

The Scottish Institute  
for **Policing Research**

# How best to inform evidence from vulnerable witnesses using video parades

Amina Memon



# Collaborators

Catriona Havard



Brian Clifford



Fiona Gabbert



# Vulnerable witness Act

- Under the 2004 Act the prosecution can submit a report from a video parade or any other identification procedure and use this as identification evidence at trial if it is not challenged by the accused.

# Vulnerable witness Act

- All child witnesses regardless of the seriousness of the offence will be subject to a video parade in cases where identification is an issue.
- New guidance to ensure that children are better supported and less distressed (Scottish Executive, 2005).

# VIPER Parade

Examples (max 9 images)  
Viewed Twice with unbiased  
instructions

**Lord Advocates Guidelines**

# Prior Research

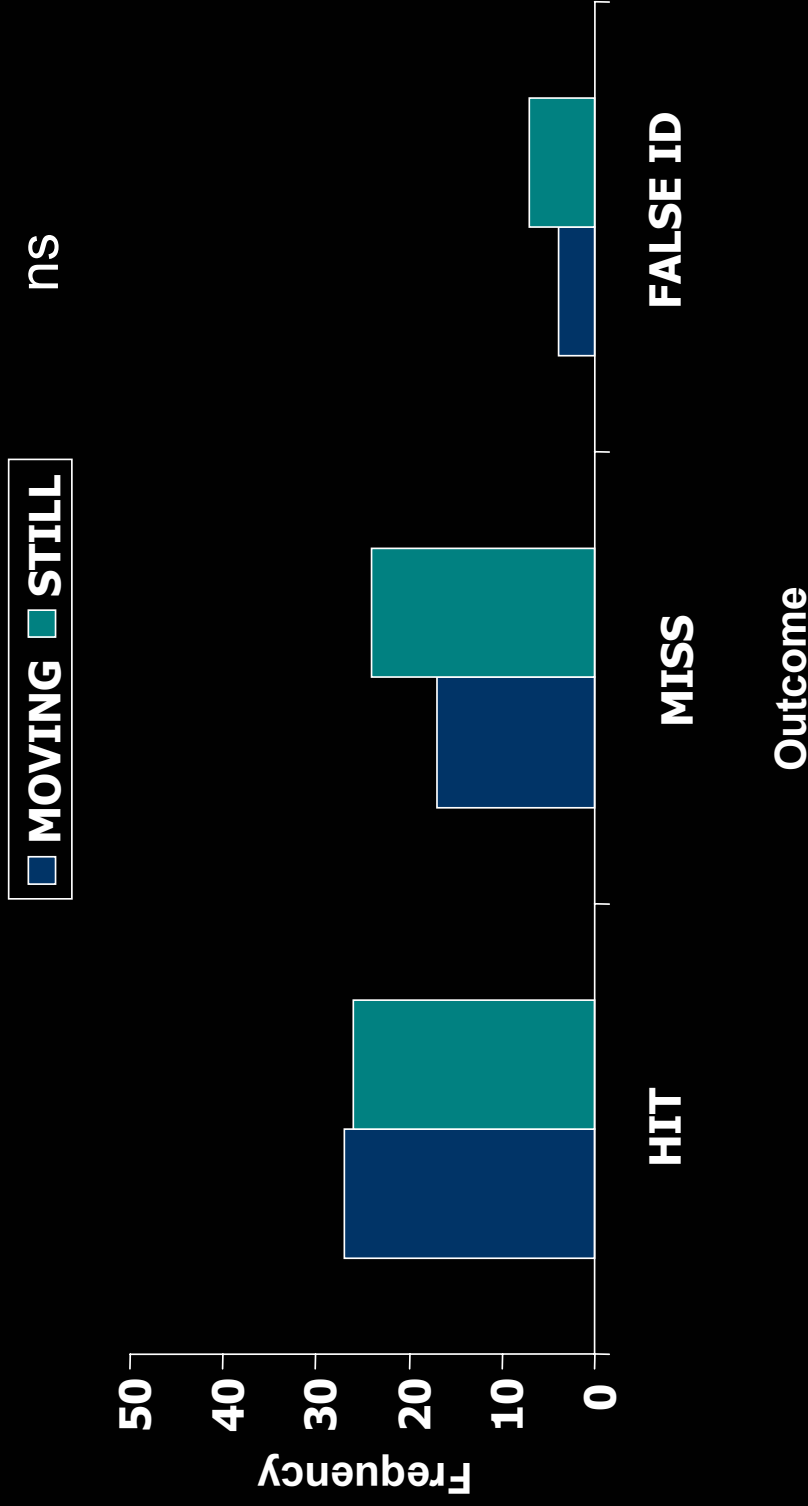
- Adults: Video parades vs. Static Images
- Target (Culprit) Present or Absent

Present  Correct Identifications (hits)

