

## Notes on Student Evaluations of Teaching (SET)

P.B. Stark, 17 September 2019

### Experimental and quasi-experimental results

- weak or negative association with objective measures of learning (Carrell & West, 2010; Braga et al., 2014; Boring et al., 2016)
- substantial bias from gender
  - gender bias can make female instructors rate worse than objectively less effective male instructors (Boring et al., 2016)
  - bias affects ratings of “objective” items like promptness (MacNell et al., 2015; Boring et al., 2016)
  - varies by discipline &c (Boring et al., 2016; Mengl et al., 2018)
- bias from ethnicity & gender (Chisadza et al. 2019)
- strong association with grade *expectations*, but not necessarily with learning (Boring et al., 2016)
- grades—not learning—“rewarded” with high SET (Cho et al., 2015; Carrell & West, 2010; Braga et al., 2014)
- providing cookies during class increases ratings of instructors and of course materials (Hessler et al., 2018)
- the number of points on the rating scale affects gender differences (Rivera & Tilcsik, 2019)

### Laboratory studies

- bias in favor of young male instructors (Arbuckle & Williams, 2003)
- ratings predicted by responses to 30 seconds of silent video (Ambady & Rosenthal, 2003)
- race and gender matter (Basow et al., 2013)

### Meta-analyses

- weak or negative association with objective measures of learning (Uttl et al., 2016)
- association between author conflicts of interest and conclusions that SET are valid (Uttl et al., 2019)

### Observational studies and $n = 1$ experiments

- strong association with student enjoyment (Stark, unpublished)
- data unreliable: substantial fraction of students give demonstrably—apparently deliberately—false answers to objective questions (Stanfel, 1995)
- gendered language in evaluations (Schmidt, 2015, *inter alia*)
- bias against older instructors and female instructors (Bianchini et al., 2013; Wagner et al., 2016)

- bias against non-native English speakers, (Subtirelu, 2015, *inter alia*), URM (Wagner et al., 2016)
- bias in favor of physically attractive instructors (Wolbring & Riordan, 2016; Feeley, 2002; Hamermesh & Parker, 2004)
- biases from physical condition of room, time of day, mathematical level, class size, ... (Bedard & Kuhn, 2005, *inter alia*)
- “halo effect”: students conflate enthusiasm, attractiveness, & other things with effectiveness; enthusiasm not associated with learning (Williams & Ceci, 1997; Feeley, 2002; *inter alia*)
- negative association with learning (Stroebe, 2016)

### Surveys

- students deliberately falsify ratings (Clayson and Haley, 2011)
- students and faculty use the same adjectives differently (Lauer, 2012)
- comments incommensurable across disciplines (Stark & Freishtat, 2014)
- bias against quantitative classes (Uttl et al., 2013)

### Statistical abuses (Stark & Freishtat, 2014)

- averages of categorical data are meaningless/misleading
- response rate matters
- report distributions, not means
- SET are an incomplete census, not a random sample. Nonresponse bias not ignorable.

### Litigation/Arbitration

- U. Florida
- Miami U. <https://casetext.com/case/brunarski-v-miami-univ-2>
- Ryerson U. <https://ocufa.on.ca/blog-posts/significant-arbitration-decision-on-use-of-student-questionnaires-for-teaching-evaluation/>
- U. Toronto
- UNLV
- American Sociological Association seeks to crowd fund a class action <https://www.change.org/p/american-sociological-association-end-the-use-of-biased-student-evaluations-of-teaching-in-employment-decisions-e3ff4761-0d64-4b51-9fce-f160d743e690/sign>

### Policy changes at other universities

- USC <https://academic senate.usc.edu/teaching-evaluations-update/>
- U. Oregon <https://provost.uoregon.edu/revising-uos-teaching-evaluations>
- Colorado State, University of Kansas, ...

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