Eyewitness Identification Evidence: Procedural Reforms

Presentation to the California Commission for the Fair Administration of Justice

March 2006, San Francisco

Overview

- Proven cases of convictions of the innocent
- Memory as trace evidence metaphor
- Scientific method for finding cause-effect relations
- Relative judgments (a psychological process)
  - **Instructions**
  - **The selection of fillers**
  - **The sequential lineup**
- Blind testing (the most important reform)
- False certainty (the problem of feedback)

Analyses of Convictions of the Innocent

1992-present DNA exoneration cases:

show that mistaken eyewitness identification was the primary evidence used to convict these people.

[Connors et al, 1996; Wells et al, 1998; Scheck, Neufeld, and Dwyer, 2000.]

Source: Wells et al, Law and Human Behavior, 1998

Table 1. A Sample of 40 Cases in Which DNA Evidence Exonerated Persons Wrongfully Convicted of Crimes

Name	Charges	Year convicted	Original sentence/ years served	Evidence producing conviction
Adams, Kenneth	Two counts murder, rape	1978	75/16	**Witness id**
Alejandro, Gilbert	Sexual assault	1990	12/4	Blood evidence testimony; **victim id**
Bloodsworth, Kirk	Murder, rape	1985	Death, reduced to life/9	**Five witness ids**; self-incriminating statements
Bravo, Mark Diaz	Rape	1990	8/3	**Victim id**; blood analysis; misrepresentation
Brison, Dale	Rape, kidnapping	1991	18–42/3.5	**Victim id**; hair analysis; weak alibi
Bullock, Ronnie	Aggravated sexual assault	1984	60/10.5	**Two victim ids; police id**; proximity of residence
Callace, Leonard	Sodomy, sexual abuse	1987	25–50/6	**Victim id**; blood analysis; weak alibi
Chalmers, Terry Leon	Rape, sodomy	1987	12–24/8	**Victim id**; weak alibi

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Cotton, Ronald	Rape (2 counts)	1985, 1987 (2nd trial)	Life+ 54/10.5	**Victim id**; similarity of shoes and flashlight
Cruz, Rolando	Murder, kidnapping, rape	1985	Death/11	Alleged "dream visions" of the murder; witness statements
Dabbs, charles	Rape	1984	12.5–20/7	**Victim id**; blood analysis
Davis, Gerald Wayne	Kidnapping, sexual assault (2 counts)	1986	14–35/8	**Victim id**; semen analysis
Daye, Frederick Rene	Rape (2 counts), kidnapping	1984	Life/10	**Victim id; witness id**; blood analysis; misrepresentation
Dotson, Gary	Rape, aggravated kidnapping	1979	25–50/8	**Victim id**; semen analysis; hair analysis
Green, Edward	Rape	1989	Never sentenced/ 9 months	**Victim id**; blood analysis
Hammond, Ricky	Sexual assault, kidnapping	1990	25 and 3 probation/2	**Victim id**; victim id of car; hair analysis; weak alibi
Harris, William O'Dell	Sexual assault	1987	10–20/7; 1 home	**Victim id**; semen analysis
Hernandez, Alejandro	Murder, kidnapping, rape	1985	Death/11	Self-incriminating and inculpatory statements; witness statements

Honaker, Edward	Rape, sexual assault, sodomy	1985	3 life + 34/10	**Victim id; witness id**; hair analysis; similarity of clothing
Jimmerson, Verneal	Two counts murder, 2 counts aggravated kidnapping, rape	1978	Death/11	**Witness id**
Johnson, Richard	Armed robbery, sexual assault	1990	36/6	**Two victim ids**, semen analysis, fingerprints
Jones Joe C.	Rape, aggravated kidnapping	1986	Life + 10–25/6.5	**Victim id**; proximity to crime scene; similarity of pants; **2 witness ids**
Kotler, Kerry	Rape (2 counts)	1982	25–50/11	**Victim id**; non-DNA genetic analysis
Linscott, Steven	Murder rape	1982	40/3 in prison; 7 on bond	Blood analysis; hair analysis; "dream confession"
Mitchell, Marvin	Forced intercourse w/minor, unnatural sex w/minor	1990	9–25/8	**Victim id**, semen analysis, self-incriminating statement
Motto, Vincent	Rape, robbery, deviate sex, criminal conspiracy	1987	12–24/9	**Victim id**
Nelson, Bruce	Murder, rape	1982	Life/9	Testimony of codefendant, self-incriminating

Source: Wells et al, Law and Human Behavior, 1998

Oritz, Victor	Rape, sodomy, deviate intercourse	1984	12.5–25 concurrent/ 12	**Victim id**, semen analysis
Piszczek, Brian	Rape	1991	15–25/4	**Victim id**; weak alibi
Rainge, Willie	Two counts murder, 2 counts aggravated kidnapping, rape	1978	Life/18	**Witness id**
Scruggs, Dwayne	Rape	1986	40/7.5	**Victim id**; similarity of boots
Shephard, David	Rape	1984	30/10	**Victim id**; blood analysis; weak alibi
Smith, Walter	2 counts rape	1986	78–190/11	**Victim id**
Snyder, Walter (Tony)	Rape, sodomy	1986	45/7	**Victim id**; similarity of clothing; blood analysis; weak alibi
Toney, Steven	Sodomy, rape	1982	Two consecutive life/14	**Victim id, witness id**

