

How well are we teaching research methodology?

Evaluation of the BA and BS in Psychology

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Learning Outcome: Apply quantitative skills in scientific inquiry related to Psychology (BA) and Apply quantitative skills in scientific inquiry related to Psychology with proficiency (BS)

Background

We evaluated student projects from PSY 301: *Research Methods and Design in the Behavioral Sciences*, a course required of all Psychology majors. This course requires students to write a research report based on their own data or a research proposal in a poster format (depending on the instructor). A rubric was used to evaluate competence in research methods based on a 3-point scale:

	Intro/Hypothesis	Methods	Results	Discussion	APA/Style
Excellent 3	Logical progression of ideas	All relevant information	Completely accurate; includes a table	Logical; full discussion	Completely accurate
Good 2	Mostly logical progression	One or two details missing	Mostly correct	Usually logical; findings/plans discussed	Mostly accurate
Fair 1	Disconnected ideas	Details missing	Inaccurate	Lacks logic	Incorrect

Conclusions

- For both BA and BS students, the weakest dimension of the research methods rubric was interpretation of results. For BA student two out of three semesters were below the percent competency expectation, while BS students fell below the threshold in only one semester.
- Instructors concurred that we need to develop guidelines for teaching interpretation of research in PSY 301 as well as 200-level courses leading up to PSY 301.
- Introduction, Methods, Discussion and use of APA Style all met expectations.
- We recommend course coordination for sections of PSY 301.
- Spring 2021 was taught all remotely during the COVID shut down, which may explain lower scores in some areas.

Method

BA students were judged competent if they achieved a 2 with 75% receiving either a 2 or 3.

BS students were judged competent if they achieved a 2.5 with 85% receiving either a 2 or 3.

Sample: 75 BA students' research reports/proposals were reviewed and 15 BS students. These students were enrolled in 3 course sections of PSY 301 in Fall 2019, Fall 2020, and Spring 2021. These courses were taught by Dr. Kate Webster and Dr. Andrea Paiva. BA and BS students are combined in the sections.

BA Results

Percent of BA students for each rubric dimension obtaining a 2 or 3 on the rubric rating and the mean rubric rating.

	n	Intro	Methods	Results	Disc	APA/Style
Fall 2019	17	94% M=2.39	94% M=2.56	62% M=2.28	88% M=2.47	94% M=2.81
Fall 2020	24	92% M=2.68	96% M=2.4	96% M=2.92	92% M=2.8	n/a
Spr 2021	35	82% M=2.46	88% M=2.41	54% M=1.83	77% M=2.5	100% M=2.66

BS Results

Percent of BS students for each rubric dimension obtaining a 2 or 3 on the rubric rating and the mean rubric rating

	n	Intro	Methods	Results	Disc	APA/Style
Fall 2019	2	100% M=3.0	100% M=3.0	100% M=3.0	100% M=2.75	100% M=2.88
Fall 2020	6	100% M=2.67	100% M=3.0	100% M=3.0	100% M=3.0	n/a
Spr 2021	7	100% M=3.0	86% M=2.57	71% M=2.11	86% M=2.71	n/a