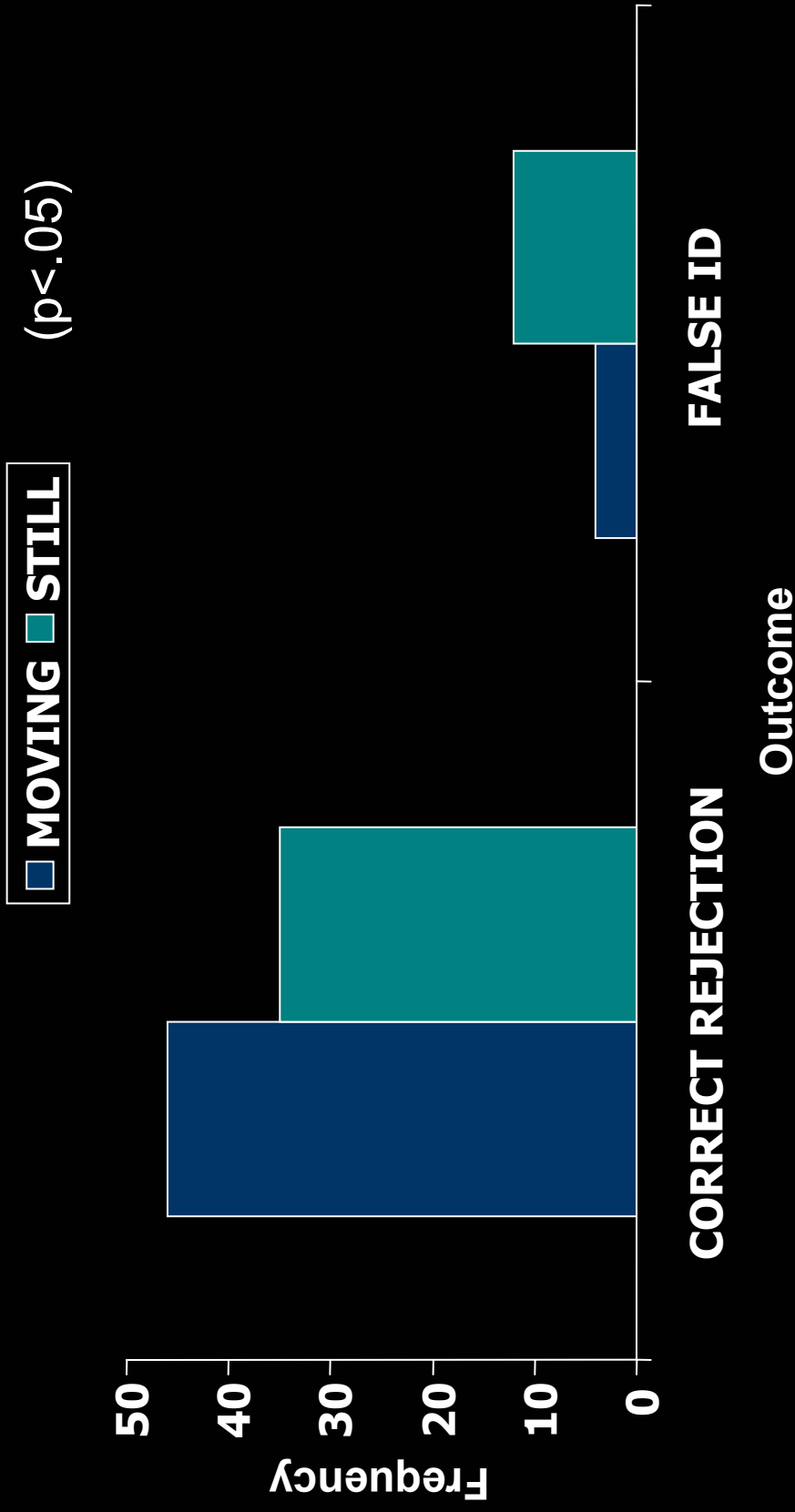
Incorrect rejections (miss), false id

Absent  Correct rejections, false id

# Moving vs Still images: target present lineups



# Moving vs Still images: target absent lineups

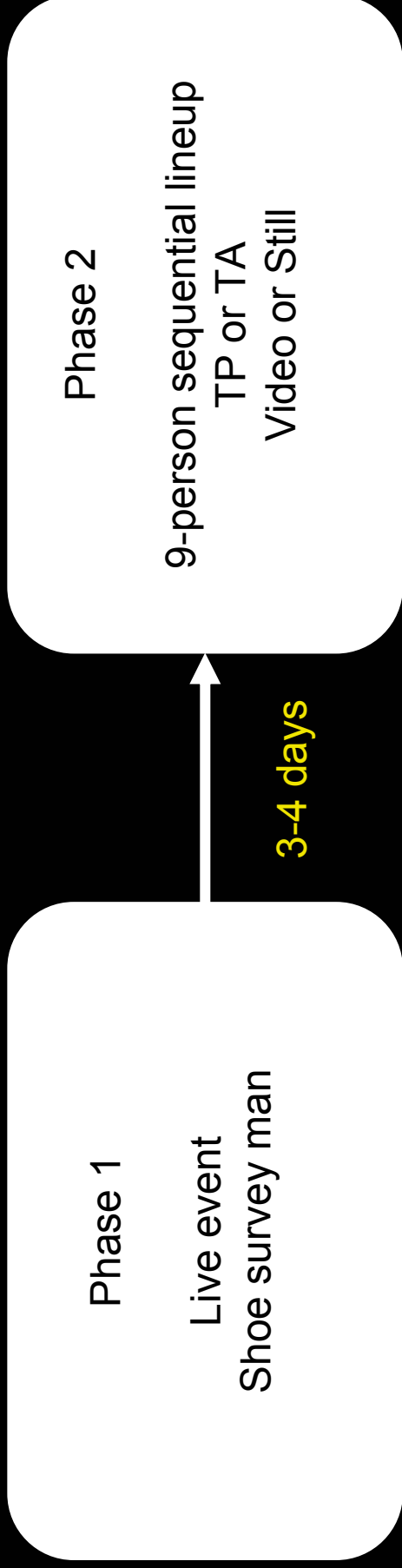


Valentine et al. (2007)

# Current Project

- How do children and young people fare with video parades (moving images) as compared to still photo lineups?
- How do children fare when the culprit's appearance has changed?