Vasquez, David	Murder, rape	1985	35/5	**Witness id**; no alibi; confession, hair analysis
Web, Thomas	Rape	1983	70/13	**Victim id**
Williams, Dennis	Two counts murder, 2 counts aggravated kidnapping, rape	1978	Death/18	**Witness id**
Woodall, Glen	Sexual assault, kidnapping	1987	2 life + 203–335/4, then 1 home	Blood analysis; hair analysis; **victim id**; similarity of clothing

Source: Wells et al, Law and Human Behavior, 1998

This is a small slice of cases of mistaken identification because:

- The biological evidence not collected at all
- The biological evidence was not collected properly
- The biological evidence was destroyed
- The biological evidence deteriorated
- The biological evidence was lost
- There was no biological evidence

Only a fraction of cases can be solved with DNA tests because most serious crimes do not leave behind definitive biological evidence.

It is rare to have any definitive, DNA-rich biological trace evidence for:

- **Murders**
- **Muggings**
- **Burglaries**
- **Drive-by shootings**
- **Robberies**

Mistaken Identification is a Dual Problem

A person who did not commit the offense can be convicted

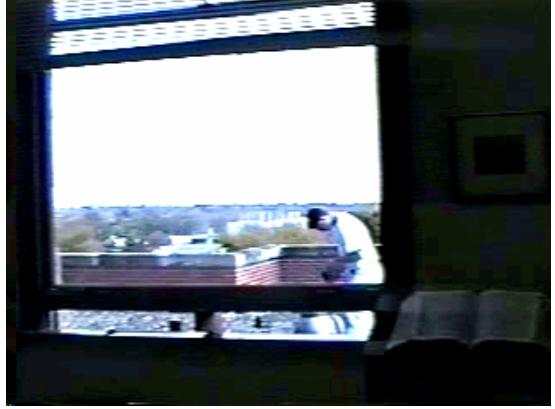
The actual perpetrator gets away with the crime

Eyewitness Memory as Trace Evidence

- Like physical trace evidence, eyewitness memory traces can be delicate.
- Hence, professionalism requires that one be concerned with how the evidence is collected, recorded, and so on, so as to avoid:
  - **Deterioration**
  - **Cross contamination**
  - **Misinterpretation**
- Protocol

The Scientific Method for Studying Eyewitness Identification

Created event

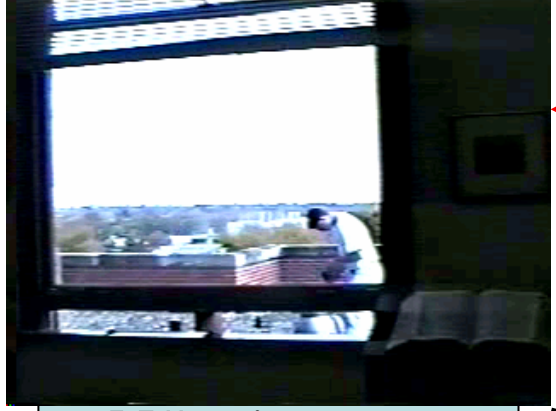


Created event

N# witnesses

View a lineup

Created event



Nature of the witnessed event

N# witnesses

View a lineup

Identification decision

Certainty of identification

Created event

N# witnesses

Characteristics of witnesses

View a lineup

Identification decision

Certainty of identification

Created event

N# witnesses

Instructions

View a lineup

Identification decision

Certainty of identification

Created event

N# witnesses

View a lineup

Type of lineup

Identification decision

Certainty of identification

Created event

N# witnesses

View a lineup

Identification decision

Certainty of identification

Behaviors of lineup administrator

Common Criticisms

"These are just experiments; real witnesses would be too cautions to make these errors"

- **Comparisons when the witness knows it is an experiment at the time of identification (versus thinks it was real) show no important differences.**
- **DNA exoneration cases**
- **Archival analyses of real witnesses show high rates of filler identifications (20-25% or so for both experiments and actual cases)**

Common Criticisms

"The eyewitnesses in these experiments are not experiencing the levels of stress and intensity of feeling that real eyewitnesses experience; higher stress and intense feelings leave stronger memory traces."

Due to ethical constraints, few eyewitness experiments place participants under stress. But, our understanding of how memory works clearly points to stress and intense feelings as factors that have a negative impact on memory.

Studies that have used stress support the interference theory.

Common Criticisms

Stress and intensity…

Recent issue of *Psychiatry and the Law* (2004, Vol. 27, issue 3, pages 265-279) article by Charles Morgan et al (Yale University).

Military personnel in survival training;

- **Food and sleep deprivation for 48 hours**
- **High versus low stress interrogation**
- **24 hrs later shown lineups of interrogators**
- **Simultaneous versus sequential**
- **Sequential did better, but …**
- **High stress performed much more poorly**

Common Criticisms

"The standard experiment uses college students as witnesses"

- College students are among the very best eyewitnesses. Their general health, visual acuity, memory abilities, and alertness are exceptional.
- Comparison studies have consistently shown college students outperforming other age groups.

General Observation

In general, it is not the overall level of error in experiments that is of interest for eyewitness researchers.

