Today's topics:

- Literacy worldwide
- Adult literacy education

Background: (none)

Tu Nov 19

0. Key points today

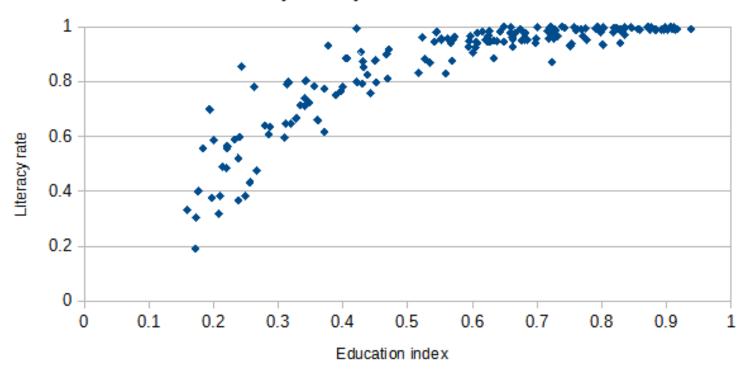
- Literacy rates around the world
- Early reading education in a few sample locations
- Reading skills in the US, revisited
 - National Assessment of Educational Progress (NAEP)
 - Programme for International Student Assesment (PISA)
- Adult literacy education

1. Literacy rates around the world

- Data and maps from <u>Data Pandas</u>
 - How is "literacy" **defined** here?
 - Is the definition satisfying?
 - What are some **factors** that appear to influence literacy rates in this data set?
 - Compare <u>this map</u>
 - Or this <u>map</u>

1. Literacy rates worldwide

• How highly does literacy correlate with **education**?

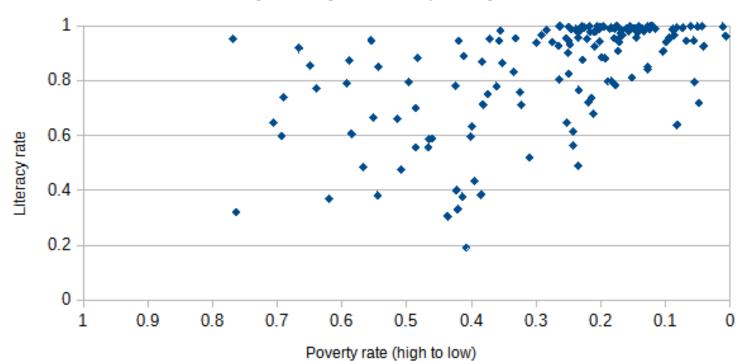


Literacy rate by education index

<u>education index</u> data from Data Pandas (note: literacy rates are *included* in education index)

1. Literacy rates worldwide

• How highly does literacy correlate with **poverty**?



Literacy rate by inverted poverty rate

poverty rate data from Data Pandas

2. Orthographic depth, revisited

Country	Majority language	Orthographic depth	Education index	Literacy rate
Alphabetic writing systems				
Finland	Finnish	shallow	0.91	100%
Spain	Spanish	shallow	0.72	98%
Guatemala	Spanish	shallow	0.31	79%
France	French	deep	0.76	99%
USA	English	deep	0.88	99%
Non-alphabetic writing systems				
Japan	Japanese	deep	0.83	99%
China	Mandarin	deep	0.57	96%

Literacy rate, education index data from Data Pandas

2. Orthographic depth, revisited

 Amount of time spent on different school subjects in elementary school, in <u>Japan</u>

- In Finland, reading instruction begins at age 7
 - 6-year-olds do phonological awareness, though

- We've seen claims about how many fourth graders read at a "basic" or "proficient" level in the US
 - Example from <u>Hanford (2018)</u>
- Reminder: The data behind these claims
 - <u>NAEP</u> (National Assessment of Educational Progress) web site — lots of data and graphics
 - Some <u>controversy</u> about NAEP benchmarks?
 What is "basic", what is "proficient"?

- Discussion from Seidenberg (2017), ch 10
 - NAEP (US only)
 - PISA Programme for International Student
 Assesment (OECD countries + some others)
- These are not "high-stakes testing" used to evaluate individual students or even schools/districts
 - Instead, these are best viewed as a kind of "census" of how well students are doing

- PISA
 - Conducted every 3 years (since 2000)
 - Tests students at age 15

• <u>Reading performance</u> (data from 2018 test)

- NEAP and PISA are not directly comparable
- But, both suggest that reading rates in the US have not changed much over two decades
- Both tests show disparities in
 - gender (girls > boys)
 - race/ethnicity ("achievement gap")
 - income

 Seidenberg (2017: 229) argues: "...we can use the PISA cutoffs to ask whether the NAEP was curved too strictly. A comparison of the results shows clearly that the NAEP achievement cutoffs are stricter, but not by much:

Eighth graders (NAEP) 4% Advanced

22% Below Basic

Fifteen-year-olds (PISA)

8% advanced levels (5-6) 17% lowest levels (1-2)"

Discussion

- What are some ways that adult literacy education might differ from early-elementary education for children?
 - What are some ways in which the students are different?
 - Should the materials or teaching methods be different? How?

- Overall, there is less research on adults learning to read than on children learning to read
- Kruidenier (2002) review of then-existing research on adults learning to read in English [open-access ebook]

Kruidenier, John. (2002). *Research-based principles for adult basic education reading instruction.* Portsmouth, NH: National Institute for Literacy.

• From Kruidenier (2002: 3)

"...adults can have difficulties with **any** of the crucial aspects of reading: alphabetics (phonemic awareness and word analysis), fluency, vocabulary, or comprehension."

[here and below, emphasis added]

- From Kruidenier (2002: 3) | *Decoding, word reading* "Phonemic awareness among adult non-readers is almost non-existent and is only a little better among adult beginning readers. Adult beginning readers also have poor phonics or word analysis knowledge."
 - "Their **sight word** knowledge (the ability to recognize words on sight without having to sound them out) may initially be better than expected."

"Teaching alphabetics leads to **improved achievement** in other aspects of reading."

- From Kruidenier (2002: 4) | *Reading comprehension*
 - "...most ABE learners have difficulty **integrating** and **synthesizing** information from any but the simplest texts."
 - "Although it is likely that poor phonemic awareness, word analysis, fluency, and vocabulary **contribute** to poor reading comprehension, it is also likely that most ABE adults will need to be taught **specific comprehension strategies**."

From Kruidenier (2002: 4) | Reading comprehension
 "Three important emerging principles from the ABE reading research suggest that **participation** in an ABE program can lead to increased reading comprehension achievement, that **explicit instruction** in reading comprehension strategies is effective, and that teaching comprehension along with instruction in **other** components of reading is also an effective way to improve reading comprehension."

 A local adult literacy organization: <u>Orange Literacy</u>

5. For next time

- Workshop day for article contribution report #1
 - Bring your laptop
 - Work on your own or workshop/brainstorm with classmates
 - I'll be available for check-ins and questions
- Feedback from topic proposals will be released before class time on Th