**1. Intro Slide:**

* Lily Orth-Smith
* interested in gender equity, decided to explore access to contraception in connection with GDP and literacy rates
* this is a graph of literacy rate versus contraception use, will explain more later

**2. Variables:**

**GDP** = Gross Domestic Product, purchasing power parity = adjusted for cost of living, per capita = the GDP/# of people, so it’s like a measure of the economic activity per person in the country

* + DOES NOT TAKE INTO ACCOUNT INTERNAL INEQUALITY
  + Source: World Bank
* **Literacy rate**: % of men or women ages 15+ who are literate.
  + Source: World Bank
* **Contraception Use:** women who are married or in a union, and are ages 15-49.
  + Marriage does affect some of my findings. I’ll talk about this more later
  + Any: % of women using any method
  + Modern: % of women using IUDs, pills, condoms, sterilization, etc.
  + Condom: % of women who use a condom, or whose partners use a condom
  + Source: UN compiled it, but individual data points have different sources, mostly surveys established by groups like UNICEF, the League of Arab Nations, and the CDC.
* Upon closer analysis of the spreadsheet, some sources are reported contraception usage for women of different age groups. This could be problematic, but most sources reported contraception usage for AT LEAST women in their early twenties to early forties.
* Data sets had a value for a country and a year
* Also, the contraception and literacy rate files had HOLES

**3. Reading in Data**

* Hardest part of the project: I have universal functions for analyzing my data once it’s in tuple lists
* The World Bank’s website was really annoying. 1300 different variables, they let you reformat csv files before downloading but all the formats were really weird
* Also holes were terrible: literacy rate and contraception had SO MANY
* So to do correlations, I had to match up countries and years with lots of for loops
* MORAL: data about things worldwide is gross.

**4. Mean Contraception Use:**

* Condom use is low because people in long term relationships tend not to use condoms with their primary partner, because they’re primarily used to prevent the spread of STDs, not prevent pregnancy**.**

**5. GDP and Contraception**

* These are not very high correlations, but there is a correlation.
* Point out: condom use has highest correlation. Will come back to later
* Graphs of any and modern are similar, included modern only
* Condom is different: again, bc married women don't use condoms that often. Perhaps indicates that in countries with higher GDPs, extramarital sex is more common

1. **LOG PLOTS:**

* Log plots of GDP vs contraception looks linear, pearson R only linear, so correlated log(GDP) with contraception use, got higher correlations
* AND, the highest correlation switched from condom to any method!

**6. Correlation between Literacy Rate and Contraception**

* Higher than GDP correlations
* Any/modern > condom, possibly bc married women don't use them freqently

1. **Future investigations**