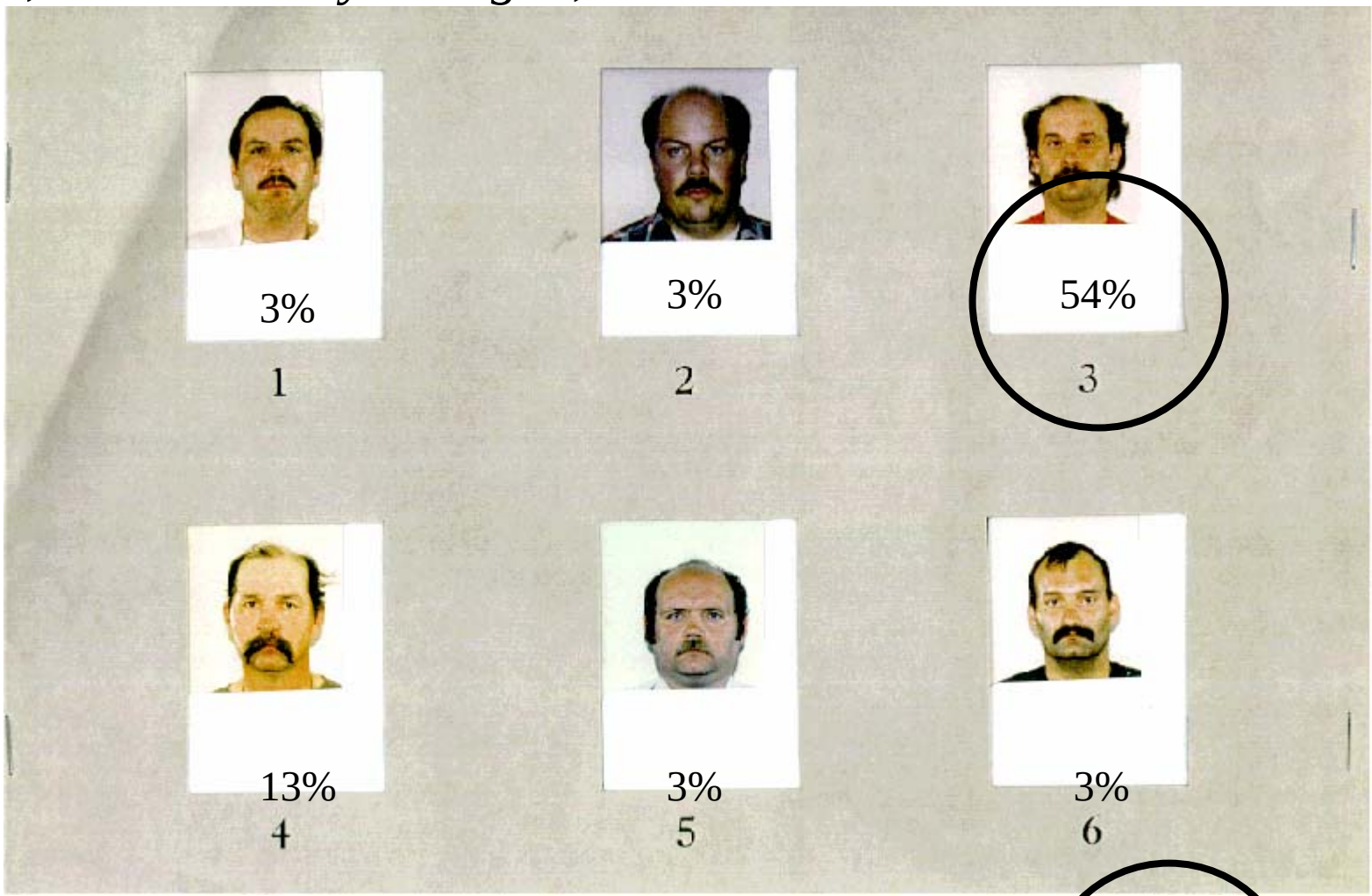
Instead, it is the patterns of error that are of interest because general principles are contained in patterns.

The Relative-Judgment Process

Eyewitnesses tend to select the person who looks most like the perpetrator <u>relative</u> to the other members of the lineup.

From: Wells, *The Psychology of Lineup Identifications* (1984)

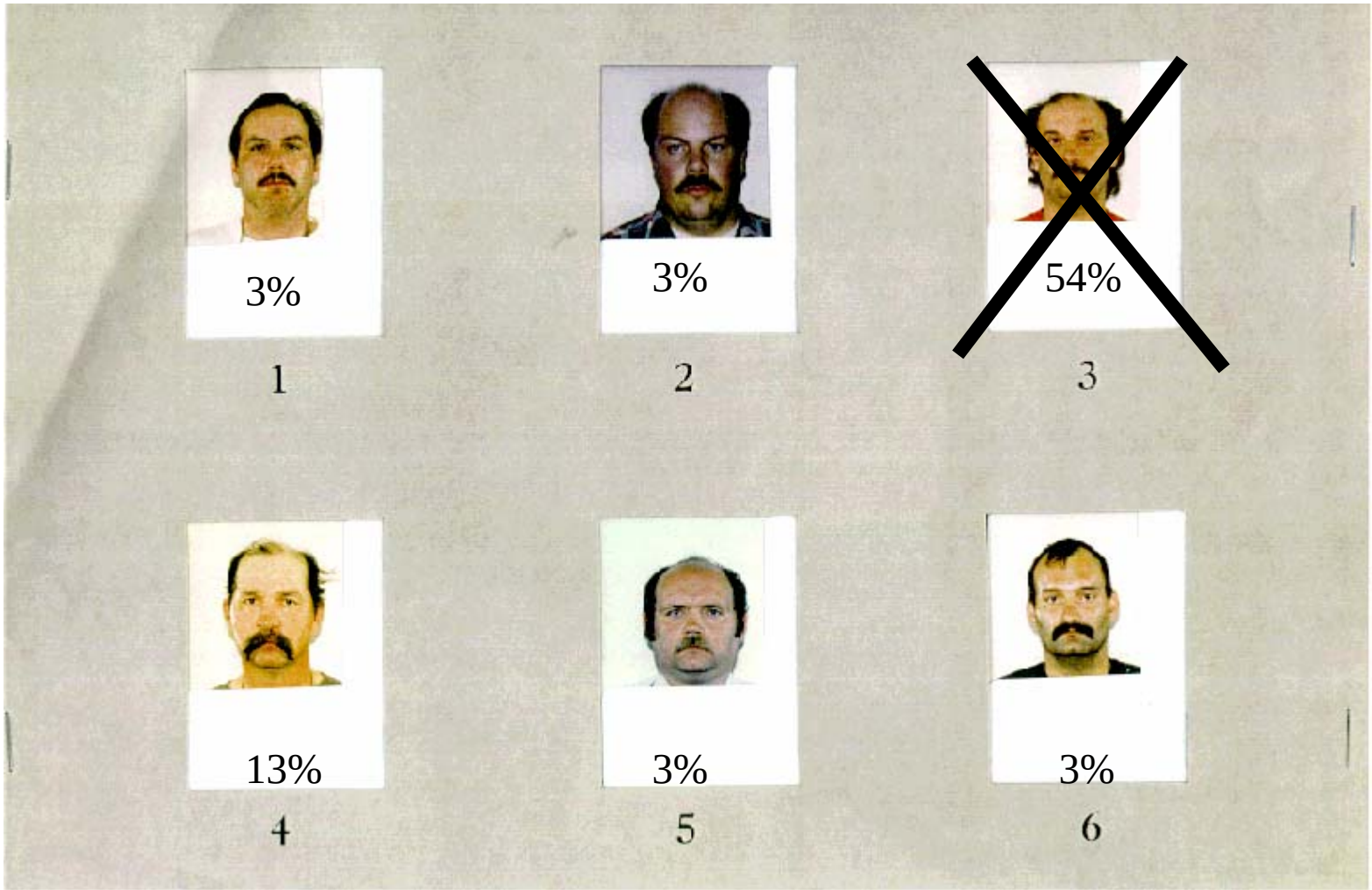
From: *What Do We Know About Eyewitness Identification?*
Wells, *American Psychologist*, 1993.



Note: All witnesses were warned that the actual perpetrator might not be in the lineup

No choice = 21%

Removal-without replacement and relative judgment processes [from Wells, *American Psychologist*, 1993]



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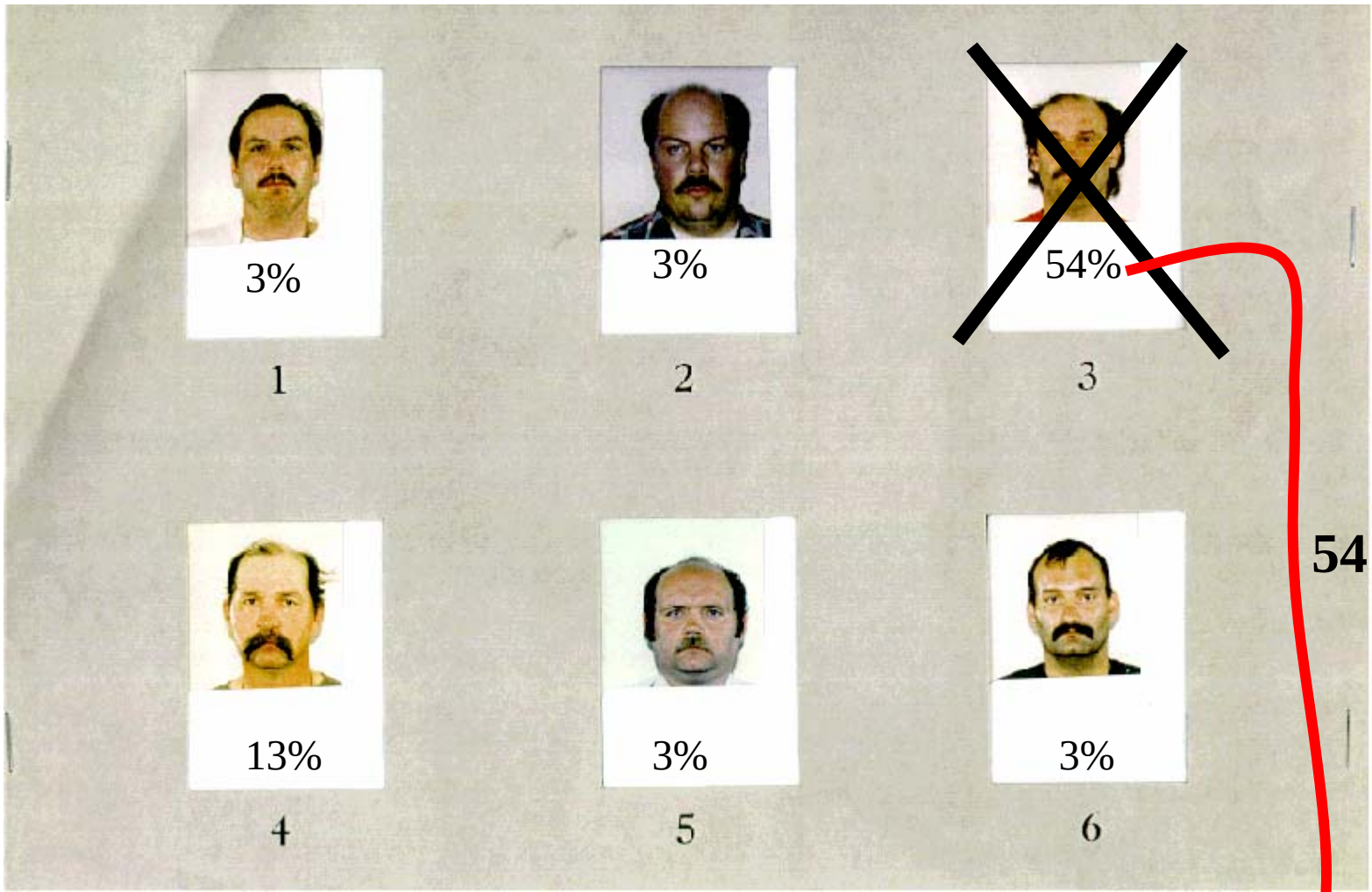
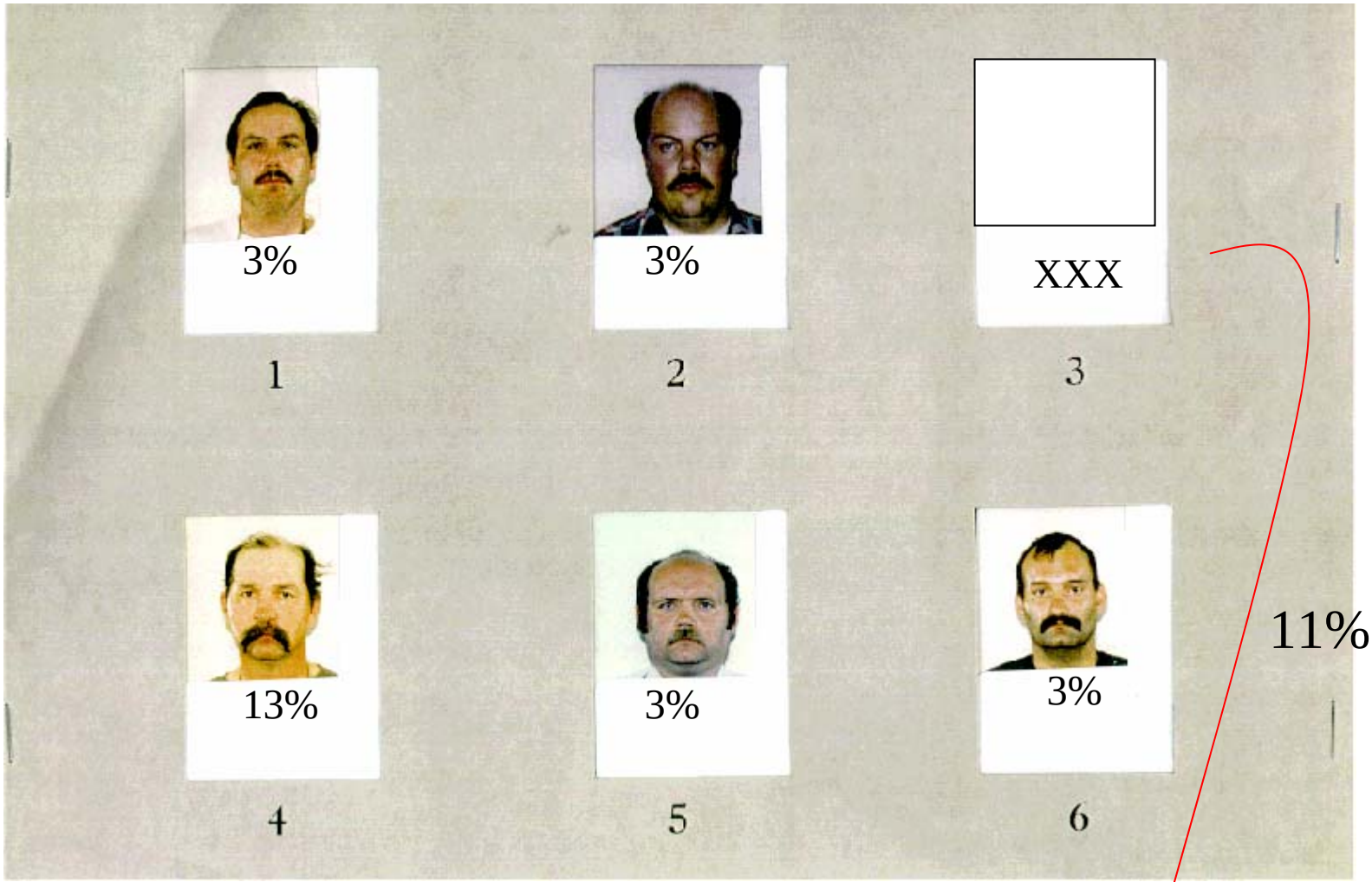
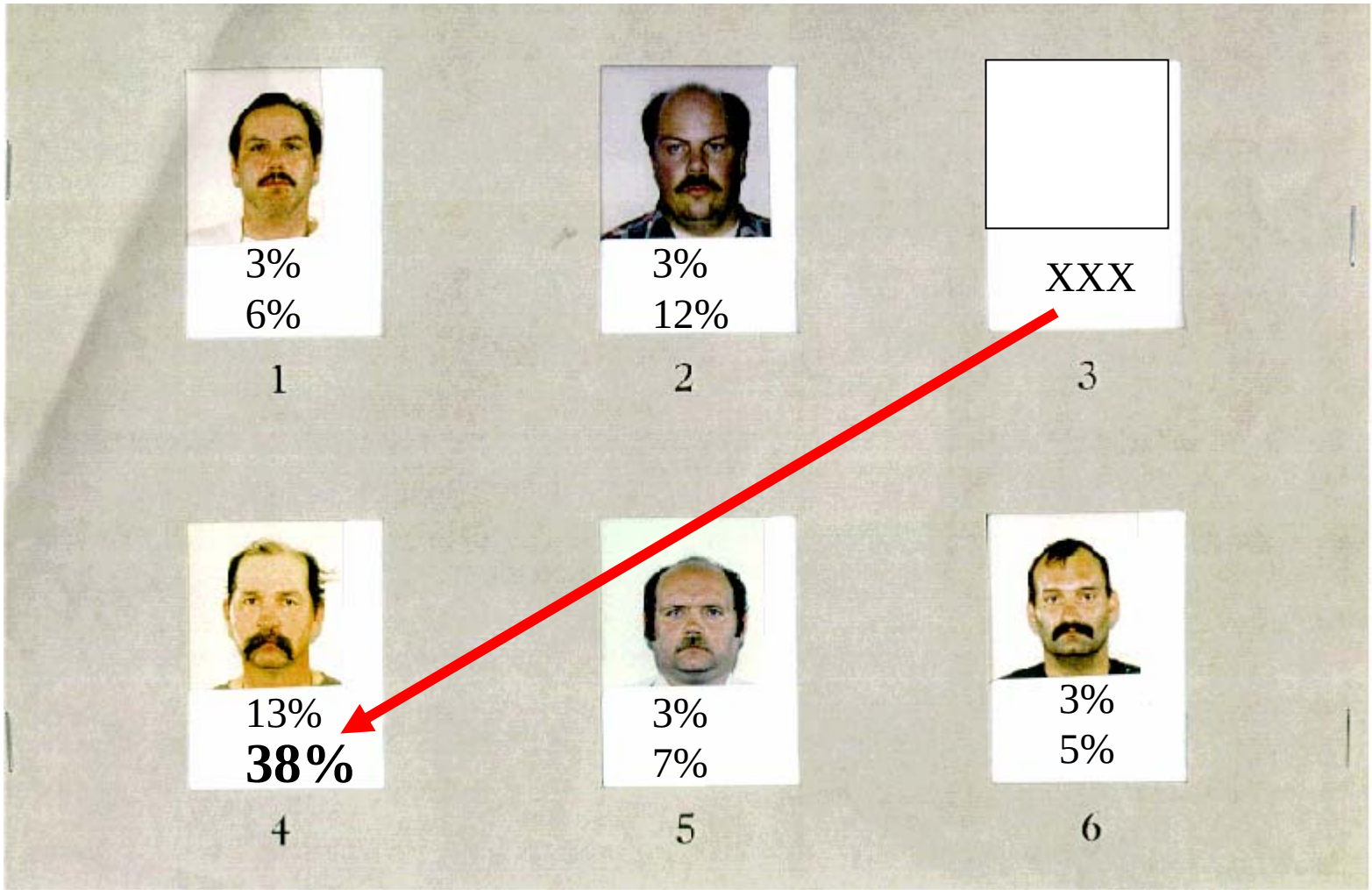



