Non-Cognitive Predictors of Student Success: A Predictive Validity Comparison Between Domestic and International Students

INTRO
- We look at the inspection regime in England.
- The Office for Standards in Education (Ofsted) was created in 1992. Since then there have been multiple Chief Inspectors.
- We wondered whether sentiments of secondary schools’ inspection reports changed with these Chief Inspectors.

METHODS
- We ‘scraped’ all inspection documents available from 2000 to end 2017 from the Ofsted website https://reports.ofsted.gov.uk/
- This resulted in a corpus of 17,212 documents, 2.49 GB of data.
- All documents were pre-processed to a ‘tidy text’ format (Silge and Robinson, 2017), a format with 32,235,414 separate words. The documents were grouped per Chief Inspector (period of time).
- We then used sentiment analysis, applying a general-purpose AFINN lexicon (Nielsen, 2011) which assigns words with a score that runs between -5 and 5, with negative scores indicating negative sentiment and positive scores indicating positive sentiment.
- We used R in Rstudio to do these analyses.

RESULTS
- There were differences in sentiment over time.
- From 2000 sentiment rose to its highest in 2007-2011, after which sentiment went down again, changing with Chief Inspectors.
- There were commonalities and differences in the sentiments of words that contributed to the total sentiment of Ofsted documents.
- The development of sentiment can cautiously be linked to policy changes in the inspection regime.

DISCUSSION
- However, interpretation of sentiment is tricky.
- We say ‘cautiously’ because correlation/causation remains a challenge.
- There are semantic challenges, for example double negations.
- We are now looking at differences in sentiments for reports with different judgements: inadequate, requiring improvement (formerly ‘satisfactory’), good, outstanding.

Sentiment analysis is able to denote policy changes in English secondary school inspection reports over time.

REFERENCES