



Eyewitness memory performance in children with intellectual disabilities

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Background - memory and ID

- If we look at laboratory memory tasks, children with ID do not perform well
- Most papers report **deficits** on standard memory tasks (see Weiss et al., 1986 for a review)
- However, children with ID seem to do better on **unexpected** or **incidental** memory tasks

"3, 7, 2, 5, 1" (digit span)

Memory for stories

Paired associate learning
"cup - juice"
"lamp - carrot"

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Vulnerable witnesses

- Children with ID are vulnerable because of their age *and* their disability
- Rarely called as witnesses, although data difficult to find on this issue
- Increased risk of physical abuse, sexual abuse, criminal victimisation (e.g. Westcott & Jones, 1999)
- May be the only witnesses to crimes against others with ID (e.g. Residential institutions)
- ID is common – at least 2-3% (and perhaps up to 10%) of children may have some level of ID (Simonoff et al., 2006)

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For example,

Burack & Zigler (1990) found that children with ID showed the usual deficits on remembering lists of picture cards (e.g. of animals) – a traditional "memory span" measure of memory

- However, on a measure of **incidental learning**, those with ID showed no impairments compared to mental age matched peers
- Burack & Zigler (1990) concluded that children with ID may show best performance on naturalistic "everyday" memory tasks



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The eyewitness task

- The eyewitness memory task is more like an everyday test of memory – it is **more naturalistic** than many laboratory memory tasks
- There is little scope for using deliberate memory strategies to aid recall - these are often not used by children with ID
- Perhaps children with ID would perform well on this task because it is relatively naturalistic and unexpected?

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Suggestibility

- Even if children with ID performed well in recalling a witnessed event, would they be more **suggestible** if an interviewer used misleading questions?
- Young children are more suggestible than older children and adults (Ceci & Bruck, 1993), but there is very little data on how children with ID might perform when asked misleading questions

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Henry & Gudjonsson (1999) American Journal on Mental Retardation

- Set out to provide an experimental test of two hypotheses:
 - Do children with ID recall a witnessed event as well as CA peers, MA peers or neither?
 - Are children with ID more suggestible than children of the same CA or MA?

All children witnessed an unexpected live acted scene in their classrooms. "Melanie" came in to describe what school was like 100 years ago. Bert took a video of her but said nothing

Interviews took place one day later with an unfamiliar adult

Question order followed the *Memorandum of Good Practice* (Home Office, 1992)



INTERVIEWS

- Free recall
- General questions
- Specific questions
 - Non-leading
 - Leading
- Specific (yes/no) questions
 - Correctly-leading
 - Misleading



Examples of questions (free/general):

- "Tell me everything you can remember about what happened yesterday when those people came into your class."
- "What did the lady look like?"
- "What did the man do?"



Examples of questions (specific):

- "What things did the lady take out of her bag?"
- "What did the man say?"
- "The lady did not write "hello" on the board, did she?"
- "You saw that lady before on television, didn't you?"



Participants

- 28 children with ID, 11-12 years in Special Schools. Mean IQ 60 (range 40-78). Mean MA 7.0 years
- 19 children of comparable CA. Mean IQ 101 (range 81-132)
- 21 children of comparable MA (7-8 years). Mean IQ 100 (range 80-140). Mean MA 7.25 years

Results

- There were significant group differences for two types of questions:
 - free recall (CA > MA). ID did not differ from either group
 - specific (yes/no) misleading questions (ID = MA < CA, i.e. MA and ID were more suggestible than CA controls)
- For the other four types of questions, there were no group differences in performance

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Forensic implications

- Children with ID may be able to recall useful information about an event – in some cases even at or around the level expected on the basis of their chronological age
- Although children with ID were more suggestible than CA controls, they were no more suggestible than MA controls. In other words, suggestibility was mental age appropriate.

