

# The Political Origins of Critical Social Science

## Presentation at Lund University

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University of Copenhagen   .   University of Oslo

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# Roadmap

Motivation

Measurement

Validation

Descriptive Results

Correlational Results

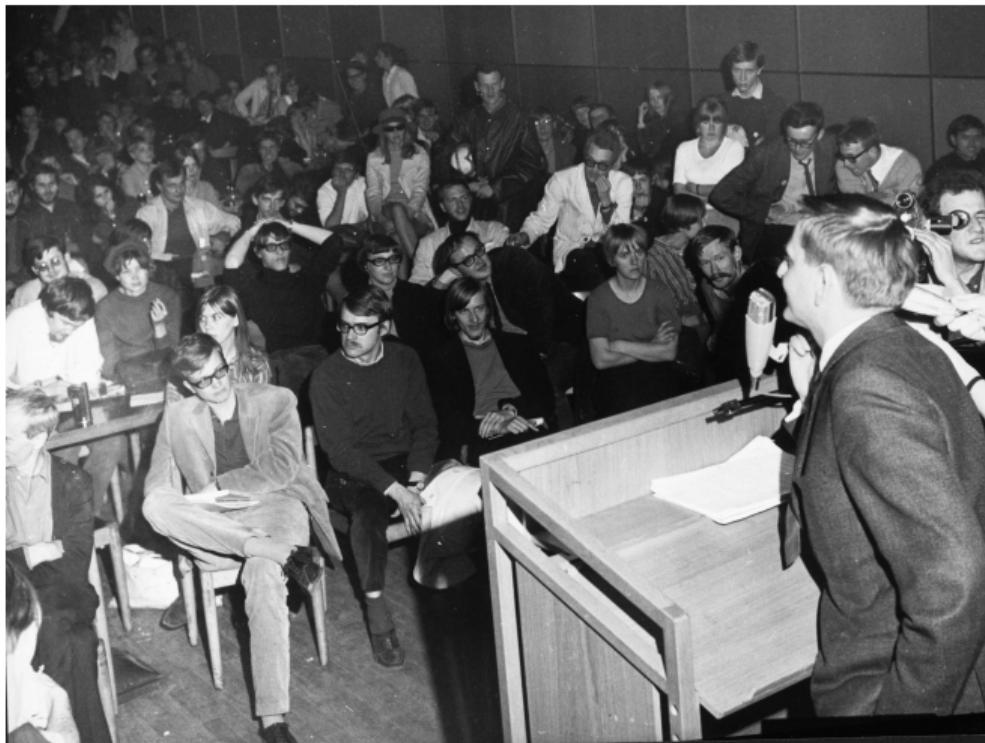
Conclusion

# Where does social science come from?



Source: <https://www.sam.lu.se/en/about-faculty/faculty-brief>

# Where does social science come from?



Source: Wikimedia Commons

# The rise and influence of 'critical social science'

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Today, Foucault is most assigned author across university syllabi (>2x Plato, Kant, Weber)

<https://analytics.opensyllabus.org/record/persons?size=100>

Motivation  
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Measurement  
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Validation  
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Descriptive Results  
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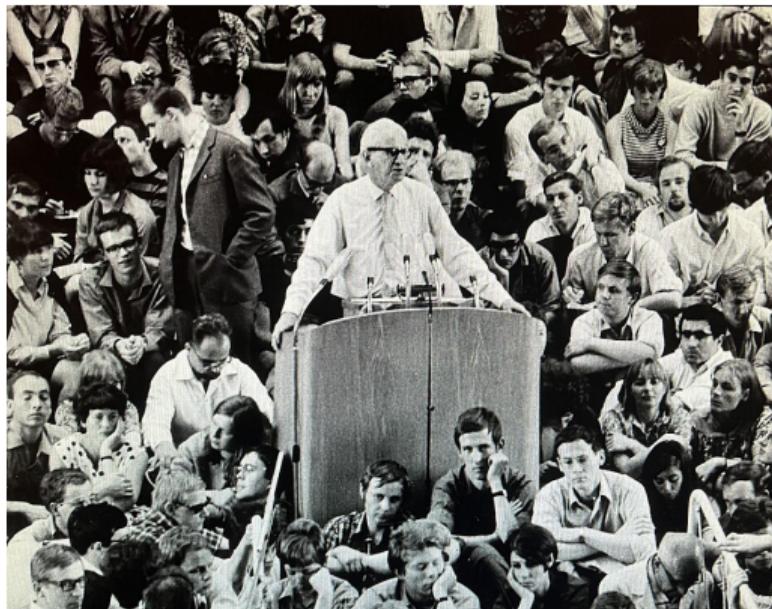
Correlational Results  
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Conclusion  
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References

# Critical social science and student activism

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Herbert Marcuse

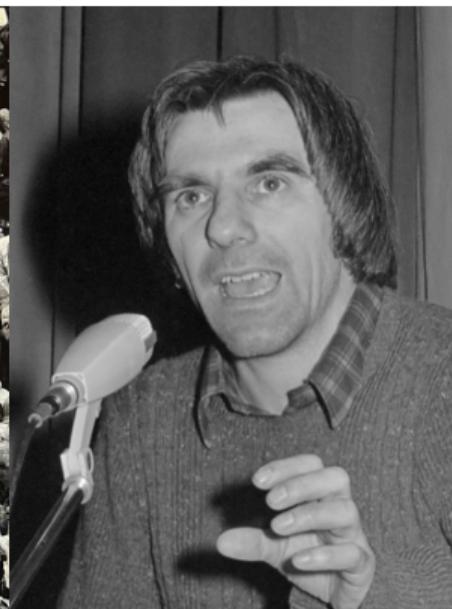


Rudi Dutschke

# Critical social science and student activism



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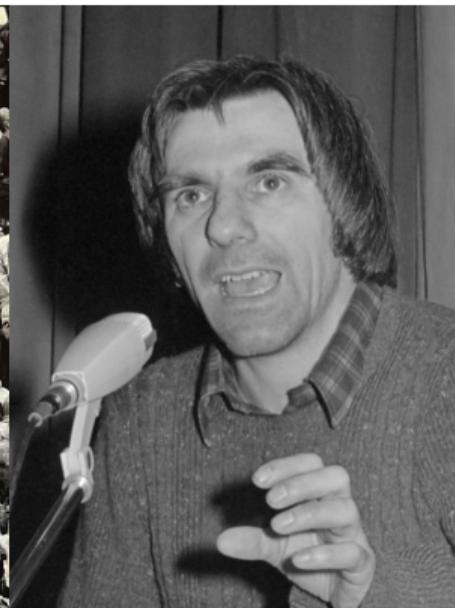
Rudi Dutschke

- “Long march through the institutions”: create radical change from within government and society.

# Critical social science and student activism



Herbert Marcuse



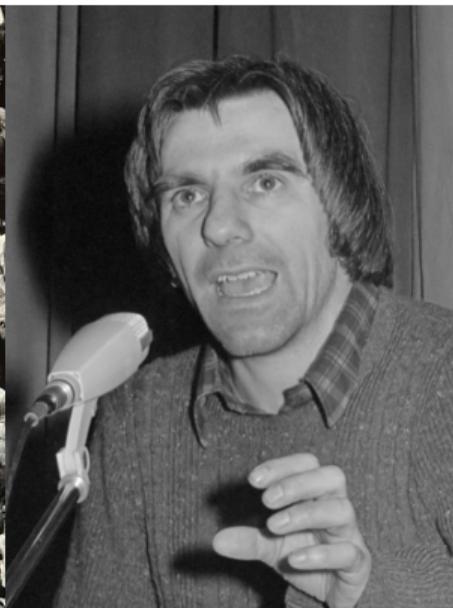
Rudi Dutschke

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- The ‘long march’ in academia: new departments, curricula, hiring strategies

# Critical social science and student activism



Herbert Marcuse



Rudi Dutschke

- “Long march through the institutions”: create radical change from within government and society.
- The ‘long march’ in academia: new departments, curricula, hiring strategies
- ⇒ More critical social science in places w. history of student activism

Motivation  
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Measurement  
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Validation  
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Descriptive Results  
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Correlational Results  
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Conclusion  
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References

# Our contributions

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1. New measure of critical social science (CSS), measured across millions of published (Web of Science) articles

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~~ in this version: (i) descriptive evidence, (ii) preliminary correlational evidence

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Motivation  
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**Measurement**  
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Validation  
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Descriptive Results  
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Correlational Results  
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Conclusion  
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References

