Distinguishing Between Correlational and Experimental Studies

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For the following statements, which would be more likely a correlational study and which would more likely be an experimental study?

An apple a day keeps the doctor away. - Correlational study

Blonds have more fun. - Experimental Study

Explain how each could be done as a correlational study. 1. Eating fruits make you healthier, therefore preventing you going to the doctor. 2. Cannot be a correlational study

Explain what would have to be done to make each an experimental study. 1. Take a group of people and let them eat an apple, then we would take another group and don't let them eat an apple a day, then we'll compare their health from the beginning. 2. Take groups of people with different hair color and compare them with what they have fun with because of people's different personality.

For each of the following studies, decide whether the study is correlational or experimental.

If the study is Correlational: An apple a day keeps the doctor away

a) Identify the variables - The Apple & The Doctor

b) Briefly describe how the variables are related and whether the correlation is positive or negative. The apple is has high vitamins which make you healthier and the doctor is someone who is suppose to cure you

c) Describe how variable A might cause variable B - The healthier

d) Describe how variable B might cause variable A - you get the less chance of you having to go to the doctor

e) List possible third variables or confound causes that might also be causing or influencing the results. A different fruit with different vitamins.

If the study is experimental, briefly describe: Blondes have more fun

a) The hypothesis - The color of the hair make people have more fun

b) The independent variable - Color of their hair

c) The dependent variable - enjoyment or fun

d) The experimental group - Blondes

e) The control group - People with other hair colors
The studies:

1) A Dartmouth study found that overweight young women (age 23) earned 6.4 less than their non-overweight peers. Additionally, they found that young men's earnings rose 2% for each 4-inch increase in height. Correlational

2) An Australian study reported that MSG does not cause people to be sick/as previously reported. The researcher told subjects that he was studying ingredients in a new soft drink and fed them either MSG or a placebo in the drink. The same number and type of symptoms were reported in both the MSG and the placebo groups. Experimental

3) USA Today reported that the stock market ends the year with a gain if the Super Bowl is won by one of the original NFL members: which are all of the NFC teams that remained and the three NFL teams that became AFC teams (Indianapolis Colts, Pittsburgh Steelers, and Cleveland Browns). Correlational

4) A psychiatrist from England found that wealthy women aged 35 to 59 had more frequent sex, experienced more orgasms, and reported enjoying sex more than women from poorer households. Correlational

5) Despite popular belief, men are just as likely to "help" as women are. In fact, one study indicated they were more likely than women to engage in helping behavior. When confederate men and women were staged in a parking lot having apparently locked their keys in their car, 80 of the individuals who came over to see if they needed help were men. (The staging was done such that equal numbers of men and women would pass by.) Correlational