

THE
JURY **EXPERT**

from Winter 2016
Volume 28, Issue 2

THE ART AND SCIENCE OF LITIGATION ADVOCACY
A PUBLICATION OF THE AMERICAN SOCIETY OF TRIAL CONSULTANTS



**Juries, Witnesses, and Persuasion: A Brief
Overview of the Science of Persuasion and Its
Applications for Expert Witness Testimony**

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Don't miss the responses at the end of the article:

- [Jennifer Cox and Stanley L. Brodsky](#)
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EXPERT TESTIMONY IS IMPORTANT for helping jurors make legal decisions when information needed for making those decisions is not common knowledge. Expert witnesses are invited by the courts to testify and share with the jury their specialized knowledge and they may be permitted to offer an expert opinion. Through their testimony, expert witnesses communicate information to the jury with the potential to influence the jury's decision and persuade them one way or another. Thus, expert testimony often functions as a persuasive message from the expert (the source) to the jury (the audience). We begin this article with two major theories of persuasion that have emerged in the scientific literature. We then briefly discuss jury methodology to help the reader understand the science of jurors' evaluations of expert testimony. Finally, we

end with some practical applications that attorneys can utilize during witness selection and preparation.

History of the Science of Persuasion

The study of persuasion can be traced to the Periclean Age of ancient Athens in the fifth century B.C. (McGuire, 1985). By the late 1970s, a substantial number of different theories and studies on persuasion had emerged, including studies about how such factors as characteristics of the source of the message, the content of persuasive messages, intended audiences of the message, and how the message was delivered influenced the adoption of the position in the message. Although the amount of research was extensive, there was little to no consensus on how these variables influenced the effectiveness of a persuasive message (Petty & Cacioppo, 1986). The results were inconsistent – showing that the same variables could have a significant impact, no impact, or a negative impact on persuasion in various situations – which led to confusion in the field about how and when messages were persuasive. By the early 1980s, two models emerged from different teams of researchers that provided a similar framework for understanding the effective-

ness of persuasive arguments. These models accounted for the prior inconsistencies in the literature as well by showing how the situation was important for understanding when and how messages would be persuasive. Both models contend that there are two main paths for persuasion, although they use different terminology. The first path is known as “central” (Petty & Cacioppo, 1981, 1986) or “systematic” (Chaiken, 1980) processing, and the other is known as “peripheral” (Petty & Cacioppo, 1981, 1986) or “heuristic” (Chaiken, 1980) processing.

Central Route to Persuasion. Central processing involves being persuaded by the content of someone’s argument (Chaiken, 1980; Petty & Cacioppo, 1986). For persuasion to happen via central processing, the person evaluating the quality of the argument must both be able to comprehend the content of the argument and motivated to pay attention to the whole argument. However, jurors may be presented with evidence from experts that exceeds their ability to understand, thus failing to meet the necessary conditions for central processing.

Peripheral Route to Persuasion. Peripheral processing occurs when a person’s evaluation of a persuasive statement is based on superficial aspects of the argument rather than a careful consideration of the strength of the information itself. Thus, people are using peripheral processing when they take cues from characteristics of a message other than its quality. These cues may make certain heuristics—shortcuts in the decision-making process—accessible. There are many superficial factors that can cause these heuristic judgments, such as the length of a message, the number of arguments made during the message, and the reactions of other people (Chaiken, 1987). Superficial characteristics of the presenter can also function as a cue for persuasion. People are more likely to be persuaded by an attractive, likable, and powerful person than they are by a less attractive, likable, or powerful person despite the content of the argument or statement (see Chaiken, 1987; Neal, 2009).

How Scientists Study Jury Decision Making

Before describing the studies that have been conducted on expert witness’s persuasion and juror decision-making, a basic primer on jury research methods is useful. Researchers primarily use one of three types of studies to examine jury decision-making. The first is archival. These studies utilize public records of jury trials, such as appellate records, to look for relationships between features of the case and the outcome of the trial. Researchers conducting archival studies are unable to control the types of data in public records, so their research questions are limited by the content of the records. There have been archival studies that examine if case law developments have an impact on judicial decisions to admit expert testimony (Groscup, Penrod, Studebaker, Huss & O’Neil, 2002) and what case features can predict the use of expert evidence in child abuse cases (Connolly, Price, & Read 2006). However, we are not aware of any archival studies that have investigated the role of expert testimony in jury decision-making.

Archival studies would be difficult to use for studying expert testimony and jury decision making, as there is not any variability in jury verdicts in appellate cases (all defendants would have been “guilty”). It isn’t the best method to use in civil contexts either, because there could be a lot of covarying factors influencing the trial outcome. It would be difficult to determine if changes in the verdict occurred because of the expert evidence or due to other related variables.