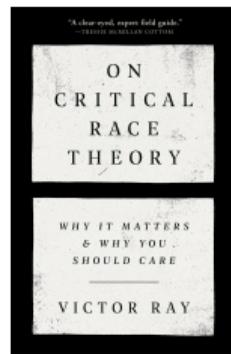
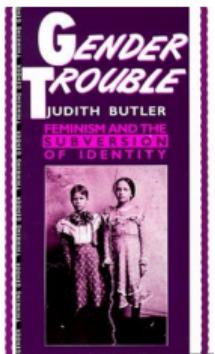
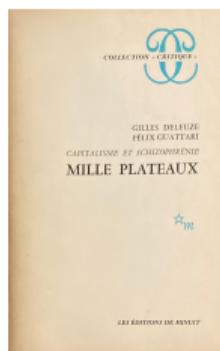
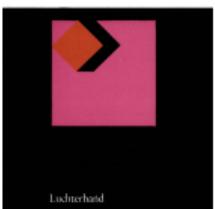
# Data

# Data



40 Soziologische Texte

Herbert Marcuse  
Der eindimensionale Mensch

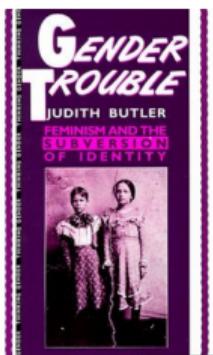


1 'Seed books': foundational books in CSS ( $\Leftarrow$  examples)

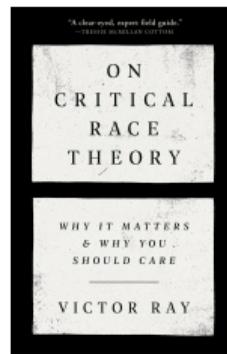
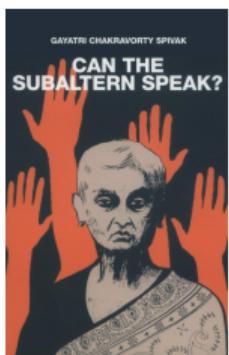
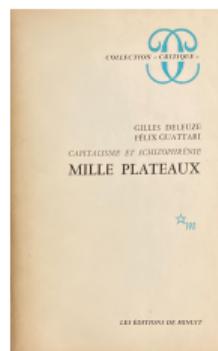
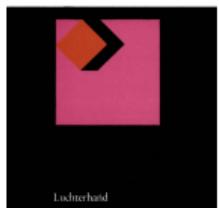
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éditions Gallimard

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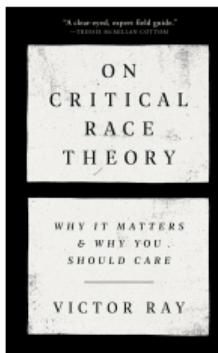
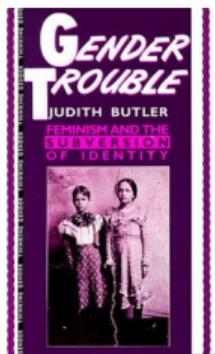
2 2,360,541 humanities and social science article abstracts + metadata obtained through the Web of Science API

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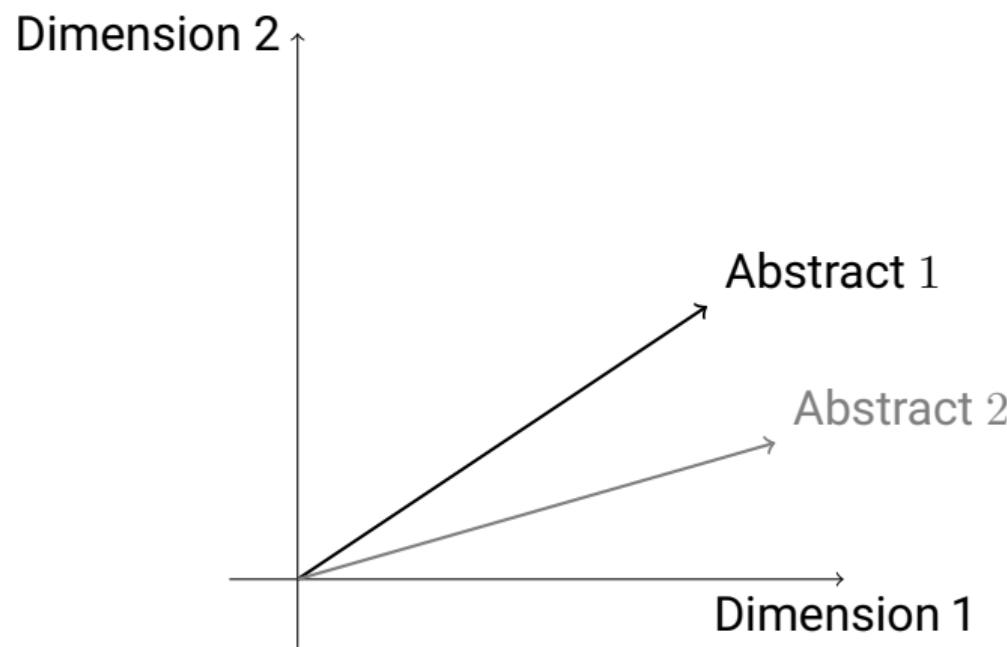


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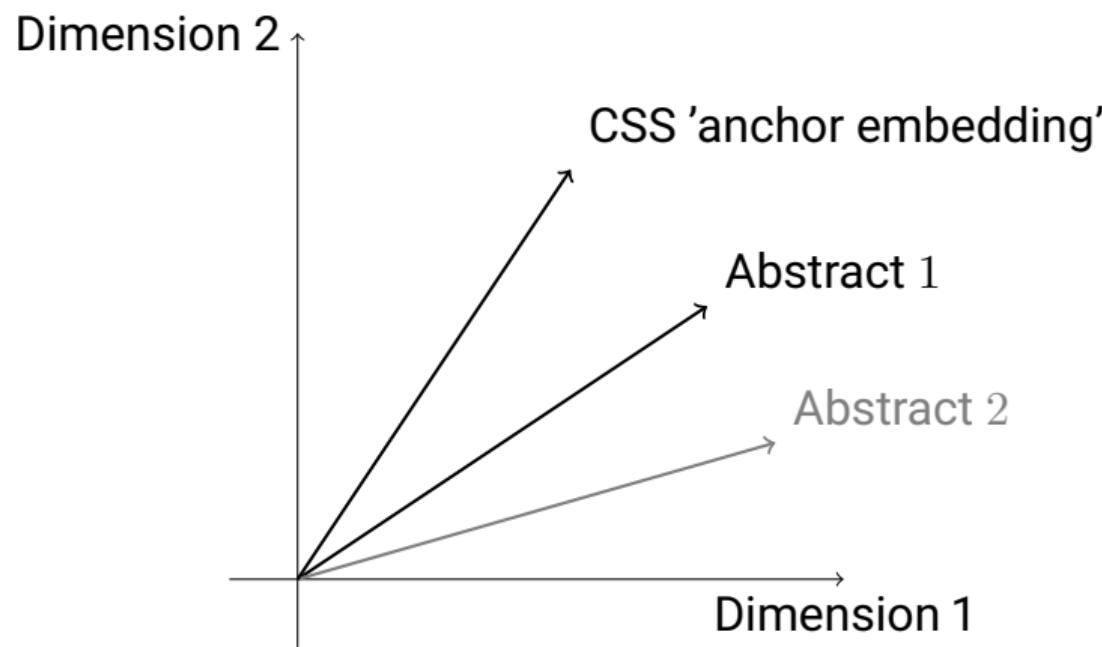
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- Goal: develop article abstract-level 'CSS score'

