

Stat 8801

Case Study 9: Group 1

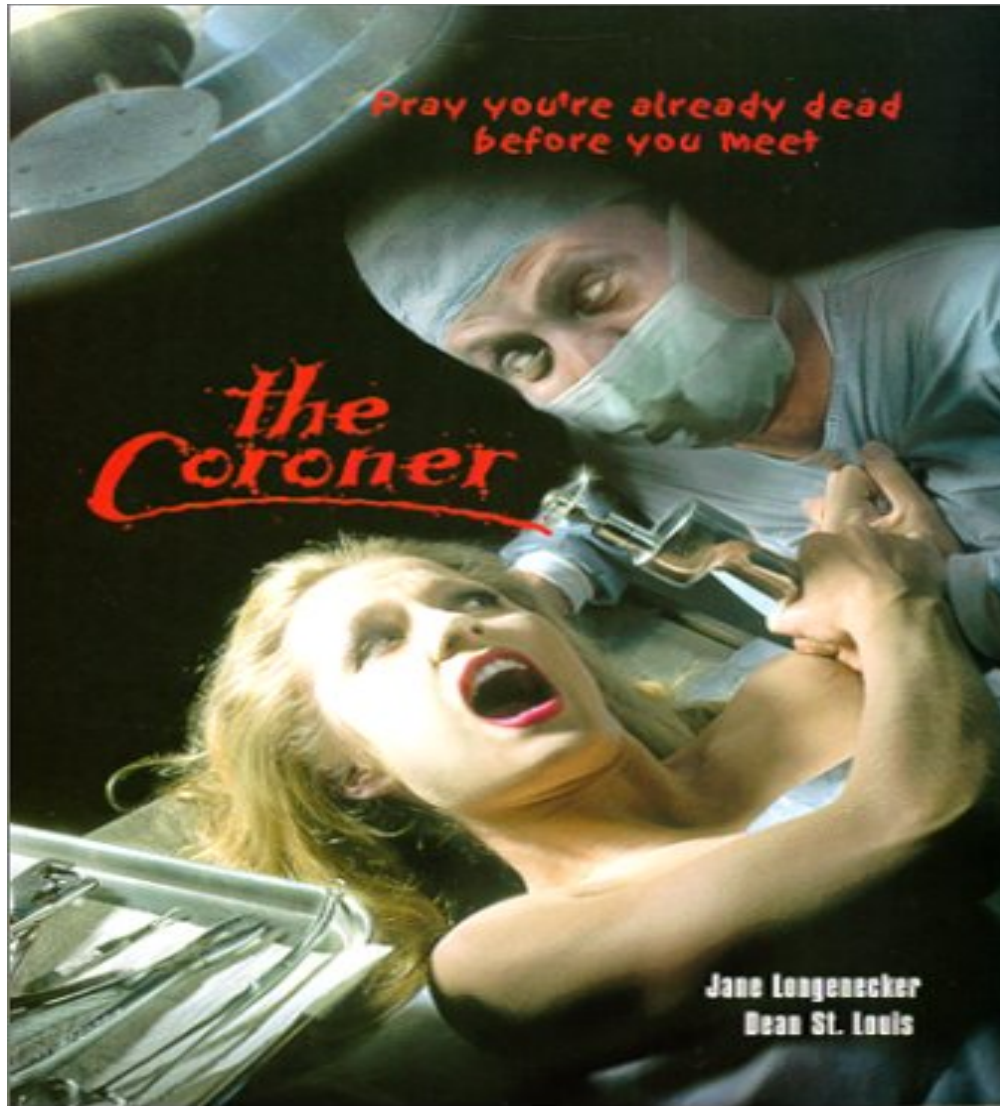
The Issue: Cheating



Justice: What is at stake?



The Statistician and the Coroner



STATISTICS



Methods

- Scrutiny! (St. Paul, Minnesota)
- Scheck
- *Angoff's B*
- *Crawford's method*
- *Kling's K*



Method

- ‘Work with the estimated overall probability that, in the absence of copying, any two students who choose a wrong answer will choose the same option’ (Stark, 2001).

Correspondence Theory of Reality



"LET'S GET MARRIED, MISS JONES AND HAVE 2.8 KIDS!"

Considerations

- What is the threshold of considering an event to be unlikely?
- Probability of obtaining a perfect score on 20 items through blind guessing on a True/False test would be $p = .000000954$
- ‘Trigger’: additional information that suggests further investigation of irregularity (Cizek, 2001).
- Previous performance of student (cross-sectional or longitudinal view).