- How do variations in the standard VIPER procedure influence performance?
- Are correct identifications related to how long a witness sees a culprit?

# Experiment 1



Sample N=215

114 aged 7-9 years (59 ♀ & 55 ♂)  
101 aged 13-15 years (63 ♀ & 38 ♂).

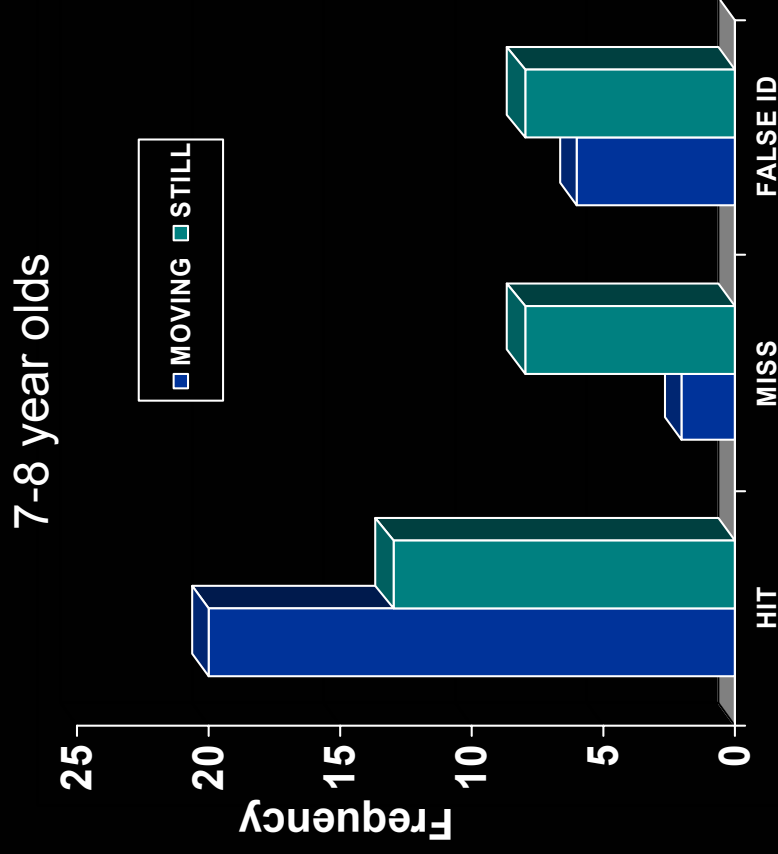
Lord Advocates Guidelines

*“the person may or may not be there”*

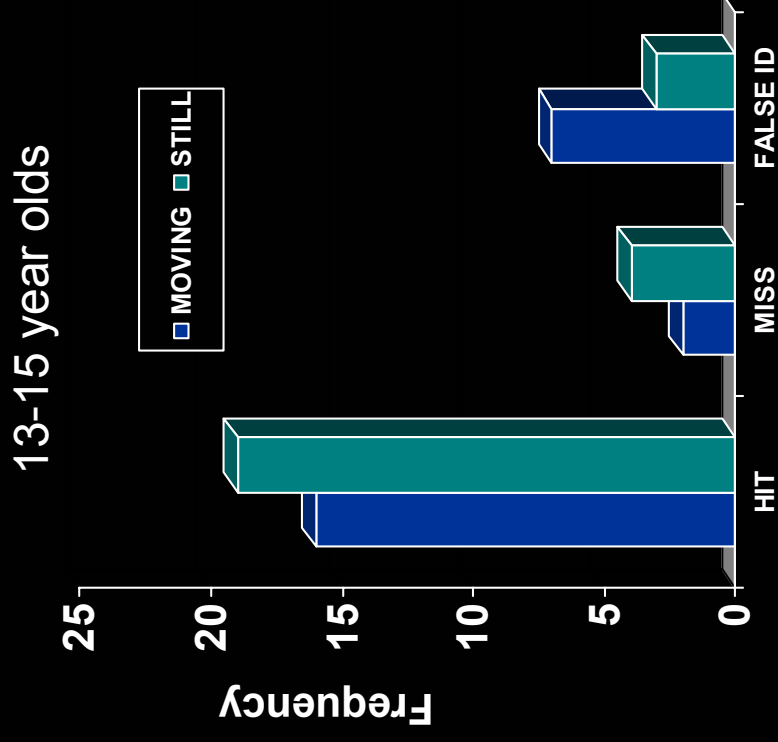
Lineup viewed twice

# Moving vs Still images: target present lineups

(*ns*)



Correct ID- 58%

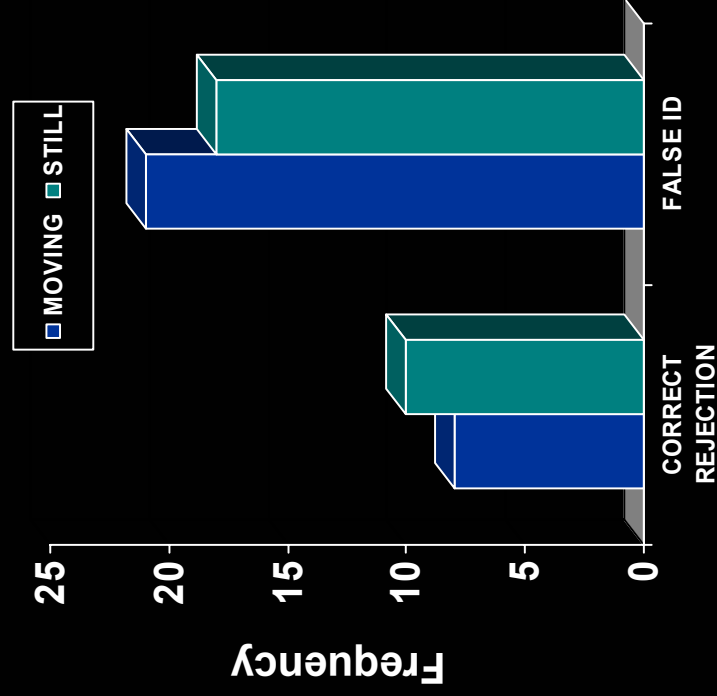


Correct ID- 69%

# Moving vs Still images: target absent lineups

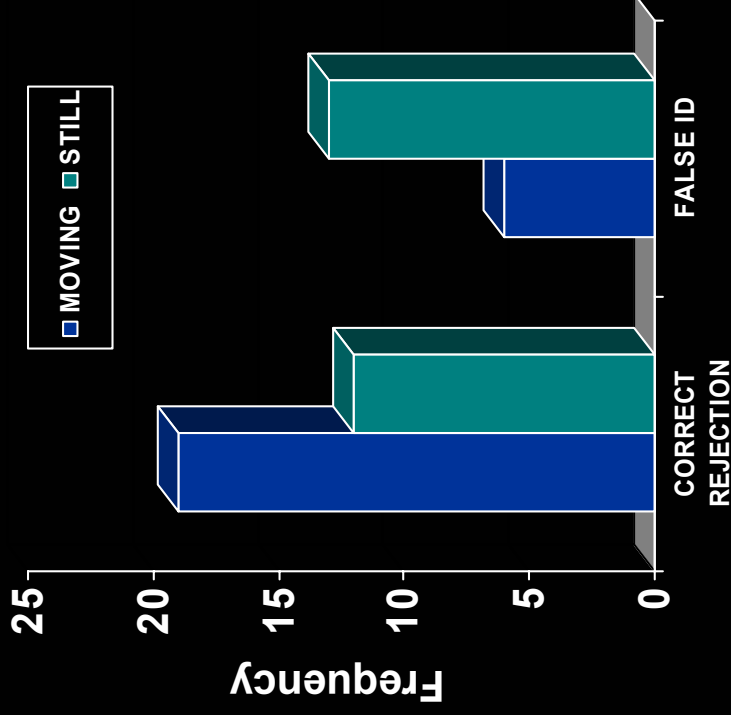
$(\chi^2(1) = 3.76, p = .053)$

7-8 year olds



Correct rejection – 32 %

13-15 year olds



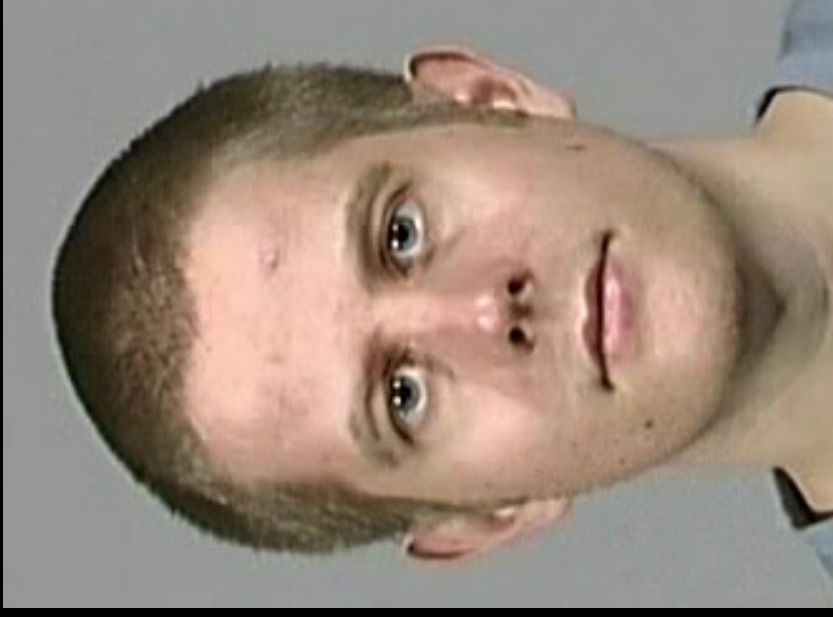
Correct rejection – 62 %

# Experiment 2

**No Change**



**Change**



Phase 1

Live event  
Shoe survey man

108 Ss aged 7-9 years  
(M = 7.7 years, 43 ♀ & 65 ♂)

3-4 days

Phase 2

9-person video lineup  
TP or TA  
No change  
or changed appearance

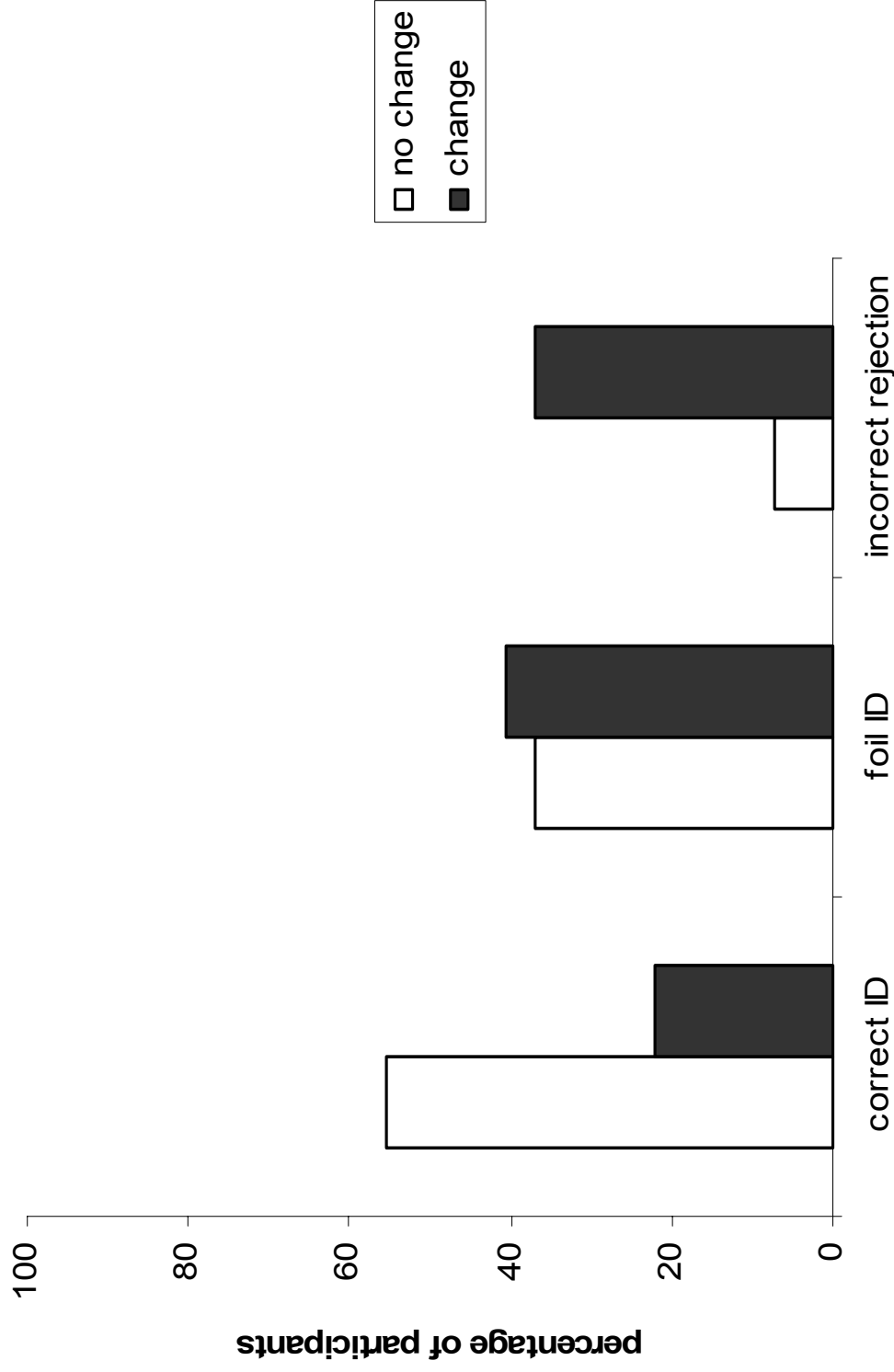
Lord Advocates Guidelines

*“the person may or may not be there”*

Lineup viewed twice

# TP lineups: Appearance and response

$\chi^2(2) = 9.23, p < .01; \phi = .41$



# TA lineups

No Change		Change	
Correct rejection	False ID	Correct rejection	False ID
40.7 (11)	59.3 (16)	48.1 (3)	51.9 (14)