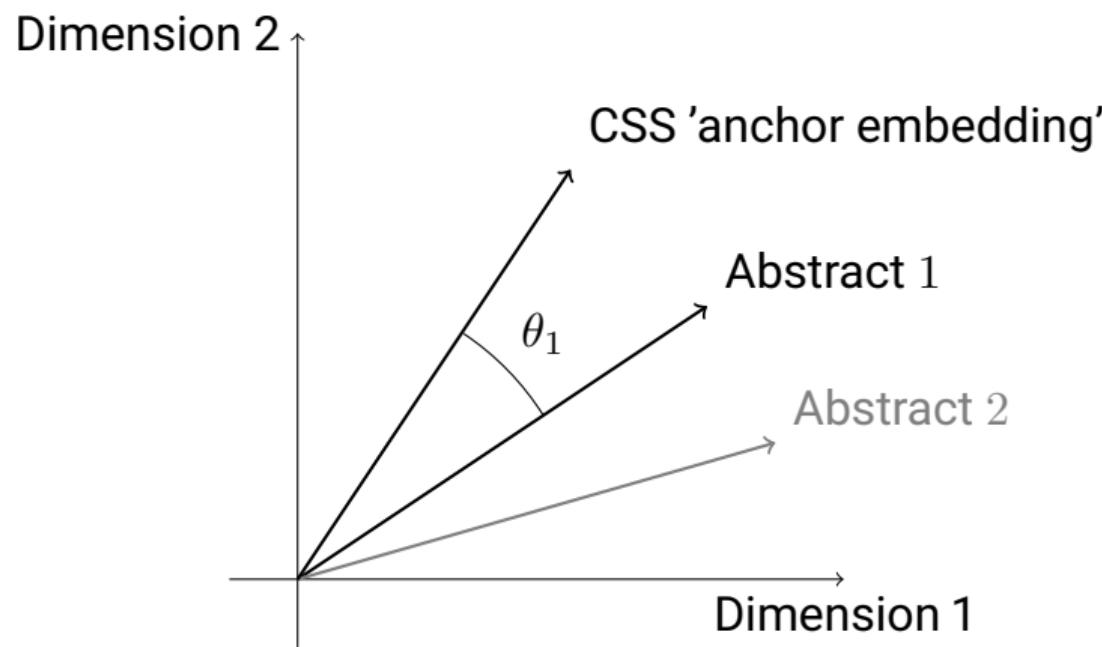
# Measurement I: Word embeddings



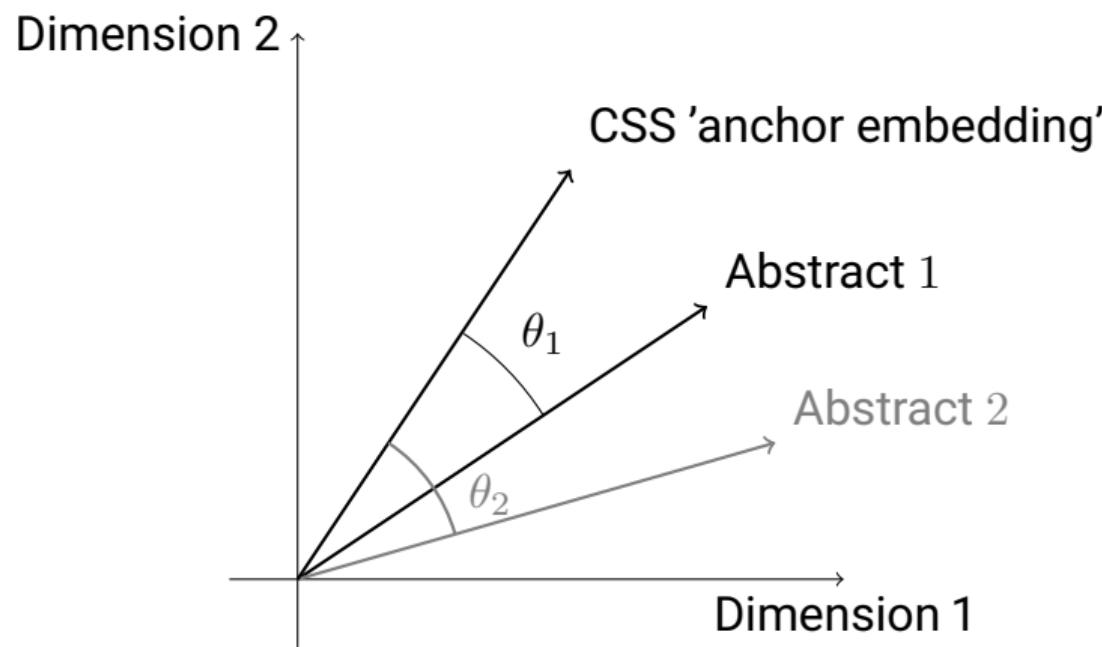
# Measurement I: Word embeddings



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Motivation  
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**Measurement**  
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Validation  
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Descriptive Results  
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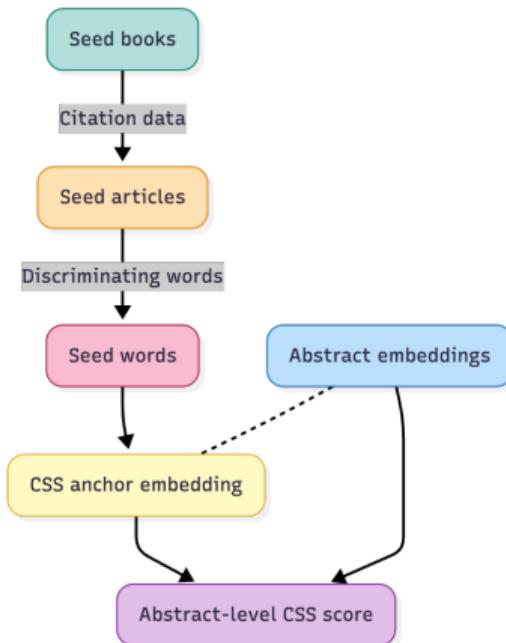
Correlational Results  
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Conclusion  
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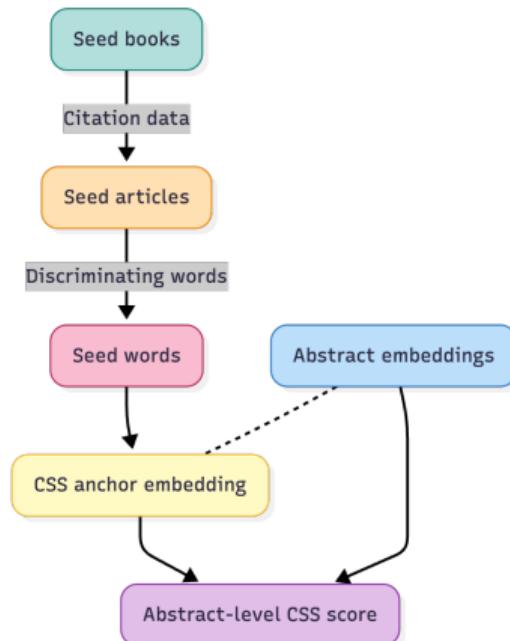
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# Measurement II: From seed books to CSS scores

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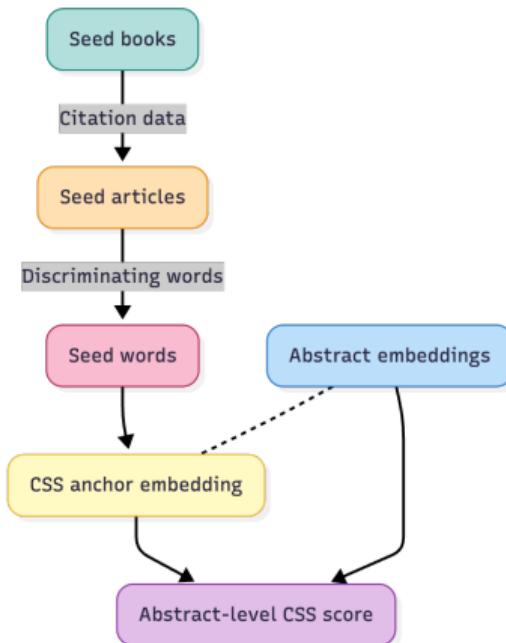