Researchers can also study jury decision-making using jury interview studies. In this method, researchers interview jurors in real trials after the trial is concluded. Jurors answer questions about how they made their decisions and what factors influenced them. Berger (1997) reported that jurors in a medical malpractice case were influenced by the demeanor of the doctor on the stand, and not by the content of the expert testimony. However, asking jurors directly about factors that influenced their decisions is not necessarily the best way to find that answer. People are generally unaware of the factors that influence their choices (Nisbett & Wilson, 1977). Jury interview studies are able inform researchers of what jurors *think* influences their decision making, but not necessarily what *actually* influences their decisions.

Experimental studies are the third method of studying jury decision-making. Researchers use random assignment to assign jurors or juries into different trial conditions to investigate what causes jury verdicts to change. These types of studies can be done in the field, using actual trials assigned to different conditions, or in the laboratory using mock trials. An example of an experimental field study is the Arizona Jury Reform Study in which juries were randomly assigned to one of two conditions. In the first condition, juries were not permitted to discuss the case until they heard all of the trial evidence and received instructions by a judge. In the other condition, juries could discuss the case at any point during the trial so long as they were in the jury room and all jurors were present (Hanford, Hans, & Munsterman, 2000).

Experimental studies can also be conducted in a laboratory setting using trial simulation methodology. In simulation or laboratory studies, participants experience a trial stimulus that reflects the topic the research is interested in studying. Participants make decisions about the trial, such as rendering a mock verdict. Trial simulation studies can differ in many ways, including whether the sample uses college students or jury-eligible community members, the trial simulation is in the form of a written summary or a videotaped simulation, and juries reaching verdicts after deliberation or individual jurors making decisions without participating in deliberation (Penrod, Kovera, & Groscup, 2011).

There are two principal features of experimental studies that enable researchers to determine if the purposeful changes across conditions had a causal influence in the changes in verdict. The first is that researchers select specific variables to manipulate between different conditions and keep all other factors con-

stant. Second, the use of random assignment of participants to different conditions ensures that any individual differences among participants are distributed randomly across conditions. These two methodological features allow researchers to attribute differences in verdicts from the different conditions to their manipulated differences among conditions (Penrod et al., 2011). Jury researchers tend to prefer conducting their experiments in laboratory settings rather than in the field because there is more control in the laboratory setting and a greater chance of random assignment failing in the field, as was the case in the Arizona study. Laboratory simulation methods ensure that researchers have control of random assignment and manipulation of variables (Penrod et al., 2011).

Persuasion and Expert Witnesses: How Jurors Perceive Experts and their Messages

We have covered the two models of persuasion, explaining how jurors can be persuaded by both the substance of a message and by peripheral cues that are unrelated to the strength of the message. We have also considered the science of studying juror decision-making, describing how scientists use experimental methods to examine how specific messages and situations influence juror perceptions and decisions. We will now look at some specific studies that have examined how jurors are persuaded by expert testimony. We will begin with studies that examined peripheral cues before turning to studies that cover jury persuasion through central processing.

Peripheral Processing of Expert Testimony. Peripheral cues related to the expert witness – the source of the message – affect the extent to which jurors are persuaded to reach decisions consistent with the expert’s testimony. One example is witness credibility. The Witness Credibility Model is an empirically-developed model that examines witness credibility as a function of four factors: witness likability, knowledge, confidence, and trustworthiness (Brodsky, Griffin, Cramer, 2010; Brodsky, Neal, Cramer, & Ziemke, 2009; Cramer, Brodsky, & DeCoster, 2009; Neal, Guadagno, Eno, & Brodsky, 2012; Parrott, Neal, Wilson, & Brodsky, 2015). Jurors assess the content of expert testimony while also evaluating experts using these factors and others as peripheral cues. Prior studies have investigated the effects of each of the four factors independently to examine how jurors perceive expert witnesses, respond to testimony, and make trial decisions. One of the most critical aspects of this series of studies is that all of them used the same case materials, including the content of the expert witness testimony. The only difference between the studies was the factor that was manipulated. Because the persuasive message given by the expert was unchanged in each study, this group of studies gives valuable information about how these four peripheral cues affect the persuasiveness of expert witness testimony.

Two studies examined the likability of expert witnesses by using high and low expert likability conditions and keeping the content of the testimony the same in each condition. Jurors were more persuaded by likable experts than unlikable experts,

and particularly so if the expert witness was a woman (Brodsky et al., 2009; Neal et al., 2012). Other studies have investigated expert knowledge (e.g., displays of the expert’s competence, expertise, impressive educational credentials, relevant experience) and show that knowledge cues are a critical factor for witness credibility and persuasiveness (Neal et al., 2012; Parrot et al., 2015). Jurors find highly knowledgeable experts more credible and persuasive than less knowledgeable ones. However, cues to knowledge were less critical for male experts than female experts. Male experts that were perceived as less knowledgeable could still be persuasive to jurors, but for female experts, exhibiting knowledge was essential to be persuasive (Neal et al., 2012).^[1]

Another study manipulated the confidence displayed by the expert witness using three conditions: low, medium, and high confidence. The content of the testimony was the same in each condition. Jurors were the least persuaded by the unconfident expert (Cramer et al., 2009). Interestingly, jurors were more persuaded by the medium-confidence expert than they were by the high-confidence expert. The researchers surmised that the high-confidence expert may have appeared arrogant or overly assertive, whereas the medium-confidence expert had enough confidence to appear credible without being unlikable.

