Contact: **Candice Thomas, IO Program Coordinator**

In what year was the data upon which this report is based collected? **AY2022-23**

In what year was the program's assessment plan most recently reviewed/updated? **2023**

Is this program accredited by an external program/disciplinary/specialized accrediting organization or subject to state/licensure requirements? **No**

If yes, please share how this affects the program's assessment process (e.g., number of learning outcomes assessed, mandated exams or other assessment methods, schedule or timing of assessment, etc.):

1. **Student Learning Outcomes**
   Which of the program's student learning outcomes were assessed in this annual assessment cycle? (Please provide the complete list of the program's learning outcome statements and **bold** the SLOs assessed in this cycle.)

Assessment activities for AY 2022-2023 focused on collecting and analyzing information regarding Outcome #2 for the IO program: "Research abilities to design, execute, analyze, and report findings for scientific studies in industrial-organizational psychology". A full list of the program's learning outcome statements is included here:

Program learning outcomes. we expect all students who complete the program to know or be able to do the following:
   1. Breadth and depth of knowledge in industrial and organizational psychology
   2. **Research abilities to design, execute, analyze, and report findings for scientific studies in industrial and organizational psychology**
   3. Oral and written communication skills
   4. Ethical behavior and professional conduct in industrial and organizational psychology

2. **Assessment Methods: Artifacts of Student Learning**
   Which artifacts of student learning were used to determine if students achieved the outcome(s)? Please describe the artifacts in detail, identify the course(s) in which they were collected, and if they are from program majors/graduates and/or other students. Clarify if any such courses were offered a) online, b) at the Madrid campus, or c) at any other off-campus location.

The following artifacts of student learning were used to determine if students achieved the outcome for leaning outcome #2 (Research abilities to design, execute, analyze, and report findings for scientific studies in industrial-organizational psychology):

   • Completion and grades for graduate coursework in statistics and research methods: Applied univariate statistics in behavioral science, applied multivariable and multivariable statistics in behavioral science, advanced quantitative research methods, and advanced courses in research methods and statistics. All

statistics courses are part of the broad psychology graduate course offerings (open to all psychology graduate students).
- Completion of master's thesis projects
- Completion of written comprehensive examinations
- Completion of oral comprehensive examinations
- Completion of dissertation projects
- Refereed publications
- Conference Presentations
- Technical Reports
- Internships

Note. The academic programs on the SLU Madrid campus are not related to the Industrial-Organizational Psychology Graduate Program. No coursework was offered online during AY2022-23.

3. Assessment Methods: Evaluation Process

What process was used to evaluate the artifacts of student learning, and by whom? Please identify the tools(s) (e.g., a rubric) used in the process and **include them in/with this report document** (please do not just refer to the assessment plan).

- Grades for coursework were obtained from individual students and averaged across students to provide a mean course GPA. Course GPAs above 3.0 were considered supportive of the learning outcome.
- Completion of thesis, comprehensive exams, and dissertations were complied from the result forms for each project type. Ratings of "passing" or "passing with distinction" were considered supportive of the learning outcomes.
- A listing of publications, conference presentations, technical reports, and internships was obtained from students. Each of these was considered evidence supporting the learning outcome.

4. Data/Results

What were the results of the assessment of the learning outcome(s)? Please be specific. Does achievement differ by teaching modality (e.g., online vs. face-to-face) or on-ground location (e.g., STL campus, Madrid campus, other off-campus site)?

Statistics and Research Methods Training Outcomes
- Outcome for first to second year IO graduate students (n = 5) completing the foundation course in univariate statistics (Applied Univariate Statistics in Behavioral Science) was a mean course GPA of 4.00/4.00
- Outcome for first to second year IO graduate students (n = 5) completing the foundation course in multivariate statistics (Applied Multivariable and Multivariate Statistics in Behavioral Science) was a mean course GPA of 3.75/4.00
- Outcome for first-year IO graduate students (n = 4) completing the foundation course in research methods (Advanced Quantitative Research Methods) was a mean course GPA 4.00/4.00
- Outcome for second to third year IO graduate students (n = 3) completing advanced courses in statistics (Structural Equation Modeling) was a mean course GPA of 4.00/4.00

Master's Thesis Research Outcomes
- Two research-based master's theses that employed advanced methodology and statistical analyses were completed and successfully defended.

Written Comprehensive Examination Outcomes
- Two graduate students successfully completed written comprehensive exams that assessed advanced competencies in statistics and research methodology. Both were successful in fulfilling these competencies.

Oral Comprehensive Examination Outcomes
- One graduate student successfully completed oral comprehensive exams that included questions that assessed advanced competencies in statistics and research methodology. They were successful in fulfilling these competencies.

Dissertation Research Outcomes
- Six research-based doctoral dissertations that employed advanced methodology and statistical analyses were completed and successfully defended.

