

# Values as a Predictor of Educational Performance Gap between Natives and Migrants in 14 Countries

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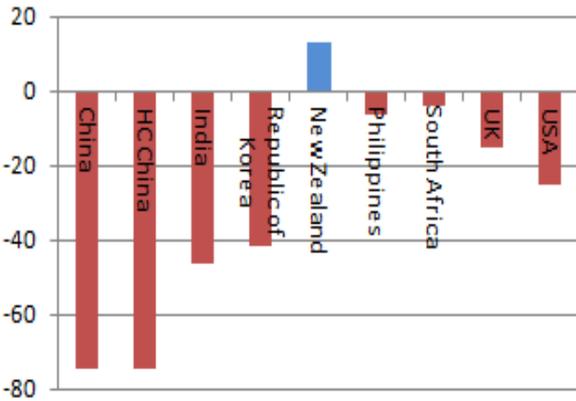
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*DO MIGRANT CHILDREN DIFFER FROM LOCALS  
IN TERMS OF EDUCATIONAL RESULTS?*

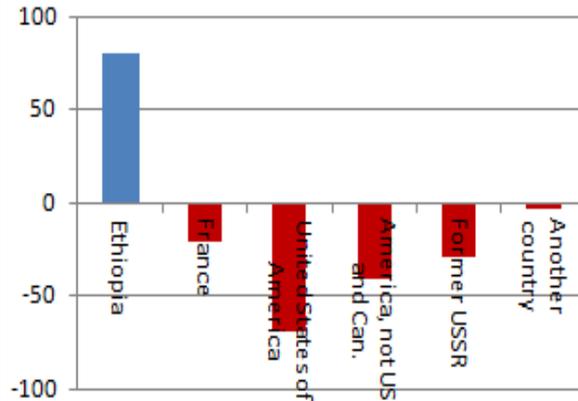
*DOES A COUNTRY OF ORIGIN MATTER IN  
TERMS OF HOW A MIGRANT PERFORMS AT  
SCHOOL? HOW AND WHY?*

