

# Meta-Analyses of Estimator and System Variables

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A quantitative review, combining tests of a common hypothesis

Summarizes reliable patterns of outcomes, across studies

Across labs, research teams, method, stimuli, witness samples

Alerts us to moderators of the phenomenon

Also detects anomalies – studies that do not fit the pattern

# Meta-analyses of Estimator and System variables

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Weapon Focus

Lineup Instructions

Sequential and Simultaneous Lineups

Post-Identification Feedback



# Weapon Focus

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The presence of a weapon impairs an eyewitness's ability to accurately identify the perpetrator and to recall descriptive details

Stebly (1992); Fawcett, Russell, Peace, & Christie (2011)

Weapon present vs. absent conditions

Correct culprit identifications (*Culprit-Present* lineups)  $r = .12$ , 30% vs. 42%

Accurate description of crime and culprit details:  $r = .31$

22 published articles



# Lineup Instructions

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Lineup Instructions can affect an eyewitness's willingness to make an identification

Steblay 1997 (Biased and unbiased instructions)

Steblay 2013 (Recommended "may or may not" caution)

Identification errors (Culprit-Absent lineup):  $r = .31$ , 70% vs. 43%

- Designated Innocent suspect:  $r = .23$ , 40% vs. 19%

Correct culprit IDs (Culprit-Present lineup):  $r = .05$ , 59% vs. 54%

- CP filler picks  $r = .14$ , 26% vs. 15%
- If no caution: more picks, 2.5X filler than culprit

16 published experiments 3200 witness-participants



# Sequential vs. Simultaneous lineups

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Identification of a suspect from a sequential lineup vs. a simultaneous lineup is more diagnostic of guilt

Stebly, Dysart, Fulero, & Lindsay (2001)

Stebly, Dysart, & Wells (2011): 23 labs, 13,000 witnesses

72 tests of SEQ vs. SIM lineups (replication of 2001 findings)

27 Full 2X2 “diagnostic” design studies (CP X CA, SEQ X SIM)

- Match conditions between culprit-present and culprit-absent within study

} Correct IDs from culprit-present lineup

SIMULTANEOUS	52 %
SEQUENTIAL	44 %

8% Fewer HITS from SEQ

} FALSE ALARMS from culprit-absent lineup

SIMULTANEOUS	54 %
SEQUENTIAL	32 %

22% Fewer FAs from SEQ

} DESIGNATED INNOCENT SUSPECT from culprit-absent lineup

SIMULTANEOUS	28 %
SEQUENTIAL	15 %

13% Fewer Innocent Suspect IDS

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Diagnosticity ratio (Probative value): Correct IDs/False Alarms

SEQUENTIAL LINEUP: 8.30

SIMULTANEOUS LINEUP: 5.78

Holds across all base rates of culprit in lineup

A witness's lineup selection is more likely to be the culprit, if the lineup was sequential.



# Post-Identification Feedback

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Witness confidence is affected by lineup administrator feedback

“Good. You identified the suspect.”

Malleability of confidence *after* the identification

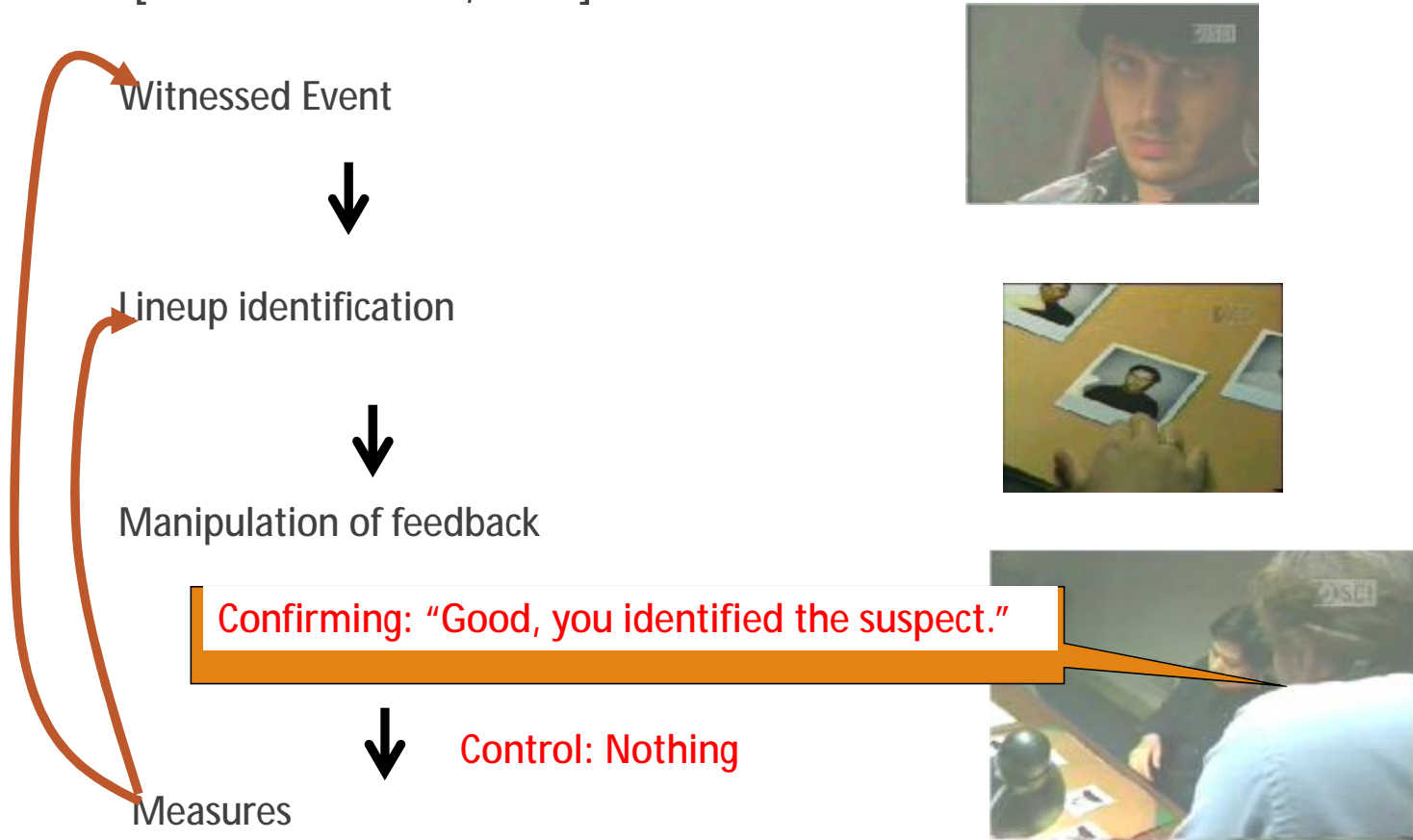
- “...potential to increase the appearance of reliability without increasing reliability itself” (*Oregon v. Lawson, 2012*)