Jurors are more likely to be influenced by peripheral cues when other factors impede their motivation and/or ability to systematically process evidence. For example, one study manipulated the complexity of expert witness testimony to investigate if jurors would be more likely to rely on peripheral cues if they had difficulty understanding evidence. The expert’s pay was also manipulated as a peripheral cue. The expert was either paid an extremely high or low amount of pay. The researchers expected that jurors would only use the pay cue if they could not understand the evidence and needed to rely on other details to make their decisions. In this study, participants heard a civil case in which the matter to be decided was whether chemical polychlorinated biphenyls (PCBs) were the primary cause of the plaintiff’s cancer (Cooper & Neuhaus, 2000). When asked if research studies had investigated the effect of PCBs on animals, the low-complexity expert answered (p.164):

Definitely. In 1980, a scientist named McConnell, published a summary of the diseases that PCBs cause. He found that PCBs caused several different forms of liver disease in rats, mice, monkeys, and humans. In the rats and mice, PCBs caused not only liver disease, but also cancer of the liver. In addition to the liver damage, McConnell found diseases of the immune system as well.

In the high-complexity condition, the expert responded (p. 164):

Definitely. In 1980, McConnell, publishing in the Elsevier Biomedical Press, reported a summary of the patho-

logical findings due to the toxicity of PCBs. He reported tumor induction in rats and mice. He also reported that not only rats and mice, but in monkeys as well, there was hepatomegaly, hepatomegalocytosis, and lymphoid atrophy in both spleen and thymus.

As the researchers hypothesized, participants in the low-complexity language condition were not affected by expert pay. In the high-complexity language condition that was designed to impede understanding, participants instead relied on the expert's pay rate when making trial judgments. In the high-complexity condition, the low-paid expert was more persuasive than the high-paid expert.

Systematic Processing of Expert Testimony. Recall that for jurors to process expert witness testimony systematically, they must be both motivated and able to examine the quality of the arguments being presented. Researchers can infer if jurors are processing evidence through the central route because their decisions will be more consistent with the strength of the evidence that is presented. Experts may be able to increase jurors' ability to systematically process trial evidence by connecting relevant research to specific case facts in their testimony. These connections help jurors understand the link between scientific research and the specific case about which they are making decisions. In a study aimed at testing this hypothesis, jurors viewed a videotaped trial simulation of a child sexual abuse case. The child victim testified in a calm, composed, and confident manner, or in an emotional, confused, and uncertain manner (Kovera, Gresham, Borgida, Gray, & Regan, 1997). There were four different conditions for expert testimony. In the control condition, there was no expert testimony. In the second condition, standard expert testimony gave a summary of research findings about children's reactions to child sexual abuse (which are consistent with the emotional/uncertain demeanor of the victim). The third condition was similar to the second condition in that it provided a summary of the research, but it also repeated the summary so that jurors would hear it more than one time. In the last condition, the expert gave a research summary like in the second condition, and then linked the research to the specific facts of the case. In the standard and repetitive conditions, the decisions that jurors made about the child and the verdict were less consistent with the expert testimony compared to the control group. Jurors that saw the child testify in a composed manner thought that she was more credible and were more likely to reach a guilty verdict for the defendant, even though the expert testified that actual child victims tend to be emotional and uncertain. The fourth condition was the most effective in helping jurors process evidence systematically. Linking the research with specific case facts made this the only condition that equipped jurors to evaluate the victim's demeanor. Jurors in this condition saw the emotional and uncertain child as more credible and were more likely to find the defendant guilty when the child's demeanor was emotional and uncertain.

Researchers have also looked at how procedural safeguards can

aid jurors in processing evidence systematically and recognizing differences in the methodological quality of research presented in expert testimony. Jurors are influenced by expert testimony and also by peripheral cues, such as the general acceptance of the underlying method in the relevant scientific community (Kovera, McAuliff, & Hebert, 1999). But jurors are not very sensitive to methodological flaws in research presented by experts (Kovera et al., 1999; McAuliff, Kovera, & Nunez, 2009). And although cross-examination has been considered to be the "greatest legal engine invented for the discovery of truth" (Wigmore, 1974), research suggests that even strong cross-examinations are unlikely to help jurors systematically process evidence and recognize the scientific validity of information (e.g., Kovera et al., 1999). Recent studies have investigated this matter and suggest that scientifically-informed cross-examinations that are intended to educate jurors about flaws in an expert's research can help jurors process evidence and recognize flawed and valid evidence (Austin & Kovera, 2015).

