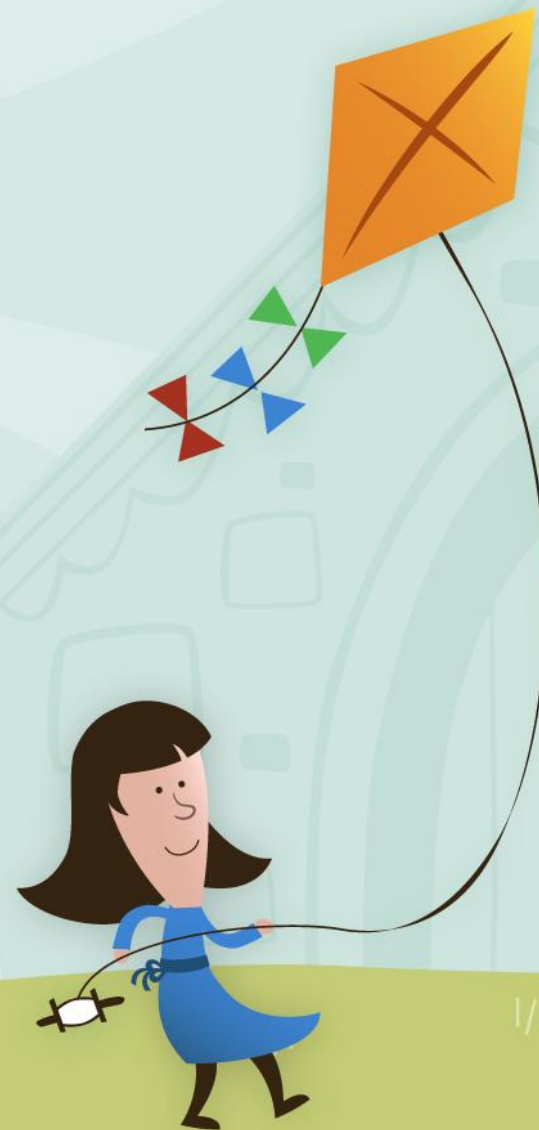


Girls Education in Western China

ZENG Xiaodong

Prof. , Economics of Education, Beijing Normal University

Deputy Director of INRULED, UNESCO



Education in rural areas at micro-level



Policy makers around the world are very familiar to continuous increase in education growth in China. I here provide it just as a background information.



Education in rural areas at micro-level

- Given that, I would rather to share some experiences that I have obtained at micro-level, which contains teachers' real efforts in an intervention program in western rural areas.
- √ Rich and linked info might inspire us deep thinking on gender issue

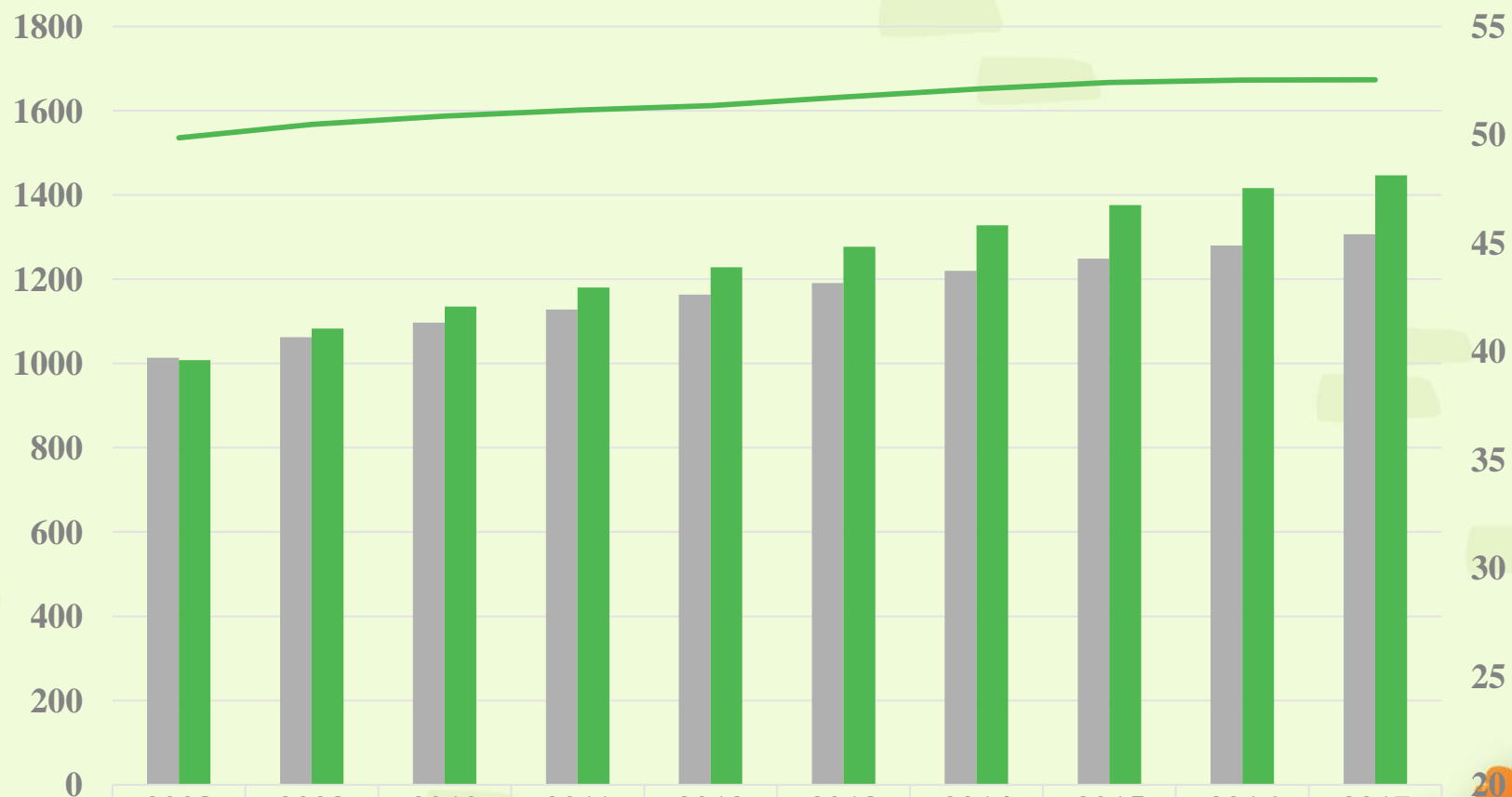


content

- 1. Outlook: gender equality in education at macro-level
- 2. Introduction: how the program works
- 3. Measurement: self-report social emotional development
- 4. Hypothesis: girls benefit more from the program than boys?
- 5. Data analysis
- 6. Conclusion

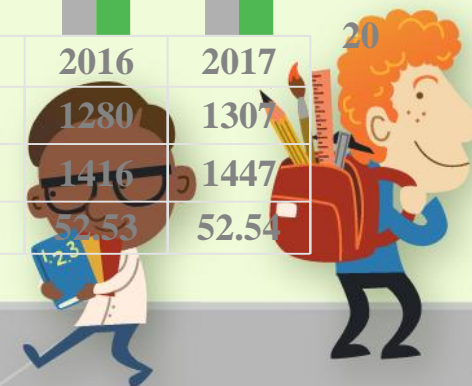
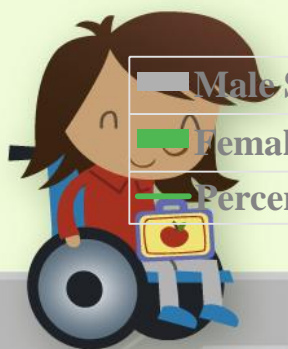


Trends in Gender Composition of Students in Regular IHEs in China(2008-2017) (Undergraduate)



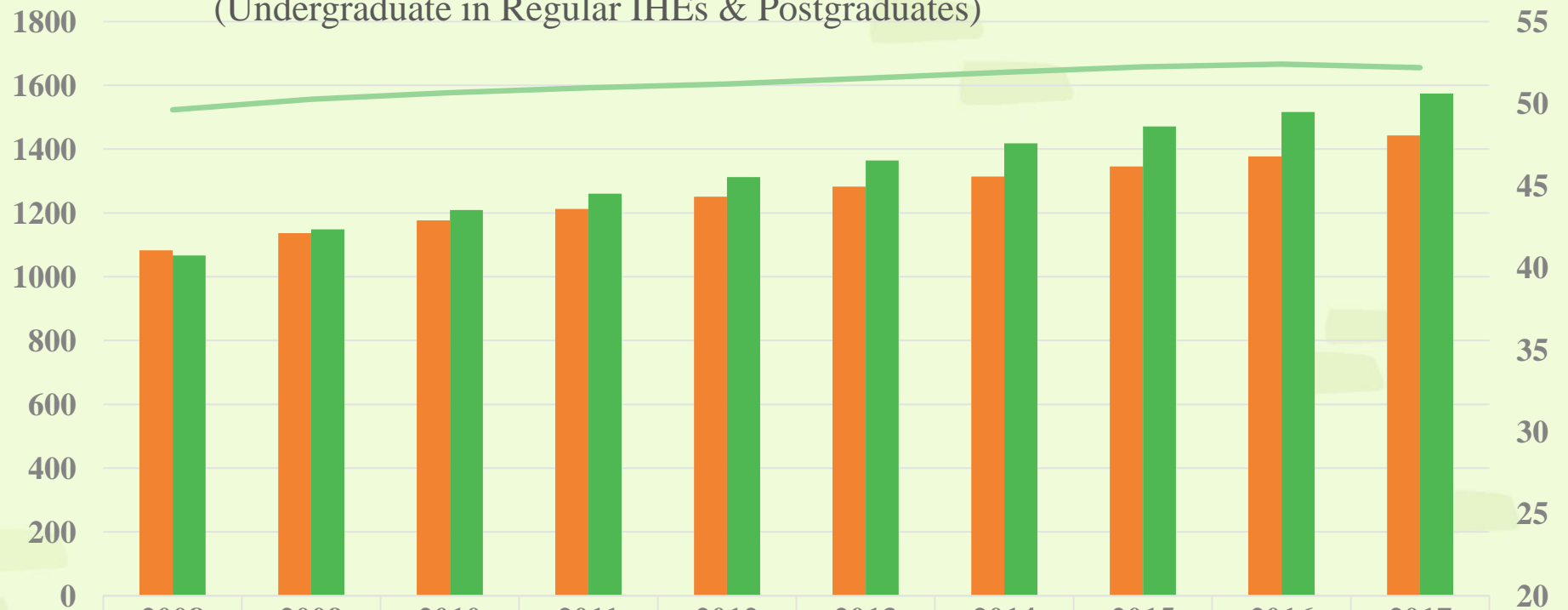
Male Students (In 10 thousand)	1013	1062	1097	1128	1163	1191	1220	1249	1280	1307
Female Students (In 10 thousand)	1008	1083	1135	1180	1228	1277	1328	1376	1416	1447
Percentage of Female Students (%)	49.86	50.48	50.86	51.14	51.35	51.74	52.12	52.42	52.53	52.54

*Source : Educational Statistics Yearbook of China



Trends in Gender Composition of Students in Higher Education in China(2008-2017)

(Undergraduate in Regular IHEs & Postgraduates)



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Male Students (In 10 thousand)	1083	1137	1177	1213	1251	1283	1314	1345	1378	1443
Female Students (In 10 thousand)	1066	1149	1209	1260	1312	1365	1419	1471	1516	1575
Percentage of Female Students (%)	49.61	50.27	50.67	50.96	51.20	51.55	51.92	52.24	52.40	52.18

**Source : Educational Statistics Yearbook of China*



Outlook

- Generally, I can make a conclusion that girls have an equal access to education
- Or...
- Gender equality appears in another form or extremely in boys' crisis in China?
- Is time to say saving boys? ^-^
- It hard to get the answer at macro-level



introduction



Let's go to village...

- OECD:
- Skills for Social Progress: the Power of Social and Emotional Skills

- Achieving goals
- Working with others
- Managing emotions

Heckman, J. J., et al. (2006). "The effects of cognitive and non-cognitive abilities on labor market outcomes and social behavior." *Journal of Labor Economics* 24(3): 411-482.

From education achievements to skills



introduction

- Continue:
- DCSF, UK, Department for Children, Schools and Families
 - SEAL program, Social and emotional aspects of learning



- **Conceptual framework:**
- Self-perception and self-awareness
- Motivation
- Self-control and self-regulation
- Social skills
- Resilience and coping



introduction

- What works in enhancing social and emotional skills development during childhood and adolescence? A review of the evidence on the effectiveness of school-based and out-of-school programs in the UK
 - Communication
 - Confidence
 - Plan and problem solving
 - Relationships and leadership
 - Creativity
 - Resilience and determination
 - Managing feelings



introduction

- Catch-up strategy, does that mean we keep following them?
- I have to say it is to some extent.
- Real reason is we faced the same challenges
- When a country is in a fast process of urbanization, something broken must be fixed up...



introduction

Albert
Bandura



- **Social learning theory**
- Canadian-born American psychologist and originator of social cognitive theory who demonstrated that children can learn behaviors through the observation of adults.



introduction

- Social learning theory is a theory of learning process and social behavior which proposes that new behaviors can be acquired by observing and imitating others.
- It states that learning is a cognitive process that takes place in a social context and can occur purely through observation or direct instruction, even in the absence of motor reproduction or direct reinforcement.



introduction

- **Developing $6 \times 15 \times 2 = 180$ classes for students aged 6-11**
- Class teachers (or class advisers) are encouraged to give the HWB (health and well-being) program weekly to their students, esp. who suffer from disadvantage environments...





A 10 years old girl in
Gansu, Northwest China



Two boys at grade 3 in
Guizhou, Southwest China



more than 29,445 students in 4 counties covered

introduction

- **Covering 4 modules:**
 - **healthy life**
 - **Relationships**
 - **Motivation and self-regulation**
 - **social and culture life**
- **Pedagogical consideration:**
 - **Learning in group**
 - **Skills practice**
 - **Writing feelings**



introduction



- 心理与情绪
- 身体与健康
- 家人与朋友
- 社会生活

北京慈弘慈善

《健康与幸福》课程-四大模块10个主题



introduction

- **Organizing stepwise teacher training programs**
 - 1st training program is designed for the starters
 - 2nd training program provided for
 - 3rd training program held in Beijing Normal University for Class teachers who are expertise in the HWB Program





Starting program (1st)



Improving teaching strategy (2nd)



A series of training programs provided to 929 classroom teachers

introduction



The training program was rewarded a SERVE prize in 2019



measurement

- Dimensions of the “Big Five” model
 - Conscientiousness
 - Extraversion
 - Agreeableness
 - Emotional Stability (also called Neuroticism)
 - Openness to experience

OECD is going to release its first report on social emotional skills. Its conceptual framework is “Big Five”

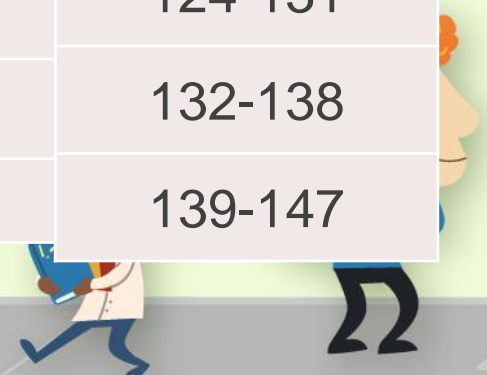


Questionnaire and coding

- Prof. DONG Qi, the current president of Tsinghua University
- Psychological development among Chinese children aged 6-15
- Dimensions covered in this national questionnaire

President DONG Qi provides us 'bricks' and other standardized components that you could fit together based on your own research designs

+ self-identification	1-25
+ confidence	26-42
+ self-control	43-60
+ Holistic self-esteem	61-65
+ attitudes toward school and learning	66-74
+ life satisfaction	75-87
+ classroom environment	88-111
+ prosocial behavior	112-123
+ school climate	124-131
+ school bullying	132-138
+ subjective well-being	139-147



measurement

- **Data collection and laundry**
 - Students at Grade 4-6 are surveyed before and after one year intervention program
 - Pretest 7950
 - Post test 6600



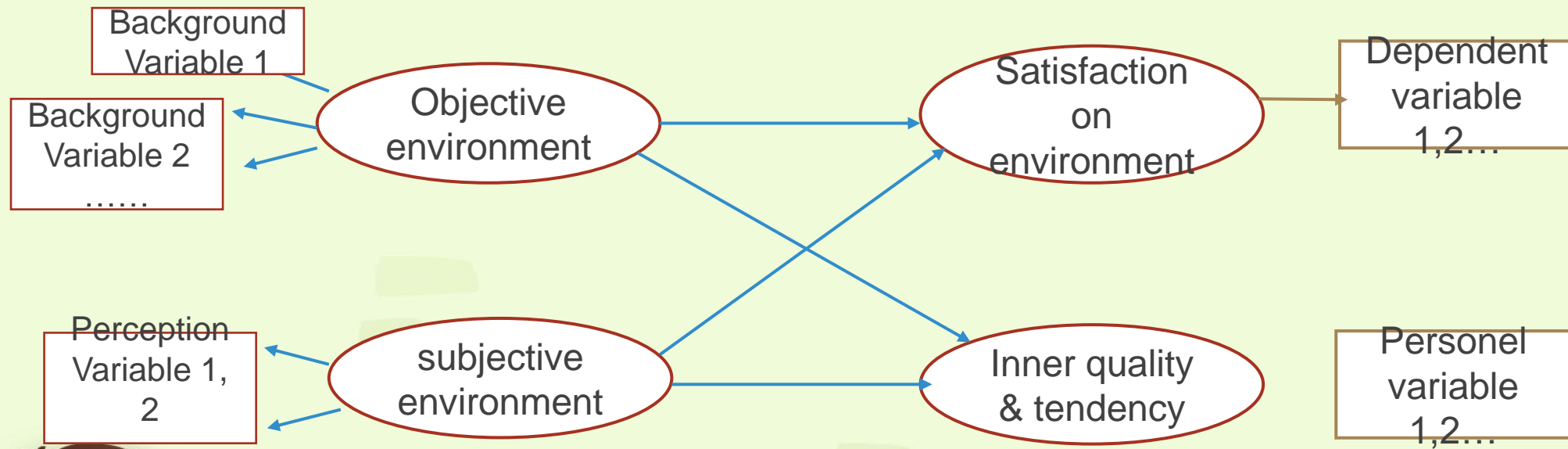
Hypothesis

- Girls benefit more from the intervention program than boys?
- Confidence
- School climates
- Pro-social behaviors
- School bully



Establishing a structural equation modeling(SEM)

- A comprehensive model is developed like the following



	confidence	school climates	prosocial behavior	school bullying
pretest score	0.379*** (0.09)	0.292*** (0.03)	0.361*** (0.02)	0.308*** (0.02)
father's education level	0.029*** (0.01)	-0.015 (0.02)	0.442*** (0.14)	-0.253* (0.13)
treatment (treatment=1, control=0)	0.095*** (0.03)	-0.107** (0.05)	1.723*** (0.43)	-1.289*** (0.40)
gender (male=1, female=0)	-0.017 (0.02)	0.111*** (0.04)	-0.407 (0.30)	0.636** (0.28)
teacher student ration (teacher/student)	0.072 (0.18)	-0.083 0.28	-1.52 (2.27)	-5.562*** (2.13)
standardized achievement test score	0.021* (0.01)	-0.074*** (0.02)	0.513*** (0.02)	-0.441*** (0.15)
school type	0.044*** (0.01)	-0.024* (0.01)	0.465*** (0.17)	-0.485*** (0.11)
constant	1.664*** (0.09)	1.329*** (0.10)	21.827*** (1.01)	6.71*** (0.68)
R-squared	17.50%	0.096	18.2%%	14.4%%

OLS regression



Standard errors in parentheses.

	Dependent variable			
	confidence	School climates	prosocial behavior	school bullying
gender (male=1, female=0)	-0.070 (0.06)	0.157 (0.10)	-1.799** (0.79)	1.637** (0.76)
pretest score	0.333*** (0.06)	0.252*** (0.06)	0.238*** (0.06)	0.283*** (0.06)
standardized achievement test score	0.030** (0.01)	-0.054*** (0.02)	0.490*** (0.15)	-0.369*** (0.14)
father's education level	0.023** (0.01)	-0.02 (0.02)	0.401*** (0.14)	-0.233* (0.13)
Treatment (treatment=1,control=0)	-0.111 (0.21)	-0.169 (0.14)	-4.772** (2.31)	-0.733 (0.69)
teacher student ratio	0.334* (0.18)	-0.155 (0.29)		-7.686*** (2.24)
school type(base=village school)				
rural teaching station	-0.167* (0.10)	0.093 (0.16)	-1.641 (1.30)	2.226* (1.26)
township school	-0.105*** (0.04)	-0.03 (0.05)	-0.912** (0.43)	-0.11 (0.41)
primary school in county	0.184*** (0.03)	-0.073* (0.04)	1.888*** (0.35)	-1.695*** (0.34)
treatment X pretest score	0.050 (0.07)	0.056 (0.07)	0.141** (0.06)	0.027 (0.06)
treatment X gender	0.067 (0.07)	-0.054 (0.10)	1.695** (0.85)	-1.182 (0.82)
constant	1.909***	1.357***	28.053***	5.855***

OLS plus
interact item



Standard errors in parentheses.

Conclusion

- Girls benefit more from the intervention program than boys?
 - No significant impacts except prosocial behaviors on boys
 - Intervention enlarge the existed social emotional development among students





More efforts in rural areas can change some students
observation and image on the world

Visible hands
can change
somethings



Thank You