# Measurement II: From seed books to CSS scores



## 1. Seed books

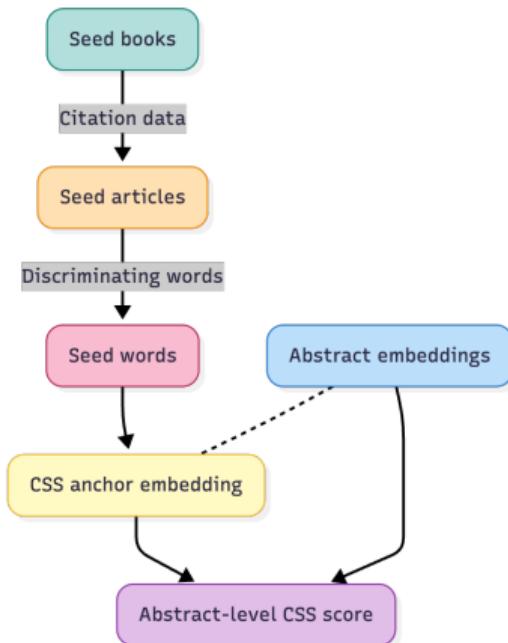
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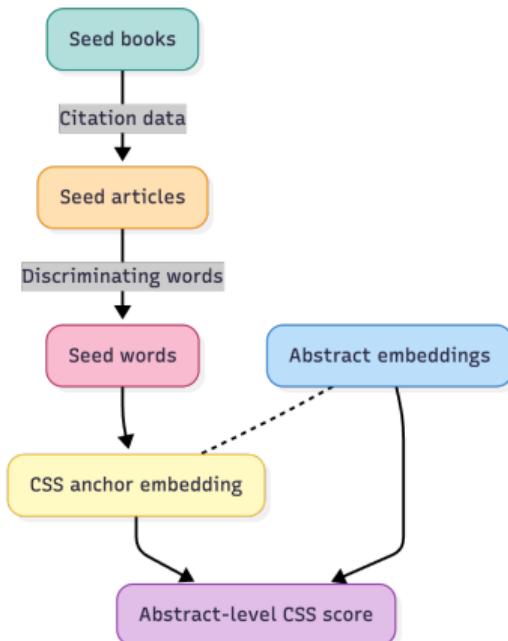
2. **Seed articles:** most central citing articles (Citation data from inciteful.xyz)

# Measurement II: From seed books to CSS scores



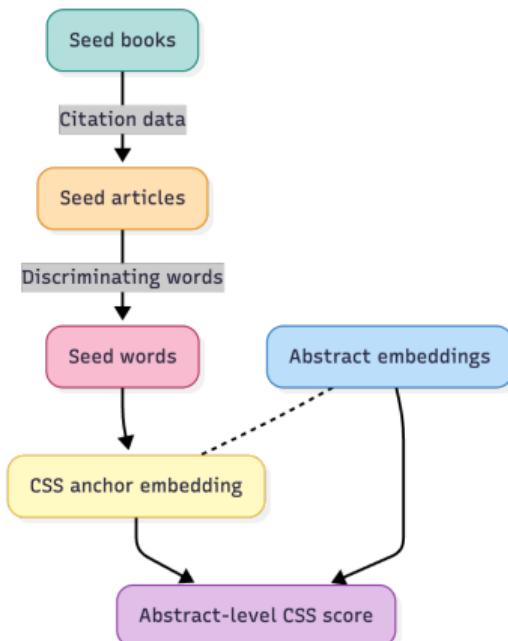
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3. **Seed words**: most discriminating words in seed article abstracts relative to all abstracts in WoS data

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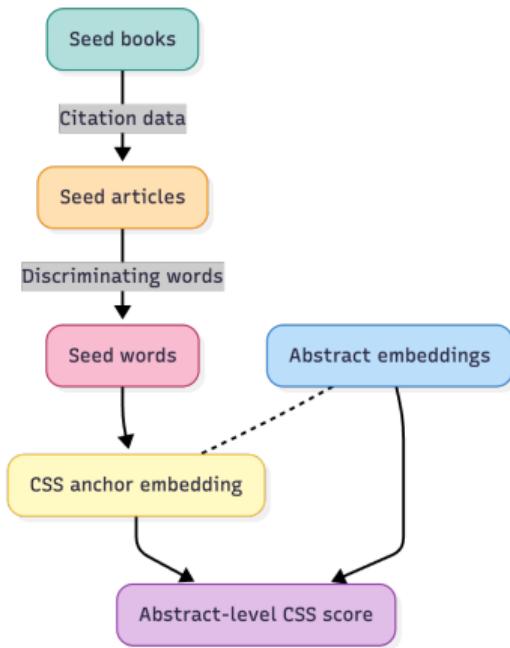
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5. **Abstract embeddings**: GloVe embeddings of all WoS data abstracts
6. **Abstract-level CSS score**: abstract proximity to anchor embedding

# Roadmap

Motivation

Measurement

**Validation**

Descriptive Results

Correlational Results

Conclusion

Motivation  
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Measurement  
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**Validation**  
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Descriptive Results  
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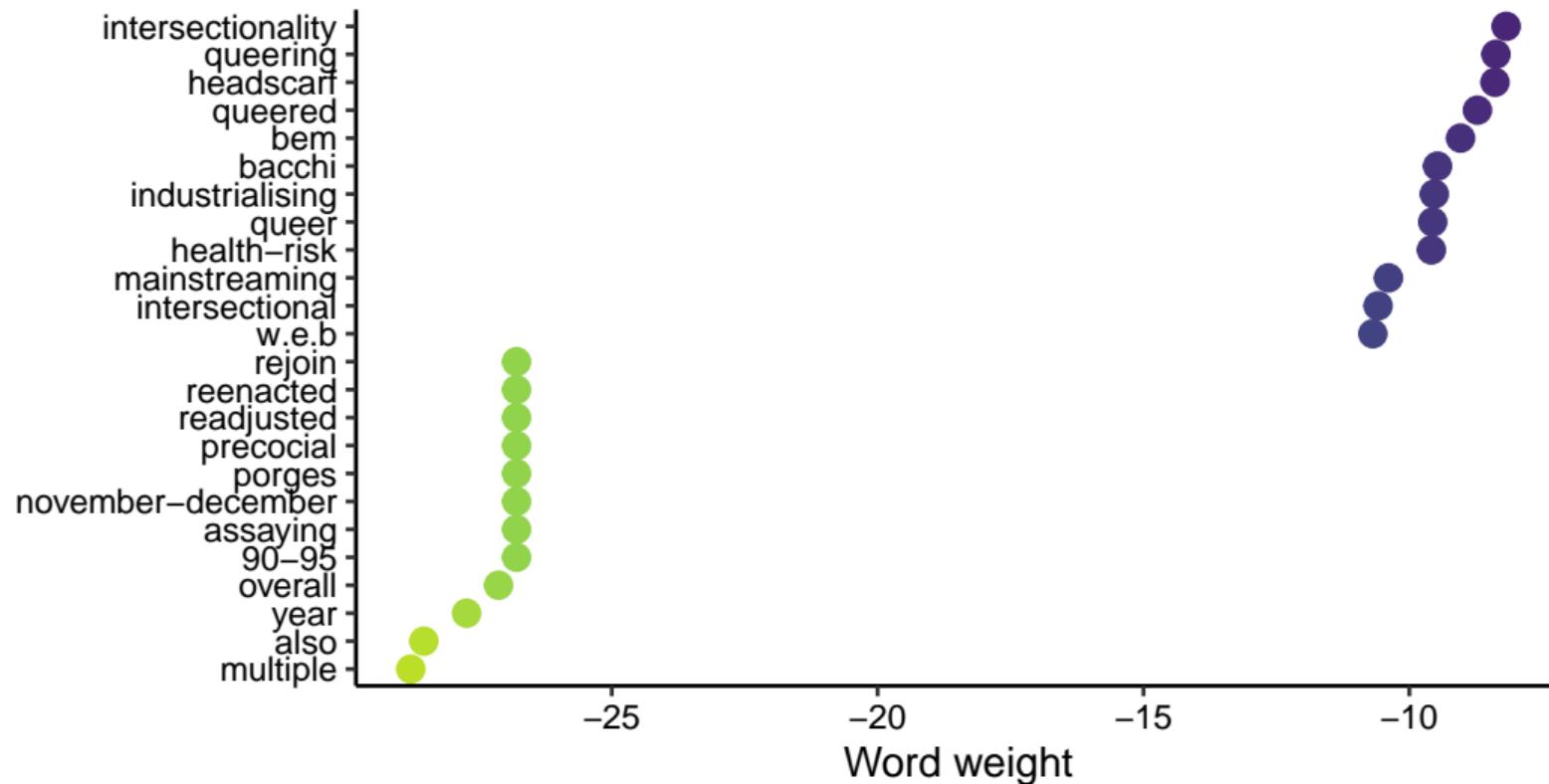
Correlational Results  
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Conclusion  
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References

