

SUGGESTIBILITY OF CHILDREN

Submitted by the Child Witness Institute

KEY CONCEPTS	
Suggestibility	Contaminating evidence
Child development	Leading questions
Interviewer bias	Cross-examination
Child witness	Evidence of children

Introduction

Traditionally suggestibility has been defined as “the extent to which individuals come to accept and subsequently incorporate post-event information into their memory recollections.”¹ Ceci and Bruck² (1995:44-5) suggest that a broader definition of suggestibility be used which follows the legal and everyday usage of the term. Suggestibility then would refer to “the degree to which the encoding, storage, retrieval, and reporting of events can be influenced by a range of internal and external factors”. The broadened definition implies that suggestibility can result from social as well as cognitive factors, which would include information unwittingly incorporated into memory, subtle suggestions, expectations, stereotypes, leading questions as well as explicit bribes, threats and other forms of social inducement. In the context of an investigation, suggestion occurs when a witness changes their testimony to adopt a version of events which was suggested either by a questioner or someone else.

Suggestibility can occur in two ways:

- where memory is influenced from within the individual without the influence of another i.e. as in when a person thinks about something and reorganises the memory
- where the testimony is influenced by factors external to the child i.e. the use of leading questions, bribes or threats.

Suggestibility does not occur intentionally. The memories of a particular event will change without the child (or adult) even being aware of this change. There is no deliberate intent to mislead. This would amount to lying and suggestibility is not lying. It is about interfering with or contaminating a memory. The concern is that, once a memory has been changed through suggestion, it can be difficult, if not impossible, to access it again. The suggested ideas then become the witness's and, in this way, the witness can unknowingly give false evidence.

Research on suggestibility

Stern, a German psychologist, focused on suggestibility in his research, and developed two types of experiments in this field, which are still used today. In the first, subjects were shown a picture, asked to study it for a while and then asked to recall what they had seen. They were then asked questions, amongst which were included some misleading questions which requested information

¹ Gudjonsson, G. 1986. The relationship between interrogative suggestibility and acquiescence: Empirical findings and theoretical implications. *Personality and Individual Differences*. 7:195.

² Ceci, S.J., and Bruck, M. 1995. *Jeopardy in the Courtroom: A Scientific Analysis of Children's Testimony*. American Psychological Association: Washington.

about objects that had not appeared in the picture. In one of the studies he conducted, he tested children between the ages of seven and eighteen, and found that free recall produced fewer errors whereas the misleading questions produced the most errors. He found that, although the younger children were more suggestible, even the eighteen years olds were misled by the suggestive questions.³ Stern's findings are briefly summarised as follows:⁴

- he cautioned that subjects should not be questioned repeatedly about an event;
- he claimed that a subject's original verbal answers were better remembered than the actual event; and
- he believed that the questioner was in many cases responsible for the unreliable evidence of witnesses because of the way in which a question was phrased.

The German psychologist, Lipmann, concluded that children were less reliable than adults as witnesses because children pay attention to different attributes of stimuli than adults and this plays a role in what they encode. This, together with certain social factors, was responsible for children being more suggestible than adults. Children are questioned in most cases by adults, who have great authority over them, about events which are not important to the child. Lipmann (1911:253) believed that in this situation children will attempt to revise their memory to comply with the authority figure.⁵

These early studies of children's evidence dealt almost exclusively with children's memory and suggestibility. Today, however, understanding of cognitive ability is much greater and it is recognised that a child's knowledge of, or familiarity with, an event affects memory performance. A child who is knowledgeable in a certain domain may remember events in that domain better than an unknowledgeable adult. Memory is also related to cognitive development. These issues have only recently been recognised. In addition, early researchers tended to make definitive statements about the abilities of children. For instance, they state that children are always more suggestible than adults or that a child always remembers less. These studies were designed to demonstrate the inaccuracies rather than the accuracies of memory. In addition, standards of scientific research have improved considerably since the early 1900s.⁶

