

## Improving the Reliability of Older Eyewitnesses

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SEEN 29<sup>th</sup> April 2009



## Why is it Important to Consider Older Adults as Witnesses?

- In 2006 11.3 million people were of state pensionable age. This is projected to rise to *12.2 million in 2010, 12.7 million in 2020*, and almost **15 million by 2031** (ONS, 2008).
- Older people are more likely to witness crimes and be victims (Wilcock et al, 2008).
- In 2001/2 there were 19,400 reported cases of distraction burglaries where the victim was 60 and over (Thornton et al. 2003).


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## Implications of Aging for Witness Performance

- Losses in the sensory system (Schneider & Pichora-Fuller, 2000).
- Deficits in paying attention to information in their environment (McDowd & Shaw, 2000).
- Less likely to be proficient at encoding information (Rabinowitz, Craik, & Ackerman, 1982).


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## Implications of Aging for Witness Performance

- Older adults have poorer episodic memory (Balota, Dolan, & Duchek, 2000).
- Older adults are poorer at making judgments about the origin of memories (Spencer & Raz, 1994).

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## Older Witnesses Identification Performance

Findings from Psychological Research (Rose, 2002)

Performance on Perpetrator Present Line-ups


	Hit	False ID	Incorrect Rejection
Young	59% (54)	11% (10)	30% (27)
Old	42% (38)	39% (35)	19% (17)

	Correct Rejection	False ID
Young	60% (54)	40% (36)
Old	33% (30)	67% (60)

Performance on Perpetrator Absent Line-ups

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## Older Witnesses Identification Performance

Findings from Police Data

• Identification decisions made by witnesses aged 60 to 98 years were collected over a one year period (2005/6) by a number of divisions across 10 police forces in England and Wales.

	Witness Performance
Identified suspect	25% (75)
Identified Foil	18% (53)
No Identification	57% (172)
Total	100% (300)

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## Older Witnesses Identification Performance

Findings from Police Data

	Young - Old 60 - 79 years	Old - Old 80 - 98 years
Identified suspect	27% (60)	19% (15)
Identified Foil	17% (38)	19% (15)
No identification	56% (124)	62% (48)
Total	100% (222)	100% (78)

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## Memory for Non-Biased Line-up Instructions

*'the perpetrator may or may not be present in the lineup'*

- Older participants failed to remember these: 91% vs 75% & 68% vs 46% (Rose et al. 2003; 2005).
- Those older participants who failed to remember them made more false identifications.
- Research has demonstrated the importance of non-biased line-up instructions (Malpass & Devine, 1981).

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## Methods for Reducing False Ids

- Pre identification questions had a beneficial effect for young adults (Dysart & Lindsay, 2001).
  - How good a memory do you have for the perpetrator?
  - How confident are you that you would be able to identify perpetrator?
  - How confident are you that you would be able to say none of them if the perpetrators face was absent?
- Practice line-ups have been shown to aid the identification performance of children (Schwartz-Kenney, Bottoms, & Goodman, 1996).

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## Wilcock & Bull (in press)

- Younger and older participants viewed a video event involving a car theft.
- Prior to the lineup participants were allocated to 1 of 3 conditions: pre id questions, a practice lineup, or control.
- Received non biased lineup instructions prior to viewing either a TP or TA lineup

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## Study 1

**Effect of Pre Lineup Procedure on Older Adults Performance on the Target Present Young Lineup**

Condition	hits	false identifications	incorrect rejections
Pre identification questions	~10	~8	~4
Practice lineup	~10	~4	~4
Control	~10	~8	~4

**Effect of pre Lineup Procedure on Older Adults Performance on the Target Absent Young Lineup**

Condition	false identifications	correct rejections
Pre identification questions	~8	~10
Practice lineup	~8	~10
Control	~12	~4

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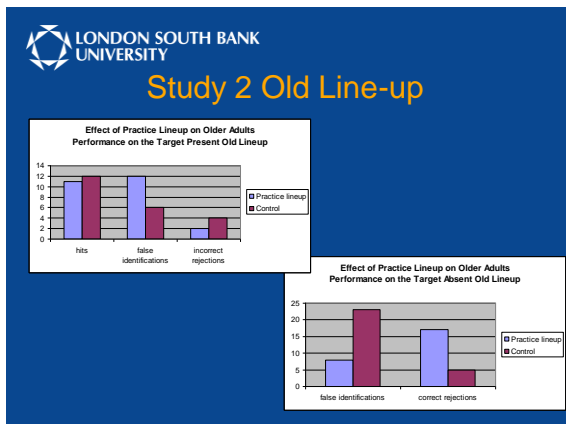
## Study 2 Young Line-up

**Effect of Practice Lineup on Older Adults Performance on the Target Present Young Lineup**

Condition	hits	false identifications	incorrect rejections
Practice lineup	~13	~8	~4
Control	~8	~14	~6

**Effect of Practice Lineup on Older Adults Performance on the Target absent Young Lineup**

Condition	false identifications	correct rejections
Practice lineup	~5	~19
Control	~20	~2



### Older Witnesses' Testimony

- Older witnesses give fewer details of an event compared to younger witnesses (Brimacombe et al. 1997)
- Older witnesses tend to be less accurate in what they report compared to younger witnesses (Yarmey, 2001)

### Using the Cognitive Interview with Older Witnesses

- Significant beneficial effect of CI (Mello & Fisher, 1996; Wright & Holliday 2007)
- Remembered a story with a 3 week delay, significant beneficial effect (Dornburg & McDaniel, 2006)
- No significant beneficial effect of CI (Milne, McAlpine, & Bull, 2000; McMahan, 2000)

### Wilcock & Bull (2006)

To modify the CI with the needs of elderly in mind: remove *'Change Perspective'* and *'Reverse Order'*

To examine specific components of the CI that may still be useful but adapt them with the needs of elderly in mind: *'Context Reinstatement'* and *'Report Everything'*

### Design

- Older adult participants viewed a simulated crime event shown on videotape
- After a 48 hour delay interviewed according to one of six conditions

1. CR
2. CR adapted
3. RE
4. RE adapted
5. CR and RE
6. CR and RE adapted

### Adaptations of CR and RE

- **CR:** Original CR instructions and a series of six photographs taken of the surrounding environment and objects contained in the video
- **RE:** Original RE instructions and told: *'Sometimes older adults think that interviewers may not be interested in what they have to say and what their opinions are. As a consequence, they give shorter accounts. I want to reiterate that I am very interested in what you can remember and I am sure that you have a good memory for the event. Tell me as much as you can, and take as much time as you want, I'm in no hurry'*



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Table 2: Means for Correct, Incorrect, and Confabulated Information

Component	Condition	Correct	Incorrect	Confabulation
CR	Adapted	82.50	10.08	1.00
	Original	73.42	7.50	.83
RE	Adapted	83.50	10.33	1.08
	Original	66.42	7.17	.50
CR & RE	Adapted	87.25	11.25	.92
	Original	67.92	8.92	.58

Adapted component interviews led to significantly more correct and incorrect information, respectively,  $p = .05$ ;  $p = .02$ . No significant difference in accuracy rates

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- ### Conclusions and the Future
- Insufficient research in both ID and interviewing
  - Interviewing: further research using the MCR component (currently collecting data on MCR sketch plan and older witnesses)
  - Identification: Practice line-up looks like it may help. Other methods to remind witnesses of non-biased line-up instructions?
  - Role of individual differences
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### Any Questions?

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