

How do we teach introduction to statistics to psychology majors?

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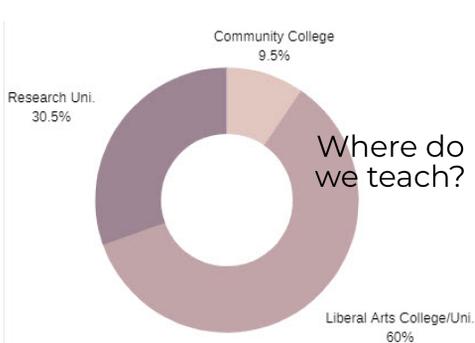
Introduction

Instructors who teach statistics to psychology majors have many pedagogy choices to make. Which software should they use? What content is appropriate and realistic for an introductory class? The present project captures some of these choices made by psychological statistics.

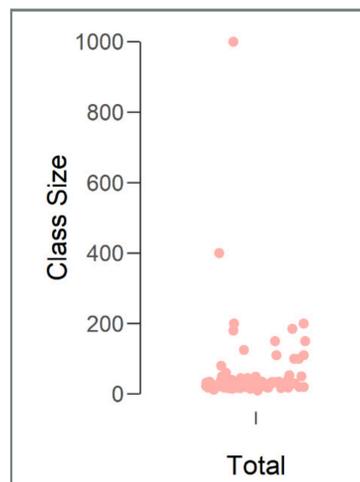
Method

Data was collected from 93 instructors during the Fall 2019 semester. Participants were solicited via Twitter and the STP listserv. All participants provided informed consent and stated that they teach Introduction to Statistics to psychology majors.

Who were our participants, and who do they teach?



Class size Median: 30, SD: 114.67

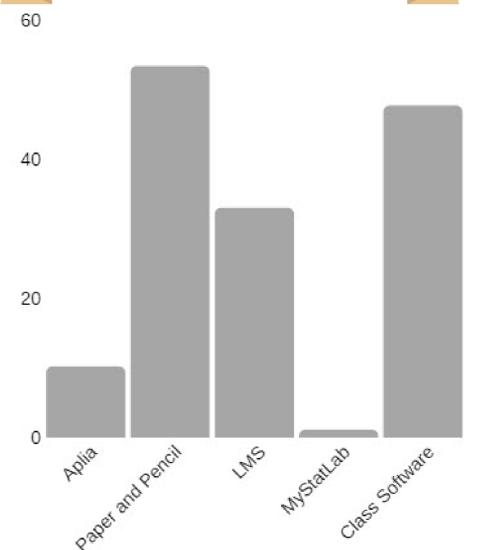


How do we assess our students?

Number of Homework Assignments:

Mean: 11.94
Median: 10
Standard Deviation: 9.14
Range: 0 - 50
NOTE: Includes lab reports, 1-4 question assignments

How do our students do their homework?



18.3%

have at least one take-home exam

% of our students who are psychology majors:

Mean: 75.27%
Median: 85%
SD: 28.15%
Range: 10-100%

57.9% of our classes have a quantitative pre-requisite

97.9% of our classes are required for psychology majors

What do we teach our students?

What do most of us teach? (>85%)

- Pearson's Correlation
- All the t-tests
- One-way ANOVA
- Measures of Variability
- Measures of Central Tendency
- Z-scores
- Effect sizes
- Central Limit Theorem
- Sampling distribution of the sample mean

What don't most of us teach? (<20%)

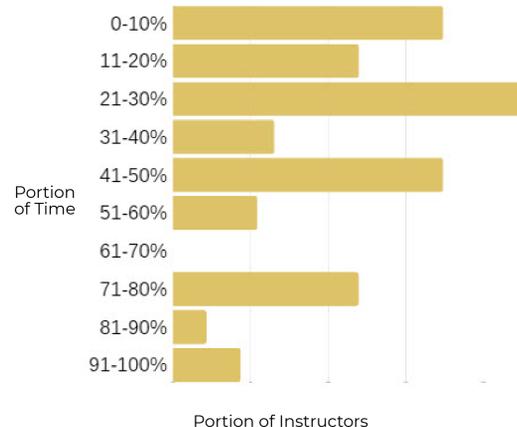
- Bonferroni corrections for correlation
- Wilcoxon Mann Whitney
- Kendall's tau b
- Bayesian
- Spearman's correlation

Topics with no clear consensus (21%-84%)

- Probability
- Linear Regression
- Factorial ANOVA
- Repeated measure ANOVA
- Data Visualization

How do we teach our students?

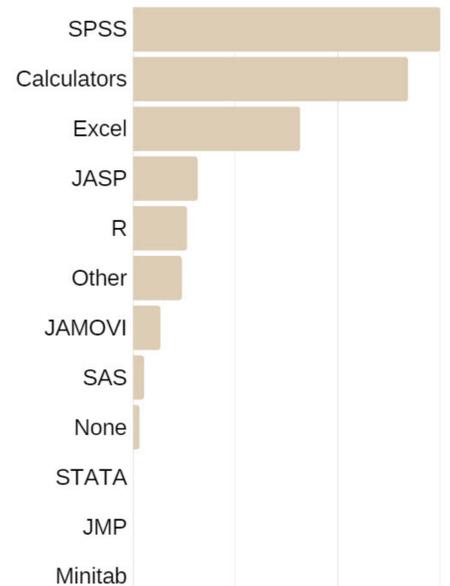
what percentage of your instruction time is dedicated to working through formula by hand?



86%

use a textbook

What technology we use to teach statistics?



63.7%

Use materials beyond a text, including APA Style Manual, software guides, videos, and instructor generated guides.

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