



Guest Presentation Descriptions

for the

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Statistical Literacy: Critical Thinking about Statistics as Evidence in Arguments

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Many – if not most – social arguments today involve statistics. These social statistics are quite different from mathematical numbers. They are socially constructed by people with goals and motives. And since they are based on reality, they can be influenced in ways that pure numbers cannot. The purpose of this session is to introduce statistical literacy as a new discipline and as a course (Math 1300) taught at the University of New Mexico. This course is taught without using computers or calculators. The focus is on introducing those concepts and ideas that students need to decode and evaluate the statistics in the everyday media, in tables and in graphs. Confounding is introduced as a strong source of influence that is often disregarded. As an example, recent UK data shows that those vaccinated are more likely to die from Covid than those unvaccinated. However, this association is reversed after taking into account (controlling for) a confounder: age. Statistical literacy, quantitative rhetoric, is argued to be a necessary skill in order to deal with data-based arguments in a modern democracy.

Video (25 min):

https://drive.google.com/file/d/14QFCpm_WijQUZiU7IN9iCuYptVAwOHs3/view?usp=sharing

Slides: www.StatLit.org/pdf/2022-Schild-CCT-Slides.pdf

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