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Two highly distinguished academics, John Wixted from the University of California, San Diego, and Gary Wells from Iowa State University, have come together to present a new synthesis of the literature on the relationship between the confidence of an eyewitness and the accuracy of that witness. The joining of these two forces will come as a surprise to many of us in the field who have seen them duke it out at professional meetings, and even more so to those who know that it even got personal in a widely circulated manuscript. It is a testament to the leadership at *Psychological Science in the Public Interest* that these two former adversaries could come together to produce a common product.

Seeing the manuscript brought back some old memories for one of us (Elizabeth Loftus). Back in the early 1990s, at the height of the "memory wars," Loftus locked horns with one of the country's leading experts in child abuse, Lucy Berliner, who routinely dealt with people in pain from being sexually victimized. Loftus, on the other hand, routinely talked with people who claimed to have been falsely accused of sexual abuse, and saw their desperation and pain. Loftus and Berliner debated the issue in numerous venues—forums that often encouraged disagreement. Then, one day, they decided to talk privately (over burgers, fries, and chardonnay) and found there was much to agree about in that sea of disagreement (Berliner & Loftus, 1992).

It is not known whether burgers, fries, or chardonnay helped Wixted and Wells come together to write this major synthesis on eyewitness confidence and accuracy, but whatever facilitated their collaboration, it has been enormously fruitful. In an earlier era, many scholars opined that the relationship between confidence and accuracy was pretty weak. In fact, nearly four decades ago, one of us summarized the relationship this way:

Although there are many studies showing that the more confident a person is in a response, the greater the likelihood that the response is accurate, some studies have shown no relationship at all between confidence and accuracy. In fact, there are

even conditions under which the opposite relation exists . . . namely, people can be more confident about their wrong answers than their right ones. To be cautious, one should not take high confidence as any absolute guarantee of anything. (Loftus, 1979, p. 101)

Now come Wixted and Wells to argue a major point of agreement—namely, that when conditions are pristine, there is a strong relationship between confidence and accuracy. But when conditions are not pristine, the accuracy of even high-confidence witnesses is, in their words, "seriously compromised." Of course, their long manuscript makes a number of other points, which they back up with thoughtful marshalling of data contributed by hundreds of scholars over the past 40 years.

Readers may rightfully wonder, what do Wixted and Wells mean by "pristine" conditions? Their article has a whole section on this issue. One example is whether the procedure used to elicit an eyewitness identification is conducted in a double-blind fashion. This means that the investigator conducting the test of witness memory does not know who the police suspect is (and neither does the witness). This is important, of course, because it means the investigator cannot inadvertently (or even deliberately) cue the witness as to the "desired" choice. Moreover, the blind investigator cannot give the witness feedback on the choice, which could artificially inflate the witness's confidence and have other negative effects on memory.

Other examples of pristine conditions include choosing innocent fillers so that the suspect does not stand out in the lineup, providing a warning to the witness that the offender might not be in the lineup, and obtaining a confidence statement from the witness at the very time that the initial identification is made. When these conditions

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are not met, Wixted and Wells would argue that the procedure is not pristine, and confidence may not be a good indicator of accuracy.

The astute reader of their article would rightly wonder just how often conditions are actually pristine out there in the real world of crime and investigation. It just so happens that one of us (Rachel L. Greenspan) has been investigating this issue over the past year. In late 2011, the Police Executive Research Forum (2013) conducted a survey of eyewitness-identification procedures used by law enforcement agencies. Their large sample of agencies (N = 619), created to be a nationally representative sample of all U.S. law enforcement agencies, provided relatively recent data on what procedures are currently being used in the field. We have used these data to give a brief picture of how often pristine lineups actually occur.

Our analyses indicate that at least some of the criteria outlined by Wixted and Wells are frequently met in the real world. A great majority of agencies (83.9%) reported that witnesses identifying a suspect from a photo lineup do receive an instruction that the perpetrator may or may not be present in the lineup. Moreover, officers often give other pressure-reducing instructions, such as informing the witness that he or she does not need to make an identification (56.3%) or that the investigation will continue even without an identification (59.8%).

Most agencies (69.1%) also reported that only one suspect is allowed per lineup; however, almost 16.4% of agencies reported that more than one suspect is allowed in each photo lineup. A further 14.4% of agencies reported having no clear practice or policy on this issue. Despite a large number of agencies reporting that they allow more than one suspect per lineup, it is unknown how lineups are conducted with more than one suspect.

The Duke lacrosse case represents one well-known example of a multi-suspect lineup (Wells, Cutler, & Hasel, 2009). During the course of the investigation, the witness in this case viewed several lineups, all of which contained only members of the lacrosse team. One of the later lineups contained every member of the lacrosse team with no known-innocent fillers, essentially creating "a multiple-choice question which had no wrong answer" (Wells et al., 2009, p. 318). The innocent fillers in a lineup are an important feature for controlling for guessing on the part of the witness and thus an essential criterion in the creation of a pristine lineup. Our data show that this criterion may not be met in all lineups. Other criteria are also met less frequently. For instance, the administration of photo lineups is double-blind only about 31% of the time.

Arguably, one of the most important criteria for a pristine lineup is the documentation of the confidence statement at the time of the identification. If a highly confident witness has made a positive identification from a pristine lineup, the identification cannot be considered strong evidence in the legal system unless the confidence statement was documented. Roughly 15% of agencies do not explicitly ask

witnesses for their level of confidence after they make an identification. Witness confidence is documented only 76.2% of the time for identifications and 43.9% of the time for non-identifications.

Overall, these data indicate that although some criteria for pristine identifications are commonly met in the field, there are many situations in which all the aforementioned criteria for a pristine lineup are not met. Fortunately, as Wixted and Wells state, many districts and states are moving to adopt reforms to improve eyewitness-identification procedures. This trend may be strengthened by the recent publication of the National Research Council's (2014) report reviewing eyewitness evidence. Many of the recommendations the National Research Council proposed for law enforcement (e.g., providing witness instructions, documenting confidence, implementing double-blind lineups) mirror Wixted and Wells's criteria for pristine lineups.

At least one interesting question remains. Out in the messy real world, we will not be able to classify particular sets of case facts as pristine or not pristine. There will be all sorts of shades of gray. What is the classification when only two or three of the criteria are met? What happens when new criteria are discovered to be critical for good practices? How do we ensure that investigators will not exaggerate the pristine-ness of the procedures, even unwittingly? Despite these concerns, it is important to emphasize that Wixted and Wells have called to our attention important new findings and significant reanalyses of earlier findings and have provoked a hugely important societal conversation.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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References

Berliner, L., & Loftus, E. F. (1992). Sexual abuse accusations: Desperately seeking reconciliation. *Journal of Interpersonal Violence*, 7, 570–578.

Loftus, E. F. (1979). *Eyewitness testimony*. Cambridge, MA: Harvard University Press.

National Research Council. (2014). *Identifying the culprit: Assessing eyewitness identification*. Washington, DC: The National Academies Press.

Police Executive Research Forum. (2013). *A national survey of eyewitness identification procedures in law enforcement agencies*. Retrieved from https://www.ncjrs.gov/pdffiles1/nij/grants/242617.pdf

Wells, G. L., Cutler, B., & Hasel, L. E. (2009). The Duke lacrosse rape investigation: How not to do eyewitness identification procedures. In M. L. Seigel (Ed.), *Race to injustice: Lessons learned from the Duke lacrosse rape case* (pp. 307–321). Durham, NC: Carolina Academic Press.