



# **Covid-19 and the Achievement Gap**

**In Primary Schools in the Netherlands**

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# Background

**Research Question :** How did socioeconomic status impact the performance of elementary school children in the Netherlands before and during the Covid-19 lockdown?

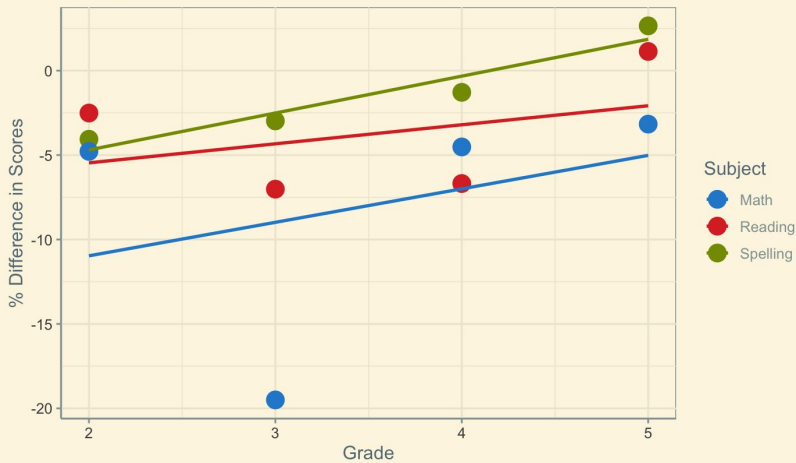
- We focused on test scores of Dutch students Grades 2-5
- Looking at the changes between students in 'High' and 'Medium' income household
- As well as families with 'High' and 'Medium' levels of parental education
- Scores taken prior to Covid-19 and During

# Data Collection

- **Gathered from NCO database (owned by Dutch gov)**
- **From national education registry**
- **Includes all students at nationally funded schools**
- **Info on household income is cross referenced from gov data about parental employment, gov benefits**
- **Info on parental education gathered from gov data about parent's degrees**
- **Scores for students is their final exam score - midterm score**

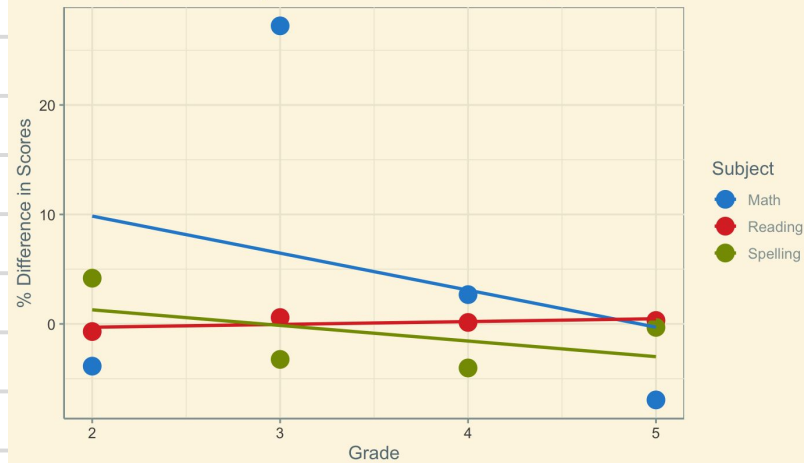
# Grade + subject + scores + household income

Change in Scores by Grade Pre/During Covid in Medium Income Household



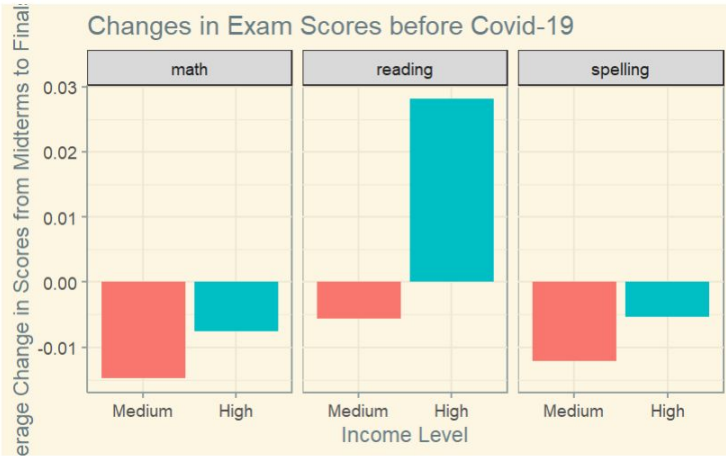
- Covid has less impairment with increasing grade
- Math decrease in 3rd grade

