Meta-Analyses of Estimator and System Variables
Meta-analyses of Estimator and System variables

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

Weapon Focus
Lineup Instructions
Sequential and Simultaneous Lineups
Post-Identification Feedback
Weapon Focus

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

Steblay (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

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):
- Designated Innocent suspect: $r = .31$, 70% vs. 43%
- $r = .23$, 40% vs. 19%

Correct culprit IDs (Culprit-Present lineup):
- CP filler picks $r = .05$, 59% vs. 54%
- $r = .14$, 26% vs. 15%
- If no caution: more picks, 2.5X filler than culprit

16 published experiments  3200 witness-participants
Sequential vs. Simultaneous lineups

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

Steblay, Dysart, Fulero, & Lindsay (2001)
Steblay, 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

<table>
<thead>
<tr>
<th>Type</th>
<th>Simulation</th>
<th>Sequential</th>
<th>Fewer HITS from SEQ</th>
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<tbody>
<tr>
<td>SIMULTANEOUS</td>
<td>52%</td>
<td>44%</td>
<td>8%</td>
</tr>
<tr>
<td>SEQUENTIAL</td>
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FALSE ALARMS from culprit-absent lineup

<table>
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</thead>
<tbody>
<tr>
<td>SIMULTANEOUS</td>
<td>54%</td>
<td>32%</td>
<td>22%</td>
</tr>
<tr>
<td>SEQUENTIAL</td>
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DESIGNATED INNOCENT SUSPECT from culprit-absent lineup

<table>
<thead>
<tr>
<th>Type</th>
<th>Simulation</th>
<th>Sequential</th>
<th>Fewer Innocent Suspect IDS</th>
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</thead>
<tbody>
<tr>
<td>SIMULTANEOUS</td>
<td>28%</td>
<td>15%</td>
<td>13%</td>
</tr>
<tr>
<td>SEQUENTIAL</td>
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Diagnosticsity 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

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]

Witnessed Event

↓

Lineup identification

↓

Manipulation of feedback

Confirming: “Good, you identified the suspect.”

↓

Measures

Control: Nothing
Large and robust effect sizes:

How good was the **view** you had of the man?  
$\textit{d} = .58$

How closely were you paying **attention**?  
$\textit{d} = .48$

How **easy** was it for you to identify the man?  
$\textit{d} = .86$

How **certain** were you that you identified the gunman?  
$\textit{d} = .98$

How good of a **basis** did you have for making an identification?  
$\textit{d} = .90$

How **willing** would you be to testify in court?  
$\textit{d} = .98$
Credibility Threshold
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 *Manson*
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

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?