STRATEGIC INTERVIEWING & INTERROGATION

A Science-Evidence Based Methodology

Developed and Presented by

Behavior Analysis Training Inc.

www.LieDetection.com

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CHAPTER 1

Course Introduction & Interview Psychology

- BATI's Interview & Interrogation course was first certified by the Commission on Peace Officer Standards and Training (POST) in 1985.
- BATI has trained over 52,000 investigators.
  - California local, state and federal agencies, as well as many Federal and Military law enforcement organizations, including the FBI, have had personnel trained by BATI
  - CA Board of State and Community Corrections (BCSS) STC Certified
  - Introducing a methodology of science-evidence based interviewing
- Class Exercise:
  - Interview Characteristics
    - Effective
    - Ineffective
  - Class Discussion
  - Establishing Conversations
  - NBC Video
- Establishing Conversations
  - Active Listening
  - Comfort
  - Trust and Transparency
  - Total Belief
  - RAPPORT

Interview Psychology

The Psychology of Interviewing

THE BASICS OF INTERVIEWING

- Dr. Martin Reiner, PhD
  - LAPD
  - "Critical Incident Briefing"

        - Human behavior and communication
- James Q. Wilson
  - “Shattered Glass” Theory
    - Disorder
    - Significant Problems
    - Critical Thinking and Skepticism
- Howard S. Becker, PhD
  - Labeling
    - “Labels” can influence perception/decision making
- Elizabeth F. Loftus, PhD
  - Professor at UC Irvine
  - Framing Conversations
- Identifying V/A/K
- FBI on Rapport
  - Time Constraints
  - Avoid false confessions
  - Speak slowly
- Interview Psychology
  - Suspend EGO
  - Ask for help
  - Validate
  - