



## PISA for Development | Technical Workshop

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# Outline

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- ❑ Motivation
- ❑ Objective
- ❑ Coverage
- ❑ Implementation
- ❑ Survey instrument
- ❑ Preliminary findings

# Motivation | Improving Information on Skills

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- ❑ What is the skills profile of the labor force?
- ❑ What skills matter for employment and productivity?
- ❑ What is the nature and size of skills gaps and mismatches?
- ❑ What interventions may be considered to improve employability and productivity?

**To answer these  
Questions about Skills**



# Objective | STEP Skills Measurement Program

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Collect internationally comparable data on different types of skills to inform policy and skill development strategies



## Survey of Individuals (HH survey)

### Supply of skills

- Sample size: 2,000-3,500
- Length: 120-150 minutes
- Representative of urban areas
- Population aged 15-64



## Survey of Employers (Firms)

### Demand for skills

- Sample size: 300-500 enterprises
- Length: 45-60 minutes
- Formal and informal sectors
- Geographic or economic sector based



# Countries | Global Scope

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Two Waves

Wave 1 – Started 2011

Wave 2 – Started 2012

# STEP Household Survey | Implementation

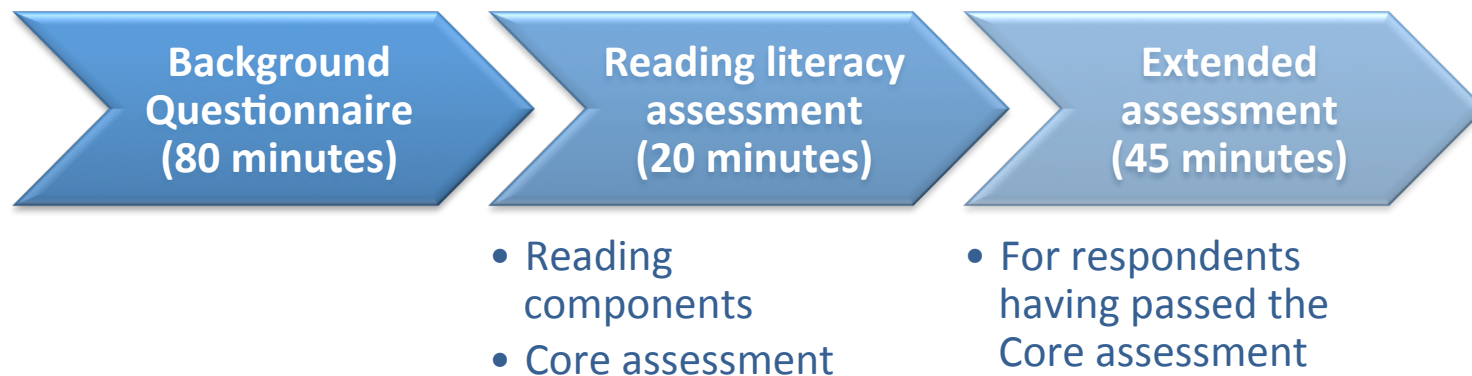
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- ❑ Design of the survey instruments
  - ❑ Developed with the support of a multi-disciplinary panel of experts (psychology, skills assessment, education, and labor market specialists)
  - ❑ Qualitative testing and pilots were undertaken to test the instruments in different cultural settings
- ❑ A standardized implementation relying on strict technical standards
  - ❑ Adaptation & translation of the survey instruments
  - ❑ Fieldwork processes
  - ❑ Booklet scoring
  - ❑ Centralized coordination and supervision
- ❑ One survey methodologist to ensure consistency across country methodologies
  - ❑ Sampling strategy
  - ❑ Weighting

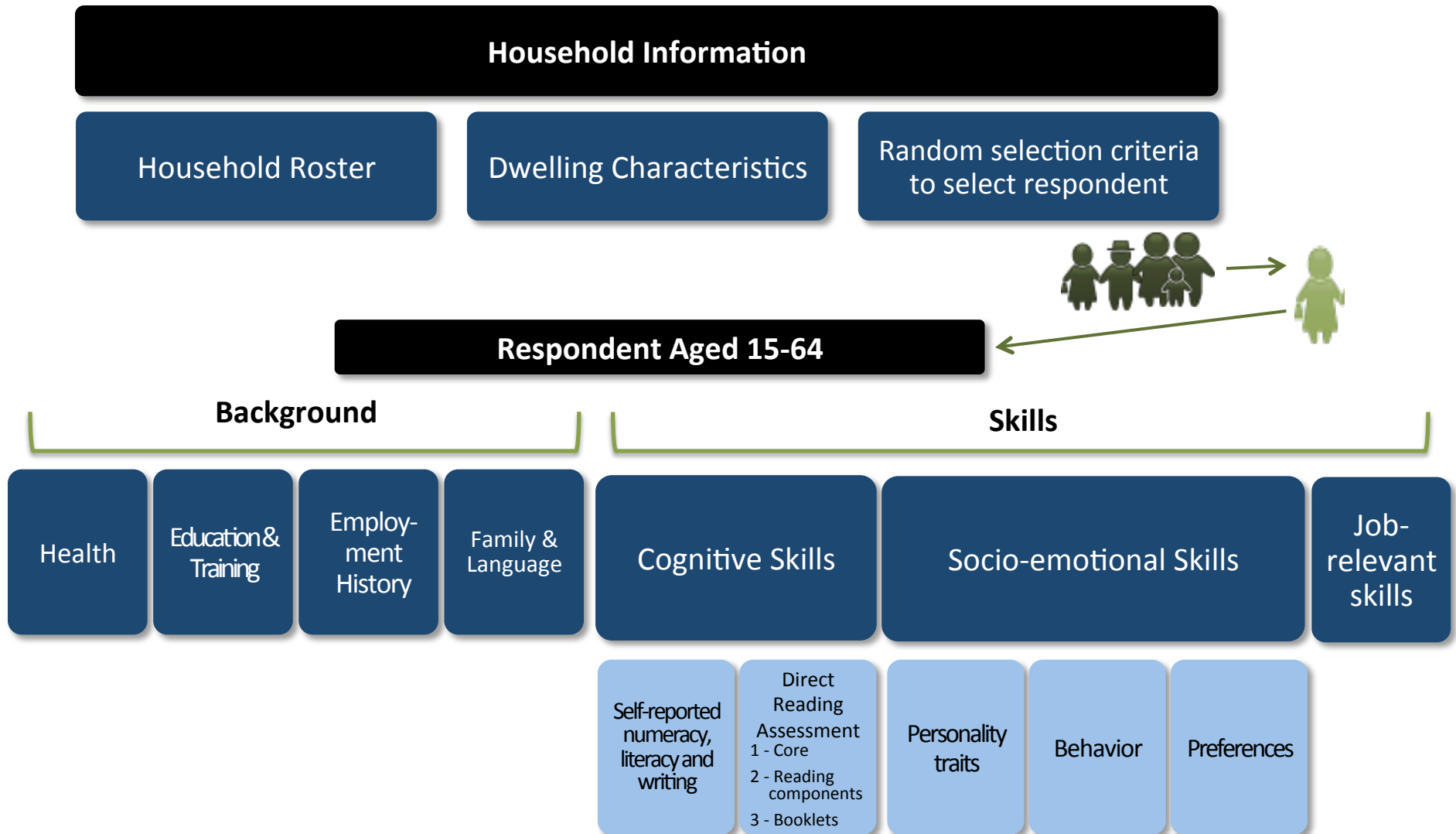
# STEP Household Survey | Key Features

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- ❑ Target population
  - ❑ Urban population aged 15-64
- ❑ Household-based survey
  - ❑ The Background Questionnaire provides a rich array of data, which can be used independently from the Reading Literacy Assessment data
- ❑ Interview sequence



# STEP Household Survey | Survey Instrument





# STEP Background Questionnaire | Household Information

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- ❑ The household roster provides information on respondents' **current living situation**
  - ❑ Lists all household members
  - ❑ Includes their educational attainment, or whether they can read and write, and their labor market status
- ❑ The Family & Language module collects data on **family background**
  - ❑ Parents' educational attainments
  - ❑ Siblings, including age, at the age of 12
  - ❑ Negative shocks experienced by the household at the age of 12
  - ❑ Languages used

# STEP Background Questionnaire | Household Information

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- ❑ Dwelling characteristics
  - ❑ Dwelling characteristics, including ownership
  - ❑ Water & sanitation, cooking & lighting energy
  - ❑ Assets, including books, and animals owned
  - ❑ Transfers

- ✓ Adapted to country-context, as assets correlated with wealth vary across countries
- ✓ Use of asset indices

# STEP Background Questionnaire | Education & Training Module

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- ❑ Extensive information collected on education and training
  - ❑ Early Childhood Education
  - ❑ Formal education
    - ❑ Start age
    - ❑ Attainment and field of study
    - ❑ School (type, location)
  - ❑ Other forms of training / learning
    - ❑ Literacy program
    - ❑ Professional certificate, work-related training
    - ❑ Apprenticeship
  - ❑ Dropped out and/or interrupted studies and reasons
  - ❑ Reasons for having never attended school
  - ❑ School-to-work transition
  - ❑ Parental involvement in primary school

# STEP Background Questionnaire | Employment Module

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- ❑ Provides information on **current employment status**
  - ❑ Labor market participation, including reasons for inactivity
  - ❑ Employment status
  - ❑ Types of occupation and tasks
  - ❑ Earnings
  - ❑ Aspirations
- ❑ **Transitions in the labor market**
  - ❑ First job and previous job
  - ❑ Information on previous wage jobs for self-employed (voluntary/ involuntary self-employment)
- ❑ **Labor market success of the self-employed**
  - ❑ Start-up capital
  - ❑ Earnings, sales
  - ❑ Business expansion, employees

# STEP Background Questionnaire | Skills Modules

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- Cognitive Skills**
- Direct assessment of reading literacy based on the Survey of Adults Skills instruments
  - Indirect assessment on individuals' use of reading, writing and numeracy skills at work and/or in daily life

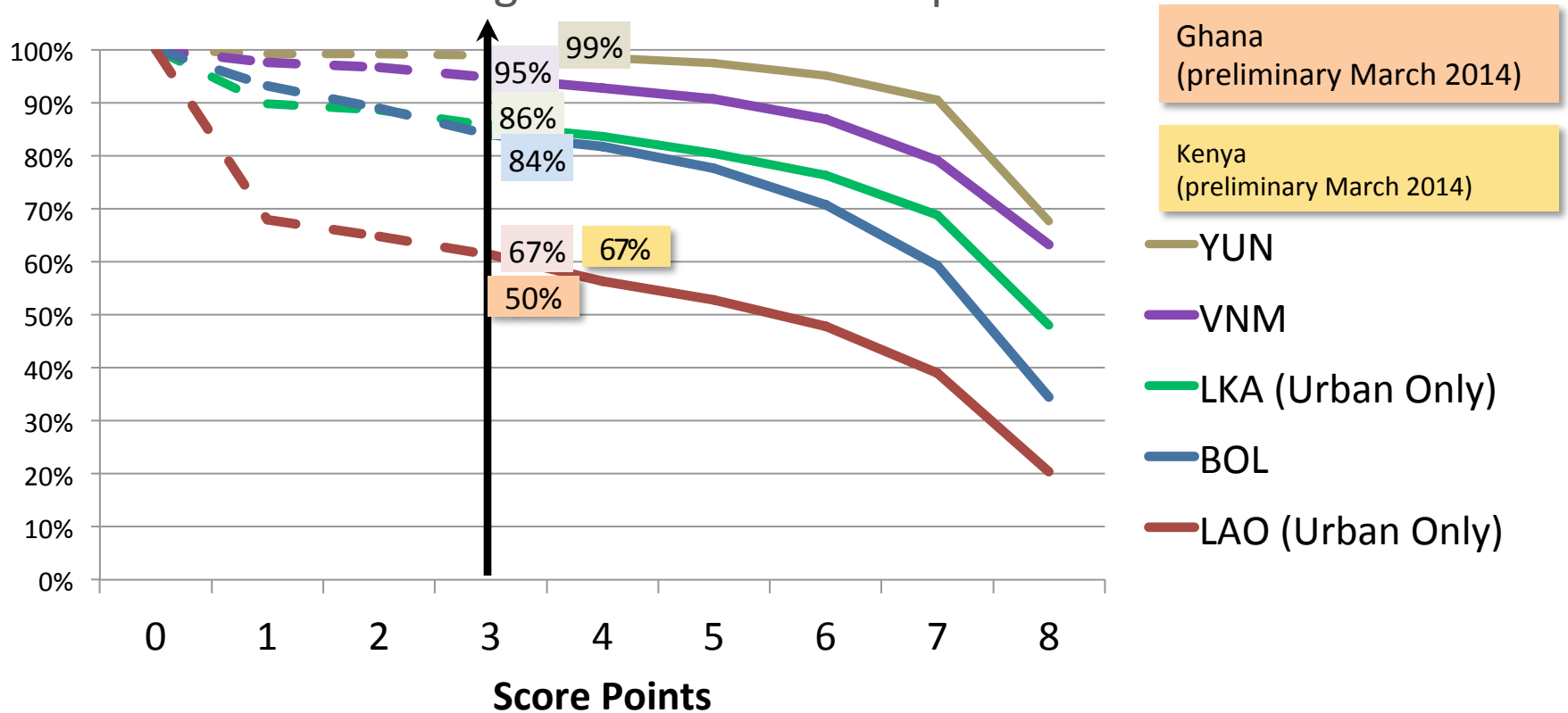
- Job-specific Skills**
- Qualifications required for the job and job learning times
  - Indirect assessment of skills used at work
    - Job tasks
    - Data—cognitive, mental power
    - People—interpersonal
    - Things—physical, muscle power
    - Technology use

- Socio-emotional Skills**
- Personality traits (Big Five and Grit)
  - Behavior (Hostile Attribution Bias and Decision Making)
  - Risk and Time Preference

# Preliminary Findings | ETS Literacy Assessment

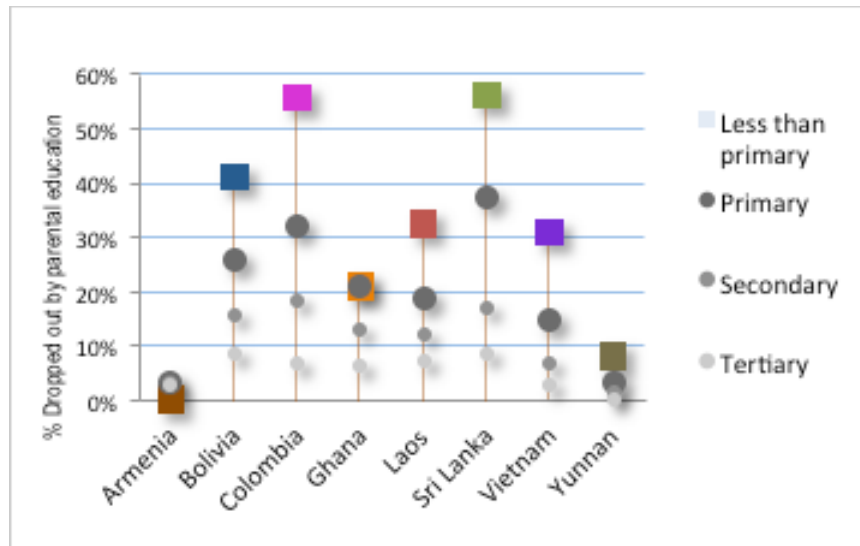
## Results from CORE Assessment: Cumulative Distribution By Country

Passing Score = 3 out of 8 questions



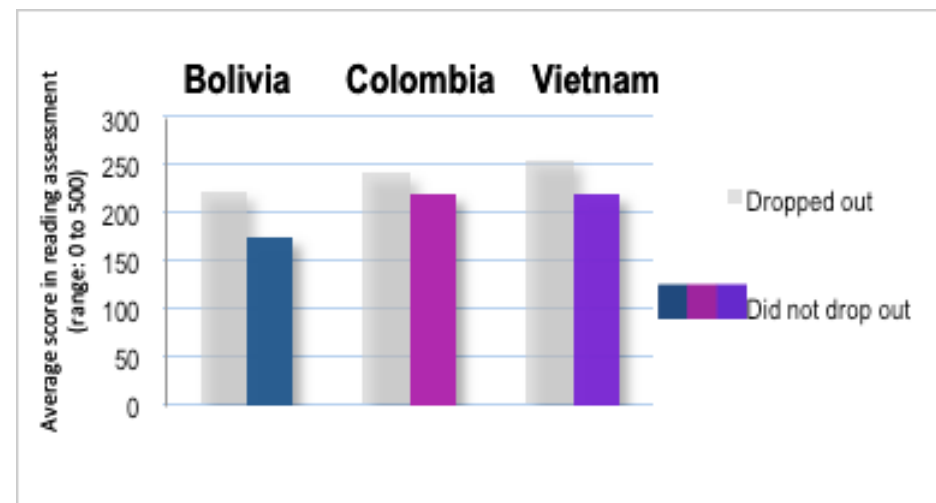
✓ Adapt questionnaires to account for possible low reading literacy rates, in particular parent questionnaire

# Preliminary Findings | Household Information

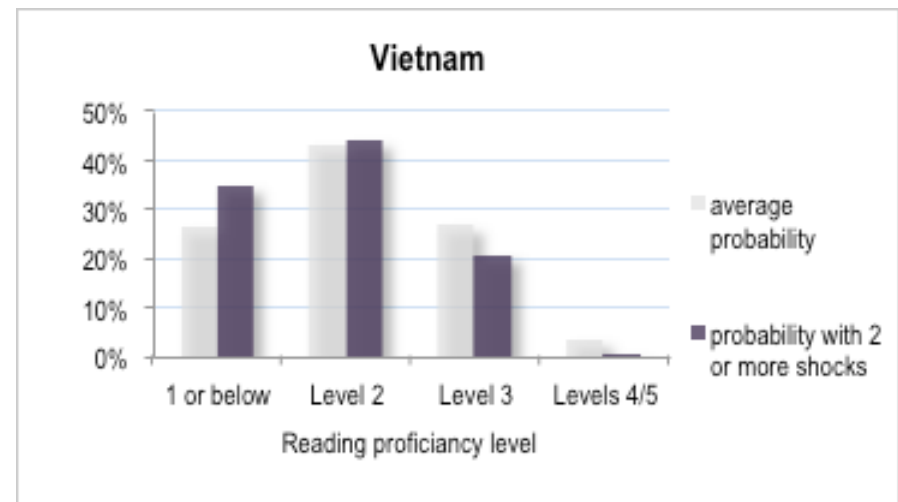
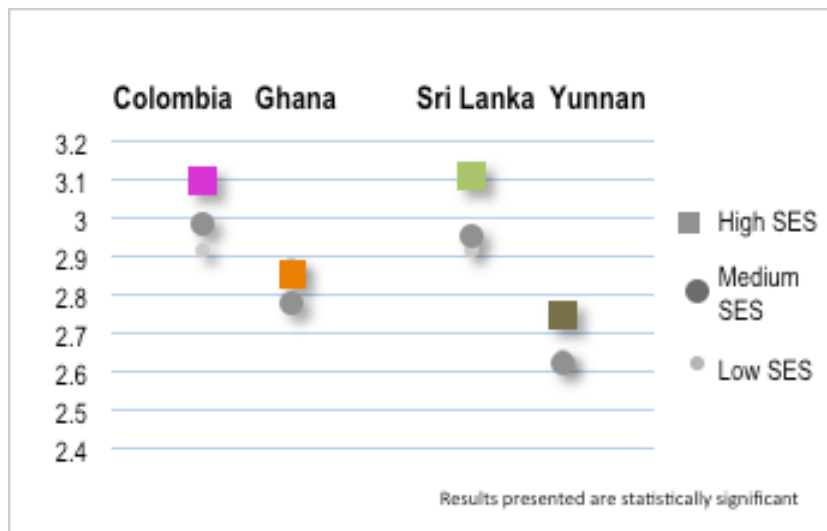


□ Adults whose mothers completed primary school or less display higher school drop-out rates than adults with more educated mothers...

□ And adults who dropped out of school are likely to score lower on reading proficiency than those who did not



# Preliminary Findings | Household Information



❑ A family's past socioeconomic status can affect how a child develops socio-emotional skills : adults who come from a higher SES tend to exhibit more grit

❑ Experiencing more than one household shock before the age of 15 is associated with lower reading proficiency levels

- ✓ Key role of family background  
Information collected directly from parents would improve data quality
- ✓ Recalled information retains an explanatory power

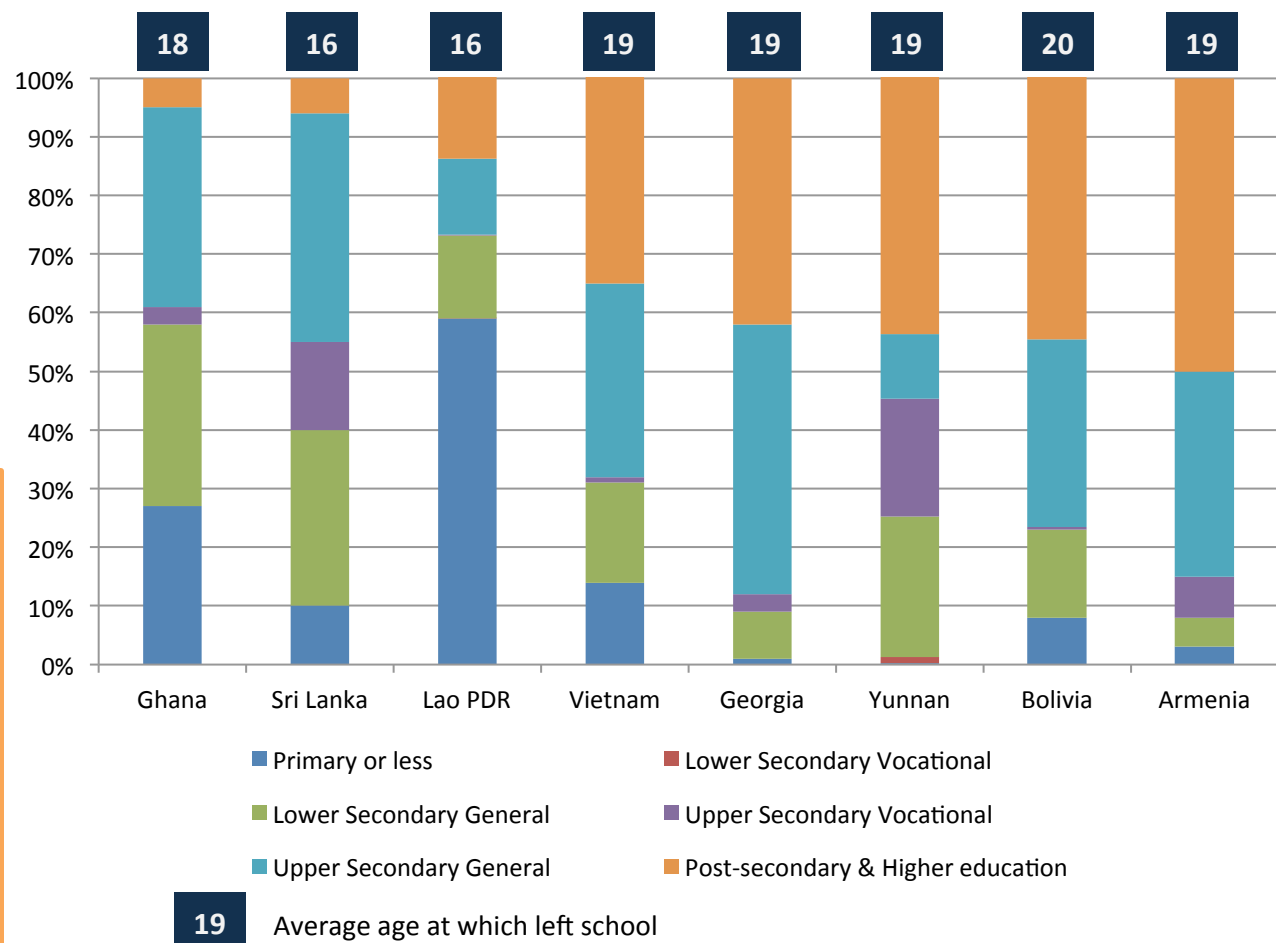


# Preliminary Findings | Education

☐ Respondents aged 15 may be close to ending their formal education

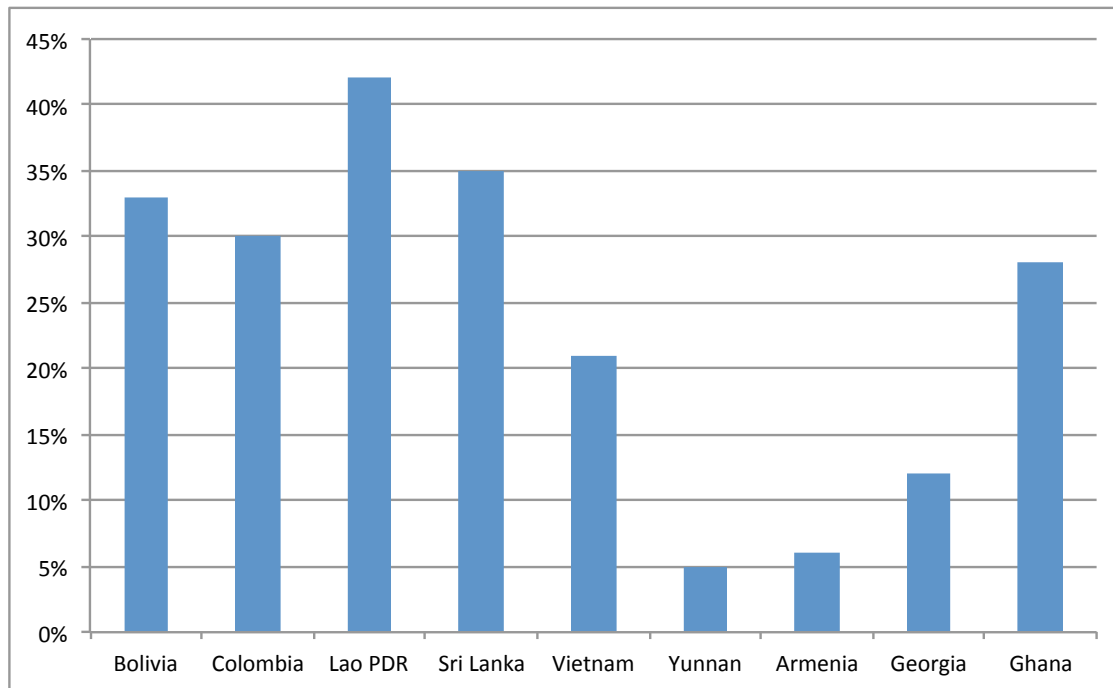
✓ Questionnaire to adapt to contexts in which a majority of 15-year olds may be about to leave school

Highest level completed & age at which left formal education  
- Respondents aged 20 to 29 -



# Preliminary Findings | Education

Dropout rates – respondents aged 15-24

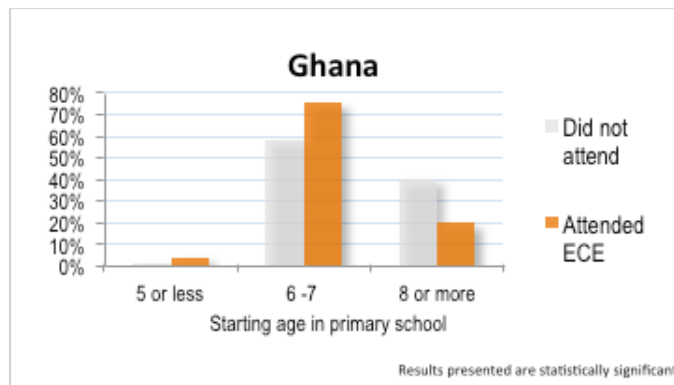


✓ Uncertainty regarding how much further they will study might affect students' outlook

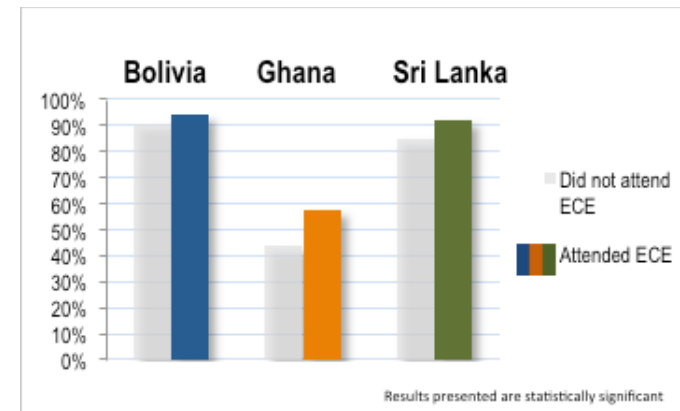
- ❑ In most countries, over 20% of respondents aged 15 to 24 dropped out of the highest level they were attending
- ❑ A major reason for dropping out was the lack of money to pay for fees, uniforms, and/or school materials
- ❑ Other reasons included having to work or help at home, and pregnancy (Bolivia and Colombia)
- ❑ Lack of interest in school is usually reported in lower proportions than the above reasons

# Preliminary Findings | Education

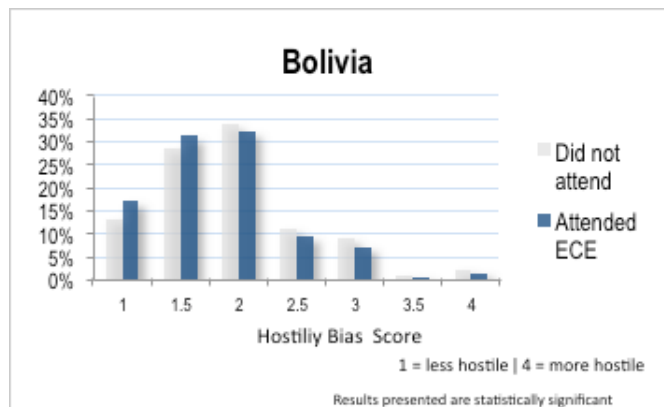
Adults who participated in ECE programs are...