Opposing expert witnesses theoretically serve as another safeguard to increase jurors' ability to process evidence systematically. Previous research in this area has suggested that opposing experts bring little help to jurors in systematic processing of evidence. Instead of comparing and contrasting content from each expert's testimony, jurors experiencing opposing experts use the disagreement between the experts as a peripheral cue that both experts were biased and were not persuaded by either one of them. This effect has been termed the "skepticism effect" (Levett & Kovera, 2009, p. 128). However, a recent study suggests that opposing experts can help jurors weigh evidence *if* the expert demonstrates to jurors how the other expert's arguments are flawed by using a visual aid to walk them through a methodological evaluation of the research used by that expert (Jones & Kovera, 2015). This approach can show jurors how to effectively evaluate the validity of evidence and has a "sensitizing effect" on jurors (Levett & Kovera, 2009, p. 128), enabling them to evaluate and compare evidence given by opposing experts, instead of relying on the peripheral "skepticism effect" cue.

Applications of the Science of Persuasion for Witness Selection and Preparation

The theory of persuasion, the science of juror decision-making, and specific findings from jury studies can be relied upon to generate practical strategies for preparing expert witnesses to be effective and persuasive communicators. However, using these techniques to prepare experts to deliver false or misleading testimony to increase persuasion is both unethical and illegal (American Bar Association, 2001, §1.2d & §3.4b). The objective is to deliver testimony in a responsible way that enables the trier to understand and use the content of the message in reaching their judgment.

The most ideal scenario is when jurors are able to process the expert testimony systematically (i.e. through central processing). Strategies that attorneys and judges can employ to help

ensure this are:

- Have the expert go beyond simply providing research information by linking it to the case facts. The attorney can ask the expert to find relevant research with specific links to the case facts, and help prepare the expert to present these links to jurors in a clear and concrete manner.
- Attorneys can develop an effective cross-examination of expert witnesses that not only exposes the flaws in experts' research, but also educates jurors about why those flaws matter. This scientifically informed cross-examination better enables jurors to process evidence systematically by teaching them to recognize valid versus flawed evidence.
- When there are opposing experts hired by each adversarial side, attorneys can equip jurors to evaluate the strength of the experts' testimony by educating them about valid versus flawed evidence. When opposing expert testimony on how to evaluate the other expert's research validity is paired with a visual aid representing the research evaluation process, jurors are better able to process expert evidence systematically.

Peripheral cues also function as an important part of the persuasive process. Attorneys and experts should prepare and practice strategies to manage these cues as well (see e.g., Brodsky, 1999, 2004, 2013). The expert witness should:

- Be likable. This includes being well-mannered, respectful, and pleasant. Using plain language is preferable to technical jargon. As stated previously, this cue appears to be more important for female experts.
- Be confident without being arrogant. Maintain good eye-contact with the attorneys, judge, and jury. Be poised and maintain a good posture and stable tone of voice with a

moderate pace of speech and a moderate degree of certainty.

- Try to appear competent and knowledgeable. Both men and women should demonstrate expertise (see e.g., Cialdini, 2001; Titcomb et al., 2015), but this demonstration may be particularly important for women. Attorneys should ask questions that allow the expert to provide details about strong educational credentials (e.g., specific areas of training, board certification), relevant professional experiences, history of academic publication in case-relevant areas, and other background information that may aid in establishing expertise.

In conclusion, attorneys who wish to use the science of persuasion should be aware of the two main processes by which persuasion takes place. They should ensure their expert is delivering testimony in a way that enables jurors to process the information systematically. And they should also be aware of how peripheral cues impact a juror's ability to process information systematically, taking steps to minimize their negative impact by teaching experts how to generate positive cues.

This article is a revision of a similar article that Neal & Kovera developed for an American Bar Association, Litigation Section Annual Conference presentation in 2015. The title of the session was "The Science of Persuasion: Insights from Expert Witness Effectiveness & Jury Decision Making Research," and the citation for the accompanying article that was posted online but never published is:

Neal, T.M.S. & Kovera, M.B. (2015). *Harnessing the science of persuasion for expert witness testimony.*

Available at: http://www.americanbar.org/content/dam/aba/administrative/litigation/materials/2015-sac/written_materials/32_1_harnessing_the_science_of_persuasion.authcheckdam.pdf ©

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[1] Neal (2014) published a comprehensive review of men and women's persuasiveness as expert witnesses in different court contexts.

