# Enhancing juror comprehension and memory retention

A juror must rely on memory to keep straight the facts of the case at hand. Jurors must transfer the evidence to long-term memory storage in order to be able to use that information during deliberations. The author suggests strategies to increase juror comprehension and retention.

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he extent to which jurors attend to and retain information presented to them in court is of the utmost importance to trial attorneys. Essentially, if a juror has not paid attention or has failed to transfer the information into long-term memory storage, no new learning has taken place. Subsequently, this information, possibly of critical importance to the case, will have no bearing on the jurors' final verdict. This article examines human cognition and memory functioning, as well as techniques for attorneys to enhance juror comprehension and retention.

## Three Phases of Memory

Memory research usually views memory in three phases: immediate, short term, and long term. A failure of jurors to retain information for use later during deliberation and decision making can occur during any of the three phases of memory.

#### **Immediate Memory**

This phase includes basic attention and concentration. Research indicates that humans are generally only capable of handling approximately seven

bits of information at one time. This is why telephone numbers consist of seven digits. If they were ten digits, for example, only a small percentage of the population could immediately repeat the exact sequence following its presentation.

The capacity for maintaining attention/concentration varies from person to person and is affected by such factors as fatigue, boredom, age, intellect and drug usage. It is apparent that jurors are not always attentive to attorneys' arguments. Post-trial interviews with jurors have indicated that an attorney's most important arguments often go right by jurors. Some do not recall even hearing the arguments. This may have been because the jurors were distracted or confused, or because evidence was contained in a deposition or some dull witness testimony, and the jurors were not paying attention.1

## Short-Term Memory

In general, short-term memory lasts longer that immediate recall (more than 10 seconds) and is responsible for converting immediate memories into long-term storage. It is difficult for attorneys to assess whether jurors, despite giving their attention, are consolidating this information into short-term storage. If you are asked, for example, to repeat the sentence prior to this one, you probably could. (This would be immediate recall.) But could you do it in five minutes? This may depend on how important it was for you to remember, in which case a complex system of encoding and retrieval cues would be activated. This process must take place for jurors if they are to move to the next step: consolidation of information into long-term memory.

## Long-Term Memory

For jurors to assess and utilize information presented over days, weeks,

and sometimes even months in longer trials, it must become a part of long-term memory. As stated earlier, much of what is presented to jurors is lost. The rate of

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forgetting is logarithmic, i.e., rapid at first and then slowing down. What is retained and what is forgotten depends on a multitude of factors, such as depth of processing, amount of mental rehearsal and retrieval cues. Theories of forgetting include passive decay (fading of memory) and two types of interference: proactive (what you learned before interferes with what you are trying to learn now) and retroactive (information you've recently learned interferes with your ability to remember previous information).

The neurobiological mechanisms involved in the critical transmission of memory from immediate to long term is complex and beyond the scope of this article. Obviously, a failure for this process to occur results in forgetting. Caregivers for victims of Alzheimer's disease, which primarily affects memory, often view this affliction as a fate worse than death. While individuals suffering from such serious neurological disorders would not likely serve as jurors, it should be noted that there is clear evidence that memory retention and intellectual ability decline to varying degrees, even in normal aging. All intellectual and memory tests are "age corrected," which basically means an older person can perform far worse that a younger person and "score" at the same level. Of what importance is this to attorneys? In many jurisdictions, jury panels are over-represented by the retired elderly, who most often have time to serve as jurors. The effects of "benign

senescent forgetfulness" will become even more dramatic in the following section, which examines comprehension and the capacity for memory retention in young adults.

# Communicating to Jurors:

# Comprehension and

### Retention

Research indicates that trial attorneys unknowingly present arguments and issues that exceed jurors' capacity to understand. It may be that attorneys, with years of education and expertise in the law and in the technicalities of the case at hand, fail to realize that the average juror has few of these advantages. In fact, many jurors may fail to understand basic words, concepts, and issues, much less legal jargon.

To exemplify this, the Wechsler Adult Intelligence Scale-Revised (WAIS-R)<sup>2</sup> (Wechsler, 1981), commonly used to obtain estimates of I.Q. for legal and educational purposes, reveals some interesting facts. Many of the subtests on the WAIS-R are arranged in ascending order of difficulty. Assuming that all prior questions were answered correctly, a 35-to 44-year-old adult of "average" intelligence (I.Q.=100, subscale score=10) may be unable to

- understand such words such as perimeter, generate, matchless and fortitude;
- conceptualize how yeast causes dough to rise;
- name three kinds of blood vessels in the human body;
- comprehend why land in rural areas costs less than in metropolitan areas;
   or

 explain what a poem and statue have in common.

What does this indicate for attorneys asking jurors to evaluate the complexities of antitrust litigation between rival computer technology firms? Keep in mind that being confused or feeling intellectually inferior is psychologically uncomfortable, and jurors may respond with resentment and antagonism toward the presenting attorney, perhaps viewing him or her as aloof or condescending.

Assuming that information is presented in a manner that is easily understood by jurors, how much will they retain? The Wechsler Memory Scale<sup>3</sup> is a standardized and often-used device for

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clinical memory testing. The Logical Memory Section, "intended to measure immediate recall of logical material," most clearly resembles what is expected of jurors.