Change in Scores by Grade Pre/Post Covid in High Income Households

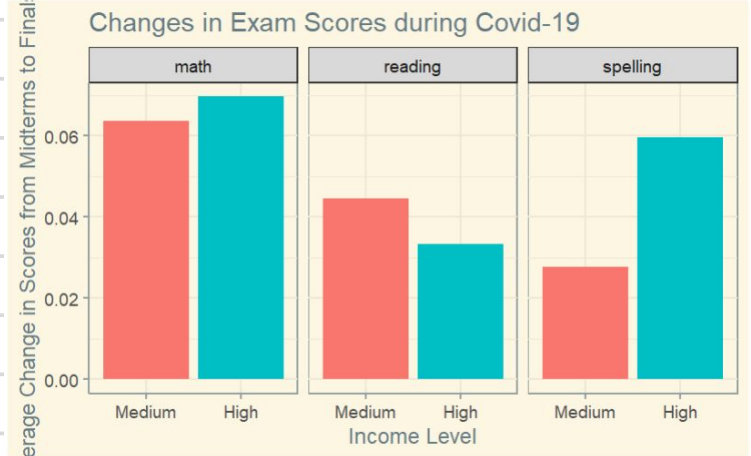


- Covid has less impact on all scores
- Math increase in 3rd grade

# Scores by Income Levels

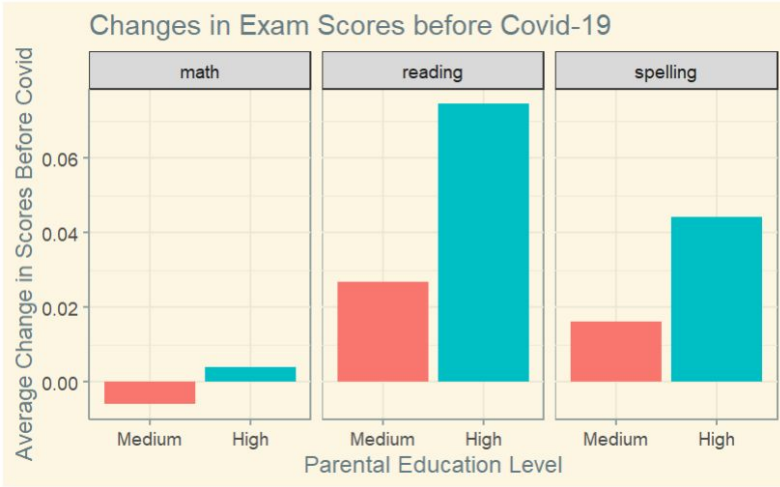


- Clear gap between the average score differences of medium and high income students
- Reading scores improved on average for high income students

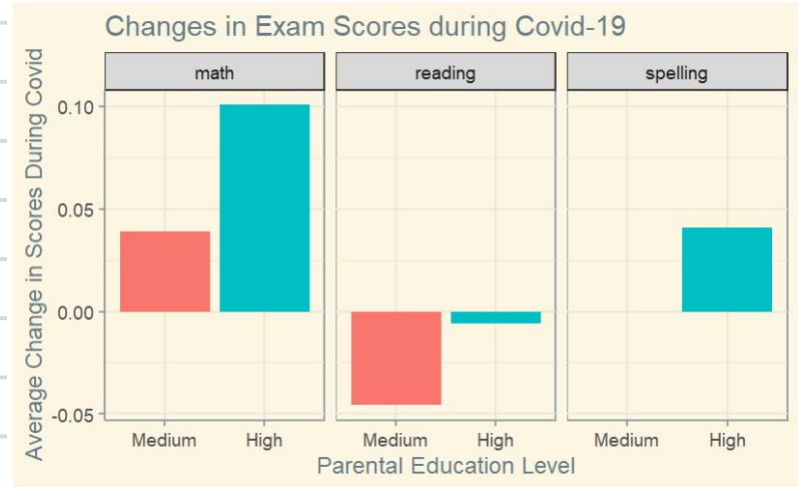


- All scores improved on average from midterm to finals
- Smaller gap between medium and high income students
- Gap flipped for reading scores

# Scores by Parental Education



- Improvement in Math across the board
- Decrease in Reading
- Lower scores in spelling



- Either less improvement for medium education
- Or further drops in scores than higher educated families

# Conclusion

- Before Covid, there was consistently more improvement between midterm and final test scores in students with higher household income and higher parental education.
  - *READING SAW HIGHER ACHIEVEMENT GAPS THAN OTHER SUBJECTS*
- Covid disrupted the regular improvement patterns.
  - *THE INCOME ACHIEVEMENT GAP WIDENED IN SPELLING SCORES*
  - *THE PARENTAL EDUCATION ACHIEVEMENT GAP WIDENED IN MATH SCORES*

# Limitations and future work – Marvin

- Does not include private/public schools (helps further ascertain wealth disparity)
- Missing a timescale– limited to 1-year spans for pre-Covid and post-Covid
- Large group of “missing” household income and “missing” parental education info
- Would be interesting to look at data from middle/high schoolers