# PISA'09 natives – migrants gap (maths)

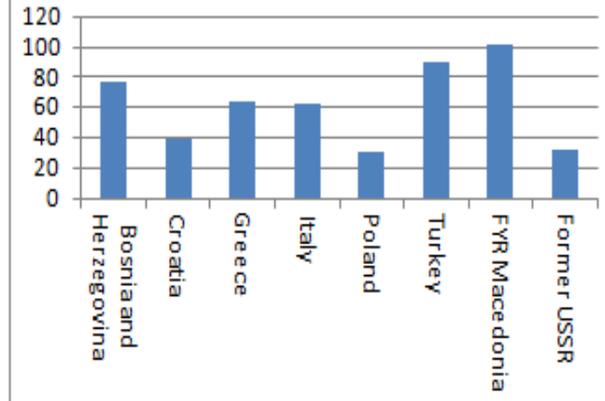
## Australia



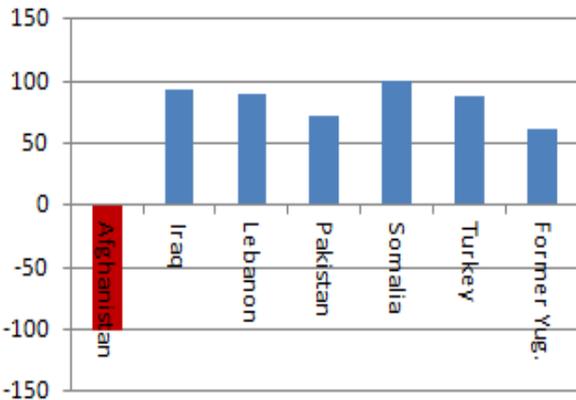
## Israel



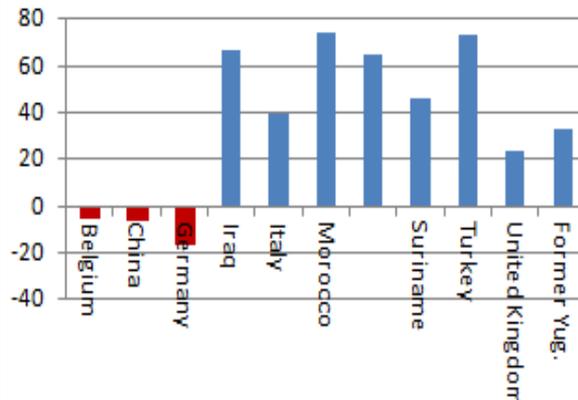
## Germany



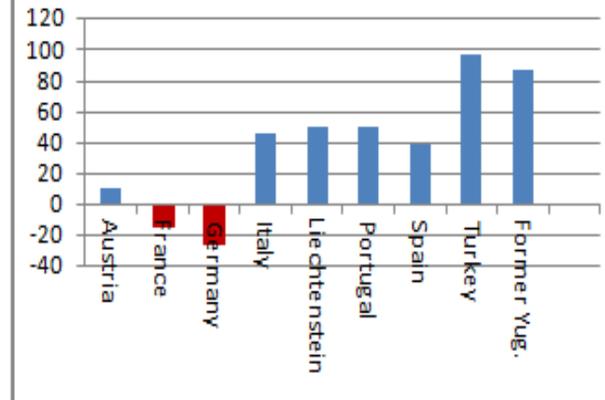
## Denmark



## Netherlands



## Switzerland



- Dependent variable: educational gap between natives and migrants of a particular origin
- Unit of analysis: a diaspora in a particular country
- Independent variables:
  - Characteristics of a diaspora
  - Characteristics of a destination country
  - Characteristics of an origin country - values

# 2 LARGE DATA-SETS COMBINED

- Program of International Student Assessment a.k.a. PISA (individual + aggregated)
- World Values Survey (aggregated on the country level)

# Hypotheses

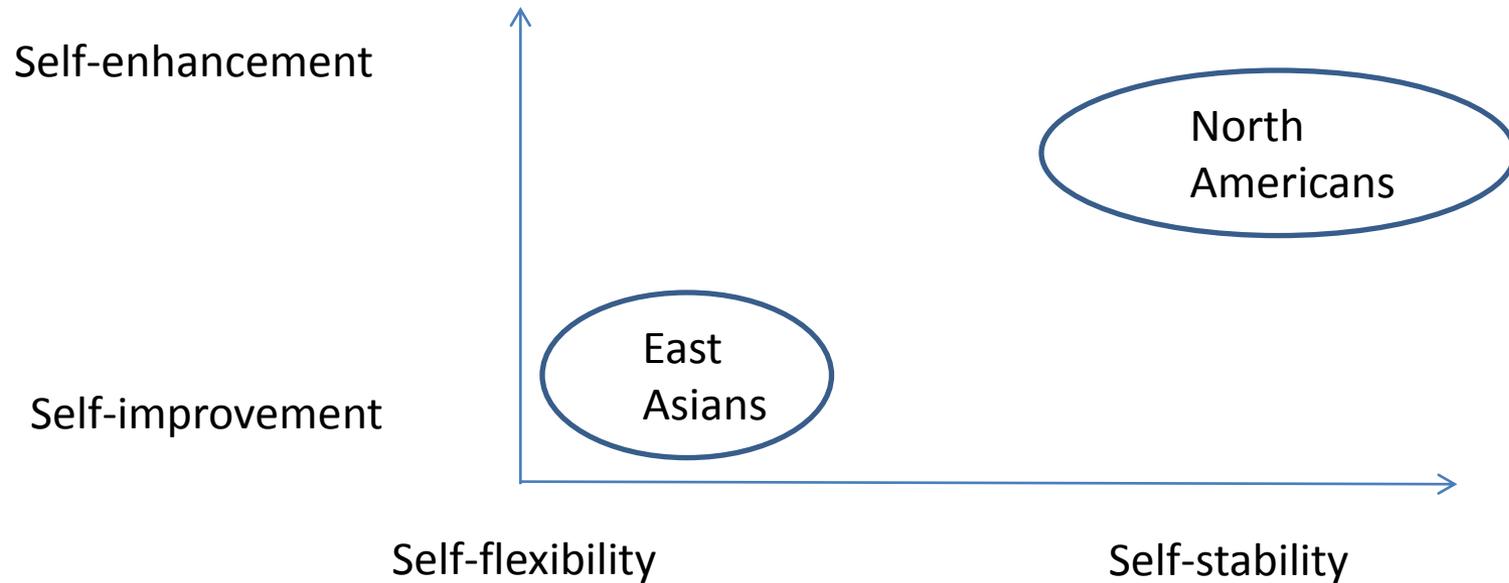
- The main impact on an educational gap has the difference in family background characteristics
- The differentials of values between natives and different groups of immigrants as they are expressed in indices have an impact upon the differential between natives and different groups of immigrants in school performance.
- The school performance differential between natives and different groups of immigrants partially stems from the fact that immigrants originate from the (a) Confucian cultural region, (b) Islamic cultural region, (c) Ex-communist cultural region