Expert Witness Persuasion: What We Know and Where We Go

Jennifer Cox and Stanley L. Brodsky respond:

What We Know

In their 2016 essay, "Juries, witnesses, and persuasion: A brief overview of the science of persuasion and its applications for expert witness testimony" Valez, Neal, and Kovera describe the dual cognitive processing model as well as how this model has been examined within the context of juror decision making. Their essay concludes with some common sense suggestions for attorneys and expert witnesses to present their message to lay jurors. This review of the literature and the proffered suggestions are helpful in forensic practice, and may encourage jurists and experts alike to consider how juror cognitive processing may inform their own practice.

Valez, Neal, and Kovera highlight the importance of addressing factors central to juror cognitive processing such as the strength of the expert's argument as well as peripheral factors such as the expert's likability or perceived attractiveness. One cannot overstate the power of peripheral factors. In fact, during the first author's clinical internship training, an entire seminar was devoted to focusing on those secondary factors. As one supervisor pointed out, the expert does not want to focus on peripheral factors at the expense of the central factors (e.g., trying to come across as likable and sacrificing authenticity). At the same time, experts certainly do not want to allow peripheral factors to distract the juror from relying on reason and logic.

Although not always intuitive, linking research to the case at hand is part of effective testimony. However, in our experience scientifically oriented experts may feel overly inclined to insert caveats into their reports and testimony when the elements of the case stray from documented research. For example, we recently evaluated a defendant and included in the report an opinion of future violence risk. The demographics of this defendant (African American, female, emerging adult) were such that the usual actuarial foundations and structured measures lacked applicable standardized norms, requiring the evaluator to rely more heavily on clinical judgment. When explaining this to the retaining attorney, the attorney initially was left with the opinion that a violence risk opinion could not be supported by empirical evidence. After some conversation, the matter was clarified. However, we can be safe in assuming that, in the desire to present accurately, our message was muddled. If this

communication had transpired in the presence of a jury, the jurors may have been equally confused and the expert might have been less persuasive due to this confusing testimony.

The Valez et al. suggestion concerning communicating a message in plain language free of technical jargon is important. However, this begs the question – how do experts know when their message is too technical? Undoubtedly, to be expert one has to have knowledge of the area. As a consequence, there may be a lack of understanding about how laypersons may not grasp such knowledge. For this reason, expert witnesses, and the attorneys prepping them for testimony need to practice, and then practice more, communicating their messages to laypersons.

Where We Go

To this point we have discussed central and peripheral processing in the context of expert behaviors. The salient issue for trial consultants in jury selection is to attend to the interaction of the nature of the case with characteristics of potential jurors. When the evidence is strongly on the side opposing that of retaining counsel, the trial consultant may well seek to help select jurors who process information poorly and superficially. Is it right that attorneys and their teams should deselect jurors who will do an especially good job of understanding the evidence? Attorneys may answer affirmatively without reservation. When the weight of the evidence is against an attorney, they may actively seek jurors who are emotionally reactive and non-cerebral.

The first new direction, then, is to understand how different testimony styles fit with varying jurors' or judges' methods of processing knowledge. It is reasonable to hypothesize that testimony styles may correspond with processing – an expert who communicates in a strong manner or about weak evidence may be more effective with the "feelers", while an expert testifying to strong evidence in any manner might be more appealing to the "thinkers." However, future social science research should examine this hypothesis about the relationship between testimony styles and cognitive processing styles. It could be informative to the practice of trial consultation.

The subtext from the Valez et al. discussion is that experts are generally capable of communicating substantive content that lends itself to central processing. Yet, Ireland (2012) studied the reports and transcripts of 126 experts who testified in family

court in Great Britain. She concluded most of the experts were either unqualified, off-task, unscientific, or did not address the referral issue. Once the Ireland results came out, she was subjected to an unceasing barrage of attacks and efforts to stifle publication. However, when most experienced and knowledgeable mental health experts are asked, they will present a torrent of critiques of certain unprepared, biased, and naïve experts. This leads us to conclude that part of where we need to go from here is to clean our own houses. Experts who misrepresent the science, tout bad science, or in other ways misinform the jury should be called out during cross-examination or by an opposing expert. Not doing so allows the message of any expert witness to be called into question. The operational issue of how to clean our own houses goes well beyond the space and scope of the present commentary. But it should not be neglected.

Finally, we need more informative and effective communicators like Valez, Neal, and Kovera to talk to lawyers and teach in law schools. The research foundations of expert knowledge and communication need to be given away. But, even then, we are aware that the stammering, nervous, and socially awkward expert may have a tough time effectively testifying about good and scientifically sound opinions. Increasing the quality of research about how to improve effectiveness, given the variable cognitive processing styles of jurors, may result in better communication and understanding.

An Aside

We have joined the authors in using the term persuasion. We would like to think, in expert testimony, that *res ipsa loquitur* - the facts speak for themselves. Jurors and judges should not have to be persuaded. Persuasion belongs in domain of attorneys. Nevertheless, experts are called and examined by attorneys who are committed to persuasion, and it is the rare expert who does not think of court testimony as having an element of persuasion.