In the 1980's there was a revival of interest among developmental researchers on how reliable children's reports were. Although it is commonly believed that children are more suggestible than adults, psychological research has shown that children are not as suggestible as many adults would believe them to be.⁷ Studies of suggestibility among children and adults have provided mixed findings. Some studies support the finding that young children are no more suggestible than adults. A number of studies have demonstrated that children as young as five can answer objective questions about simple events as well as adults can.⁸

Duncan et al (1982) conducted a series of studies on subjects, ranging from six year olds to college students, in which the subjects were shown slides and later questioned about the contents. The results demonstrated that children and adults were influenced equally by the questions asked. A second analysis, based upon only those instances in which there was correct memory, showed that the younger subjects appeared to be less influenced than the older subjects. A follow-up

³ Ibid. 56-7.

⁴ Ibid 57.

⁵ Lipmann, O. 1911. Pedagogical psychology of report. *Journal of Educational Psychology*. 2:253.

⁶ Goodman, G. 1984. Children's testimony in historical perspective. *Journal of Social Issues*. 40(2):9.

⁷ Myers, J.E.B. 1987. *Child Witness: Law and Practice*. John Wiley & Sons: United States.

⁸ Perry, N.W. and Wrightsman, L.S. 1991. *The Child Witness: Legal Issues and Dilemmas*. Sage Publications: California, USA.

experiment obtained a similar pattern of results. In 1979 Marin et al (1979:295-304) also conducted a study on the recall memory of children with subjects ranging from kindergarten to college age. They found that children were as capable as adults of answering direct questions about an incident. Children in the study were no more easily swayed into incorrect answers than were adults by the use of leading questions.

However, some studies have found that under certain circumstances, children may be more suggestible than adults. One such study was conducted by Cohen and Darnick⁹ on third-graders, sixth-graders and college-age adults. The results showed that the third-graders had poorer memories than the older groups, and the younger participants had a greater tendency to accept false suggestion, although all three groups were influenced to some extent. Of importance was the fact that the analysis of results attributed the inferior performance of the youngest group regarding suggestion to their inferior encoding of the film in memory. The effect of suggestion upon the material that had been encoded well was not significantly different for the three age groups. Goodman and Reed¹⁰ conducted similar studies and found that the adults were more likely to answer suggestive questions correctly than were six year olds, and six year olds in turn were better than three year olds. It is important to note, however, that when asked accurate but leading questions, the six year olds answered with the greatest accuracy, followed by the three year olds and then the adults. In addition, adults made more intrusion errors than the other subjects i.e. they allowed inaccurate information to intrude on their memory of an event. Although the three and six year olds were found to be more suggestible than the adults, this finding did not hold true for central information that had been encoded properly in memory.

Saywitz et al¹¹ also conducted a study in which reports of five and seven year old girls who visited a paediatrician were examined. Half of the girls had their spines examined while the other half had a genital examination. The older girls were more accurate than the younger girls in response to the misleading non-abuse question. There was essentially no age difference for misleading abuse questions. The seven year olds made no false reports of abuse, while five year olds were misled into making false statements of abuse in three instances only (out of 215 opportunities). These findings again support the argument that children cannot easily be misled into making false allegations of abuse. A further significant finding in this study was that when the children's inaccurate reports were examined, they were found to involve mainly omission errors. The children left out information rather than included false information. For instance, most children who had the genital examination did not disclose genital contact unless they were specifically asked.

A review of the above results appears to lead to the conclusion that adults spontaneously recall more about incidents they have witnessed than children do. They do not, however, support the idea that children are always more suggestible than adults. The possible reasons for the discrepant findings in the above studies would include:¹²

- No single factor can by itself explain the discrepant findings of these studies.
- Age alone is the wrong focus for these studies.

⁹ Cohen, R.L. and Harnick, M.A. 1980. The susceptibility of child witnesses to suggestion. *Law and Human Behavior*. 4(3):201.

¹⁰ Goodman, G.S. and Reed, R.S. 1986. Age differences in eyewitness testimony. *Law and Human Behavior*. 10:317.

¹¹ Saywitz, K., Goodman, G.S., Nicholas, G. and Moan, S. 1991. Children's memory for genital exam: implications for child sexual abuse. *Journal of Consulting and Clinical Psychology*. 59:682.

¹² Loftus, E.F. and Davies, G.M. 1984. Distortions in the memory of children. *Journal of Social Issues*. 40:51.

- Whether children are more susceptible to suggestive information than adults probably depends on the interaction of age with other factors.
- If an event is understandable and interesting to both children and adults, and if their memory for it is still equally strong, age differences in suggestibility may not be found.
- If the event is not encoded well to begin with, or if a delay weakens the child's memory relative to an adult's, then age differences may emerge. In this case the fragments of the event that remain in the child's memory may not be sufficient to serve as a barrier against suggestion, especially from authoritative others.

The belief that children are more suggestible than adults occupies legal thinking despite the fact that there is lack of scientific evidence to support his belief. Recent studies have failed to uncover any simple relationship between suggestibility and age.¹³ It would appear that a number of factors interact with age in influencing a person's response to suggestion, and this is not limited to children.

Implications for the legal system

The concept of suggestion creates challenges for the courts, since trials are conducted on the belief that examination and cross-examination of witnesses is the best way to arrive at the truth. Credibility is judged by the witness's performance on the stand and by an analysis of their testimony, and there is the belief that cross-examination will discover lying. But, a suggested memory will interfere with or replace the original memory of a witness, and the witness will truthfully be relating what they remember and appear credible. Although the witness may not be lying, they are nevertheless not telling the truth.¹⁴

Reasons for suggestibility

There are three main reasons why the memories of children are susceptible to suggestion:¹⁵

- the nature of the relationship between children and adults
- the level of development of memory retrieval skills among children
- the ways humans store memories.

Suggestion is not only found in children. Researchers¹⁶ have conducted experiments with adult subjects in which repeated suggestive questions were used to convince adults that they had experienced an event, even a traumatic event, during their childhood. The researchers had ensured that the event they were implanting in their subjects' memories had never occurred, yet the adults came to believe that their memories were accurate. Although the memories were implanted, it was difficult to convince the subjects that those memories were inaccurate.

Relationships between children and adults

The relationship between children and adults is one of inequality, characterized by dependence, trust and respect for the position of adults. This affects how children perceive and interact with the adults around, especially young children, who are very trusting of adults. Children are especially trusting of certain categories of adults, such as parents, teachers and police and court personnel. If such an adult were to tell a child that something is true, the child will likely believe it, even if it is

¹³Zaragoza, M.S. 1987. Memory, suggestibility and eyewitness testimony in children and adults in *Children's Eyewitness Memory* edited by Ceci, S.J., Toglia, M.P. and Ross, D.F. Springer-Verlag: New York. 53.

¹⁴Schuman, J. 1999. *Questions for Witnesses*. LLM Thesis. Department of Psychology. Queen's University. 91.

¹⁵Ibid. 91 – 99.

¹⁶Loftus, E. 1991. *Creating Childhood Memories*. 11 *Applied Cognitive Psychology*. Stephen Porter, John Yuille, Dark Lehman. 1999. *The Nature of Real, Implanted and Fabricated Memories for Emotional Childhood Events: Implications for the Recovered Memory Debate*.

inconsistent with the child's memory.¹⁷ Children also believe that adults always know the answers and will submit to their knowledge. If the adult provides hints to the answers, the child will assume they are correct and try to please by supplying the suggested responses.

Memory retrieval skills

If a child has no memory or a poor recollection of an event, they will more readily adopt the suggestions of a trusted adult. The ability to store and recall memories is a skill which children develop over time. Although children acquire the ability to store information early, but the ability to retrieve that information is more complex and acquired later. Basic strategies to search for the memory of a specific event is only developed by about 8 years while more complex, efficient and accurate strategies do not develop until adolescence.¹⁸ Retrieval is exacerbated by stress. In addition, the information that the child has focused on (and thus stored in memory) may not necessarily be the details that the interviewer requires. When memory is weak, people will fill in the missing information by borrowing from past experiences or by borrowing ideas that have been suggested to them. This is very often an unconscious process.¹⁹

