

# Horbach et al., 2019

## The influence of variance in learner answers on automatic content scoring

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### Variance

#### Sources of variance

- Conceptual variance:
    - when there are multiple separate right answers to a question.
    - bigger issue is number of variants of incorrect answers. *why not focus on modelling correct answers? Could you use an approach that allows you to rely more on how close this answer is to the correct answers I saw in training (if generative, I'm not sure how this would work for discriminative) could you model correct/wrong questions as anomaly detection?*
  - Variance in realization
    - different ways of forming the same conceptual answer
    - Linguistic variation
      - language provides lots of possibilities to express the same meaning *what if you did reparsing or something to map variant forms to roughly the same meaning*
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