

# Systematic Review:

## The Effects of Classroom Heterogeneity on Students' Socio-Emotional Experiences

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### What is classroom heterogeneity?

- Classroom heterogeneity is ...
  - the presence of individual differences within a group of students.
  - Present in multiple dimensions (e.g., achievement, SES, gender, motivation,...)
  - a group-level characteristic
  - NOT an average or proportion;
  - can be measured with specialized indices (see Harrison & Klein, 2007).
  - These indices combine information on
    - balance,
    - distance and
    - multiplicity of categories

### Methods

- We conducted a systematic review, adhering to PRISMA 2020 guidelines (Page et al., 2021).
- Literature search for studies of effects of **heterogeneity in schools and classes on psycho-social outcomes**
- DV: Psycho-Social characteristics and relationships
  - Affective (e.g., attachment, belonging, classroom climate)
  - Behavioral (e.g., victimization, violence, social support, cooperation, contact, peer relations)
  - Cognitive (e.g., social skills, attitudes, stereotypes)

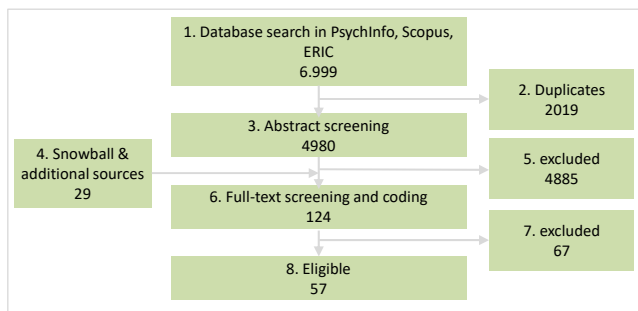


Figure 2. Literature search and screening

- Studies originate from diverse research fields (Fig. 3)
- Studies refer to different pathways linking heterogeneity and psycho-social outcomes (Fig. 4).
- Studies are largely exploratory and make few predictions despite a richness of theory (Fig. 4)
- Results are very diverse, across all outcome categories (Fig. 5).
- Breaking up results by heterogeneity dimension, most studies look at ethnic heterogeneity, for which results are mixed (qr-code).
- The evidence map for other dimensions of heterogeneity is sparse, but results are mostly negative.

### Integrated model of heterogeneity effects on student psycho-social outcomes

- Our model integrates theories from developmental psychology, social psychology, sociology and politics.

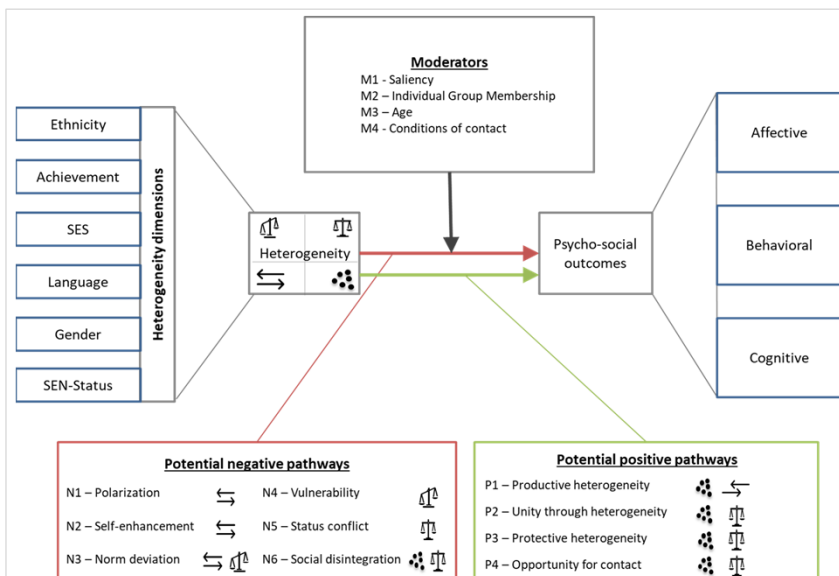


Figure 1. An integrated theory model of heterogeneity effects on student psycho-social outcomes

### Results

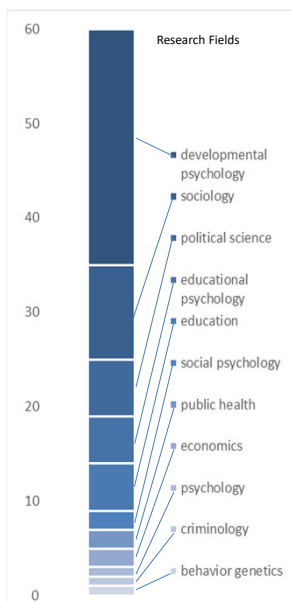


Figure 3. Research fields of included studies

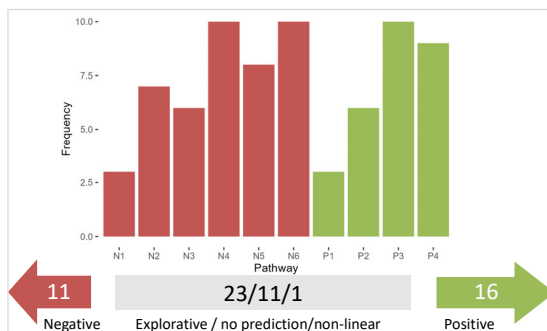


Figure 4. Pathways mentioned and predictions made in studies

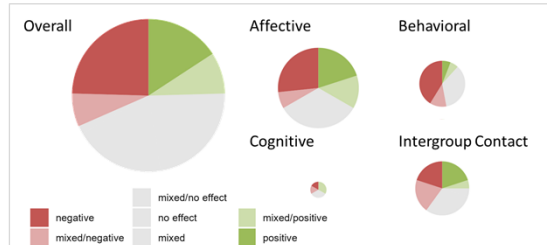


Figure 5. Description of study results

### Discussion

The effects of heterogeneity on psycho-social outcomes... are studied in diverse disciplines, consider a variety of outcomes are mainly viewed under the lens of Intergroup Contact Theory (Allport, 1954) and related theories of intergroup relations and are mostly confined to effects of ethnic diversity

The evidence available to-date... is inconclusive about the effect of ethnic heterogeneity is insufficient in other heterogeneity dimensions, but first results seem to point to negative effects of heterogeneity on psycho-social outcomes

Future research should... identify moderators use more different data sets consider additional heterogeneity dimensions consider multidimensional heterogeneity consider non-linear associations align research designs closely to the theories use experimental designs

Ultimately: Get ready to develop interventions and make policy recommendations!

Explore heterogeneity of results!

Accumulate research on understudied dimensions!

Put theories to the test more rigorously!

