

## Introducing “Opening Up”

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Hi there! Chris Castille here. I’m an I-O psychologist from Nicholls State University, working in the College of Business Administration. I’ve been asked to serve as the editor of *TIP*’s newly created “Opening Up” column. This column was created in coordination with SIOP’s Open Science and Practice (OSP) Committee to foster a meaningful and constructive dialogue regarding open science in I-O psychology as it is applied in I-O research and practice.

So, how did I get here and why am I doing this? Although there are many historical facts that brought me to open science, I’d like to share two with you. The first occurred during my doctoral studies at Louisiana Tech. My cohort was tasked with reading what I would argue is the most controversial high-profile psychology study that has been published in the past 20 years: Daryl Bem’s study, published in the *Journal of Personality and Social Psychology*, which claimed to provide experimental evidence of psychic abilities like ESP, telepathy, and clairvoyance (hence the controversy). Though my cohort generally dismissed the findings as both theoretical and statistical nonsense, our professor (Jerome Tobacyk) pushed us to consider how Bem’s methods (e.g., power analysis, experimental design, statistical approach) compared to others we commonly trusted from our own experience and literature. At the time (and at first blush), his methods appeared simpler (e.g., only *t*-tests were used) and more straightforward than similar designs from studies we respected and trusted. This dialogue planted a seed of doubt: If we were so willing to dismiss Bem’s case for ESP in spite of the apparent rigor and simplicity of his methods, what other hypotheses should we be willing to jettison from our own evidence base?

The second event occurred years later, when that first seed of doubt received sunlight in the form of a catalog of damning facts gathered by cognitive neuroscientist Chris Chambers. In his book *The 7 Deadly Sins of Psychology: A Manifesto for Reforming the Culture of Scientific Practice* (2017), Chris examines the state of scientific psychology and provides a wealth of evidence that calls the validity of many claims in psychology into question. His alternative explanations: a set of sins that include bias (e.g., negative results are often excluded from the literature), degrees of freedom in analyzing one’s data (e.g., interrogating the data until a statistically significant and thus publishable probability value is found), use of unreliable methods (e.g., preference for conceptual rather than direct replication), and not making one’s work reproducible in some form.

Although his sins could read as an indictment of many researchers, Chambers pointed to the system within which research takes place as being at fault (e.g., a culture of “publish or perish”). Within this system, top-tier publications can be valued more in practice than the mission that motivates these publications in the first place: furthering science and evidence-based practice. To the extent that this is true, the system can distort the scientific record, which in turn can threaten the improvement and integrity of future research and practice.

Interestingly, although Chambers provides little detail on the scope of the problem for our specific area of I-O psychology, others have moved to assess our literature to see what, if any, foundations are weaker than we’d like them to be.

I share these two facts because they offer a glimpse into my motivation for taking on the task as editor of “Opening Up” as well as what I hope to do with this column. I took up this role because I believe I could help foster a productive dialogue regarding open science and practice in I-O psychology. To this end, the column will aim to do the following: