more likely than a female to say "a good chance" or "almost certain." What would the graph look like if there was *no* association between the two variables? In that case, knowing that a young adult is male would not help us predict his opinion. He would be no more or less likely than a female to say "a good chance" or "almost certain" or any of the other possible responses. That is, the conditional distributions of opinion about becoming rich would be the *same* for males and females. The segmented bar graphs for the two genders would look the same, too.

CHECK YOUR UNDERSTANDING

Let's complete our analysis of the data on superpower preferences from the previous Check Your Understanding (page 14). Here is the two-way table of counts once again.

	Country	
Superpower	**U.K.**	**U.S.**
Fly	54	45
Freeze time	52	44
Invisibility	30	37
Superstrength	20	23
Telepathy	44	66

1. Find the conditional distributions of superpower preference among students from the United Kingdom and the United States.
2. Make an appropriate graph to compare the conditional distributions.
3. Is there an association between country of origin and superpower preference? Give appropriate evidence to support your answer.

There's one caution that we need to offer: *even a strong association between two categorical variables can be influenced by other variables lurking in the background.* The Data Exploration that follows gives you a chance to explore this idea using a famous (or infamous) data set.