You can Prove Anything With Statistics.

As Homer Simpson said: "Oh, people can come up with statistics to prove anything...."



Activity One Group discussion – Do you agree with Homer Simpson's statement? What's your personal experience of people using facts and figures to prove a point? Do you quote a lot of statistics when you are arguing a point? Are you interested in statistics in general?

Activity Two – Paying attention to your pronunciation and intonation take turns reading the article.

Science Secret for Happy Marriages: Be More Attractive Than Your Spouse

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The prettier a wife in comparison to her husband the happier the marriage. The source for this correlation is a in the Journal of Family Psychology, which analyzes ratings on Marital Satisfaction, for 82 newlywed couples (i.e. couples married for less than 3 months).

Taking the sample into account, one might consider revising the above statement to read: *The prettier the wife in comparison to her husband the higher the marital satisfaction score for a fairly homogeneous group of couples at the very early stages of marriage*.

That being said, it might also be worthwhile noting that the study only looked at physical attractiveness in respect to the marriage partners faces, and possibly I should be a little more careful about stating correlation as causal dependency, so maybe I'd better say that *the degree to which the female partners face is prettier than the male partners face is correlated with marital scores for a fairly homogenous group of couples at the beginning of their marriage*.

Another look at the data and a reminder that "people who do well at mathematics usually play an instrument, doesn't imply that people who play an instrument usually do well in mathematics", forces me to admit that in reality it is not so much that marriages are happier when the female has a prettier face than her husband, but that males in this data set are unhappier when they are married to women less attractive than themselves. Hence, I should say: *In the sample of examined marriages, the degree to which men have more attractive faces than their wives correlates with reduced marital satisfaction scores*.

> However, it is not so much the degree to which men and women are unequally attractive, that is driving the correlation in this dataset, but simply the fact that the man has a more attractive face than the woman. It's the direction (not the magnitude) of the difference that counts! So I might conclude that there are husbands out there, who look better than their wives, and these guys are also miserable...

For the complete article - http://www.psychologytoday.com/blog/evolved-primate/201005/science-secret-happy-marriages-be-more-attractive-your-spouse

Activity Three – Questions: Answer the questions individually and then we will discuss the answers as a group.

- What is the initial correlation, which is found by researchers?
- Why does the author say that this is in fact a causal dependency rather than a correlation?
- Why does he refer to people who play musical instruments?
- What do you think the author is seeking to prove in this article?
- What conclusion does he reach?
- What do you think of the findings of the research?
- What do you think this research actually proves?

Activity Four – Read the expressions, these are all used for talking about findings or results.

- We have found that
- We have shown that
- We have been able to prove that
- I found that
- I saw that
- Research has proved that
- Our findings show that
- This research proved that
- It has been found that
- It has been proved that
- I have seen that
- It is clear that
- It seems obvious that
- Our findings prove that
- Our results prove that
- Obviously
- Clearly
- What these results show is that
- According to our research
- According to recent data
- These statistics prove that
- The statistics show that

Activity Five – Using the expressions make up some facts and figures and (real or fake) research to prove the following. Work with your partner to put together a solid argument. We will stage a 'debate'. You will present your arguments, using the expressions, and the class will vote to agree or disagree with you. They will have to justify their opinions. The pair with the most convincing argument wins the debate!

- There is life on Mars.
- You are immortal.
- You are irresistible to the opposite sex.
- You should be promoted at work.
- You are achieving all your objectives at work.

Activity Six – read out the statistical facts and say what they prove using the expressions.

1. The average woman spends 136 days dressing up, applying make-up, plucking and showering.
2. Men spend one year of their lives ogling women - that's ten women every day - while women spend six months eyeing up men.
3. We spend five years of our lives constantly on the Internet.
4. We spend five months of our lives complaining - but only 115 days laughing

Read more at home: http://www.dailymail.co.uk/femail/article-1205476/Ever-feel-life-passing-Heres-fascinating-statistics-waste-time-.html#ixzz0qcQR393s

Now using the facts and figures on this amazing web page present some conclusions to your teacher:

http://www.worldometers.info/