No significant effect of change of appearance

$$(\chi^2 (1) = .67, p > .1; \Phi = .11)$$

# VIPER procedure

Lord Advocate's guidelines

*“the witness should normally view the whole set of images at least twice before confirming that he or she wants to view the images or any part of them again. Only where the identification is unequivocal at the first viewing, and further viewing is likely to cause distress to the witness, should this practise be departed from”*  
(Appendix C).

# Viewing once vs. twice

- Pike, Rowlands, Towell & Kemp (1999)  
TP benefit from twice viewing, not TA.

- Valentine et al., (2007)

Strict sequential reduced correct ID.

- Lindsay, Lea & Fulford (1991)

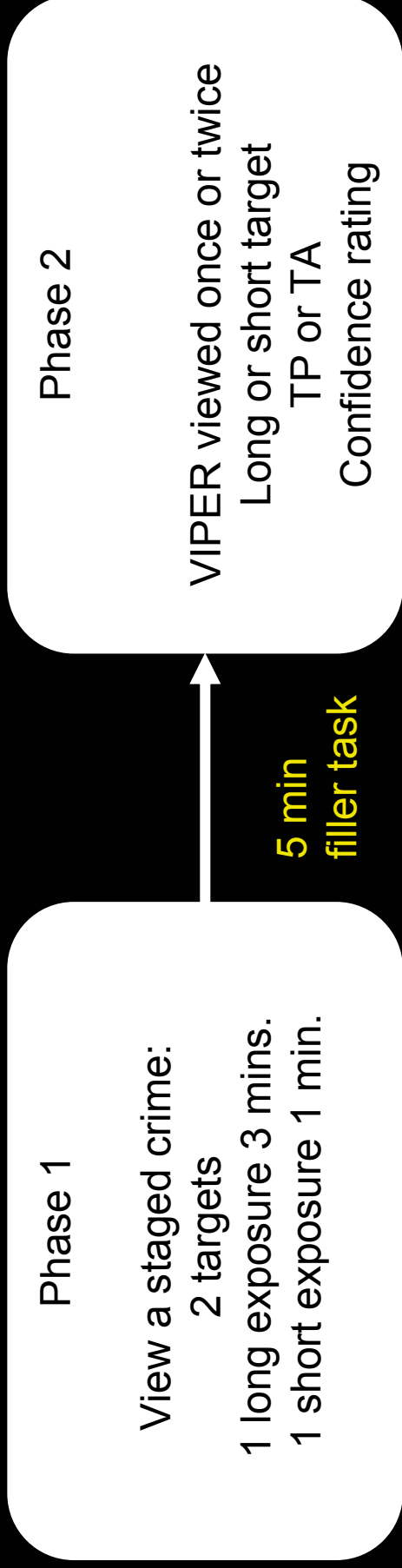
Twice viewing increased false ID rate for TA.

*Photo lineup*

# Target Exposure

- Memon, Hope & Bull (2003)  
Longer exposure more correct IDs
- Shapiro and Penrod (1986)  
Longer exposure more correct and false IDs
- Read (1995)  
Longer duration increased tendency to choose, and confidence. Higher correct IDs & false IDs

# Experiment 3



*“the person may or may not be there”*

Satrosphere Science Centre volunteers

Sample 223 aged 6-54 years (107 ♀ & 116 ♂).

186 aged between 6 & 11 years of age

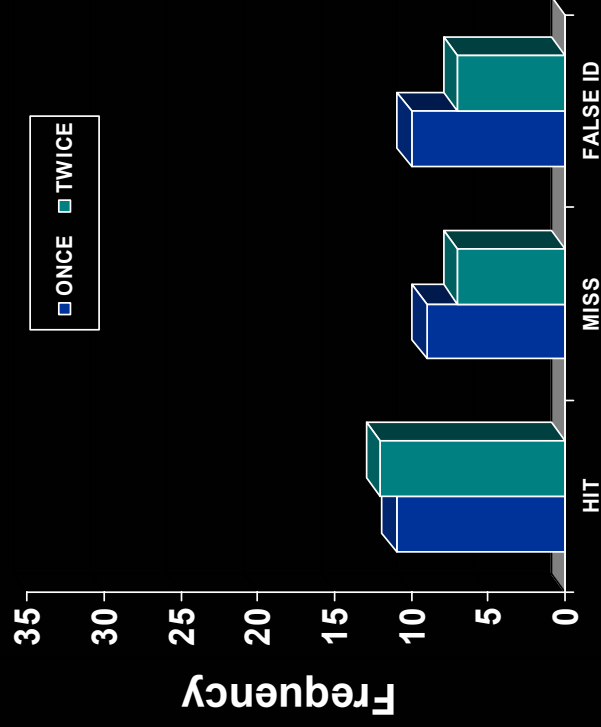
# Hypotheses

- Seeing a lineup twice will increase choosing for TP and TA lineups
- Seeing a target for longer should increase correct ID and confidence