Referred Publications
- 8 graduate students were coauthors with program faculty on 5 publications in well-respected referred journals in AY 2022-2023 (e.g., IO Psychology: Research & Practice, Journal of Vocational Behavior, Community, Work & Family).

Presentations
- Graduate students were coauthors on 11 presentations (posters/papers/symposiums/panels) given at major professional conferences (i.e., Society for Industrial-Organizational Psychology).

Technical reports
- Five graduate students were coauthors with program faculty on technical reports that employed quantitative and qualitative research methods (e.g., program evaluation and organizational assessments)

Internships and applied positions
- Seven IO doctoral students were placed in internships or engaged in applied work with data analytics roles during AY2022-23 at (e.g., at Centene Corporation, Uber, Enterprise Bank &Trust)

Note. The academic programs on the SLU Madrid campus are not related to the Industrial-Organizational Psychology Graduate Program. No coursework was offered online during AY2022-23. Therefore, there are no comments to be made about teaching modality or on-ground location differences.

5. **Findings: Interpretations & Conclusions**
   What have you learned from these results? What does the data tell you? Address both a) learning gaps and possible curricular or pedagogical remedies, and b) strengths of curriculum and pedagogy.

   Our results suggest that students are succeeding in obtaining research-related training (as evidenced by coursework), demonstrating their competency in research abilities (as evidenced by course grades and by thesis, dissertation, and comprehensive exam outcomes), and producing high quality research deliverables (as evidenced by publications, presentations, technical reports, and placements in applied research positions). Together, this evidence supports that we are meeting our learning goal.

   We view our statistics and methods training as a strength of the program. Furthermore, the high number of research-related outputs clearly demonstrates that our students can design, execute, analyze, and report findings. More than half of our students were coauthors on a peer-reviewed journal publication during AY2022-2023 alone – this is a significant strength that we are celebrating!

   Through this review, we did not identify any learning gaps or remedies that need to be made. We will continue to foster student educational opportunities and support research engagement through our ongoing coursework, degree requirements, and faculty mentoring.

6. **Closing the Loop: Dissemination and Use of Current Assessment Findings**
   A. When and how did your program faculty share and discuss the results and findings from this cycle of assessment?

   The results of this assessment were shared with the faculty in the Industrial-Organizational Psychology Program and were discussed during our in-person program meeting 10/3/2023. The full report will also be shared with the Chair of the Psychology Department, Jere Weinstock. In addition, topics from the report may be included in the annual IO Newsletter, as well as the list of annual accomplishments prepared by the Department of Psychology and distributed to Psychology students, faculty, and staff.

   B. How specifically have you decided to use these findings to improve teaching and learning in your program? For

example, perhaps you've initiated one or more of the following:

Changes to the Curriculum or Pedagogies
- Course content
- Teaching techniques
- Improvements in technology
- Prerequisites
- Course sequence
- New courses
- Deletion of courses
- Changes in frequency or scheduling of course offerings

Changes to the Assessment Plan
- Student learning outcomes
- Artifacts of student learning
- Evaluation process
- Evaluation tools (e.g., rubrics)
- Data collection methods
- Frequency of data collection

Please describe the actions you are taking as a result of these findings.

If no changes are being made, please explain why.

We are not making changes to our teaching and learning for the program because our review suggests that our existing structure and processes are meeting our goals. However, we will continue to be actively engaged in the ongoing process of learning and development to meet the changing needs of our students and the field. We will continue to ensure that our coursework is high quality and is well supported and that our active mentoring relationships, that foster many of the outcomes reviewed, continue and are supported.

7. **Closing the Loop: Review of <u>Previous</u> Assessment Findings and Changes**

   A. What is at least one change your program has implemented in recent years **as a result of previous assessment data**?

   Previous assessment data has suggested the importance of high-quality statistics- and methods-based coursework for our students' progress. Although our prior assessments did not find our existing courses to be lacking, we have had many personnel changes over the last few years that have made those courses more challenging to maintain. Due to this, we are more actively involved in departmental advocacy for these courses and the hiring of additional faculty to support increased offerings of advanced statistics and methods coursework.

   B. How has the change/have these changes identified in 7A been assessed?

   These changes have not been formally assessed; rather, they involve increased presence and participation around departmental decisions for graduate course offerings by our program leadership.

   C. What were the findings of the assessment?

   N/A. See section 7b.

   D. How do you plan to (continue to) use this information moving forward?

   We will continue to engage in departmental conversations and advocacy for high quality statistics courses.

IMPORTANT: Please submit any assessment tools (e.g., artifact prompts, rubrics) with this report as separate attachments or copied and pasted/appended into this Word document. Please do not just refer to the assessment plan; the report should serve as a stand-alone document. Thank you.