

# Thanks for the Memories

## Scientists evaluate interviewing tactics for boosting eyewitness recall

By BRUCE BOWER

**S**ix years ago, a Miami woman walking through the lobby of an office building casually noticed two men standing together. Several minutes after her departure, the men murdered a person working in the building.

Police investigators determined that the woman was the only person who had observed the two suspects and could possibly describe them. In an initial interview with police, her memory of the men proved disappointingly sketchy.

Several days later, psychologist Ronald P. Fisher of Florida International University in Miami was brought in to obtain a more complete account from the witness. Fisher's interview consisted of a series of rapport-building and memory-enhancing strategies that produced a breakthrough—the woman reported a clear image of one of the suspects as he brushed the hair from in front of his eyes. She then recalled several details about his profile, including his having worn a silver earring.

This information gave police critical leads that enabled them to identify the suspect and close the case.

Police investigators summoned Fisher because of his expertise in conducting the so-called cognitive interview, a kind of interactive, memory-reconnaissance mission that he and a colleague, psychologist R. Edward Geiselman of the University of California, Los Angeles, devised nearly 15 years ago. Since then, Fisher and Geiselman have conducted cognitive interview workshops throughout the world and have witnessed the establishment of in-house training programs in the technique for many local and federal law enforcement agencies, including the Federal Bureau of Investigation.

The standard training manual on witness interviewing distributed to all police officers in England and Wales also includes a section on how to conduct a cognitive interview.

Despite the method's widespread use, however, a vigorous scientific debate regarding its merits has emerged in the past year. Some researchers argue that Fisher and Geiselman's memory-retrieval strategies achieve no more than any other procedures that establish rapport

with a person and create a comfortable atmosphere for communication—no mean feat under the best of circumstances, much less at a crime scene or during a police investigation.

Some critics fear that the cognitive interview may inspire an unacceptable number of memory errors, especially if used awkwardly, by inadequately trained interviewers.

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of the cognitive interview in more real-world contexts rather than in artificial laboratory situations," says psychologist Amina Memon, currently at the University of Texas at Dallas. "This technique is very good at producing detailed reports from memory, but it's not known what percentage of that information we can expect to corroborate in an actual investigation."

Fisher disagrees. "Simply stated, in comparison to other conventional interviewing methods, whether in the laboratory or in the field, the cognitive interview elicits more information at the same or slightly higher accuracy rates."

**I**n its original form, the cognitive interview focuses on guiding witnesses through four general memory-jogging techniques: thinking about physical surroundings and personal emotional reactions that existed at the time of critical past events; reporting everything that comes to mind about those events, no matter how fragmentary or seemingly inconsequential; recounting events in a variety of chronological sequences (beginning to end, reverse order, forward or backward from highly memorable points); and adopting different perspectives while recalling events, such as having a crime victim describe the perpetra-

tors from her own point of view and from that of a bystander at the scene.

Other cognitive strategies angle for memories of physical and facial attributes, speech mannerisms, names, and numbers (such as those on license plates). For instance, a witness who heard but forgot a perpetrator's name is asked to go through the alphabet from A to Z, in search of the name's first letter.

Early laboratory tests indicated that both college students and experienced police officers trained in this version of the cognitive interview elicited up to 35 percent more information from witnesses of staged events than peers who received no such training. Moreover, the proportion of errors in witnesses' accounts did not climb as they recalled larger amounts of information in cognitive interviews.

Actual crime victims and witnesses often experience more anxiety, display poorer communication skills, and confront more confusion about their roles in an interview. So in the late 1980s, Fisher and Geiselman developed the "enhanced cognitive interview" to address such issues.

An interviewer begins this procedure by building rapport and encouraging the witness to take an active role in recalling information rather than responding only to someone else's questions. The witness first describes what happened in his or her own words, with no interviewer interruptions. The interviewer then probes further with specific techniques, such as having the witness generate detailed images of what happened from different perspectives.

Interviewers need to direct enhanced cognitive interviews with sensitivity to a witness' style of recalling information and his or her emotional state, Fisher says.

Experiments with police detectives trained in this demanding interview method find that they extract nearly 50 percent more information from witnesses than before training, while error rates remain comparable.

The enhanced cognitive interview improves substantially on the original version, Fisher adds. In one study he

conducted with Geiselman, witnesses of a filmed, simulated violent attack remembered 50 percent more about it when interviewed by high school students trained in the enhanced procedure than when interviewed by experienced police detectives trained in the original cognitive approach.

The two psychologists summarize their findings in a chapter of a 1996 book, *Intersections in Basic and Applied Memory Research* (New York: Lawrence Erlbaum).

A cognitive interview offers the greatest benefits in the initial stages of investigating a robbery, assault, or battery, where most evidence comes from eyewitnesses, the researchers conclude. The procedure also shows potential for expanding the amount of information gathered in epidemiological interviews—in which people try to recall past medical symptoms, eating patterns, and other personal information—and in oral histories, they note.

