

**DISRUPTED FUTURES:**  
International lessons on how schools  
can best equip students for their  
working lives



**OECD conference**  
27, 28 and 29 October 2021



# Disrupted futures: preliminary findings from PISA 2009 UYLS

Cardozo, S.; Cedrés, M.; Fernández, T.;  
Ríos, A.

University of Uruguay

# Contents

- **Purposes:**
- **Background**
- **Data & Method**
- **Findings & Discussion**

2019

# Background & purpose

- We build upon the OECD'S Career Readiness Project's (Anthony Mann, Catalina Covacevich) main questions:
  - How schools equip students for their future
- Main dimensions of the CR construct:
  - Thinking about the future
  - Talking about the future
  - Exploring the future
- We contributed with empirical evidence from the First Uruguayan Pisa Longitudinal Survey (2003-2012), covering young people's life trajectories from ages 15 to 25.
- Focus here: replicate first analyses using the Second PISA-L Study (2009-2014) in order to evaluate stability/changes in our main findings

2019

# *Rationale: threats to external validity*

- Concerns on external validity caused by “context-dependent mediation” (Shadish, Cook, & Campbell, 2002)
- The PISA 2003 cohort face the school to work transition during the deepest socioeconomic crisis in Uruguay in the last decades (high unemployment rates, increase in poverty, decreasing salaries)
- Conversely, the PISA 2009 Cohort benefit from a “prosperity” period, which roughly went from 2005 to 2018.
- Opportunity to use changes in the overall context as a “natural experiment” for validation

2019

## CR in Uruguay: 5 main previous findings

- a) **Strong evidence:** educational ambitions, as expressed by 15-year-olds, were associated with labor outcomes at age 25, suggesting this specific “**thinking about the future**” feature play a significant role in shaping 25-year-olds occupational destinations;
- b) **partial evidence:** on the effect of school vocational orientation activities - “exploring the future” dimension- on occupational outcomes;
- c) **no systematic evidence** regarding the association between PISA attitudes scales -attitudes towards school, instrumental motivation to Math and interest in Math – and any of our outcomes
- d) Nor for participation in work-oriented courses;
- e) Effects were not constant across different subpopulations (e.g., by gender, social class and PISA level of achievement), suggesting **interaction effects** underly the relationships under consideration.

# Dependent variable NEETuy

	Out of Labor Maket	In the Labor Market
Out of education	13.2%	29.4%
In Education	32.1%	25.2%

# Methodologic strategy

## SHORTCOMINGS FOR REPLICATION

- PISA 2009 had its focus on Reading & changed several attitudinal measures
- No measure of “educational expectation at age 30”.
- Different period of observation

2019

# Data

- Outcome: we focus on early determinants of a Neither Employed nor in Education or Training (NEET) status.
- SR variables: we focus on “school preparation” for transition
- Data: PISA-L 2009 UY
  - Sample of students assessed by OECD-PISA in Uruguay in 2009
  - Follow-up: 2009-2014
  - Educational & occupational Trajectories: ages 15 to 20/21

2019



# Variables: original & new from PISA 2009

## VARIABLES

- Thinking about future
  - Attitudes Towards School Index (ats);
  - Attitudes About Computers (atc)
  - Extended indexes:
    - Traditional school culture: library use (libuse); enjoy reading (joyread); reading tasks for school (rsf); reading diversity (divread)
    - ICT habits and skills: internet scholar uses (entuse); high confidence in ICT tasks (highconf); on line reading (onln)
- Talking the future
  - Vocational orientation at school
- Exploring the future
  - Vocational preparation (courses) both in and out of school

2019

# Modelling strategy: overall adjustments

- Method: Binary logistic regression models (principal effects)
- Stepwise:
  - Model 1: only original CR variables
  - Model 2: original CR variables + social and demographic controls
  - Model 3: Pisa levels of performance + Model 2
  - Model 4: Traditional school culture + Model 3
  - Model 5: ICT uses + model 4
  - Model 6: Gender & childcare + model 5

	mod01	mod02	mod03	mod04	mod05	mod06
McFadden Pseudo R2	0.094	0.110	0.142	0.148	0.191	0.258

	Mod01	Mod02	Mod06
Thinking			Traditional Literature readings for school (-) Ict internet & entertainment use (-)
Talking	Guest Talks (-) Tests (-) Techer's (-) Poster (-) Informal (-)	Guest Talks (-)  Techer's (-) Poster (-) Informal (-)	Poster (-)
Exploring	English At Primary (-) English Academy (-)	English At Primary (-)	English At Primary (-) English Academy (-)
Control variables		Gender ESCS Portuñol Language Grade repetition	Gender & care ESCS Language Grade repetition  PISA 2009 performance

# Findings & discussion

# Findings

- Consistent findings with PISA 2003 UYLS
  - Talking about the future: partial evidence about vocational orientation activities
  - Exploring the future: no effects of vocational courses
  - Exploring the future: effects of English courses
  - Important effects of social, cultural, economic and demographic control variables

# Career readiness in LA

- An attractive general framework for studying transitions from Compulsory Education to Labor market
  - Heavily depends on the institutional ties between education system and the labor market
- In Uruguay at least we suggest the following reformulation of the main hypothesis :
  - CR means a solid school habitus development in order to advance to non-compulsory education (i.e. Tertiary Education)
  - The development of this habitus appears to go before the school-to-work transition tasks of the schools

# Thanks

Cardozo.santiago@gmail.com