# Validation I: Seed words

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Motivation  
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Measurement  
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**Validation**  
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Descriptive Results  
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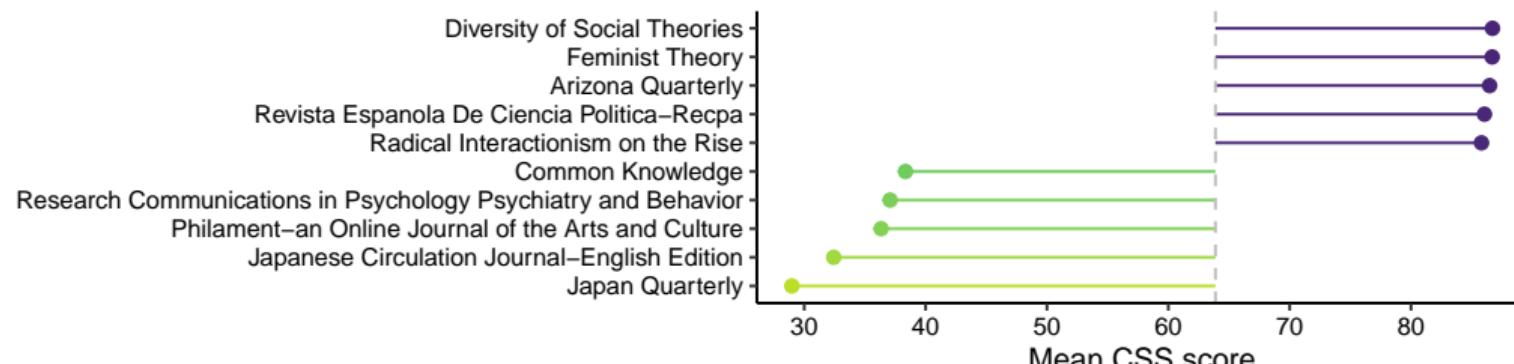
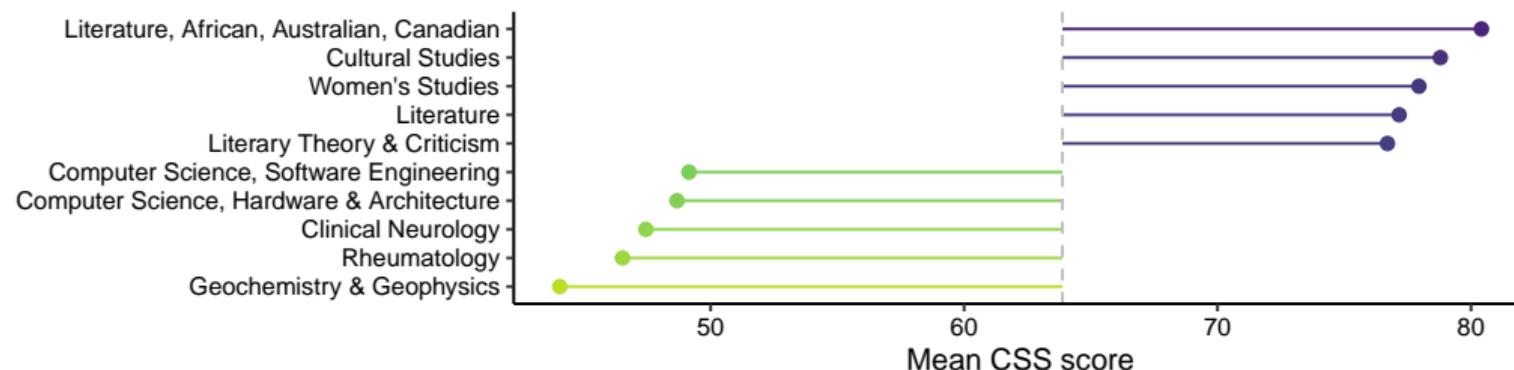
Correlational Results  
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Conclusion  
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References

# Validation II: Subfields + journals

## Validation II: Subfields + journals



Motivation  
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Measurement  
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**Validation**  
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Descriptive Results  
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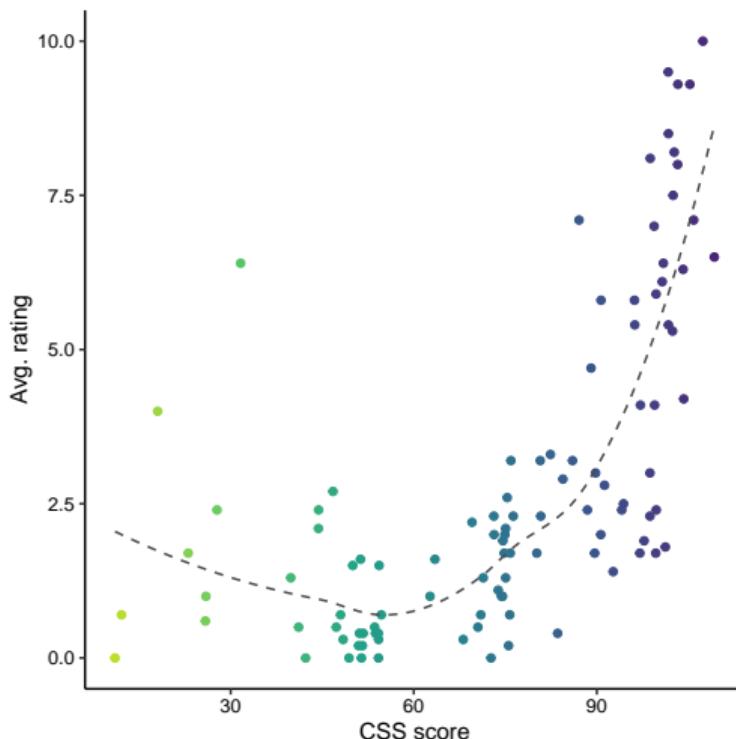
Correlational Results  
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Conclusion  
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References

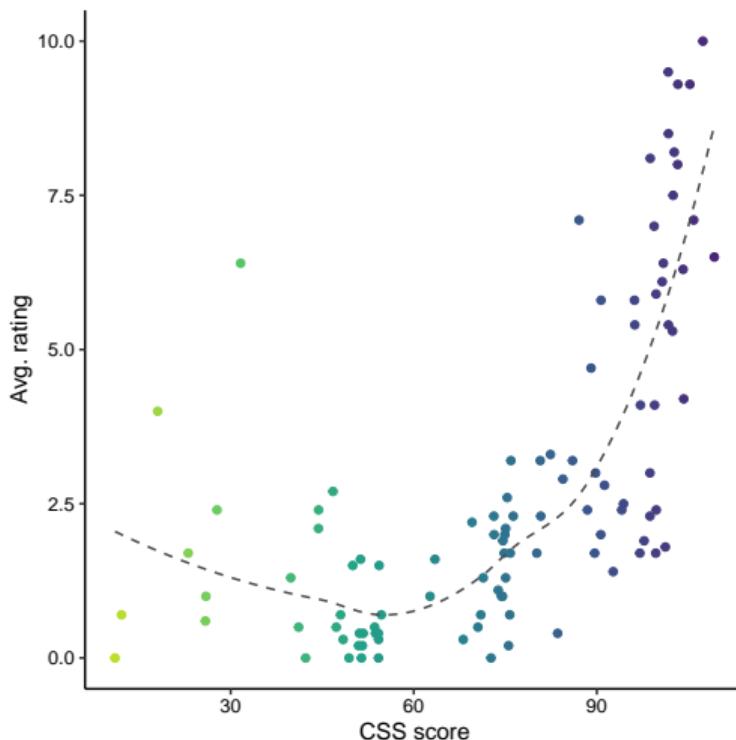
# Validation III: Human annotation

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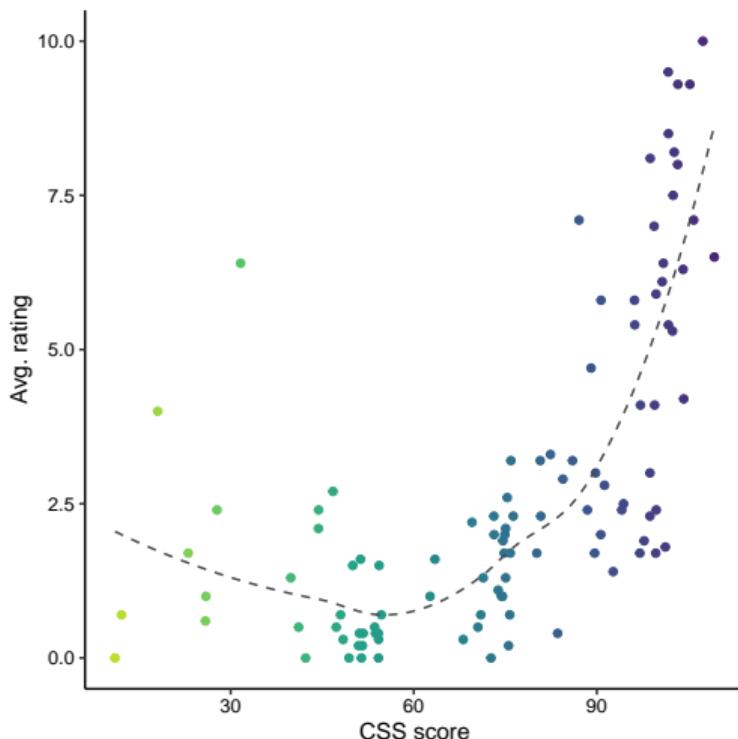
- RA manually annotated stratified sample of ~100 abstracts

