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members are shown only once, discouraging comparisons between lineup members because individual lineup members cannot be viewed repeatedly. Third, witnesses are unaware of how many lineup members they will be shown. This is designed to prevent witnesses from feeling pressure to choose as they get closer to the end of the lineup. Fourth, witnesses are not permitted to change a decision once it has been made. Finally, the person showing the lineup to the witness should not know which lineup member is the suspect (double-blind testing), so that witnesses are not prompted or cued (intentionally or otherwise) to choose suspects for reasons other than recognizing them.

There is no doubt that the sequential lineup achieved its primary purpose. Sequential lineups consistently led to fewer false selections than simultaneous lineups. The effect of using sequential lineups on correct selections is less clear. Early studies reported little or no decline in correct selection rates. The pattern of large decreases in false-positive choices combined with relatively small losses of correct selections in comparison with simultaneous lineups has been termed the "sequential superiority effect." Later research produced mixed results with regard to correct selections, and meta-analyses support the conclusion that a real but smaller decrease occurs for correct selections than for false selections.

Several issues remain to be resolved concerning simultaneous versus sequential lineup presentation. The reason for the difference in correct selection rates has been attributed to a criterion shift, a multiple-choice selection strategy (relative judgment), and guessing. Both in the laboratory and in the police station, there is variance in the sequential procedure. Not all features of the sequential lineup have been used in every study or in the field. Sometimes witnesses are permitted to see all lineup members before making a decision. For example, in England, the mandated procedure for the police using a sequential lineup is to have witnesses go through the lineup at least twice before making their decisions known. Not all studies mask the size of the lineup. Practices vary in terms of whether the lineup is terminated after a selection is made. To date, there are insufficient data to determine the degree to which these methodological issues are crucial to the size or existence of the full "sequential superiority effect." What is clear is that simultaneous presentation, the traditional technique for presenting a police lineup, is not ideal because of high false-positive selection rates. Sequential lineups lead to dramatically fewer false selections than simultaneous lineups but also lead to somewhat fewer correct selections.

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See also Double-Blind Lineup Administration; Eyewitness Memory; Identification Tests, Best Practices in; Instructions to the Witness; Lineup Size and Bias

Further Readings

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Source Monitoring and Eyewitness Memory

The source monitoring (SM) framework is an evolving set of ideas developed by Marcia Johnson and her collaborators regarding the cognitive processes by which individuals attribute mental events (thoughts, images, feelings) to particular origins (e.g., memory, perception, creativity, etc.). Most of the research motivated by the SM framework has had to do with how people identify the specific sources of mental events that they experience as episodic memories (e.g., how a witness differentiates between memories of a crime vs. memories of a cowitness's descriptions of that crime). "Source" is a multidimensional construct that includes (a) the environmental context in which a past event occurred (e.g., Did X happen at work or at home?), (b) an event's temporal context (e.g., Did X happen yesterday or last week? Before or after Y? In the morning, midday, or evening? Summer or fall?), (c) the agents involved in an event (e.g., Who said X?), and (d) the sensory modalities and media through which the event was encountered (e.g., Did I read the book or see the film? Did I see a knife or only hear mention of a knife?). People quite often experience difficulty in remembering the sources of their recollections. Moreover, they sometimes misremember aspects of a source. As briefly summarized at the end of this entry, such SM failures are thought to play central roles in a variety of false-memory phenomena.

The core assumption underlying the SM framework is that memories do not include abstract tags or labels that identify their origins; rather, accessed memory information is said to be attributed to particular sources of past experience on the basis of its quantitative and qualitative characteristics. That is, the idea is that source is inferred from the content of the accessed memory information.

According to the SM framework, dimensions of source are recognized in the course of recollecting a past event much as dimensions of source are recognized in ongoing perceptual experience. When you answer the phone and your friend Yuji says hello, you immediately recognize the voice as Yuji's even though the sensory signal includes no abstract label designating the speaker's identity. Cognitive processing of the acoustic properties of the signal interacts with memory, cuing a wealth of information that enables you to recognize the speaker. Likewise, when you recollect something Yuji told you yesterday, the memory records of hearing that utterance likely do not include any abstract symbols naming the speaker (unless you happened to reflect about Yuji's name as you listened to the utterance), but they may include information about the sound of his voice and/or his appearance, the semantic content of the statement, information pertaining to the environmental and temporal context, and so on, all of which can serve as bases for identifying the speaker of the remembered utterance as Yuji.

Just as source attributions in ongoing experience are usually made quickly and without conscious reflection, so too are most memory attributions. But just as a bad cell phone connection can make it difficult to identify a friend's voice, weak or incomplete memory records may provide insufficient information to specify various aspects of a memory's source. When this occurs, the rememberer may make conscious, strategic efforts to retrieve more information and/or make deliberative inferences about the source of the recollection.

Even if fairly rich and detailed memory information about a past event is accessed, if two or more sources characteristically give rise to memory records highly similar to those accessed, the rememberer may be uncertain as to which of them gave rise to that recollection or may mistake a memory from one source as a memory from the other. Here again, the analogy to perception holds; if Don's voice is very similar to Yuji's,

then you may mistake one for the other on the phone or when recalling their utterances. Such source-similarity effects are not limited to perceptual similarity; SM errors are also likely if the semantic content of a remembered event from source X is characteristic of the semantic content from source Y. If Don and Yuji are both psychologists who study eyewitness memory, for example, that may make it difficult to remember which of them made a particular comment on that topic.

