

Exercise: How would you test if this worked?



Do you know the trick of putting a spoon into an opened champagne bottle to keep the champagne fresh and bubbly for longer? Does this work?

How would you devise a study to test that?

(Do this for yourself first, then discuss with your group)

When you have devised your own “test”, appraise the one over the page.

3.2 Is this a reasonable test?

The editors of a scientific journal tested this theory in a simple experiment many years ago. To do this, they put not just one, but two, half-empty open bottles in a refrigerator overnight: one with a spoon, one without.

Over the course of the next few days, they had volunteers sample both bottles several times, without telling them which one contained the spoon. This way, if the volunteers believed in the spoon's effect, this wouldn't influence their judgment. The first finding was that the champagne stayed drinkable for a surprisingly long time, taking more than four days to go flat. The second finding was that the participants could not tell the difference between champagne from a bottle with a spoon and from one without. Both bottles went flat equally fast.

For this study, what is the "PCIO"? _____

What do you consider to be:

The Strengths?

The Weaknesses?

Does the suggested study have:

- Comparable groups? (**R**andomized?)
- Low **A**ttention?
- Outcome **M**easurements that are **b**linded OR **o**bjective?
- Sufficient numbers to have a reliable conclusion?

Footnote: For description of a more detailed experiment see: Richard Zare, Champagne bubble myth burst: Forget the silver spoon <http://news.stanford.edu/pr/94/941221Arc4008.html>