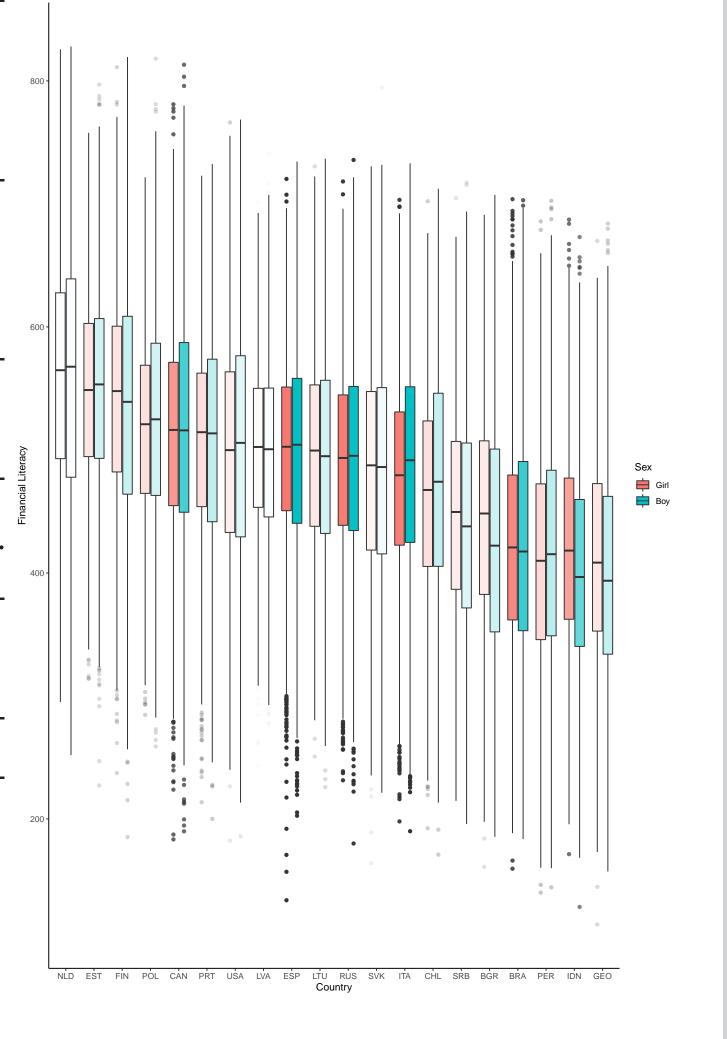
School Climate and Youth's Financial Literacy Outcomes

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Introduction

Repeated economic crises in recent times has exposed the cost of financial illiteracy. Redress schemes are more effective if introduced early in life (Lusardi & Mitchell, 2014). PISA has been tracking 15-year-olds' financial literacy levels since 2012 with the latest 2018 results showing sizeable differences across the globe. The aim of this study is to identify school climate variables that covary strongly with youth's financial literacy outcomes for the purpose of lending support to school leaders and policy makers in their evidence-based decision making with research questions:



- RQ1: To what extent can the variation in students' financial literacy outcomes be accounted for by each of the school climate variables?
- RQ2: In particular, how do cognitive and affective pathways interact during classroom financial literacy interventions?

Methods

PISA 2018 financial literacy data set: 20 participating countries^a, 6631 schools, 107162 students

Missing data: multilevel joint modelling (Asparouhov & Muthén, 2010) with ten sets of imputed data merged with ten plausible values