Subjects are required to recite what they can remember from a passage containing 24 bits of information. Ironically, the short story involves a crime whereby a woman is held up and robbed. The average number of informational segments immediately recalled by "normals" is as follows:

Ages 20–29: Mean=9.80 Ages 40–49: Mean=8.65

In other words, as much as two-thirds of what is heard is *immediately* forgotten or cannot be recited. When subjects are again asked one hour later, the average number of memories drops

considerably more. Consequently, due to limitations in human memory, attorneys can expect that more that two-thirds of the information given in a single presentation will be forgotten.

According to Vinson, "In advertising research, it has been found that one exposure to a message induced content recall in only 14 percent of subjects. Similar studies have reported that up to even exposures may be required to activate accurate recall."

In sum, research on intelligence and memory would suggest that, unless steps are taken by trial attorneys,

- 1. much of what is presented will be misunderstood or not comprehended;
- 2. two-thirds or more of the message will be forgotten; and
- 3. what *is* remembered will be subjective and vary from juror to juror.

## Strategies for Enhancing

## Juror Recollection

Extensive research indicates that jurors make decisions using a very limited number of facts. Even in extremely complex cases where hundreds of facts are presented, jurors will selectively retain only three or four facts which they perceive to be most salient. Simply put, the average juror cannot sort and process large amounts of factual data, but will minimize the complexity of the case, choose a few issues he or she understands or perceives to be most pertinent, and fit all other data into this framework.

 Key #1: Simplify. If you present a myriad of issues and facts, the jurors will decide which are most important and to be remembered. Make this choice for them. Analyze your case carefully, and present only three or four key issues on facts, with everything else supporting these issues. Make these issues clear and explicit.

Repetition and mental rehearsal facilitates recall. This fact is well known: If we want to remember someone's name or a phone number, we repeat it and rehearse it in our minds. Unless you are unusually gifted when it comes to memory, you probably spent much time utilizing repetition and rehearsal while in law school studying for exams.

Key #2: Be repetitious to the point of redundancy. By the end of the trial, every juror should be able to recite your three or four key issues verbatim. This will give jurors a comfortable feeling that they fully understand the case and are making an intelligent decision.

Visual learning is superior to verbal. If someone described child-birth to you as opposed to having you actually witness the event, which would leave the most enduring memory? Clinical studies in memory consistently bear out the superiority in retention using visual rather than verbal channels. As indicated earlier, only 14 to 33 percent of information presented through audio means is retained. Contrast this with the fact that we retain approximately 85 percent of what we learn visually.

Key #3: Present as much of your case as possible using visual aids (e.g., videotapes, slides, graphs and pictures). Augment verbal points with visual cues. At the very least, use "visual language" aimed at having jurors "picture" events in their minds.

Emotional experience enhances retention. Market and consumer behavior researchers rely on this fact to influence buyer behavior. Obviously, for advertising to be effective, it has to be remembered at some level. Baby product manufacturers try to produce a feeling of "security" with their products, soft drinks pledge "cool refreshment," and you are asked to "celebrate the moments of your life" with a particular coffee. Ads for seat-belts or against drunk driving typically utilize a fear approach. It is a fact that the most effective and best remembered persuasive messages invoke strong emotions.

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- Key #4: Induce emotions. If you present a key fact, issue, or witness that elicits fear, sorrow, rage, or disgust, most likely a relatively enduring memory has been created. However, be careful that the emotional experience produces the intended effect. Arguments designed to elicit fear must be conducted cautiously, as research indicates that too much invoked fear can produce results other than those intended. For example, when an attorney tries to induce sorrow or pity for a victim, it has been found that jurors confronted with the horror of "this could happen to me" may psychologically insulate themselves by blaming the victim—"He/she must have done something to deserve this; it could never happen to me,"—and may fail to award damages.
- Key #5: Build associations to simplify memory retrieval. A basic mnemonic aid often suggested to enhance remembrance of a person's name is to associate it with something novel or amusing. For example, to remember the name John Stonewall, picture Lyndon Johnson sitting on a stone wall.

Advertisers know that achieving associations (for example, Golden Arches=McDonald's, "Where's the Beef?"=Wendy's) results in retention of other aspects of the product.

Build positive associations for your arguments and negative ones for those of your opposition. In a product liability suit, for example, repeatedly referring to the defendant, "XYZ Corp.," and "corporate greed" builds negative associations. Conversely, the defendant might continually refer to the "careless plaintiff's" lack of adherence to safety in using the product in question.

Key #6: What is presented first and last will be remembered most. These are referred to as the principles of primacy and recency. Clinical memory testing consistently reveals that individuals, when repeating the Wechsler Memory Scale story of the woman who was robbed, for example, will retain details from the first and last parts of the story. Other memory tests utilizing word lists, digits, and so forth reveal that for most people, items from the beginning and end of the list are most often recalled. So, your most critical issues and witnesses should be presented first and last. That which is presented in the middle is more likely to be forgotten.

#### Conclusion

The limitations of human intellect and memory prohibit even the most gifted individuals from retaining all that is presented during the course of a trial. To be successful, litigators must constantly strive to enhance comprehension and retention, using techniques to organize and simplify arguments, maintain juror attention, and facilitate consolidation of memories into long-term storage.

Overestimating jurors' ability to comprehend and remember may lead to negative results and a lost case.

## **Endnotes**

- VINSON, JURY TRIALS, THE PSYCHOLOGY OF WIN-NING STRATEGY 38 (1986).
- 2. WECHSLER, MANUAL FOR THE WECHSLER ADULT INTELLIGENCE SCALE-REVISED (1981).
- 3. Wechsler & Stone, Wechsler Memory Scale Manual (1957).
- 4. VINSON, supra note 1, at 192.