Douglass & Steblay (2006)

Steblay, Wells, & Douglass (in press) 7,000 participants, 20 published articles

# The Post-identification feedback paradigm

[Wells & Bradfield, 1998]



## Large and robust effect sizes:

How good was the view you had of the man?  $d = .58$

How closely were you paying attention?  $d = .48$

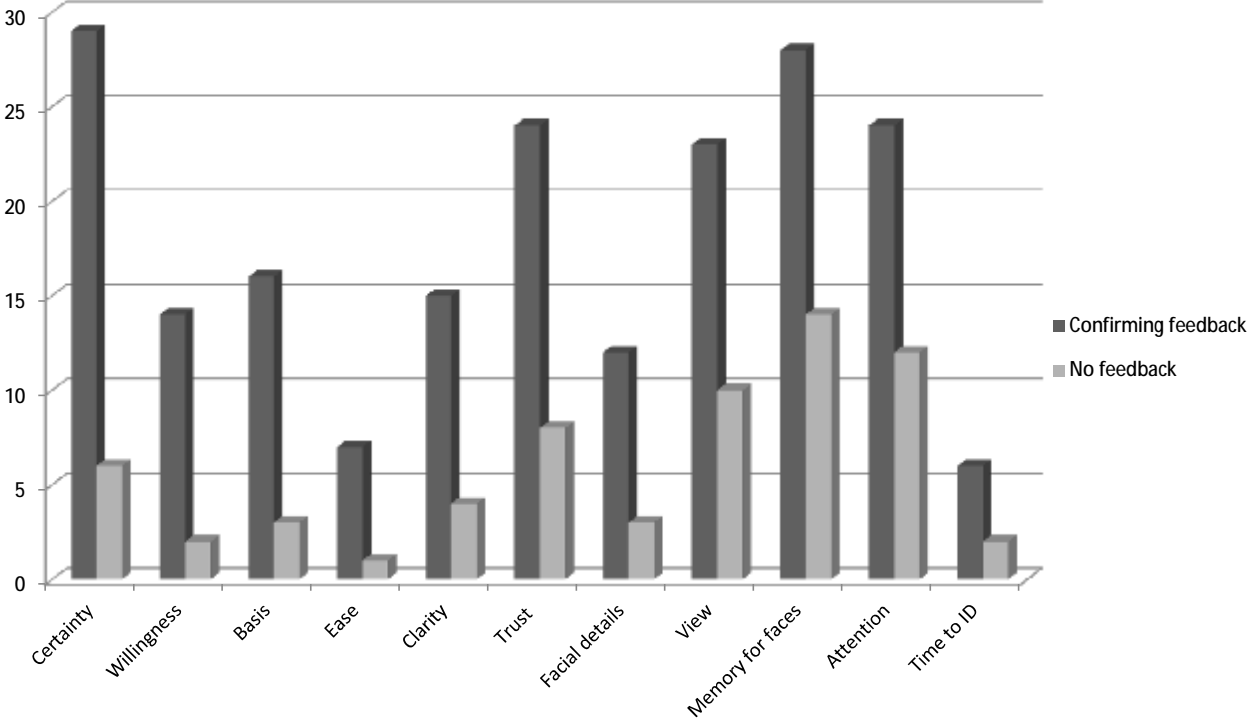
How easy was it for you to identify the man?  $d = .86$

How certain were you that you identified the gunman?  $d = .98$

How good of a basis did you have for making an identification?  $d = .90$

How willing would you be to testify in court?  $d = .98$

# Credibility Threshold



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### Feedback effect extends to

- Accurate and inaccurate witnesses
- Real witnesses to crime
- Observers are more likely to believe testimony from witnesses who receive feedback
- Remediation does not work to “un-do” the feedback

### Feedback not only affects confidence, but also distorts memory for

- The viewing experience (view, attention, ability to make out facial details)
- The identification process (ease of ID, basis for the ID, etc.)
- Willingness to testify

Evidence is contaminated

Threatens the central premise of *Manon*



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Malleability of confidence as System Variable

Document witness **certainty** at the time of the identification and before any feedback

Document witness reports of **attention, view, willingness to testify** before feedback

Blind lineup administrator

Instruct the witness that lineup administrator does not know who the suspect is



# Implications

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## Eyewitness accuracy and confidence

- Why would a witness pick the wrong person?
- Why would the witness pick the suspect from this lineup, if he's innocent?
- How can a witness be so confident, if she's wrong?