3%
3%
XXX
1
2
3
13%
3%
3%
4
5
6
11%
No choice =
21%
32%



No choice =
21%
32%

The problem with the relative-judgment process is that some member will always look more like the perpetrator than the remaining members of the lineup; even when the actual perpetrator is not in the lineup.

Important implications of the relative judgment problem:

- Witnesses must be warned explicitly before viewing the lineup that the actual culprit might not be present
- Fillers should be selected who fit the witness' description of the perpetrator in significant features


1324-1

Sequential Lineup Procedure

Lindsay and Wells, 1985, *Journal of Applied Psychology*

The standard simultaneous procedure

1

2

3

4

5

6

Is this the man you saw pull the trigger? “yes, no, or not sure”

Is this the man you saw pull the trigger? “yes, no, or not sure”

Is this the man you saw pull the trigger? “yes, no, or not sure”

Is this the man you saw pull the trigger? “yes, no, or not sure”

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Is this the man you saw pull the trigger? “yes, no, or not sure”

Steblay et al (*Law and Human Behavior*, 2001)

- 30 experimental tests using 4,145 participant-witnesses

Results:

Overall reduction in choosing

Proportionately more reduction of mistaken identifications than of accurate identifications.

Simultaneous vs. Sequential

Diagnosticity ratios, sometimes called “index of probative value,” reflect the likelihood that an identification of a suspect is accurate.

hits/false alarms

Diagnosticity ratios based on Steblay et al.

- Simultaneous = .50/.27 = 1.85
- Sequential = .35/.09 = 3.88

Simultaneous vs. Sequential

Sequential is a higher standard: “Upward criterion shift”

Sequential is more conservative: Some losses in hits.

Positive identifications are more likely to be accurate.

The Concept of Blind Testing

Blind testing means that the person administering the test does not know the “correct” or “desired” answer.

In tests of new drugs, for instance, the medical person who examines subjects does not know whether the subject received the experimental drug or a placebo.

Blind Testing

The need for blind testing does not presume that there is an intentional effort by the tester to influence the subject.

Instead, the purpose of blind testing is to prevent unintentional influence.

People are generally unaware of the many ways in which they unintentionally influence others.

Blind Lineup Procedures prevent:

Verbal influences on identification decision

- **e.g., suspect is in position #3,**
  Witness: "um..number two.."
  Detective: "Now, be sure you look at everyone"
- **or, if suspect is in position 3,**
  Witness: says "um..number three.."
  Detective: "Tell me about number three"
- **or, if the eyewitness says nothing..**
  Detective: "I noticed you paused on number three"

Nonverbal influences on identification

- **Pauses, leaning, displays of interest/disinterest**

Who should conduct the lineup?

- **Independent Administrator, someone who is not aware of which member of the lineup or photo-spread is the suspect**

A Note on Instructions When Using Blind Procedures

Witnesses should be told that the lineup administrator does not know which person is the suspect and which are fillers

Rationale:

- **To prevent the witness from looking to the lineup administrator for “cues.”**
- **To make it clear that the task is to find out what the eyewitness knows from his/her own memory.**

Blind and Sequential

The sequential procedure should not be used without blind testing procedures.

Eyewitness Certainty

The certainty the eyewitness expresses is the primary factor determining whether or not people (e.g., jurors) believe that the eyewitness made an accurate identification.

Certainty and Accuracy

Meta-analyses indicate that the certainty-accuracy correlation in eyewitness identification could be as high as .40-.45 under “pristine” conditions.

This is approximately the same as the correlation between height and gender.

Unfortunately, the way that identifications are commonly obtained leads to an unfortunate ambiguity about the meaning of eyewitness identification certainty.

The Creation of False Certainty

Eyewitnesses can be influenced even <u>after</u> they have made a choice from the lineup.

"Good. You identified the actual suspect."

"Yes! You got em!"

"They clapped"

The Post-identification feedback paradigm

[Wells & Bradfield, *Journal of Applied Psychology*, 1998]

Witnessed Event

Lineup identification

Manipulation of feedback

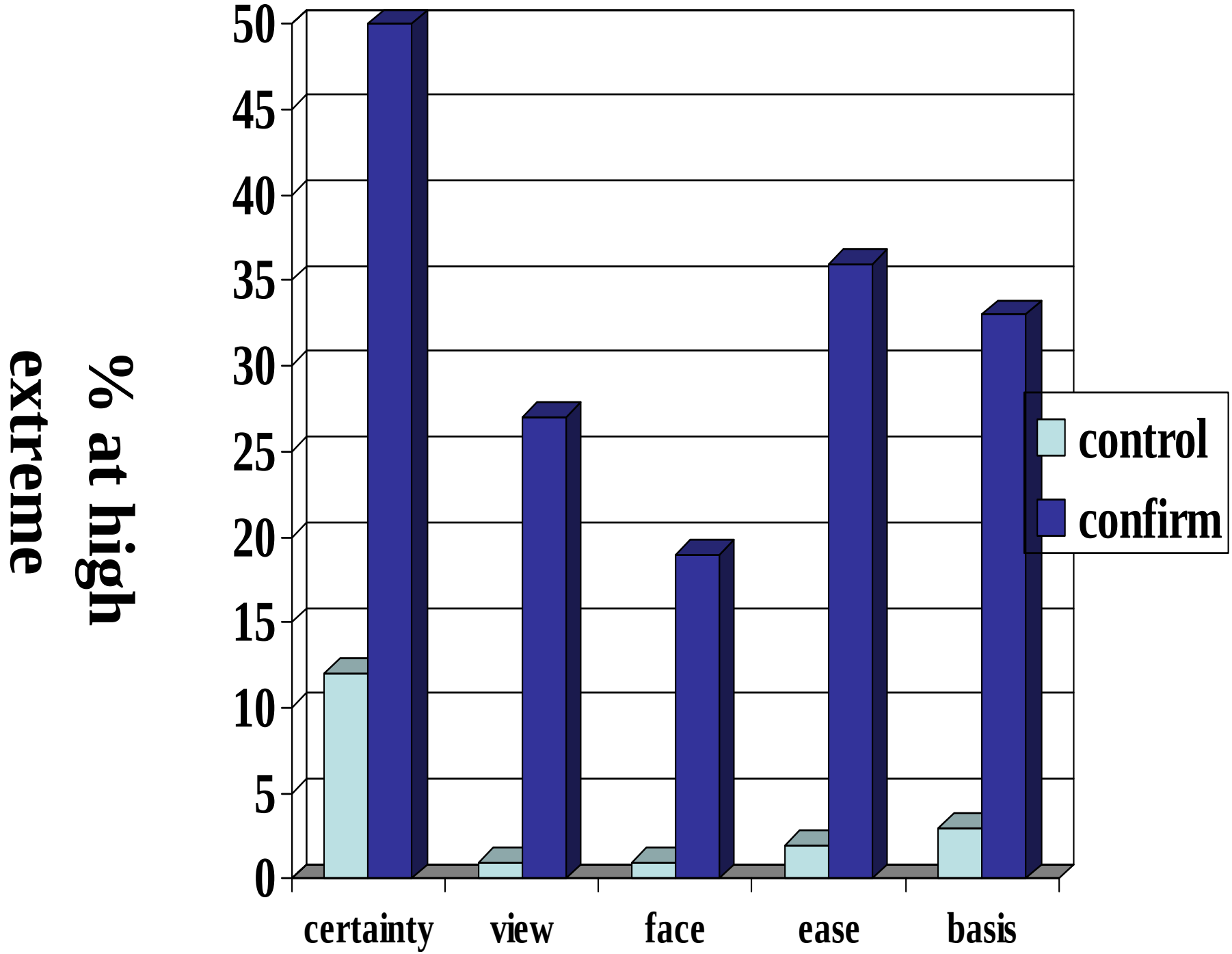
Confirming: "Good, you identified the suspect."

