

MITx: 14.310x Data Analysis for Social Scientists

Help



- Module 1: The Basics of R and Introduction to the Course
- ▶ Entrance Survey
- Module 2: Fundamentals of Probability, Random Variables, Distributions, and Joint Distributions
- Module 3: Gathering and Collecting Data, Ethics, and Kernel Density Estimates
- Module 4: Joint, Marginal, and Conditional Distributions &

Module 11: Intro to Machine Learning and Data Visualization > Visualizing Data > Improving the Visuals - Quiz

# Improving the Visuals - Quiz

☐ Bookmark this page

# Question 1

1/1 point (graded)

True or False: When presenting a chart showing the coefficients from data analysis, you never want to include the standard errors, since they make the graph too cluttered and do not provide any additional valuable information.

a. True

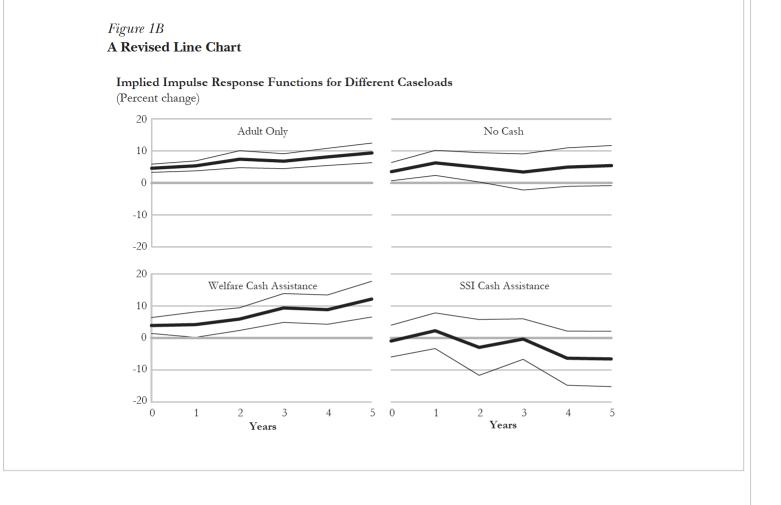
b. False

# **Explanation**

This statement is false. When presenting coefficients, such as the below example from class taken from Schwabish (2014), it is important to also show the standard errors in order to provide your reader with sense of the potential range of trend lines. However, to put less emphasis on the standard errors, you can make them either a lighter color or a dashed line.

# <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



Submit You have used 1 of 1 attempt

Correct (1/1 point)

# **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)

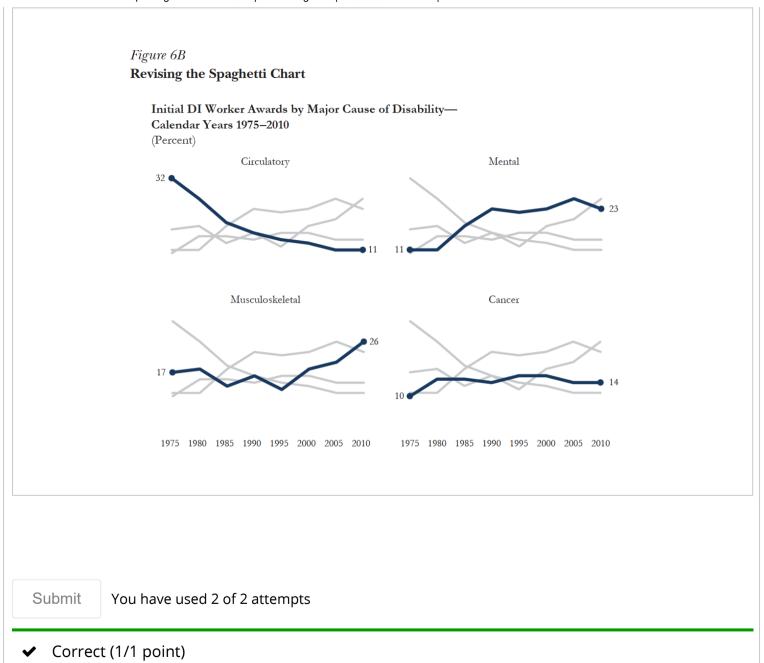
We have now finished going through the Tufte principles. Based on these past few segments, which of the following are considered Tufte principles? (Select all that apply)

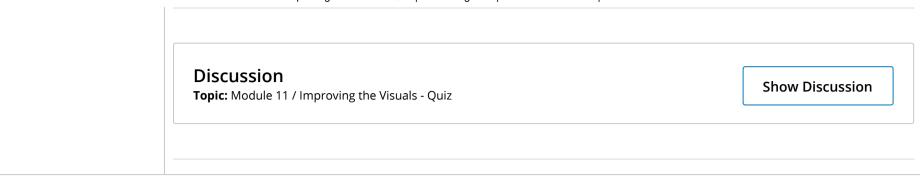
- ☑ a. Reduce non-data ink in order to maximize data-ink ratio
- b. All principles should be strictly followed at all times
- c. Continuously revise and edit your graphs
- d. Maximize the amount of data



# **Explanation**

A, C, and D have each been discussed in detail over the last several lecture segments. While one should try to apply to Tufte principles when possible, there are times when not strictly adhering to the Tufte's principles allow for a clearer presentation of the results. For instance, while the example below introduces redundancy, it also allows for easy interpretation of each of the trend lines.





© All Rights Reserved



© 2016 edX Inc. All rights reserved except where noted. EdX, Open edX and the edX and Open EdX logos are registered trademarks or trademarks of edX Inc.

