Yet another parallel with perception is that SM judgments can be biased and distorted by expectations. Rememberers may, for example, be biased to attribute a recollection of a politically conservative utterance to a person who (they know) tends to say such things. As another example, people show systematic biases in the attributions they make when they mistakenly recognize a new foil (foil refers to an innocent person in a police lineup) on a memory test as an item presented earlier in the experiment. If the acquisition phase of the experiment involved participants reading some words aloud and listening to the experimenter say others, for example, then when participants falsely recognize a new test word as one presented in the study phase, they are likely to attribute that word to the experimenter rather than to themselves. This "it had to be you effect" presumably arises because participants expect memories of words the experimenter had said to be weaker and less detailed than memories of words they themselves had said; because "memories" of new words are likely to be weak and vague, participants tend to attribute them to the source of weaker memories.

SM confusions are thought to be involved in a wide range of memory errors and memory illusions. Early studies by Sir Frederick Bartlett, for example, demonstrated that individuals' knowledge and beliefs can bias and distort their reconstructions of past episodes. Bartlett's ideas were extensively explored and elaborated during the 1970s and 1980s by researchers studying various schema- and script-based memory errors. From an SM perspective, knowledge and beliefs provide a rich source of thoughts and images coming to mind during efforts to recollect past events and hence being mistakenly attributed to memory. Similarly, the last decade yielded a torrent of research on "false memories" for nonstudied words that are highly associated with studied words, and these errors too can be described as SM failures. Additionally, there is a large body of literature demonstrating that misleading suggestions regarding details in a witnessed event can lead

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individuals to believe that they remember witnessing things that they really only read or heard about. These ideas are also relevant to the controversy regarding cases in which adults report "recovered memories" of childhood sexual abuse. Cryptomnesia (aka unconscious plagiarism), in contrast, is the opposite sort of SM confusion; here, individuals experience thoughts that arise from episodic memories of another's ideas as newly minted ideas of their own. These and other memory errors provide insight into the often unconscious inferential processes by which people attribute mental events to sources.

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See also Detection of Deception: Reality Monitoring; Eyewitness Memory; False Memories; Forced Confabulation; Postevent Information and Eyewitness Memory; Reconstructive Memory; Repressed and Recovered Memories

Further Readings

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SPOUSAL ASSAULT RISK ASSESSMENT (SARA)

Given the increasing number of spousal assaulters coming before the justice system, there is a growing need for risk assessment instruments to assist in making appropriate decisions at various stages of the proceedings. The Spousal Assault Risk Assessment (SARA) guide is a manual that presents a set of recommendations for the assessment of spousal assault risk and includes a checklist of risk factors. Adequate reliability and validity for judgments concerning violence risk with adult male offenders has been established; however, there is a continuing need for further research with the SARA to advance knowledge and practice.

The SARA is a structured professional approach to risk assessment that bridges the gap between unstructured clinical judgment and actuarial approaches. Its purpose is to guide and enhance professional judgments about risk, not to provide absolute measures of risk using cutoff scores. It is composed of 20 items that were selected based on a review of empirical research and relevant legal and clinical issues. These items are both static and dynamic in nature. The first 10 items are associated with risk for general violence and include three criminal history factors and 7 factors assessing psychosocial adjustment of the offender. The next 10 items are directly associated with the offender's history of spousal violence and include 7 factors that relate to the offenders past assaultive behavior and 3 items that relate specifically to the current offense. Additional case-specific factors may also be considered.

Each of the 20 items is coded on a 3-point scale (0 = absent, 1 = subthreshold, 2 = present), according to detailed criteria. Each item is then evaluated as to whether it should be considered a critical item, defined as those items which, given the specific circumstances of the case, are considered sufficient on their own to compel the evaluator to conclude that the individual poses an imminent risk of harm. After evaluating the presence of each item, and assessing critical items, the evaluator makes a final risk rating of low, moderate, or high. As indicated above, there is no cutoff score for identifying those individuals considered as low, moderate, or high risk. Rather, these ratings are based on a review of the available information and represent the professional opinion of the evaluator.

Assessment procedures for completing the SARA make use of multiple sources of information and use multiple methods. A thorough assessment will include comprehensive interviews with the offender and victim; standardized measures of physical and emotional abuse and drug and alcohol abuse; a review of collateral records, which should include police reports, victim's statements, and a criminal record; and other psychological tests or procedures. After the SARA is completed using the procedures noted above, overall risk ratings should be communicated in a clear manner with justification accompanying each opinion. Any limitations on the opinions should be included in a report of the findings. Additionally, risk management strategies should be discussed as they relate to the underlying risk factors present for the offender.

Although there is a paucity of research examining the SARA, the available evidence suggests that the SARA has demonstrated adequate reliability and validity for judgments concerning violence risk with adult male offenders. Structural analyses of the risk factors