

## EDITORIAL

My reflections last issue on experimental replicability prompted some further thoughts on the subject. In particular, I wondered to what extent we should consider scientific expertise to be an art, or something more like a gift than a skill. In that previous Editorial I criticized a familiar view expressed as follows by Karl Popper: “Any empirical scientific statement can be presented (by describing experimental arrangement, etc.) in such a way that *anyone who has learned the relevant techniques* can test it” (Popper 1959:99, emphasis added). I noted that given the inevitable differences between original experiments and replication attempts—magnified in the behavioral sciences by many additional kinds of potentially relevant variables (such as well-documented experimenter effects), it may be unreasonable to expect success when replication attempts are conducted by someone other than the original experimenter. What I want to consider more closely now are the related questions: What are the relevant techniques? Can they be captured and conveyed by a mere list of procedures, like a recipe for baking bread? To what extent can these techniques even be learned?

When we consider what makes a good physician, psychiatrist, or clinical psychologist, we recognize that a key requirement is something that no mere recipe can capture adequately and that can’t easily be taught (if it can be taught at all)—namely, having a “nose” so to speak for what matters—e.g., diagnostically relevant clues. Granted, education can help point one in the right direction, but it can’t turn just anyone into a great diagnostician, or a great detective, any more than it can turn just anyone into a great human being. Indeed, one would think that another key requirement of these professions is the ability to relate successfully to others—that is, to have the kind and degree of sensitivity, empathy, or whatever exactly is needed, to understand what others are saying (e.g., to know what’s *behind* their words), to know when they’re dissembling or withholding information, to make them feel comfortable, supported, etc. And that, too, is something that’s very difficult to teach (if it can be taught at all). Very likely, it requires native aptitudes that people simply either have or lack—the qualities in virtue of which some are especially good in relating to other people. To think that these qualities can be acquired merely through education is as foolish as thinking that through formal education alone one can learn to be compassionate, courageous, or witty—or more generally, that one can change deep features of one’s character. Similarly, it would be astonishing (if not miraculous) if scientific expertise generally

and experimental expertise specifically (perhaps especially in the biological and behavioral sciences) didn't likewise require certain aptitudes or native capacities with which only some are fortunately endowed. And that may also include having a nose for what matters.

Although this bit of commonsense wisdom may frequently be overlooked, it's hardly a new observation. Perhaps the origins trace back as far as Plato's *Republic*. Plato was concerned with (among other things) what human excellence amounted to, and he noted that this must be answered relative to the different roles that a person can fulfill—for example, that of a teacher, parent, musician, military commander, boxer. A person isn't simply excellent *simpliciter*. That's why we can say that someone (for example) is a good teacher but a lousy parent. Plato also noted that we can evaluate someone qua (i.e. in the capacity of a) person—along some kind of moral dimension. Indeed, we can say that someone is a good person but a terrible teacher (an all too common phenomenon, in fact), or a good military commander but a lousy human being.

Now Plato had his own philosophical and political agenda in writing *The Republic* and so he didn't extend his observations in the direction that concern me here. But we can note that excellence in a person's various capacities might be related in intimate (perhaps even lawlike) ways to excellence in some other capacities. For example, it's likely that a scientist's personal qualities (e.g., character traits) could be a deciding factor in determining whether experiments succeed or fail, or whether theory-building and data-gathering are productive. And I don't have in mind only such relatively coarse measures as (say) whether a parapsychologist is a sheep (believer) or goat (non-believer or skeptic) (see, e.g., Wiseman & Schlitz 1997). Some examples will illustrate what I have in mind. (I'll confine my comments to work in parapsychology, but I encourage readers to find analogues in other areas of science.)

When I began my serious study of parapsychological research back in the 1970s, I was struck by the following episode at a conference of the Parapsychological Association. One of the presenters was Helmut Schmidt, an exceptionally creative and successful theoretician and experimenter. Helmut gave a talk in which he described his latest success in testing subjects' ability to influence the output of random number generators. Helmut's talk was given with his usual (and considerable) energy and enthusiasm. For example, he described in a very animated way how he encouraged his subjects to imagine themselves psychically *pushing* the RNG. And the word "pushing" he expressed with great emphasis and dramatic gestures. Following this presentation was a talk given by a young woman who had tried unsuccessfully to replicate one of Schmidt's earlier

experiments. I know from having talked to her that she was a very nice person. But her personality was so different from that of Schmidt, one could be forgiven for thinking that the two experimenters were members of different species. Helmut was charismatic, extroverted, enthusiastic, and dynamic. It was easy to see how he could have effectively encouraged his subjects to succeed. By contrast, this young woman was relatively lifeless, monotonous, and insipid. Her talk was given with an almost total lack of affect, and that wasn't just a matter of stage-fright; that was her manner of talking. So it was equally easy to see how she might have failed to inspire or excite her subjects. Similarly, perhaps the late John Beloff's notoriously poor track record in conducting or supervising successful psi experiments connects with his mild and quite understated personality, despite the fact that he clearly qualified as a sheep—that is, despite his demonstrated sympathy for psi research and his obvious conviction about the positive merits of the best cases.