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Dr. John Gilleland responds:

Evidence of both central and peripheral processing is

alive and well in small group research done by jury consultants

This article not only provided a detailed overview of the classic science of persuasion, but it also worked to transport me back to graduate school when Petty & Cacioppo were first reporting studies in support of their Elaboration Likelihood Model (ELM). This seminal work in turn became the cornerstone of decades of research efforts that examined the impact of persuasion efforts on audiences in an attempt to lend understanding to how that process works within the field of social influence.

Applying these studied principles to the jury trial and/or how jurors may come to view expert witnesses testifying during the course of litigation are natural extensions of the ELM. As the field of jury consulting matured we have been regularly treated to articles – and creative mock jury research reports – that are replete with attempts to educate lawyers as to the factors that may make them and their expert witnesses more credible and therefore more persuasive.

In short, the notions of *central* versus *peripheral* processing have become mainstays when talking in general about jurors attending to and remembering evidence at trial, and when talking specifically about jurors' reactions to witnesses who may become very technical in their explanations. Applying these academic principles of persuasion to more applied mock jury research and witness preparation efforts are both major goals of almost all jury research professionals, as they try to take these tenets of persuasion into real world applications.

In my experience most consultants tend to use the central and peripheral distinction as an either/or method of processing information, since the ELM is based on a continuum that varies in the amount of elaboration that may take place for a receiver of the given persuasion attempt. That is, if elaboration is thought to be lower, peripheral processing occurs, or if higher, then central processing takes place. But of course there is also nothing that prevents *both* types of processing from occurring for an individual juror within a single lengthy opening presentation or within the full day of testimony from an expert witness. Specifically, they may be more motivated to put in the cognitive (elaborative) effort during one portion of the influence attempt, but less so during another portion of the presentation. In fact, we have seen instances where jurors appear to have centrally processed information early on in the expert's testimony, but then seem to "tune out" and process more peripherally as additional arguments are being made (evidenced by the fact they cannot really recall the arguments that occurred later on in the testimony). Perhaps once they are convinced the expert is correct, they are no longer as motivated to fully consider additional information that is presented on its own merits.

Methodology

The authors point out that *academic jury research* works best when studies are done experimentally, that is, 1) random assignment into different conditions, and 2) researchers manipu-

late specific variables between conditions (endeavoring to keep all other factors constant). And of course, the use of jury-eligible community members (versus college students) adds validity to the research design.

In *applied jury research*, there are almost always many more moving parts, and although experimental designs are occasionally implemented – two deliberation panels hear one specific additional fact or argument, two others do not – it is far more common to have all of the mock jurors react to the entirety of the presentations. Other differences between the two research approaches include:

- The use of jury-eligible respondents is the norm, not the exception
- “Quotas” are established to generate a respondent pool that is representative of the venue of interest (i.e., matching the ethnic breakdown, a set percentage of full time workers including both blue and white collar, a range of ages, etc.)
- Reactions to expert witnesses are gathered in a variety of ways
- The stimulus material is typically much more detailed.

These “mock jurors” then typically respond to the stimulus through periodic written feedback (after each presentation or after the testimony of a specific witness), the completion of verdict forms (individually and then later as a group), and through their eventual mock deliberations (which may be facilitated, unfacilitated, or both).

Thus, the presentations of the expert witnesses are not experimentally manipulated to weigh impact, but qualitative feedback is still obtained as to whom they would rate higher on key positive and negative descriptors (e.g., likable or arrogant). These witness ratings are coupled with the content analysis of open-ended comments that are collected (typically listing perceived strengths and weaknesses), and then researchers also review comments jurors make about the witnesses during their deliberations or when prompted about the witnesses during follow-on focused discussions with a facilitator.

Several observations as to how mock juror respondents exposed to this type of applied mock jury research seem relevant to The Witness Credibility Model discussed by the authors.

Witness Credibility – The Peripheral Factors Of: Likability, Knowledge, Confidence, and Trustworthiness

Jurors know that the expert witness has an agenda – they are called by one side, and therefore foster an expectation from jurors that their testimony will be supportive of that side in the litigation. However, our experience comports with the research cited by the authors, that is, those experts perceived as more likable/knowledgeable/confident/trustworthy will also be rated

as more credible. Generally, our experience for each of these characteristics dictates:

Likability can be generated in any number of ways, and for most experienced expert witnesses that translates into being more relaxed, smiling, professional, and conversational in tone (when appropriate) – more at ease in their own skin. More time on the stand helps to remove the jitters, and usually works to make the experienced expert witness more likable.

Knowledge is broken down further by the authors into the components of competence, expertise, credentials, and experience. Although being credentialed from a noted school is an instant peripheral cue, our mock jurors routinely tell us that experience is weighted more heavily than a long list of degrees – to jurors, if you’ve been in the field and actively doing the work, that is far more important than where you received your training.

