Statistical philosophy and the language of significance

Jonathan Dushoff, McMaster University

U. Chicago, Oct 2018

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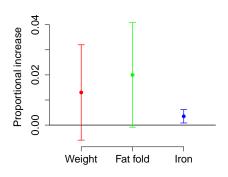
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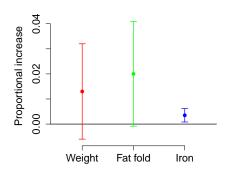
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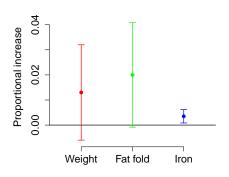
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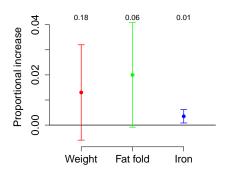
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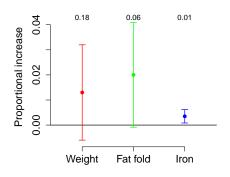
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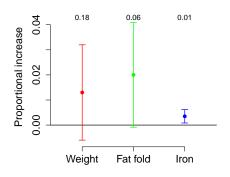
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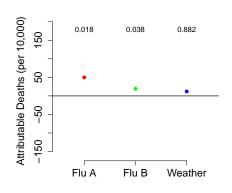
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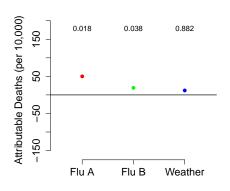
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Annualized flu deaths



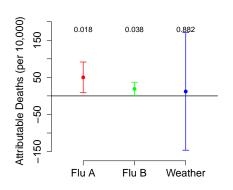
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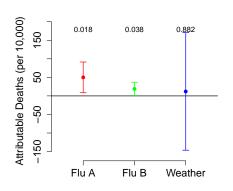
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... with confidence intervals



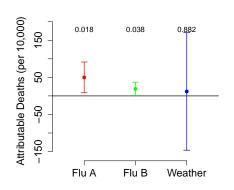
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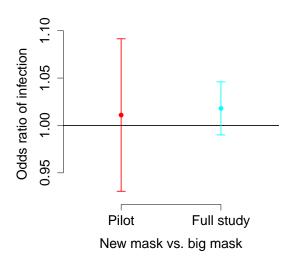
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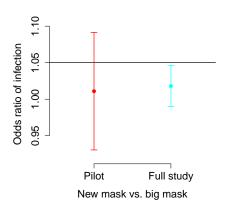
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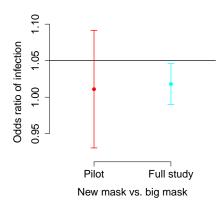
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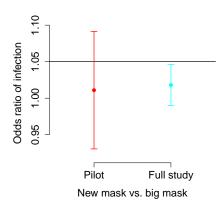




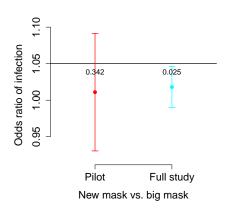
► Is the new mask "good enough"?



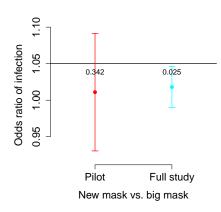
- ► Is the new mask "good enough"?
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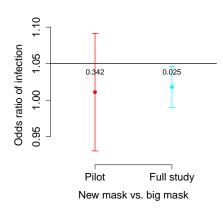
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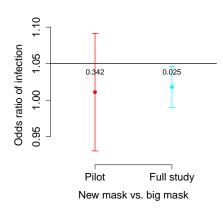
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Making decisions



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Null effects of boot camps and short-format training for PhD students in life sciences

David F. Feldon^{a,1}, Soojeong Jeong^a, James Peugh^b, Josipa Roksa^{c,d}, Cathy Maahs-Fladung^a, Alok Shenoy^a, and Michael Oliva^a

*Department of Instructional Technology & Learning Sciences, Utah State University, Logan, UT 84322-2830; *Department of Pediatrics, Cincinnati Children's Hospital Medical Center, Cincinnati, OH 45229-3026; *Department of Sociology, University of Virginia, Charlottesville, VA 22904; and *Curry School of Education, University of Virginia, Charlottesville, VA 22904

Edited by Dale Purves, Duke University, Durham, NC, and approved July 28, 2017 (received for review April 6, 2017)

Many PhD programs incorporate boot camps and summer bridge programs to accelerate the development of doctoral students' research skills and acculturation into their respective disciplines. These briefs blight higherity experiences span no more than several weeks

and what they may have learned from a given experience is notoriously inaccurate (6-10).

Extensive evidence suggests that effective instruction or practice

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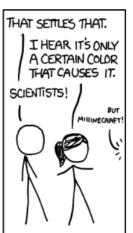
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sig·nif·i·cance

/sig¹nifikəns/ •)

noun

1. the quality of being worthy of attention; importance.

"adolescent education was felt to be a social issue of some significance" synonyms: importance, import, consequence, seriousness, gravity, weight, magnitude, momentousness: formal moment

"a matter of considerable significance"

2. the meaning to be found in words or events.

"the significance of what was happening was clearer to me than to her"

synonyms: meaning, sense, signification, import, thrust, drift, gist, implication, message, essence, substance, point

"the significance of his remarks"



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"a matter of considerable significance"

2. the meaning to be found in words or events.

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Another way to talk

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Advice for scientists

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