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Henry & Gudjonsson (2003) Law and Human Behavior

Two further questions:

1. Would there be differences in eyewitness memory performance between those with mild versus moderate ID? (larger sample of children with mild versus moderate ID)
2. Would children with ID change their answers more often than controls? (repeated interview 2 weeks later)

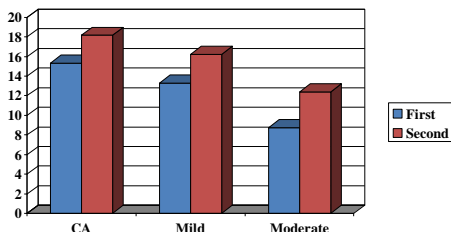
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Participants

- 30 children with **mild ID** (55-79). Mean IQ 65.6. Mean MA 8yr 3m. CA 11yrs 11m
- 17 children with **moderate ID** (40-54). Mean IQ 45.5. Mean MA 6yr 3m. CA 11yrs 10m
- 25 mainstream **CA matched** children. Mean IQ104.5. Mean MA 13yr 0m. CA 11yrs 11m
- 28 mainstream **MA matched** children. Mean IQ 103.5. Mean MA 7 yrs 3m

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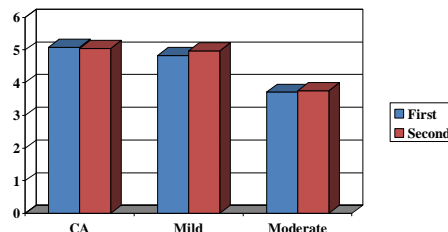
Mean free recall scores in the two interviews



The CA group and the mild ID group did not differ. Both recalled more than the moderate ID group. All recalled slightly more in interview 2.

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Mean correct on specific misleading questions (yes/no) in the two interviews



Children with mild ID were no more suggestible than the CA group. Children with moderate ID were significantly more suggestible. Interview (1,2) made no difference.

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Other Findings

General questions / Specific non-leading questions:

- Those in the CA group recalled the most information. Those with mild ID were in the middle. Those with moderate ID recalled the least amount of information

Specific misleading questions / Specific (yes/no) correctly leading questions:

- There were no group differences

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Other Findings

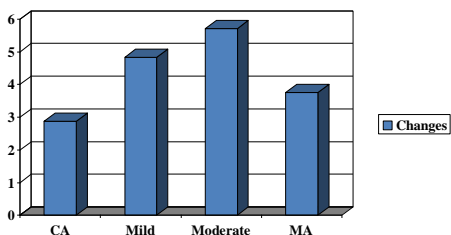
Using mental age comparisons, there was no evidence across the six question types that children with ID ever performed at a lower level than children of matched mental age

However, there was one area where ALL children with ID performed below mental age level:

Changing answers in the repeated interview: Children with ID, both moderate and mild, changed their answers to specific questions between the two interviews more than CA and MA matched controls

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Changing responses between interviews



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Forensic Implications

Testimony from children with mild ID could be useful

- Recalled as much information during free recall as same age (CA) peers
- Did not show higher levels of suggestibility than same age (CA) peers
- But - their performance on general questions and non-leading specific questions fell below CA level



Forensic Implications

Testimony from children with moderate ID is likely to be more problematic:

- More suggestible than CA peers
- Less able than CA peers to recall details about the event across a variety of question types
- But - these individuals still recalled useful details from the event



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Forensic Implications

- Repeated questions with children with ID must be undertaken with great care or avoided when possible
- Children with ID are more likely to change their responses than typically developing children of the same MA or CA



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More Recent Work

1. Increasing trace strength improves recall to the *same extent* in children with ID and CA peers (Henry & Gudjonsson, 2004, JECP). Implies mechanisms of memory storage and recall are similar in both groups.
2. Children with AS performed as well as TD peers on general/specific questions about a live event; they were not more suggestible; but they did show lower levels of free/gist recall, particularly for socially salient aspects of the scene (McCrory, Henry & Happé, 2007, JCPP)
3. There are developmental improvements in free recall in those with ID (age 8/9 to 12 years), but they are smaller than those for CA peers (Henry & Gudjonsson, 2007, ACP)

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