

Statistical significance is useless

Great. Now that I've got your attention I'm going to tell you why, I think, statistical significance is mostly useless. The main reason is because it gives me very little information about what I want to know.

Why dichotomize a perfectly good, continuous p-value?

Confounding is present when you have a common cause of an exposure and an outcome and you haven't adjusted for any variables.

Significance tests do not help you make decisions

If you've heard of a confounder before, you were likely taught that a confounder is a common cause of the exposure and the outcome. But it's easy to show that that

*Note (this is not essential to your knowledge): I often like to think about words literally mean. A confounder, if you were very literal, should be the variable that is doing the confounding. In other words, a confounder should be a common cause. But if we decided to use this language we'd be stuck in a place where we'd have to admit that you could control for confounder by adjusting for a non-confounder. So really, there's no really satisfying way to use the language here.

Other things

It's very common for people to talk about unmeasured confounding in their discussion section, often to remind you of its possible existence. As if we didn't know that. Anyway, unmeasured confounding is really the wrong way to say it. Sure an unmeasured confounder will bias your result. But so will a confounder that is poorly measured (e.g., controlling for obesity when the confounder is really BMI) or poorly modeled (e.g., failing to include age-squared when it was necessary). What we're really worried about is uncontrolled confounding.

Resources