UiO : University of Oslo

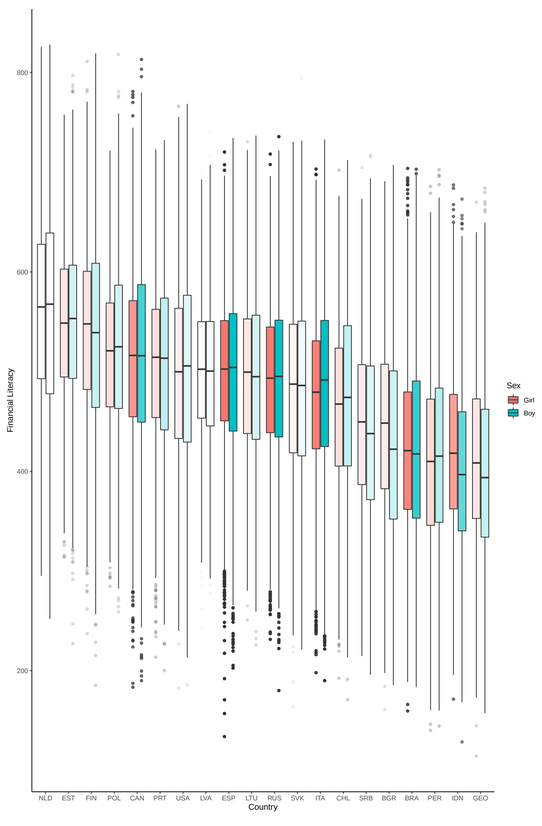
School Climate and Youth's Financial Literacy Outcomes

Candidate: Tony Tan **Supervisors: Prof Ronny Scherer** **Dr Chia-Wen Chen**

Centre for Educational Measurement, Faculty of Educational Sciences, University of Oslo

Introduction

Repeated economic crises in recent memory has exposed the cost of financial *illiteracy*. Redress schemes are shown to be most effective if introduced early in life (Lusardi & Mitchell, 2014). OECD's triennial Programme for International Student Assessment (PISA) has been tracking 15-year-olds' financial literacy levels since 2012 with the latest 2018 results showing sizeable differences across the globe. This study attempts 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

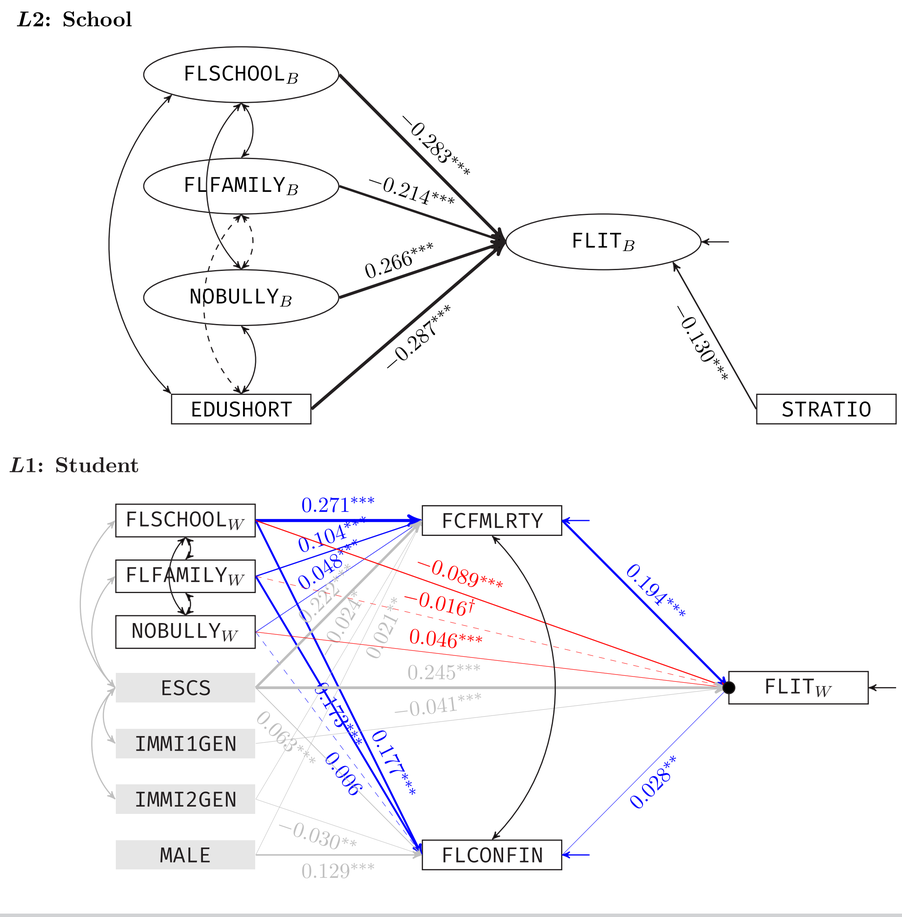
Multilevel SEM repeated ten times over each plausible value with results pooled in accordance with Rubin (1987) using Mplus 8.3

School Climate Variables (Wang & Degol, 2016):

Aspect of school climate	Operationalisation from 2018 PISA data files	Variable label
Academic	931: Financial education in school lessons	FLSCHOOL
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

[a]Brazil, Bulgaria, Canada, Chile, Estonia, Finland, Georgia, Indonesia, Italy, Latvia, Lithuania, the Netherlands, Peru, Poland, Portugal, Russian Federation, Serbia, Slovak Republic, Spain, USA

Results



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

SES positively correlates with fin lit performance both directly and through affective pathways. **Migration** is associated with lower fin lit for youth who arrived in a new country and continue to serve as a marker for children of migrants through lowered affects. "**Male premium**" existed in fin lit outcome, but only through stronger affects towards finance-related matters.

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

Corresponding author
Tony Tan tctan@uio.no
PO Box 1161, Blindern, 0318 OSLO, Norway