Along the same lines, in both psi research and the behavioral sciences generally, experimental success might require, in addition to (or instead of) charisma, a supportive experimental personality that can make subjects feel safe or comfortable about participating in the experiment, and which can help them trust the experimenter. Many believe (as I do) that this is why Russell Targ (another low-key personality) has been so consistently successful in conducting remote viewing experiments. And clearly, only some people have that kind of character trait. Moreover, it may also be a matter of the way personality styles *fit* with one another. Even a generally supportive or encouraging person may rub some people the wrong way, if their personalities are broadly incompatible. That's one reason we can feel comfortable in life with certain people but not others.

Now you might think that psychologists especially should be keenly aware of these sorts of interactions and potential personality conflicts. I used to think so—at least I did early in my academic career, before I began to meet more and more psychologists and started attending their parties. At that point, however, I realized that my hosts often had almost no idea which people should be invited together to the same affair, and which people would almost certainly create friction when placed in a common environment. I could only wonder, then, how that ironic blindness might also affect their professional work—for example, their ability to relate to their subjects, or to select appropriate graduate assistants to interact with their subjects.

Not surprisingly, there has been some mainstream research on the personality correlates to successful experimentation in psychology. But those I've seen have been rather superficial, focused on such relatively rudimentary measures as, for example, experimenter need for social

influence, experimenter desire for control, subject need for social approval (see, e.g., Hazelrigg, Cooper, & Strathman 1991), and seldom rising above commonsense, very general conjectures and observations that probably never needed to be confirmed with the aid of precious research funds. Moreover, as far as the study cited above is concerned, given the authors' own experimental procedures, one can only wonder how they evaluated the relevance of their own personality traits in leading to their results. That is, one can only wonder about the wisdom of experimentally investigating experimental biasing—at least, in the absence of detailed and reliable information about the experimenters' own personalities. Personally, I suspect that experimentation is simply not the way to proceed here. Probably, there's much more to learn from keen and sensitive observers' careful and penetrating examination of both successful experimenters and also subjects who do well under a wide range of experimental conditions.

I mentioned earlier that scientists might need a “nose” (or perhaps “eye”) for relevant data, and that in the absence of this ability their work might exhibit systematic deficiencies. This is a criticism I've lodged many times against the postmortem survival research of Ian Stevenson. Don't get me wrong; I believe Stevenson's work is monumentally important and valuable. However, as I've argued in detail (see, e.g., Braude 2003), Stevenson repeatedly treated the subjects of his case investigations as if they were psychological stick figures, with no depth or breadth of personality, and with no deep issues guiding their lives in the subtle ways most of us know from our usual life blunders and successes—for example, the cunning and often indirect or elusive ways we might repeatedly entangle ourselves in lethal relationships, or undermine our attempts to succeed professionally (for an exemplar of a more penetrating way to consider the behavior of both experimenters and subjects, see Eisenbud 1992). Consider, for example, the blatant clues about motivations and subject psychopathology Stevenson missed in the well-known case of Sharada (Braude 2003, Chapter 4). For all his many virtues, I'd say Ian was blind to much of what really deserved his attention. And as a result, he repeatedly underestimated the power of sophisticated and reasonable alternatives to the hypotheses of reincarnation specifically and survival generally.

Now if it's true that scientific success or failure sometimes hinges on the presence or absence of certain personality traits of the scientist and (in the case of experiments) is not simply a matter of following a recipe of procedures, what can be done about this? It seems unlikely that graduate programs in the sciences will suddenly—or ever—award advanced degrees only to students passing a battery of relevant psychological tests. And it seems equally unlikely that scientists will volunteer themselves for

psychological profiling, the results of which can be published alongside their research (for example, there's been very little enthusiasm for such a proposal offered in a parapsychological insiders' listserve to which I subscribe). In fact, I suspect that many (most?) scientists like to perpetuate the myth that they're especially objective observers and agents, and not the steaming, stinky cauldrons of fears, insecurities, flaws, and issues that afflict everyone else. Perhaps the most we can hope for is a rejection of Popper's simplistic statement about scientific expertise, a correspondingly more sophisticated assessment of experimental results, and a willingness to consider seriously the full range of variables (including character traits) that can affect experimental outcome. And more generally, we can perhaps hope for a greater appreciation of the fact that scientists, like other human beings, have both personalities and feelings, and that they're subject to the same grubby concerns and life issues that influence even the most mundane actions. Perhaps then we'll see a wider acknowledgment that scientific success and character traits are not neatly separable. And who knows, perhaps then we'll see a more sensible appraisal of replication attempts in areas of frontier science.

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### References

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