Confidence eliminates most of the negative peripheral cues that jurors typically rely on for their perception of truthfulness – hesitancy, face touching, throat clearing, eye blinking, and a lack of eye contact – all of which have been shown to actually be poor indicators of lying, but that are routinely relied on by lay people anyway – are typically at a minimum in the confident witness. It is a fine line between presenting confidently and presenting arrogantly – although you may want your expert witness to be the smartest person in the room, you certainly don’t want them portraying themselves as such to the jury.

Trustworthiness is very difficult for most to characterize, but mock jurors typically say it includes an openness/honesty component as well as a tendency to be unbiased. This would seem to dictate that the best expert witnesses should be respectful of opposing opinions (even when tearing them down), and would also approach the cross-examination with the same openness and candor that they have exhibited on their direct-examination. Although most lawyers say they don’t want their expert *killing them with kindness* it appears that this approach makes them appear to be much more trustworthy to jurors.

Although some very competent expert witnesses fail in projecting one or more of the above characteristics, we have found that often just teaching them about jurors’ expectations in each of these areas can enhance their performance at trial.

Witness Credibility – The Central Factors of the expert’s testimony itself

As the authors detail, the gist of the central route to persuasion is the need to *connect* the expert opinion to the specific facts of the case, allowing jurors to “see” how the opinion mirrors the facts at issue. In addition, when attacking the opposing expert’s methodology, jurors need to see an effective cross-examination on the science in order to recognize flawed evidence.

From the applied side of things, the lawyers we work with seem to believe that if they can just get the jurors to attend to the

evidence they are presenting, jurors will rule in their favor, and the hope is the same with the testimony of expert witnesses – there is a decided expectation that jurors should be able to follow the central route to being persuaded.

Of course, when the jury comes back in favor of the opposition, the lament is often that “they just didn’t get it, they didn’t understand what the evidence showed!” Of course we find that we often have to offer an alternative explanation to the lawyer by pointing out that the failure may have been in the presentation of the evidence, that is, a failure to connect the dots for jurors.

Although the number one complaint we hear from actual jurors when conducting post-trial interviews is the amount of repetition that occurs during trial, we find time and again that it is exactly that repetition that is necessary in order for jurors to piece together the arguments you are making at trial – you not only have to lay out the expert’s analysis of the case facts, but then it is helpful to explain how that analysis maps one-for-one on the arguments that are being made and the themes that are being presented by trial counsel.

The burden here does not rest solely with the expert. We have found that lawyers can *simplify* the experts time on the stand by providing outlines, by directly asking for the nexus in the middle of the examination (“...now how does that relate to this case, to the facts this jury has heard...?”), and by summarizing the main takeaways from the experts’ testimony as it concludes.

We frequently counsel that the expert who can “make the light bulb go off” for the juror is the one who is going to have the most impact on the decisions they make. For complicated expert testimony such as in financial matters or patent matters, jurors need to be taught what is going on as much as they need to be persuaded as to who is in the right, and the expert who can provide the jury with a roadmap will be both appreciated and remembered.

As the authors point out, it is common for both mock and real jurors to say that opposing experts giving diametrically opposed opinions cancel each other out – leading them to have to make up their own mind (the skepticism effect). But when you dig a little deeper into which side the juror is backing and why, you still often hear portions of the expert’s testimony being cited in support of the juror’s position (e.g., “But we heard that in the past, the defendant had never negotiated or agreed to such a high royalty rate”). Saying they “threw out” the experts is one thing, but it is not unusual for people to fail to understand what impact the testimony may have had on them, and what is actually driving their decision-making processes.

Of course, the applied mock jury research format *still* does not come close to the full stimulus presentation that will be experienced by the actual jurors who sit through an entire trial. But to me, the research surrounding central and peripheral processing arguments appear to be validated by the applied field research that is conducted by the jury consulting industry.

Although the experimental rigor is not the same, the proof is there in the decisions jurors make about experts in mock jury situations, and in the reactions we hear about from actual jurors as they explain their opinions of the real experts they heard from at trial.

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Elaine Lewis responds:

Is This New? Or Is It Very, Very Old?

Through an investigation of various scientific studies of persuasion, the authors have identified a group of elements shown to influence jury decision making which they believe would be helpful to attorneys and others responsible for preparing expert witnesses to testify at trial.

Although well researched, well written and clearly organized, I believe the results of the research fail to offer something new. An analysis of persuasion that has stood the test of time has been available since about 300 BC when Aristotle, in his book on rhetoric, taught that the three paths through which an audience or jury could be persuaded to accept a speaker’s position were *ethos*, *logos*, and *pathos*. It is generally agreed that *ethos* means credibility. *Logos* is the presentation of a logical argument. *Pathos* is emotional impression.