DESCRIBING DIFFERENCE BETWEEN NATIVE AND DIASPORIC FAMILIES (PISA'09)	DESCRIBING COUNTRY OF DESTINATION	DESCRIBING DIFFERENCE BETWEEN COUNTRY OF TEST AND COUNTRY OF ORIGIN (WVS – last time measured)
<p>DELTA_ESCS – combines 5 main measures of family's different forms of capital, DELTA_PARED – highest parental education DELTA_BFMJ – father's occupational status (ISCO-90)</p>	<p>GDP per capita (WB'09)  GINI index (WB'09)  MIPEX_OVERALL and  MIPEX_EDUCATION – Migrant international policy index 2010  JOBSCARCE_NATMIG - World Values Survey item C002 (When jobs are scarce, employers should give priority to natives than immigrants)  IMMIGRANT_POL_ATT -- World Values Survey item E143 (How about people from other countries coming here to work?)</p>	<p>Cultural Map of the World: DELTA_TRADRAT (Inglehart and Baker 2000)  DELTA_SURVSELF (Ibid.)  DELTA_EMANC  DELTA_POSTMAT  DELTA_MONUMENT (Minkov 2008)</p> <p><b>DUMMIES</b></p> <p>CONFNUM – a country of origin is from Confucian (Inglehart and Welzel 2010) region  ISLNUM – from Islamic region (Ibid.)  EXCOMM – from Ex-Communist region (Inglehart and Welzel 2005)</p>

# Monumentalism index (Minkov 2008)

- Minkov, M. 2008. Self-enhancement and self-stability predict school achievement at the national level. *Cross-Cultural Research* 42 (2): 172-96.
- Stems from cross-cultural research of East-Asian vs. Western self
- MI is a combination of two conceptual scales: self-enhancement versus self-improvement and self-stability versus self-flexibility
- If a person understands the need of improving himself and that's thinks that a change can happen, the probability of his good performance at school can higher than if he didn't want to become better or this and all other attitudes were unstable and flexible.
- WVS items used: (1) Parental pride (D054), (2) Importance of religion (A006), (3) National pride (G006)
- The less "monumental" a country is, the better its results in the TIMSS test are
- Close to traditional vs. secular-rational values by Inglehart

# Making of the MI (1)



Steven Heine (2001) describes this effect on the individual level, Minkov (2008) translates this effect to the societal level by suggesting the Monumentalism index

# Making of the MI (2)

Self-  
enhancement  
vs. Self-  
improvement

→ Pride

WVS G006 (Proud to be a national  
of a country)

WVS D054 (One of the  
main goals in life is to make  
parents proud)

WVS C037 (Receiving money  
without work is humiliating)

**MI = Factor scores \* 100**

↓  
Competition

→  
WVS E039 (Approval of interpersonal  
competition)

WVS A006  
(Religion is  
important)

Self-stability vs.  
Self-flexibility

→  
WVS F022 (Clear  
guidelines between  
good and evil)

*This factor defines a  
dimension that can be called  
“monumentalism.” Speaking  
metaphorically, in the high-  
scoring societies, the human  
self is like a monolithic  
monument: proud and stable.  
(Minkov 2008: 183)*

# Monumentalism and Trad. Vs. Secrat: Difference in Items

Item	Monumentalism	Trad. vs. Secrat
Proud to be a national of a country	+	+
One of the main goals in life is to make parents proud	+	-
Religion is important	+	+
Abortion is never justifiable	-	+
Respondent favors more respect to authority	-	+
Autonomy index	-	+

# Countries and Diasporas

- A country of test was selected if there was information on a student's and his parents' origin
- A country of origin was selected if more than 10 people in a country sample were of that origin
- Countries of test included: Australia, Austria, Belgium, Czech Republic, Denmark, Germany, Greece, Israel, Latvia, Luxembourg, Netherlands, New Zealand, Switzerland and Scotland
- Total number of diasporas – 93.

**DEFINITION OF A MIGRANT = IF RESPONDENT'S FATHER  
WAS BORN OUTSIDE THE COUNTRY OF TEST**

# Variable describing family status selection

*Pearson correlation between DELTA\_MATH and explanatory variables*

<b>DELTA_ESCS</b>	<b>DELTA_PARED</b>	<b>DELTA_BFMJ</b>
<b>.784***</b>	<b>.633***</b>	<b>.737***</b>
<b>N=91</b>	<b>N=91</b>	<b>N=89</b>

# Explaining by country of test characteristics

*Multivariate regression analysis of a country of test characteristics (controlled for family SES).*

	Model1	Model2	Model3	Model4	Model5	Model7	Model8
Constant	3.315	68.192*	-1.718	35.217	33.728	-10.468	16.716
DELTA_ESCS	73.641**	69.013**	73.094**	71.949**	70.061**	68.711**	89.180**
GINI		-2.113*					
GDP_PER_CAPITA			.000				
MIPEX_OVERALL				-.516			
MIPEX_EDUCATION					-.518		
JOBS_CARCE_NATIMMIG						17.531	
IMMIGRANT_POL_ATT							-10.607
R <sup>2</sup>	.615	.644	.616	.596	.597	.518	.706
Sig.	.000	.000	.000	.000	.000	.000	.000
Dependent variable: DELTA MATH							

Though the highest R<sup>2</sup> has the model that has IMMIGRANT\_POL\_ATT included, the only significant variable under test is the Gini of a country of test – controlled for SES it adds 2.9% of the explained variance to the model. The higher the inequality is, the better migrants perform as compared with locals, when controlling for SES.

# Explaining by value difference between countries of test and origin

*Multivariate regression analysis of a difference between countries of test and origin conditions (controlled for family SES and Gini index).*

	Model0	Model 1	Model2	Model 3
Constant	68.192*	78.243*	92.651*	102.607*
DELTA_ESCS	69.013**	55.669**	66.908**	54.821**
GINI	-2.113*	-2.638*	-2.831*	-3.219*
DELTA_TRADRAT		10.603*		
DELTA_SURVSELF			-5.077	
DELTA_MONUMENT				-.142**
R <sup>2</sup>	.644	.691	.677	.723
Sig.	.000	.000	.000	.000
Dependent variable: DELTA_MATH				

TRADRAT, MONUMENT and POSTMAT are significant. POSTMAT adds 3.2% of explained variance to the model, TRADRAT adds 4.7%, and MONUMENT – 7.9%.

# Explaining by country's of origin cultural region

*Multivariate regression analysis results related to cultural region of a diaspora origin (controlled for family SES and Gini index)*

	Model0	Model1	Model2	Model3
Constant	68.192*	52.469*	68.506*	73.453*
DELTA_ESCS	69.013**	67.430**	66.122**	70.220**
GINI	-2.113*	-1.403*	-2.146*	-2.203*
CONFNUM		-65.117**		
ISLNUM			11.618	
POSTCOMM				-9.309
R <sup>2</sup>	.644	.759	.650	.651
Sig.	.000	.000	.000	.000
Dependent variable: DELTA_MATH				

None of cultural regions when controlled for ESCS and GINI have explanatory power except the Confucian region. Origination from the Confucian region explains 11.5% of variance and the final percent of explained variance becomes 75.9%.

# Main findings

- The biggest explanatory power have the family SES differential.
- Gini Index is the most important condition of a country of test (controlled for SES it adds 2.9% to the explained variance)
- Value sets that, when controlled for SES and Gini, matter most are traditional vs. secular-rational values (4.7%) and monumentalism values (7.9%)
- Confucian culture of origin country, controlled for SES and Gini, explains 11.5% of variance
- Difference of values possesses explanatory power when explaining educational gaps between natives and different groups of migrants
- If humility and flexibility of attitudes is embedded in a culture, migrants who originate from countries of such cultures will be more successful in competing with natives at schools.