- ❑ More likely to have started primary education at the compulsory age (6-7 years old)



- ❑ More likely to pass the core reading literacy assessment than those who did not

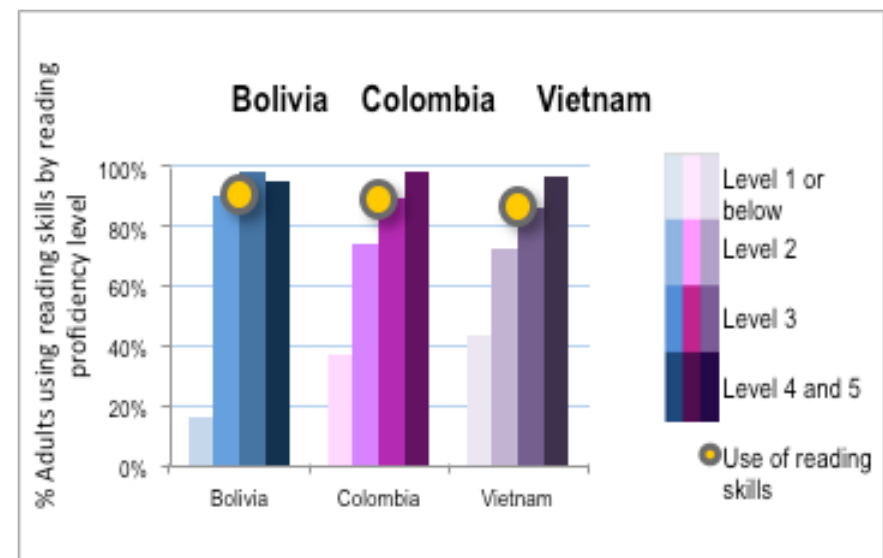
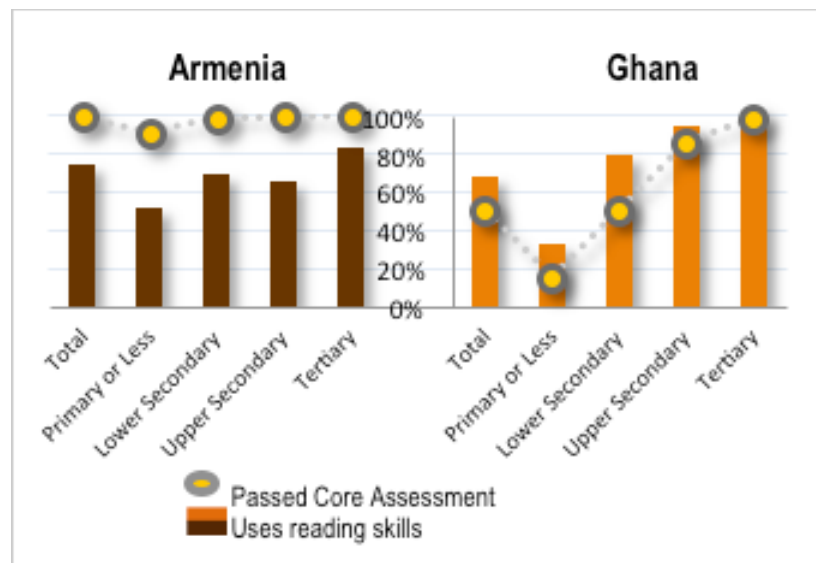


- ❑ Less likely to perceive hostile intent in others (low hostility bias score)

- ✓ ECE matters in low and middle-income countries
  - In STEP captured by an indicator variable
  - More information could improve insight

# Preliminary Findings | Cognitive Skills

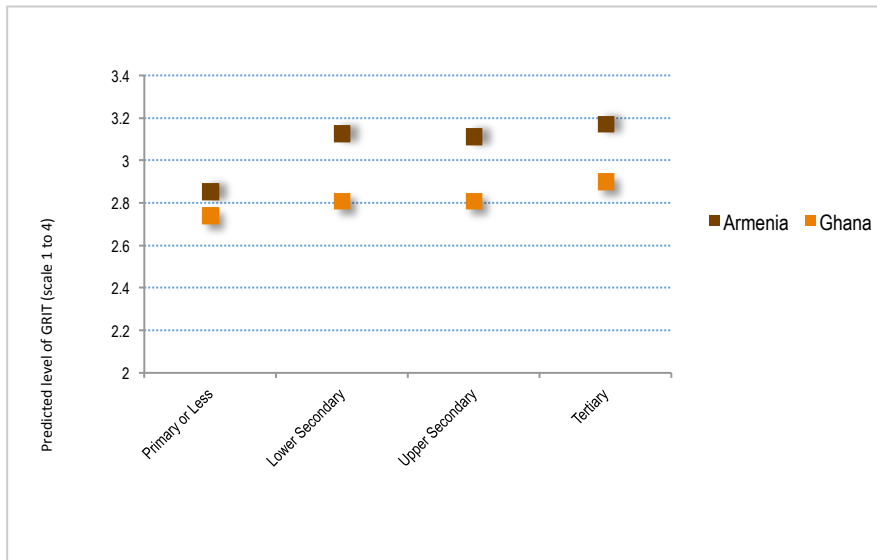
How do self-reported and direct assessments of reading skills compare?