Memory storage

According to memory theory, memories are not stored as complete units like a movie on a videotape. Instead, images in a memory are recreated from pieces of information that the brain has already stored. Schuman²⁰ illustrates this with the example of a red car. When asked to think of a red car, one will not think about the car in the abstract, but will conjure up the image of a specific car with body shape, wheels and doors. The instruction did not contain any of this information, but one's brain took the concept of a red car and used its experience of red cars to create a picture. Memory creates images in a similar way. When an event is suggested, an image will be created in the head, even though the event has not occurred. The instruction suggested that an event had occurred and the brain used available information and experiences to create a picture. It is in this way that false memories can be created through the process of suggestion. If the event is plausible, and the source of suggestion is trusted, people, especially children, can have their memories altered.²¹

Factors affecting suggestibility

Several factors appear to interact with age in influencing a person's response to suggestion. These factors include:²²

- *degree of suggestion*

The degree of suggestion employed will obviously play a role in whether a child succumbs to the suggestion or not. Strong suggestion is more likely to elicit false agreement from a child than mild suggestion. Goodman and Helgeson²³ explain that questions like 'Did uncle Henry touch your penis?' (mild suggestion) would be less likely to lead to a false or inaccurate report than 'I believe uncle Henry touched your penis, isn't that right?' (strong suggestion). The problem, however, is that research has shown that children do not offer information

¹⁷ Schuman. Note 14. 95.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.99

²² Perry, N.W. and Wrightsman, L.S. 1991. *The Child Witness: Legal Issues and Dilemmas*. Sage Publications: California, USA.

²³ Goodman, G.S. and Helgeson, V.S. 1985. *Child sexual assault: Children's memory and the law*. University of Miami Law Review. 40:181.

spontaneously, and leading (often suggestive) questions may be necessary. This is confirmed by the studies conducted by Saywitz et al²⁴ where the children did not report genital touch in the medical examination until they were specifically asked.

- *centrality of the information to be remembered*

Children are more likely to adopt suggestion when it is related to peripheral information rather than central details. This, however, applies to adults as well. It follows logically that the more attention one pays to central information, the less one is able to concentrate on peripheral detail. Children under the age of five scan events starting with the point of greatest action, which often results in children missing peripheral detail.²⁵

- *strength of the memory*

Children, like adults, may be more prone to suggestion if their memory is weak. Where a memory is weak, misleading information can sometimes replace original memories. This means that a child whose memory for an event is relatively weak may be more suggestible than a child whose memory is strong for the same event.²⁶

- *intimidation of witness*

Since children submit to the authority of adults, it follows that they will easily yield to intimidation. This is of particular concern in the courtroom, where children are often subjected to harsh and intimidating cross-examination.

- *interview techniques*

For suggestion to take place in an interview, the questioner must convey the answer they want to the witness. The cues provided to the witness can be very subtle, but are often enough to make the witness change their belief about the witnessed events to make them conform with the ideas of the questioner. Note that the use of these techniques does not mean that the witness has adopted the techniques. Some witnesses are resistant to these types of suggestion. Questionable interviewing techniques include the following:

- **overzealousness on the part of interviewer²⁷**

This is closely related to the intimidation of the witness above, and refers to the situation where the interviewer is so eager and pushy that they bully and overwhelm the witness or they provide too much encouragement. Again, this is particularly relevant to cross-examination. It also includes the situation where an interviewer is biased. This occurs where interviewers have previously decided beliefs about the occurrence of certain events and then proceed to mould the interview to elicit statements from the child that are consistent with these prior beliefs. The most obvious example is where the interviewer is convinced that abuse has taken place and then only gathers information to support this belief and fails to gather any information that may disprove it.²⁸

²⁴ Saywitz, K., Goodman, G.S., Nicholas, G. and Moan, S. 1991. Children's memory for genital exam: implications for child sexual abuse. *Journal of Consulting and Clinical Psychology*. 59:682.

²⁵ Myers, J.E.B. 1987. *Child Witness: Law and Practice*. John Wiley & Sons: United States.

²⁶ Ibid.

²⁷ Schuman. Note 14. 99.