## Validation III: Human annotation



- RA manually annotated stratified sample of  $\sim 100$  abstracts
- ← very strong agreement at top range, more noisy for low-CSS abstracts ( $\beta = .07, p < .001$ )

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- ← very strong agreement at top range, more noisy for low-CSS abstracts ( $\beta = .07, p < .001$ )
- across 20 abstracts jointly coded by 2 RAs, high intercoder reliability  $\alpha = .84$

# Roadmap

Motivation

Measurement

Validation

**Descriptive Results**

Correlational Results

Conclusion

Motivation  
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Measurement  
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Validation  
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**Descriptive Results**  
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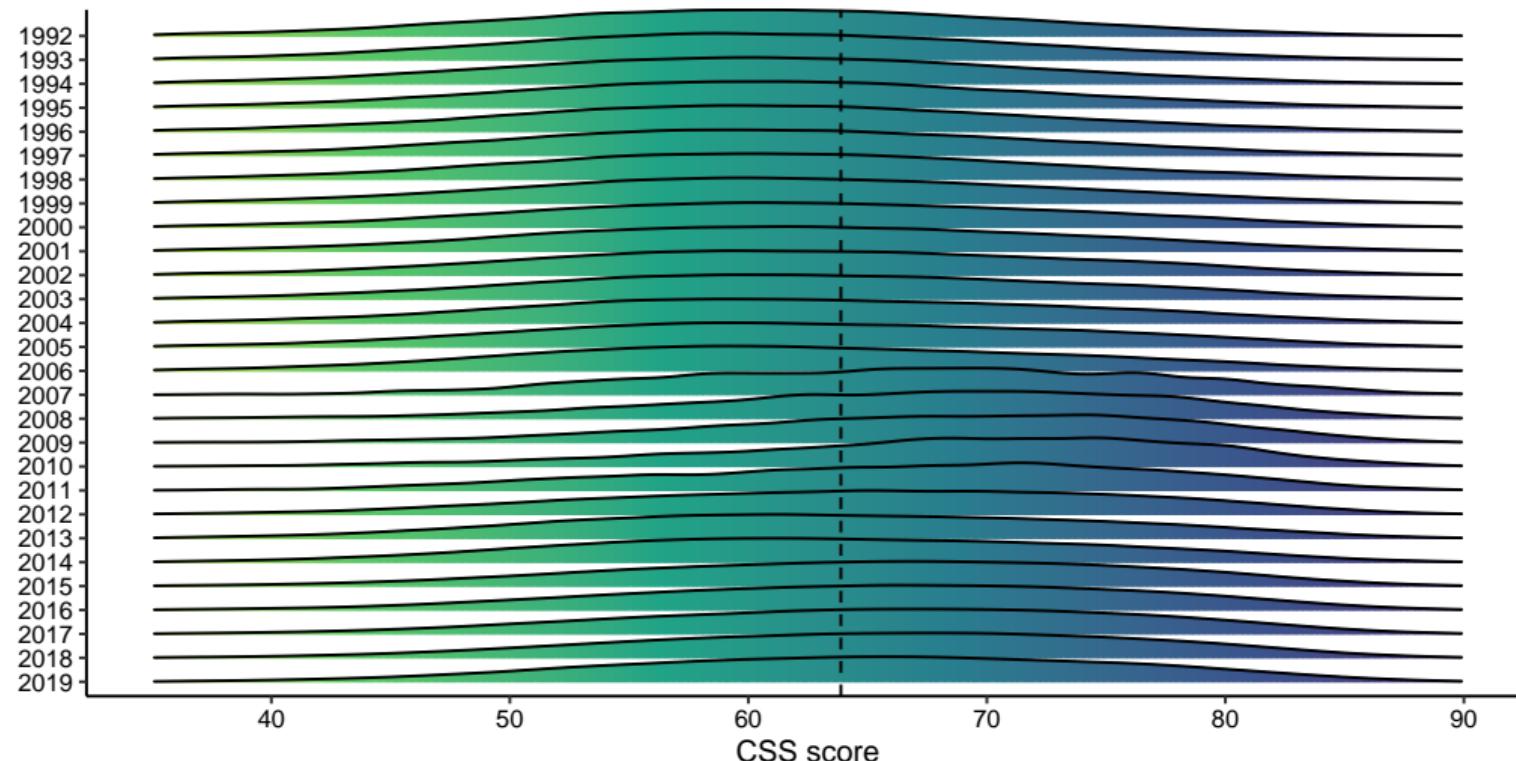
Correlational Results  
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References

# Temporal Trend

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Motivation  
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**Descriptive Results**  
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Correlational Results  
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Conclusion  
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References

# Country-level variation

Motivation  
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Measurement  
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Validation  
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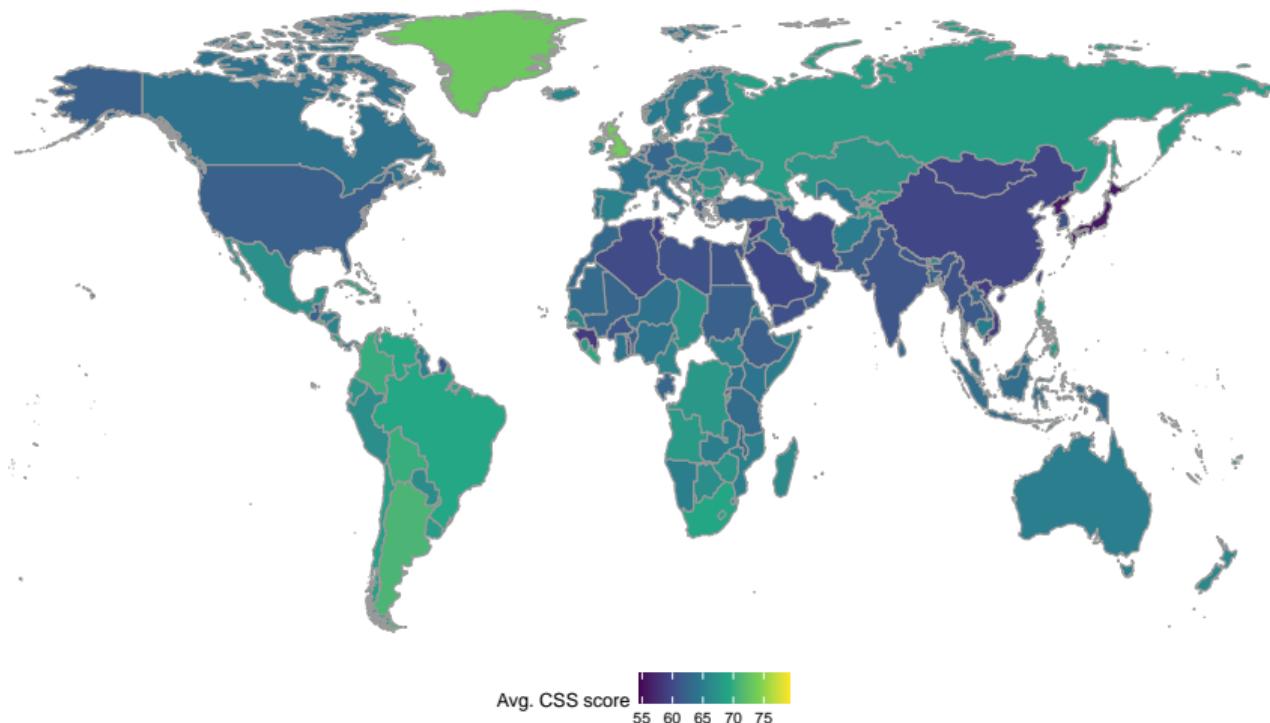
Descriptive Results  
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Correlational Results  
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References