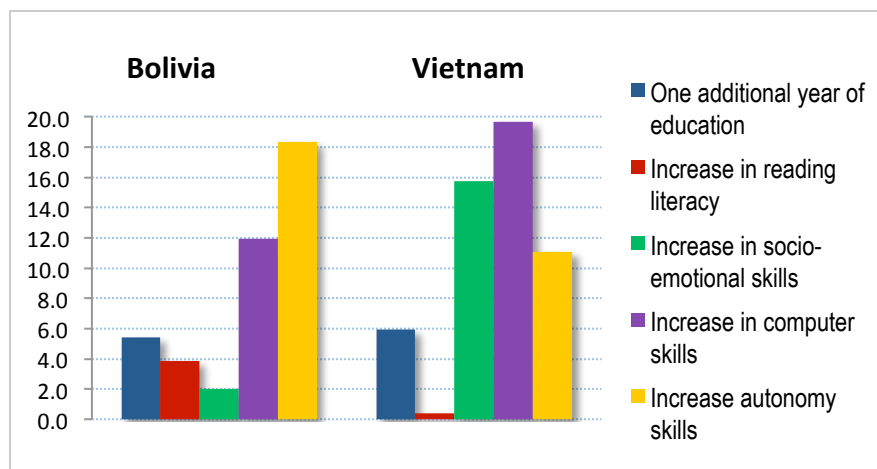
❑ Respondents' self-reported information on how they use their reading skills is different from their actual reading ability...

❑ And is a very weak indicator of actual reading proficiency

# Preliminary Findings | Socio-emotional Skills

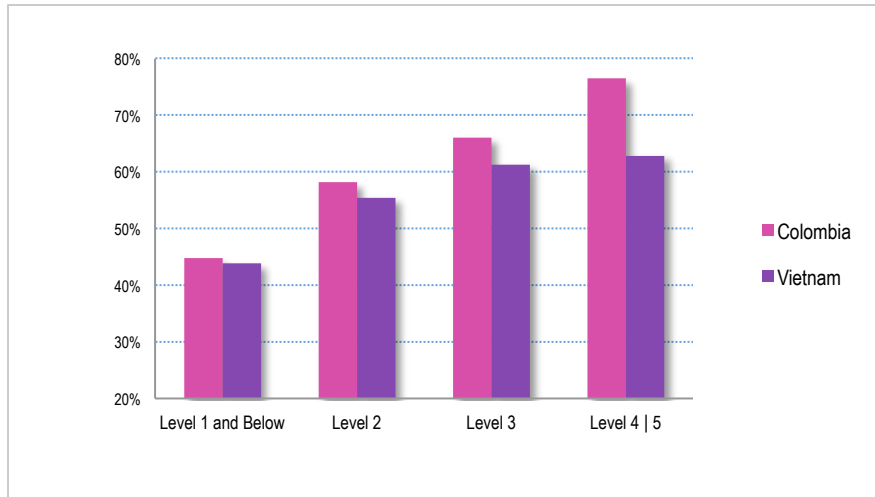


- ❑ Educational attainments and socio-emotional skills are correlated
- ❑ Adults with more education tend to score higher in terms of grit

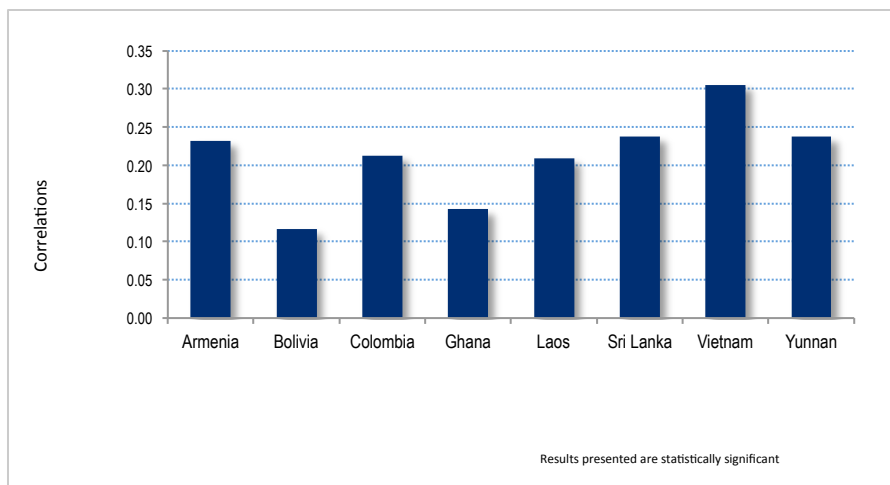


- ❑ All skills matter for labor market success, including socio-emotional skills
- ❑ Wage workers in Vietnam may increase their earnings by more than 15 percent with an increase in socio-emotional skills

# Preliminary Findings | Job-relevant Skills



- ❑ Learning outcomes are related to the use of job-relevant skills
- ❑ For instance, reading proficiency level is associated with higher computer use at work



- ❑ Similarly, a worker's socio-emotional skills are associated with the use of job-relevant skills
- ❑ The greater a person's openness to experience, the greater his or her ability to solve complex problems

# Main Conclusions

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- ❑ Family background
  - ❑ Key role, but might take different forms than in higher income countries
  - ❑ Parental literacy rates are likely to be lower than their children's
- ❑ A significant proportion of 15-year olds is likely to be on its way out of school
- ❑ ECE matters both for the acquisition of cognitive and socio-emotional skills
- ❑ Socio-emotional skills and educational outcomes are correlated

# Thank you



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