

Research Internship: Human Capital and Numeracy

Task:

Choose a country, enter a minimum of **200 age observations** (if possible and available, with place of birth and gender) and calculate ABCC values (if possible, for 2 or more birth periods). Compare with Figures from this set of slides or other articles on our internet page. Create a PowerPoint presentation on this.

How to do? Well, this is a small first step to real research:

- The sources you will be using have most likely **not been used before** for this type of analysis.
- Hence you need, first of all: at least some **frustration resilience**
- that is, after some small initial frustration, you should not give up or be deeply frustrated
- some obstacles have to be survived in real research...

The process consists of:

1. go to the <https://familysearch.org/search/> internet page
2. select a **country and source**
3. Look for age statements. You might have to look at **different documents** and different pages. Sometimes the ages are stated **within the text** (and in the Spanish, English, German **language of the time**), such as "Maria Gonzales.... tiene treintaiocho anos". Sometimes **abbreviations** are used. Sometimes no ages are contained (for example, in the Jamaican sources one has to look through a number of documents to find some).
4. type some **200 to 500** (more is better, if you are productive and do not have major difficulties with the handwriting) age statements between age 23 and 72 in an Excel file. Look at the internet for our recommendations how to format as data file: for example, only variable names (**without blanks or special characters**) in the first line, **no empty lines or columns**... please use the variable names **"age", "female", "qyear", "picture", "source" "currentnumber"** if you type in age, gender, the year when the age question was probably asked, the number of the picture you take the data from, and the source including all the place names. **"currentnumber"** is simply a number that indicates in which order you entered the data (if you sort the data later-on by age or so, we can recover the original sorting with it). "Female" should be 1 if the name sounds female, 0 otherwise. Type all your comments into a separate text document.
If you have great **difficulties with the handwriting**, either use a different source, or try the following strategy: fill in those letters that you can read into an alphabet, and try to "understand" how the person is writing. If you still have

difficulties reading the ages, use Argentina census 1895 or Chile civil registration records (marriages) around 1900.

5. Count the number of ages ending with 5 or 0. Count all your cases. Divide the first by the second number. Is it higher than 0.2? Multiply it with 125. Subtract the result from 125. The overall formula for the numeracy index (ABCC) is:
 $125 - 125 * (\text{number of ages ending in 0 or 5}) / (\text{total number of cases})$.
If you want, you can do the calculation for **subgroups** (such as those aged 23-32, 33-42, 52-72, or by regions if you collected data on more than one region).
Interpretation: where the individuals born during different periods? Is there a **trend of numeracy development levels**? Make sure the number of individuals per unit that you would like to interpret is large enough (at least 30, better 100). If you arrive at 90-100 % numeracy for countries or periods for which you would not expect such high values, the priest or census-taker might have **counter-checked** the age statements (then the results are **useless for numeracy research**, but not for your assignment).
Those who know Stata can do it also with this software (See the sample do-files on our internet pages)