# Country-level variation



Motivation  
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**Descriptive Results**  
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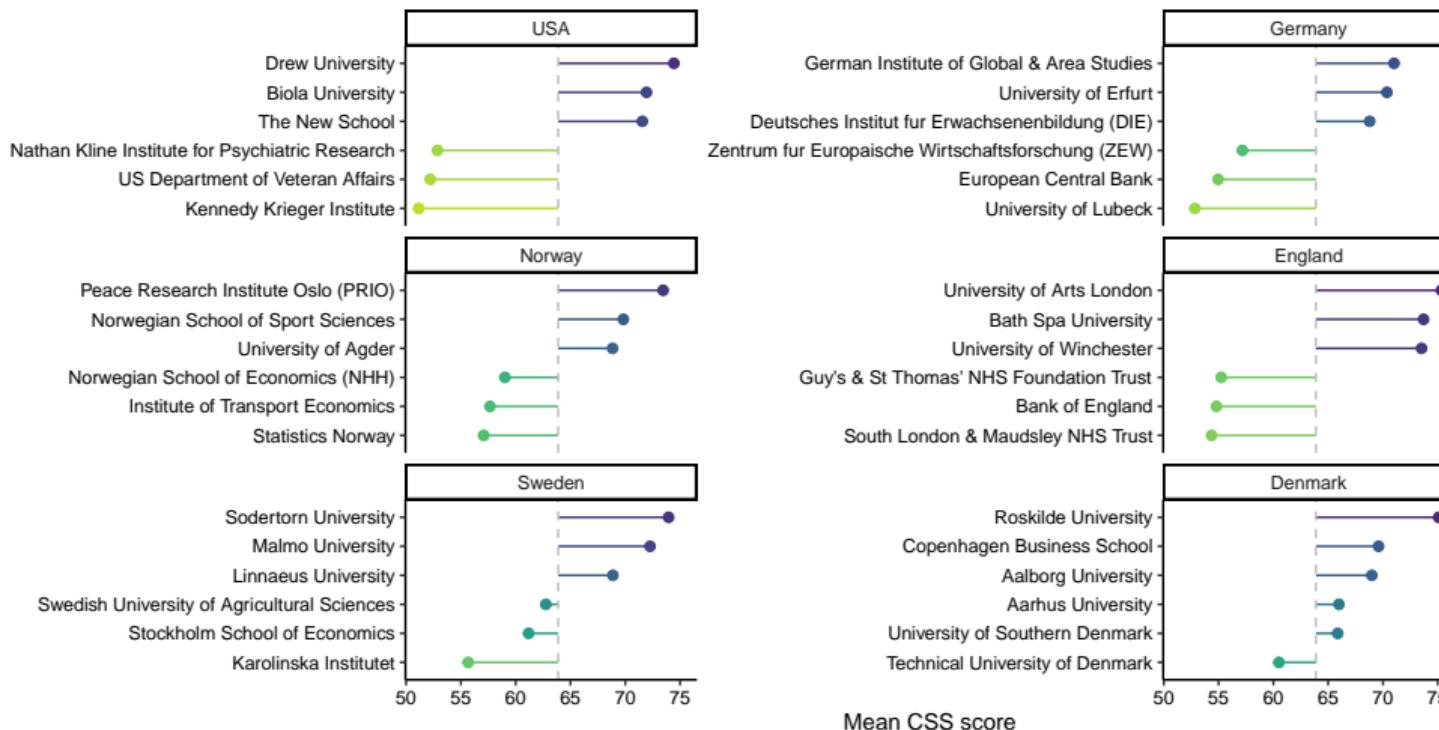
Correlational Results  
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References

# Institution-level variation

# Institution-level variation



# Roadmap

Motivation

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Motivation  
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Descriptive Results  
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**Correlational Results**  
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Conclusion  
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References

# Country cross-sectional correlations

# Country cross-sectional correlations

|                         | Dependent variable:  |                      |                      |                      |
|-------------------------|----------------------|----------------------|----------------------|----------------------|
|                         | Mean CSS Score       |                      |                      |                      |
|                         | (1)                  | (2)                  | (3)                  | (4)                  |
| Academic freedom index  |                      |                      |                      | 0.571*<br>(0.289)    |
| Student Protest History |                      |                      | 7.790**<br>(3.748)   | 8.199**<br>(3.713)   |
| Civil War History       |                      | 4.991***<br>(1.832)  | 6.155***<br>(1.885)  | 6.711***<br>(1.885)  |
| Liberal Democracy       | 3.868***<br>(1.005)  | 4.831***<br>(0.982)  | 5.155***<br>(0.992)  | 2.361<br>(1.720)     |
| GDP per capita          | -0.026***<br>(0.008) | -0.028***<br>(0.008) | -0.026***<br>(0.008) | -0.023***<br>(0.008) |
| Log Population          | -0.228*<br>(0.137)   | -0.664***<br>(0.170) | -0.761***<br>(0.175) | -0.772***<br>(0.173) |
| Constant                | 65.350***<br>(1.073) | 67.797***<br>(1.270) | 67.929***<br>(1.277) | 68.351***<br>(1.281) |
| Observations            | 145                  | 141                  | 136                  | 136                  |
| R <sup>2</sup>          | 0.115                | 0.215                | 0.248                | 0.270                |

Note:

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

Motivation  
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**Correlational Results**  
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Conclusion  
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References

# Within-country variation



Motivation  
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Descriptive Results  
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**Correlational Results**  
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Conclusion  
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References

# Within-country variation: 1960s SDS chapters

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# Within-country variation: 1960s SDS chapters



Source: Mapping American Social Movements Project, [https://depts.washington.edu/moves/sds\\_map.shtml](https://depts.washington.edu/moves/sds_map.shtml)

Motivation  
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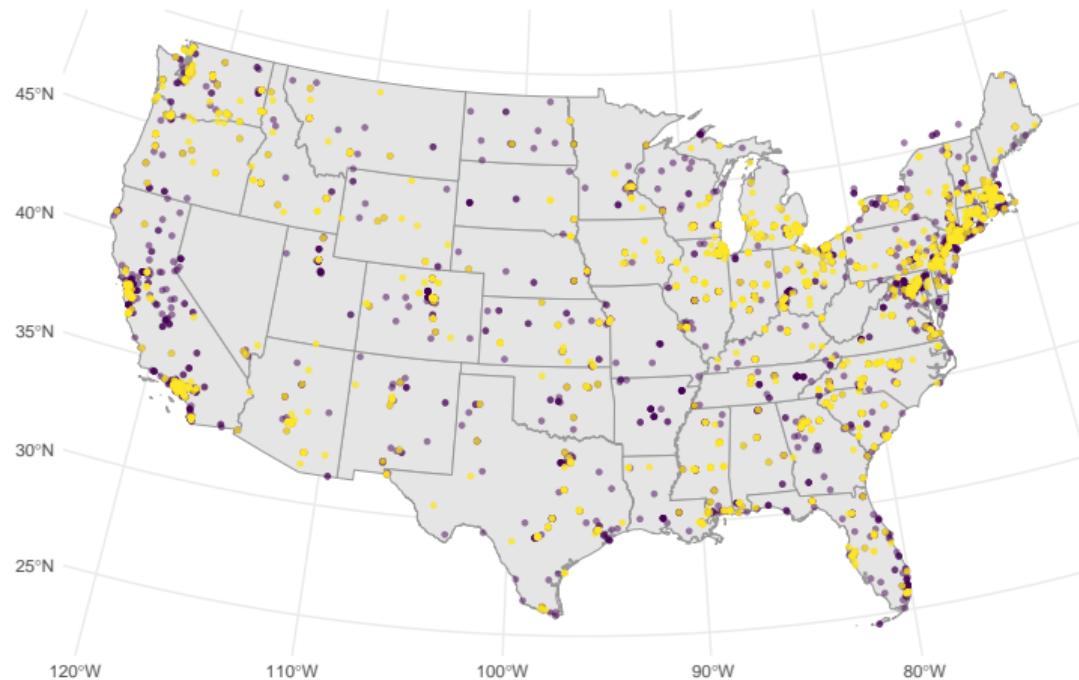
Descriptive Results  
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# Within-country variation: 1960s SDS chapters



Source: Mapping American Social Movements Project, [https://depts.washington.edu/moves/sds\\_map.shtml](https://depts.washington.edu/moves/sds_map.shtml)

Motivation  
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**Correlational Results**  
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Conclusion  
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References

# 1960s SDS Chapter and Present-Day CSS Score

# 1960s SDS Chapter and Present-Day CSS Score

|                | (1)         | (2)         | (3)         |
|----------------|-------------|-------------|-------------|
| SDS Chapter    | 0.643*      | 1.076**     | 1.107***    |
|                | (0.318)     | (0.326)     | (0.327)     |
| Num.Obs.       | 632 544     | 632 544     | 529 904     |
| R2             | 0.001       | 0.008       | 0.009       |
| Std.Errors     | by: cluster | by: cluster | by: cluster |
| FE by state    |             | ✓           | ✓           |
| Post-2000 only |             |             | ✓           |

+ p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

# Roadmap

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Validation  
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Descriptive Results  
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Correlational Results  
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Conclusion  
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References

# Conclusion

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- We develop and validate a measure of 'critical social science'

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- Across + within countries, CSS correlated w. student protest
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- Future extensions:
  - other within-country data, e.g., European student protest movements
  - measuring and explaining other social science traditions, e.g., global rise of US ‘positivist’ social science

Thanks for your attention!