# Discussion: monumentalism

- Monumentalism index was created on the wave of discussing difference between Western and East-Asian selves
- Isn't a monumentalism index is another word for "being a Confucian"?
- Taking out East-Asian cases from the model:

	With "Confucian" countries	Without "confucian" countries
Constant	102.607**	43.41
DELTA_ESCS	54.821***	71.4075***
GINI	-3.219**	-1.161
DELTA_MONUMENT	-0.142***	.002 (p=0.956)
Adjusted R2	0.708	0.779
Dependent variable: DELTA_MATH		

# Multivariate regression analysis than includes other sets of values with the “Confucian” cases taken out from the data-set

	Model 1	Model 2	Model 3	Model 4
Constant	65.594**	54.101*	62.894**	50.354*
DELTA_ESCS	67.211***	61.825***	63.722***	64.157***
GINI	-1.887**	-1.664*	-1.896**	-1.523
DELTA_TRADRAT	-2.276			
DELTA_SURVSELF		4.829		
DELTA_EMANC			24.730	
DELTA_POSTMAT				45.375
Adjusted R <sup>2</sup>	.783	.792	.784	.797

Dependent variable: DELTA\_MATH

“.” significant on the level  $0.1 < x \leq 0.05$ , “\*”  $0.05 < x \leq 0.01$ , “\*\*”  $0.01 < x \leq 0.001$ , “\*\*\*”  $< 0.001$

Without "Confucian" countries

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Constant	51.30*
DELTA_ESCS	56.21***
GINI	-1.694*

Regions WVS, ref. cat.: Protestant Europe

Catholic Europe	11.54
English speaking	-5.937
Orthodox	21.42*
South Asia	-21.90
Islamic	23.73*
Africa	27.73*
Latin America	-9.703

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Adjusted R2	0.832
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Dependent variable: DELTA\_MATH

# Appendices

# Making the traditional vs. secular-rational index

God is very important in respondent's life

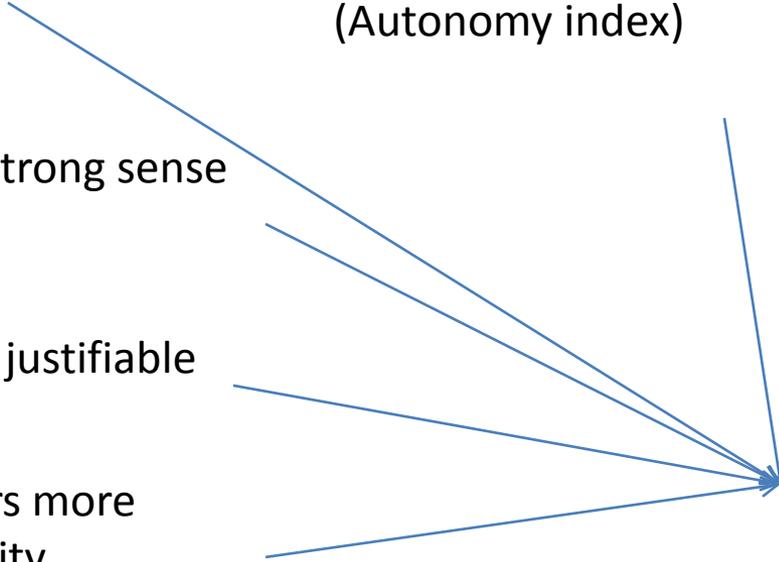
It is more important for a child to learn obedience and religious faith than independence and determination (Autonomy index)

Respondent has strong sense of national pride

Abortion is never justifiable

Respondent favors more respect to authority

**TVSRI = Factor score**

A diagram consisting of five blue arrows pointing from various text blocks on the left towards a central point on the right. The central point is labeled 'TVSRI = Factor score'. The arrows originate from the following text blocks: 'God is very important in respondent's life', 'Respondent has strong sense of national pride', 'Abortion is never justifiable', and 'Respondent favors more respect to authority'. The fifth arrow originates from the 'Autonomy index' text block.

# Economic, Social and Cultural Status Index (ESCS) – PISA “built in” index

FAMILY WEALTH (13 home possessions specified for countries)

PARED (the higher parental education expressed in years of schooling)

CULTURAL POSSESSIONS

HOME POSSESSIONS

**ESCS**

HOME EDUCATIONAL RESOURCES

BOOKS AT HOME

HISEI (the higher parental occupation)