# TP lineups: Long vs Short Exposure: lineup viewed once or twice

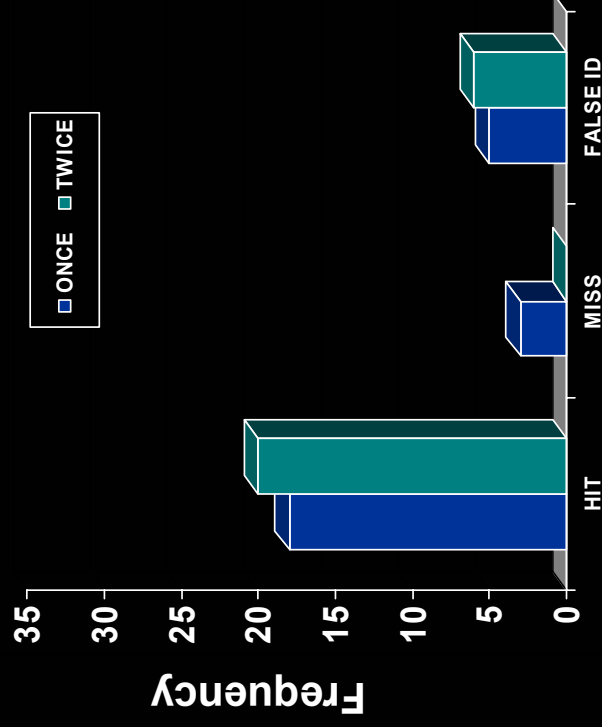
$(\chi^2(2) = 14.51, p = .001)$

### Long exposure (3 min)



Correct ID – 41.4 %

### Short exposure (1 min)



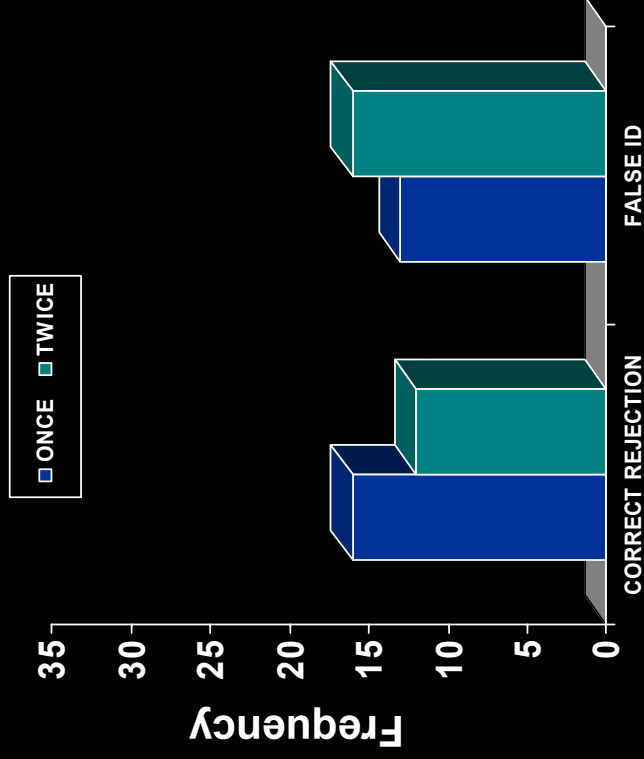
Correct ID – 73 %

# TA lineups: Long vs Short exposure: lineup viewed once or twice

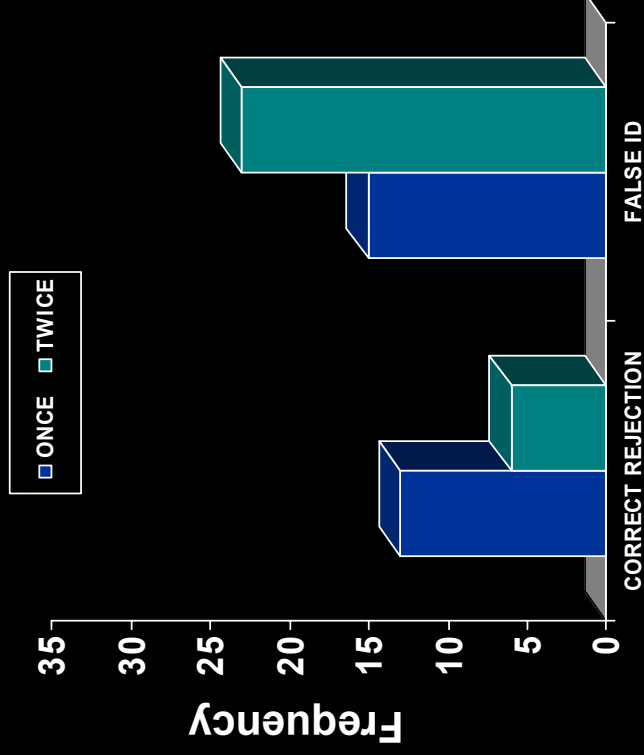
(*ns*)

Long exposure (3 min)

Short exposure (1 min)

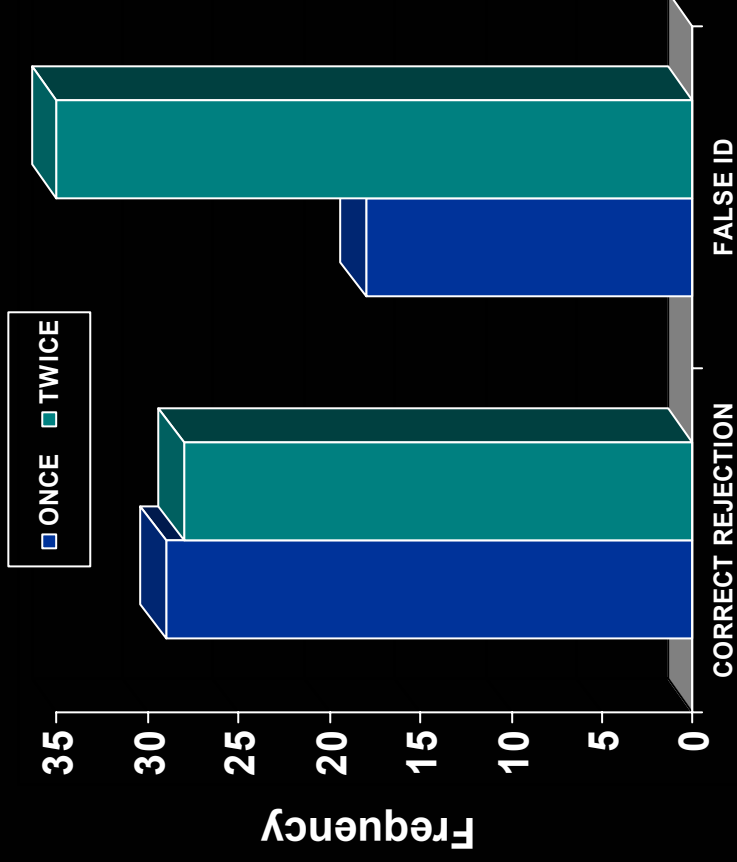


Correct rejection – 51 %



Correct rejection – 33.5 %

# TA Lineup viewed once vs. twice



$(\chi^2 (2) = 4.38, p = .036)$

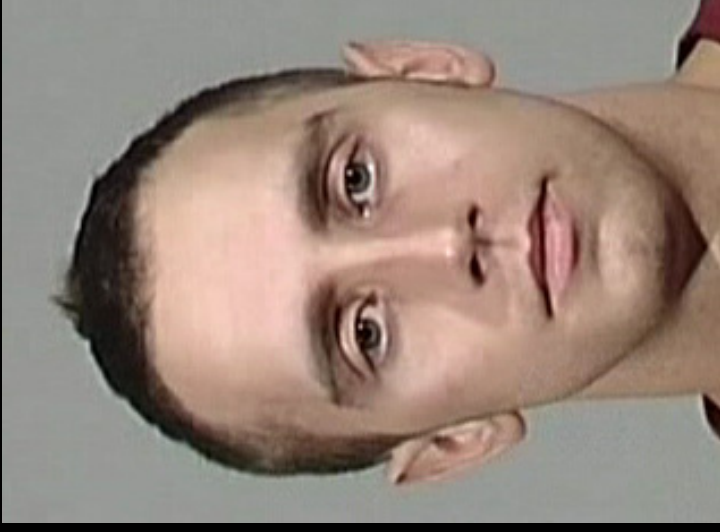
# choosing and confidence ratings

- Witnesses who viewed the lineup twice were more likely to make a choice when the culprit was absent from the lineup
- Witnesses were more confident in their decisions for the target seen for a short time

*Why are Ss more accurate, confident and more likely to choose the shorter target exposure?*



Long exposure (3 mins)



Short exposure (1 min)

Short exposure target rated by independent judges as being significantly more distinctive than long exposure target.

# Conclusions

- Vulnerable witnesses are as likely to make correction identifications in VIPER parades as they are with photo parades.
- Adolescents made more correct rejections in target absent situations with VIPER. This is consistent with the adult data.
- A change of hairstyle/colour can reduce identification accuracy

# Conclusions

- Viewing a VIPER parade twice increases choosing which can increase false IDs.
- Effects of exposure on face recognition will vary with distinctiveness of the face.
- We're currently looking at how senior citizens do with VIPER

## Acknowledgements

Nikola Bergis, Fraz Chaudhry, Susanne Donaldson, Jo Fraser, Jens Hellmann, Nicola Kent and Lynsey Kidd for assistance with data collection.

The schools and pupils who participated in the study

Grampian Police

The Satrosphere Science Centre

The Scottish Institute of Policing Research