“The Political Origins of Critical Social Science”

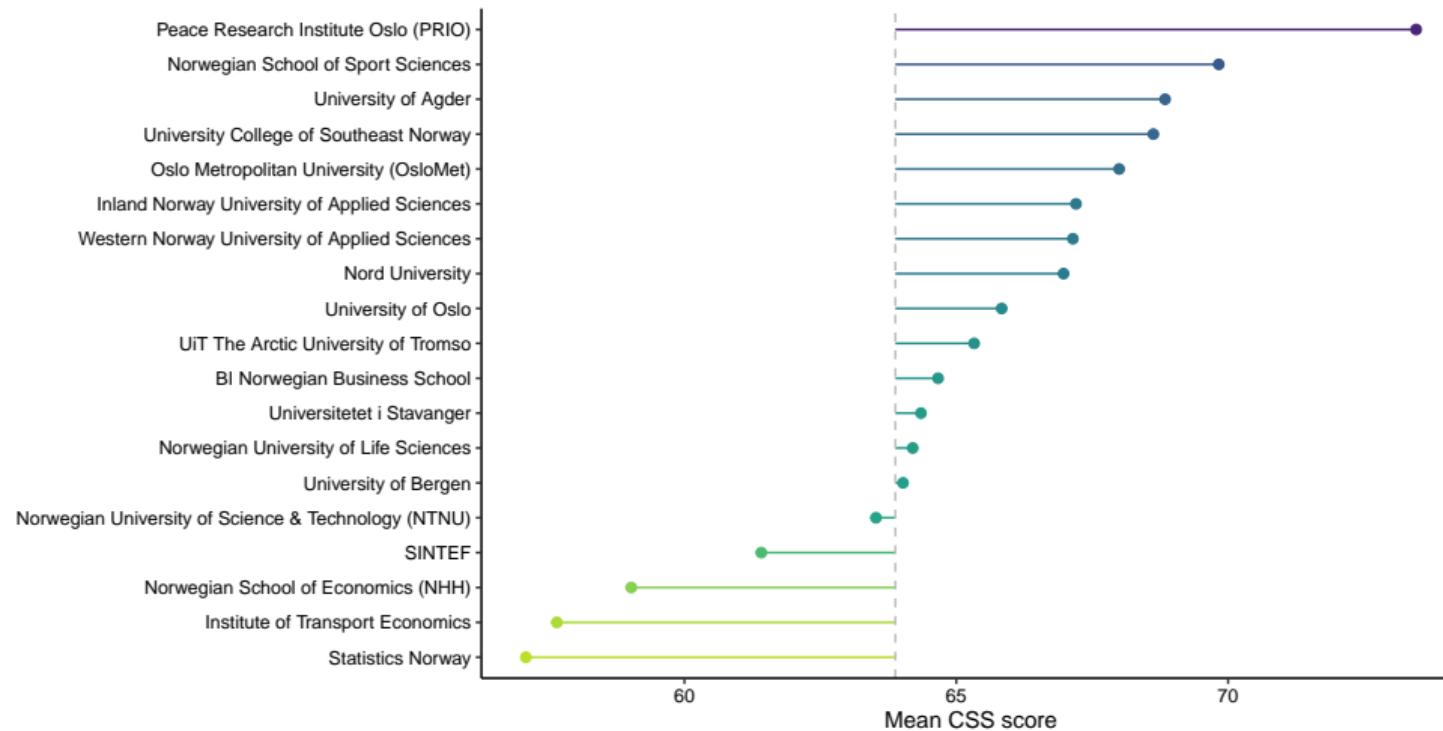
Frederik Hjorth · Tore Wig · Eli Baltzersen · Martin Søyland

University of Copenhagen · University of Oslo

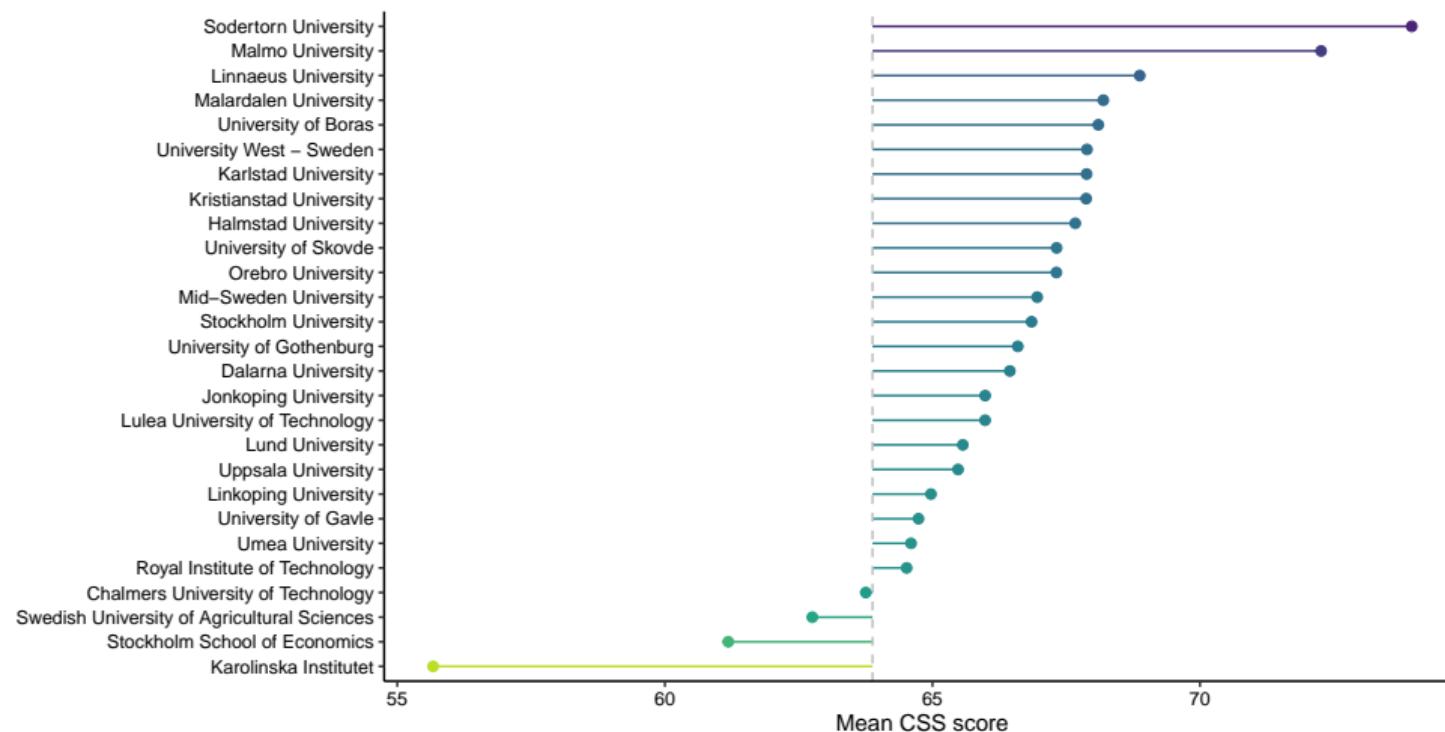
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# Institution means: Norway



# Institution means: Sweden



# Institution means: Denmark

