

MITx: 14.310x Data Analysis for Social Scientists

**Help** 



#### Bookmarks

- Module 1: The Basics of R and Introduction to the Course
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# Data Visualization: Common Mistakes, Part I - Quiz

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# **Question 1**

1/1 point (graded)

For which audiences, it is important that your graphs and charts are able to stand alone? (Select all that apply)

- a. Academic audiences
- b. Policy makers
- c. Laypeople
- d. None of the above



# **Explanation**

For all types of audiences, it is important that your data visualizations are self-explanatory. Although you may target your visualizations slightly differently for policy makers and laypeople compared to academic audiences, it is just as critical that your data visualizations are able to speak for themselves

<u>Functions of Random</u> Variable

- Module 5: Moments of a Random Variable,
   Applications to
   Auctions, & Intro to
   Regression
- Module 6: Special
   Distributions, the
   Sample Mean, the
   Central Limit Theorem,
   and Estimation
- Module 7: Assessing and Deriving Estimators
   Confidence Intervals, and Hypothesis Testing
- Module 8: Causality,
   Analyzing Randomized
   Experiments, &
   Nonparametric
   Regression
- Module 9: Single and Multivariate Linear

in academic journals or for academic presentations.

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You have used 1 of 2 attempts

✓ Correct (1/1 point)

You come across a paper where you find the following graph, and the accompanying text in the body of the paper: "Figure 1 present primary school enrollment rates for males and females for four West African countries: Togo (TGO), Ghana (GHA), Benin (BEN), and Cote d'Ivoire (CIV)."

#### Models

- Module 10: Practical Issues in Running Regressions, and Omitted Variable Bias
- Module 11: Intro to
   Machine Learning and
   Data Visualization

#### **Machine Learning I**

Finger Exercises due Dec 12, 2016
05:00 IST

#### **Machine Learning II**

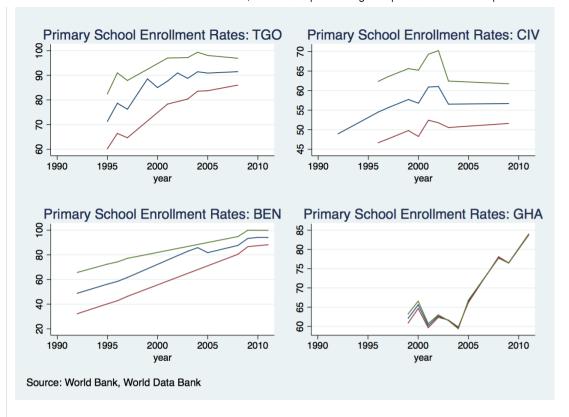
Finger Exercises due Dec 12, 2016 05:00 IST

# **Visualizing Data**

Finger Exercises due Dec 12, 2016 05:00 IST

- Module 12:

   Endogeneity,
   Instrumental Variables,
   and Experimental
   Design
- Exit Survey



# Question 2

1/1 point (graded)

Based on the discussion in lecture, which of the following is a positive aspect of how the data is presented in the graph shown above?

- a. The titles for each of the graphs are self-explanatory
- ullet b. It is separated into four graphs, which makes it easier to see the trends ullet

- c. The trend lines are properly labeled
- d. The axes make it easy to compare between each of the charts

# **Explanation**

Overall, this collection of graphs fails to be self-explanatory. However, one positive feature of this presentation of the graphs, which is similar to the collection of graphs shown in class, is that the information is separated into four distinct charts instead of squeezed onto one. All other answer choices are not true of the graph presented above.

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You have used 1 of 2 attempts

Correct (1/1 point)

# Question 3

1/1 point (graded)

Which of the following is an issue regarding the title of the graphs? (Select all that apply)

- ☑ a. They are not self-explanatory/fail to stand alone from the body of the text
- ☑ b. They are repetitive

- c. They do not provide information on how the primary enrollment rates were calculated
- d. They do not provide an explanation of the trend lines



#### **Explanation**

Based on our discussion from class, both A and B are correct answers. It is unclear from the graph alone what TGO, GHA, BEN, and CIV. While it is explained in the body of the text (as described above), a reader may not know these abbreviations and may find it difficult to locate the paragraph within the text that explains these.

B is also correct. Instead of "Primary School Enrollment Rates" above each of the individual graphs, it would make more sense to have that as the title of set of the four graphs, and have each of the individual graphs titled with the complete country names. C would be too much information to include in the title of a graph, but one may want to present this information in the footnotes. The information in D should be presented in a legend.

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You have used 1 of 2 attempts

Correct (1/1 point)

### Discussion

Topic: Module 11 / Data Visualization: Common Mistakes, Part I - Quiz

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