What is Validity Generalization? Believe it or not you do it every day.

Authors: Matthew O'Connell, Ph.D.

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Making Sense of the Research

Scientific research is wonderful because it helps us accumulate specific information about the relationship between a wide range of different variables. For instance, how well does aspirin reduce pain symptoms? Does caffeine help or hurt memory retention and recall? The problem with scientific research is that there is a lot of it. Some studies are very well thought out and rigorous ; however, unfortunately, some of studies aren't so good. It's hard to get an idea of what the "true" relationship is when you are faced with dozens, hundreds, and in some cases thousands of different studies with differing results. How do you make sense of them all?

Fortunately, scientists came up with a way to combine and summarize multiple research studies, effectively getting rid of a lot of the "noise" that accounts for different results and provides a good estimate of the "true" relationship between variables of interest. They refer to this as "meta-analysis," or a study of studies. In other words, it helps us answer the question, "When all is said and done, what's the best estimate of the relationship between these variables?" Another nice feature of meta-analysis is that it's dynamic. So, if you have the results of a meta-analysis of studies that date through 2012, you can update that meta-analysis with newer studies since that date. It allows you to refine your results without throwing out the older data.

We typically refer to the correlation (i.e., relationship) between a test and some performance variable as a "validity coefficient." It's an estimate of how accurately the test predicts something, like job performance. If you have used a test a number of times and have multiple studies looking at its relationship to performance in a variety of settings, then you can conduct a meta-analysis of those studies.

What if you want to use that test in a different setting where you haven't conducted a study? For instance, you want to use a call center test but you don't have the time, resources, etc. to run a specific study in "your" specific call center to see how it works. If you have results from a meta-analysis of that call center test then you can "generalize" to your environment. Actually, you do this same thing every day and don't even think about it. When you take aspirin (or any other pain reliever) to get rid of your headache, you are generalizing the findings about aspirin's effect on headaches – not necessarily on how it affects your headache right now, but how it has performed in the past.

That's exactly what you do when you use a process called "validity generalization" or VG. You are generalizing the results from a larger set of studies (i.e., a meta-analysis) to your specific situation. If this test has worked well in 20 other call centers and the results seem acceptable to you, then it is likely to perform equally as well in your environment. There are always differences, but you can feel confident that it will perform about as well as it has in the past.

That's the essence of VG. The goal is to use data accumulated over multiple studies to generalize to another specific situation. The more similar the specific situation is to those used in the original studies, the more likely that the results will generalize very accurately.

So the next time you reach for an aspirin or ibuprofen or whatever you use to get rid of your headaches, you are really doing a mini-validity generalization study. And you didn't even know it.

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