**A** growing body of evidence, however, challenges the unique value of that interviewing technique, Memon argues. It suggests that adept interviewers resuscitate memories just as effectively whether or not they ask people to conjure up a mental image of an event or apply other cognitive tactics. Moreover, cognitive interviewers need to keep in mind that witnesses commit a larger number of memory errors as they recall more information, the Texas researcher says.

Memon and psychologist Sarah V. Stevenage of the University of Southampton in England elaborated on this argument last March in an article written for *PSYCOLOGY*, an electronic journal sponsored by the American Psychological Association.

The much-touted advantages of the cognitive interview largely vanish when comparison groups consist of interviewers trained in establishing rapport and open communication without the use of specific memory-retrieval techniques, according to Memon and Stevenage. In other words, an interviewer who relates well to witnesses and picks up on their underlying thoughts and motivations may not need an arsenal of memory aids.

In one study directed by Memon, 19 experienced British police detectives given 4 hours of training in how to conduct structured interviews—in which they learned to build rapport and put witnesses at ease just as they would in cognitive interview training—elicited as much information of equal accuracy from witnesses to a staged armed robbery as 19 detectives given 4 hours of training in conducting a full cognitive interview.

Fisher and Geiselman's cognitive interview classes provide intensive instruction for up to 2 consecutive days. Howev-

er, most studies that endorse their method have relied on only 2 to 4 hours of training, Memon says.

Classes for fledgling police interviewers should begin with an emphasis on fostering communication skills, she suggests. Training could gradually incorporate tactics for fostering rapport. Only after that might it include instruction in specific cognitive interview techniques for those officers demonstrating particular aptitude for dealing with witnesses.

Effective communication and rapport are particularly crucial in interviews of children, although cognitive-interview techniques may help as well, Memon contends. In a study she directed slated to appear in the *BRITISH JOURNAL OF PSYCHOLOGY*, college students trained in cognitive interviewing procured a larger amount of relevant information from child witnesses than students trained to conduct structured interviews. There was no increase in the proportion of memory errors.

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The 8- to 9-year-old witnesses had attended a magic show and were interviewed about that experience once within the next couple of days and again after 10 to 13 days had passed. Cognitive techniques elicited more information than the alternative approach only in the first set of interviews.

Prior studies indicate that any superiority of the cognitive interview with adult witnesses occurs during the first encounter but not in further attempts at memory recovery. Future research needs to examine ways in which repeated interviews might uncover additional information from witnesses, Memon holds.

For every six correct details about the magic show gleaned through cognitive interviews, one error occurred, “so the gains appear to outweigh the risks,” Memon says. Children made more errors when describing persons (such as mislabeling the color of the magician's cloak) than when providing other types of information.

Results so far support the careful use of the cognitive interview with older children, she asserts, although kids under age 8 probably cannot understand or reliably use memory-retrieval tactics. Memon also cautions against relying on the procedure to recover memories of sexual abuse or other traumas until its usefulness in such cases has been investigated.

“The cognitive interview has great

potential as an investigative tool, but we need to examine its limitations in pursuit of an even better technique,” Memon asserts.

**O**ther researchers express concern that the cognitive interview's focus on mentally recreating past events may lead a substantial number of witnesses to mistake flights of imagination for reality. Repeated demands to imagine an incident raise the likelihood of creating “false memories,” they contend (SN: 8/24/96, p. 126).

In cognitive interviews, the witness thinks about and then verbally communicates to the interviewer the content of scenes imagined from different perspectives. Repetitions of this kind may unintentionally apply a sheen of truth to some memory blunders, asserts psychologist Kim P. Roberts of the National Institute of Child Health and Human Development in Bethesda, Md. Children often find it difficult to remember whether an event that they replay in their minds stems from a genuine incident or not, Roberts adds.

Some individuals more than others—among both adults and children—tend to create scenes in their heads that seem real and accept others' subtle suggestions about what they might have witnessed, adds psychologist Rhonda N. Douglas of Florida Atlantic University in Boca Raton. Douglas recommends omitting the mental imagery strategy from the cognitive interview “until further research demonstrates that its benefits exceed its costs.”

**I**n contrast, Fisher and Geiselman see a bright future for all elements of the enhanced cognitive interview. Law-enforcement officers receive no training in Memon's structured interview, they point out, which has only been used in laboratory comparisons. On a practical level, criminal investigators learn more from victims and witnesses by using the cognitive interview than by relying on whatever approaches they personally prefer, Fisher maintains.

“It's hard to isolate the effects of individual components of the enhanced cognitive interview in controlled experiments,” he contends. “Many effective police interviewers intuitively use some of our [memory-retrieval] principles, and the cognitive interview takes advantage of the fact that witnesses also intuitively do some of these things to remember information.”

Despite the difficulties of putting human interaction under the microscope, Memon looks forward to further investigations. “Debate concerning the cognitive interview has opened up new questions for research,” she remarks. □