The authors noted that while much of the persuasion research over the years has been inconsistent, they found two studies that were in agreement in their identification of two paths to persuasion. Those paths were identified as a Central Route, termed “systemic” by some researchers, and a Peripheral Route, called “heuristic” by some. Though the authors seem not to have realized it, the two path models were actually Aristotle’s ideas organized differently.

The Central Route, described as the “substance of a message,” is the same as *logos*. The Peripheral Route, explained as the “peripheral cues that are unrelated to the strength of the message,” combines *ethos* and *pathos*.

When Aristotle described three distinct paths to persuasion, he argued that *ethos*, *logos*, and *pathos* working together would be the far more powerful way of convincing an audience, than the use of any one of the paths without the others. The models relied on by the authors, tested the Central and Peripheral paths as separate routes to persuasion.

The research described in this paper was careful and thorough,

using many different variables to test the effects of the two paths on jury decision-making.

One model examined the Peripheral Route using the variables of *likability*, *knowledge*, *confidence* and *trustworthiness*. The results showed that all were important factors to a jury considering credibility (*ethos*). Another model examining *likability* and *expert knowledge* concluded that “Jurors were more persuaded by likable experts” (*pathos*), and that “Jurors find highly knowledgeable experts more persuasive and less knowledgeable” (*ethos*).

In the study using *confidence* as a variable, the finding was that “Jurors were least persuaded by the unconfident expert” (*ethos*). Medium confidence turned out to be best because high confidence came off as arrogance which is a characteristic off-putting to juries.

The studies of the Central Route (*logos*) found that structuring a clear and compelling message was at the core of successfully using this method of persuasion. Jurors were able to process an argument only if they understood it. If facts and opinions of an expert were difficult to comprehend, jurors found it easier to fall back on peripheral cues in decision-making.

The recommendations by the authors of ways to facilitate juror understanding are already known tools of good oral communication found in most books on public speaking and communication. Simplifying the argument, giving specific examples, using clear language, making use of repetition, and including visual aids in a presentation, are among the many recognized ways of helping an audience or jury better grasp the information being presented.

Based on the outcome of the Peripheral model testing, the insights offered by the authors, in my experience, are known instinctively by litigators. Litigators don't need to be told about the importance of likable, credible experts who appear confident and explain material clearly. When I get a call to help prepare a witness, it's often because the attorney is worried about an expert who is too arrogant, unlikable, not confident, acts like he or she is not telling the truth, doesn't appear knowledgeable, or is exhibiting one of the other behaviors considered negative in the Peripheral model results.

Even though it is likely many litigators are not aware of these studies, and possibly have little familiarity with Aristotle's theories, I believe most recognize the power of the peripheral cues and the need for their expert to be an effective teacher.

The two-path model research was accurate in identifying some of the elements of effective persuasion, but the results confirmed things that have long been recognized.

To me the most important revelation in this paper is something that appears not to have been the focus of the authors. While their emphasis was on identifying the elements of persuasion

that most appealed to juries, the results of the studies also demonstrated that it is nearly impossible to separate the peripheral cues from the basic central argument. Almost as an aside at the end of their paper, the authors comment that though the ideal would be for jurors to process expert testimony through central processing alone, peripheral cues are “an important part of the persuasive process”. They state that attorneys should be “aware of how peripheral cues impact a juror's ability to process information systemically”.

Until our juries are composed of artificial intelligence robots, the central and peripheral paths to persuasion are intertwined. Aristotle got it right.

Elaine Lewis is President of Courtroom Communications LLC and specializes in witness preparation. Prior to her work in the legal field, she taught Public Speaking skills to upper level business executives.

The authors reply:

We appreciate these three responses and the opportunity to reflect on their content. Drs. Cox and Brodsky's thoughtful response brings up issues of the quality of experts' work and the rightful role of persuasion by experts (should experts be thinking about persuasion at all? We targeted this write-up for attorneys and trial consultants, but it is a good question for us to wrestle with). Dr. Gilleland's detailed descriptions of how he uses these research findings in his trial consulting work is interesting and informative. His expansion about these issues in applied research echoes some of the substance of Ms. Lewis's response, particularly that trial consultants likely know the foundation of this research and build on it in their work.

Regarding Ms. Lewis's response, we feel it is important to clarify a couple of points. First, these ideas do indeed stem from Aristotle's ancient writings, but they are not entirely the same and they expand on Aristotle's ideas by specifying empirically the conditions under which people are likely to be persuaded by one route or the other. It wasn't until just a couple of decades ago that science really clarified how and when these routes to persuasion worked - there had been confusion for millennia prior to these empirical findings. It is incorrect to say that the two routes of persuasion are inextricably linked. We now know from the science that they are clearly separable: when there is no motivation and/or ability, persuasion via the central route will not occur. The purpose of science is to advance us beyond intuition - to test relations empirically rather than relying on common sense, as we know from several empirical studies that common sense is often wrong.