²⁸ Ceci, S.J., and Bruck, M. 1995. *Jeopardy in the Courtroom: A Scientific Analysis of Children's Testimony*. American Psychological Association: Washington. 70.

An interviewer's bias will affect the entire interview and will reveal a number of features that are highly suggestive. For instance, to confirm their suspicions, interviewers may not ask children open-ended questions, but rather use a number of very specific questions, many of which are repeated or leading. Another form that interviewer bias can take is when the interviewer provides too much encouragement during an interview. This occurs when the interviewer selectively reinforces the child's response when it is consistent with the interviewer's belief, for instance, nodding in agreement.²⁹ When interviewers are convinced that abuse has taken place, they may offer children rewards for disclosing abuse or punish them for denying it. This is not necessarily done in an intentional way and the reward/punishment could refer to the body language of the interviewer i.e. The interviewer may "reward" children who disclose abuse with a smile or "punish" them with a frown if they don't.³⁰ An overly solicitous voice may be used to convey a demand which is couched in a positive emotional tone. This tone may inappropriately demonstrate the approval of what the child has said. A child who is unsure, may attempt to please the interviewer and respond to these demonstrations of approval.

- **use of repeated questions or interviews**

When children become witnesses they are often subjected to a number of interviews. Repeated interviews are not necessarily to be regarded as negative, as is so often thought to be, since they serve as a form of rehearsal that prevents memories from decaying. Research studies have also shown that when given a number of opportunities to remember an event, both children and adults remember new items with additional interviews. Therefore, the repeated interviewing of a child can have beneficial effects.³¹ However, repeated interviewing can also be responsible for suggestion, although research has shown that this is particularly the case where the interviews contain misleading information. This misleading information then becomes incorporated into the memory. This is dangerous because with each additional suggestive interview the delay between the original event and the interview becomes greater, and the memory weaker so that the suggestion becomes so much easier. Not only is repeated interviewing dangerous as far as suggestion is concerned, but the use of repeated questions creates hazards of its own. A number of studies have demonstrated that when young children are asked the same question again and again within an interview, they change their answer. Siegal et al³² found in a series of experiments that young children were sensitive to repeated questioning. It conveyed ambiguity and caused children to be inconsistent. There are a number of possible reasons why young children may be sensitive to repeated questioning. It may be as a result of lack of experience or confidence or simply that the child becomes tired and changes his answer in the hope that the interview will end.³³

- **leading questions**

These are questions that suggest the answer that the interviewer wants to hear. Leading and/or suggestive questions should be avoided since they cast suspicion on any

²⁹ Ibid. 80 -1.

³⁰ Schuman. Note 14. 105.

³¹ Ceci, S.J., and Bruck, M. 1995. Jeopardy in the Courtroom: A Scientific Analysis of Children's Testimony. American Psychological Association: Washington. 108.

³² Siegal, M., Waters, L.J. and Dinwiddy, L.S. 1988. Misleading children: causal attributions for inconsistency under repeated questioning. Journal of Experimental Child Psychology. 45:438 at 453.

³³ Ibid.

information the child may provide. Interviewees are often vulnerable, especially when they are complainants in a sexual matter. They may respond with the expected answer in order to be helpful because they are confused or frightened. The witness may be too unsure to contradict the interviewer. This is especially true of children. In studies conducted by Bull,³⁴ younger children were found to be more likely to acquiesce to suggestive leading questions than adults. ¶ A further danger of using leading questions is that it can incorporate into the child's mind information and ideas that the child did not previously have. It has been argued that children may assimilate the suggestive information and may subsequently incorporate it into a statement concerning the allegation.

In conclusion, the body of the research conducted on the accuracy of a child's evidence appears to agree that if children have personally experienced a significant event and if they are given an opportunity to reconstruct their experience shortly thereafter, and if this interview is conducted in a supportive environment by a skilful interviewer focusing on central detail, then children's accounts will be highly reliable.

³⁴ Bull, R. 1995. Interviewing children in legal contexts in Bull, R. and Carson, D. (eds.) *Handbook of Psychology in Legal Contexts*. John Wiley & Sons: Chichester. 235.