Control: Nothing

Measures

Following feedback, participants were asked:

- **How certain were you at the time your identification that you identified the real gunman?**
- **How good was the view you had of the gunman?**
- **How closely were you paying attention to the gunman?**
- **How well could you make out details of the gunman's face?**
- **How easy was it for you to identify the gunman?**
- **How good of a basis did you think you had for making an identification?**


% at high extreme
50
45
40
35
30
25
20
15
10
5
0
certainty
view
face
ease
basis
control
confirm

Advantages to Reform

- Reduced chance that an innocent suspect will be identified
- Help keep investigations “on track”
  - Mistaken identifications sidetrack investigations away from actual perpetrator
  - Identifications of fillers “spoil” the witness
- Greater trust by police and prosecutors in positive identifications
- Less criticism in court
- Greater trust by juries and general public
- Diminished role for defense experts

Reform Jurisdictions

- New Jersey
- North Carolina
- Wisconsin
- Minneapolis (and surrounds)
- Boston (and surrounds)
- Misc. smaller jurisdictions, e.g.,
  - Santa Clara County, CA
  - Virginia Beach, VA
  - Northampton, MA

New Jersey's Path to Sequential/Double Blind ID's

Deputy Attorney General Lori Linskey

SURVEY

Question: Have you been able to implement the independent investigator recommendation?

Implementation	Total Responses	Percentage*
Yes, in every case	175	70%
Yes, in almost every case	43	17%
Yes, about half of the time	16	6%
Yes, but less than half of the time	5	2%
No, not at all	13	5%
Total	252	100%

*% may be slightly off due to rounding.

Where Did You Find Your Administrator?

Administration	Total Responses	Percentage *
Our own depts.officers	205	86%
Another depts officers	9	4%
Our own & another depts	25	10%
Non-officer, our dept	0	-
Total	239	100%

Difficulties w/Independent Administrator

Any Difficulties?	Responses	Percentage*
No difficulties	137	56%
Minor Difficulties, easy overcome	86	35%
Difficulties not easy to overcome	21	9%
Total	244	100%

Confidence In Using Independent Administrator

Confidence	Responses	Percentage*
Increased confidence	46	19%
No effect on confidence	186	79%
Decreased confidence	4	2%
Total	236	100%

Implementation of Sequential

Implementation	Responses	Percentage*
Yes, in every case	233	93%
Yes, in almost every case	10	4%
Yes, about half of the time	1	>1%
Yes, but less than half the time	1	>1%
No not at all	7	3%
Total	252	100%

Difficulties Implementing Sequential ID's

Difficulties Level	Responses	Percentage*
No Difficulties	209	86%
Minor Difficulties, easy overcome	30	12%
Difficulties were not easily overcome	6	2%
Total	245	100%

Increase or Decrease in Positive ID's w/Sequential

Positive Identifications	Responses	Percentage
Yes, witnesses seem better able to pick out suspect	18	7%
No, no difference noticed	202	81%
Yes, witnesses seem to pick the suspect less often	29	12%
Total	249	100%

Confidence w/Sequential ID's

Sequential ID Confidence	Results	Percentage*
It has increased confidence in the results	50	20%
It has had no effect on confidence in the results	186	76%
It has decreased confidence in results	9	4%
Total	245	100%

Link to Wisconsin Guidelines

Link to Minneapolis Data

Wright, D.B., & McDaid, A.T. (1996). Comparing system and estimator variables using data from real lineups. *Applied Cognitive Psychology, 10*, 75-84.

{19.9% of 1,561 picked filler; 20.8% for violent crimes, 17.6% for non-violent crimes]

Behrman, B.W., & Davey, S.L. (2001). Eyewitness identification in actual criminal cases: An archival analysis. *Law and Human Behavior, 25*, 475-491.

[24% filler ids from live lineups]

Valentine, T., Pickering, A., & Darling, S. (2003). Characteristics of eyewitness identification that predict the outcome of real lineups. *Applied Cognitive Psychology, 17, 969-993.*

[21.6% (n=119) filler Ids; 15.9% weapon present & 23.7% weapon absent]