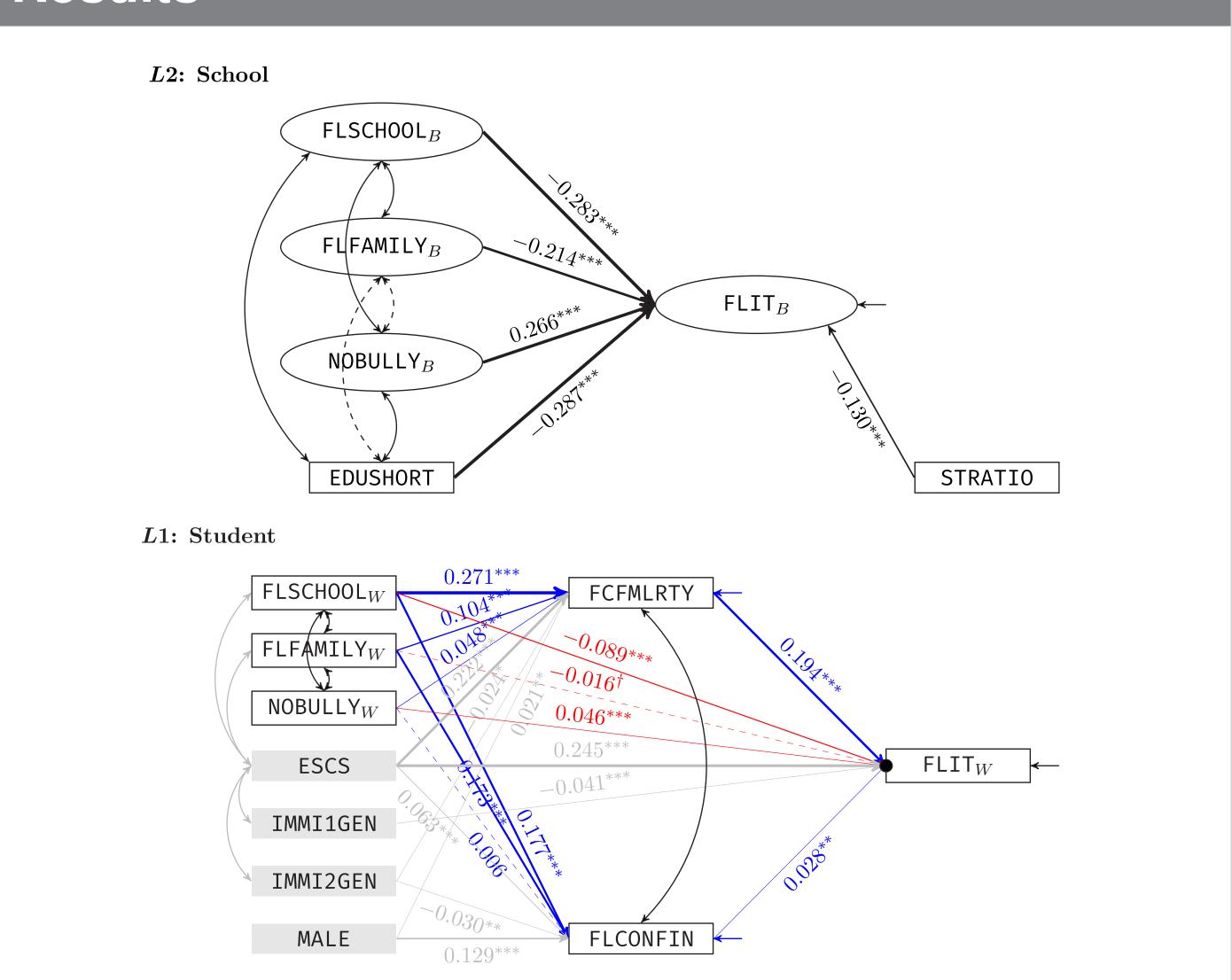
Multilevel SEM repeated ten times over each plausible value with results pooled in accordance with Rubin (1987) using Mplus 8.5

School Climate Variables (Wang & Degol, 2016):

Aspect of	Operationalisation	Variable
school climate	from 2018 PISA data files	label
Academic	931: Financial education in school lessons	FLSCH00L
Community	932: Parental involvement in matters of fin lit	FLFAMILY
Safety	916: Stdent's experience of being bullied (reverse)	NOBULLY
Inst env	188: Shortage of educational material	EDUSHORT

^aBrazil, Bulgaria, Canada, Chile, Estonia, Finland, Georgia, Indonesia, Italy, Latvia, Lithuania, the Netherlands, Peru, Poland, Portugal, Russian Federation, Serbia, Slovak Republic, Spain, USA

Results



Academic share *negative* correlation with financial literacy while its effect through affective variables are positive. Effect of **family** is fully mediated by affective pathways.

Discussion

- RQ1: All four school climate variables covary significantly with students' financial literacy outcomes
- RQ2: Classroom activities correlate positively with financial literacy via affective pathways, but negatively via cognitive pathway

Conclusion: It is the joint effort from school, family, safety and resources to bring about a future-ready, financially literate generation. Take away message: Youth at 15 reacts best to affective approaches to financial education. Implications: Pedagogically, it may not be technical curricula targeting the brain, but empowerment appealing to the heart, that would carry the most promise.

References

- Asparouhov, T., & Muthén, B. (2010). *Multiple imputation with Mplus* (2nd ed.). https://www.statmodel.com/download/Imputations7.pdf
 Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. https://doi.org/10.1257/jel.52.1.5
- Rubin, D. B. (1987). Multiple imputation for nonresponse in surveys. John Wiley & Sons. https://doi.org/10.1002/9780470316696
 Wang, M.-T., & Degol, J. L. (2016). School climate: A review of the construct, measurement, and impact on student outcomes. Educational Psychology Review, 28(2), 315–352. https://doi.org/10.1007/s10648-015-9319-1

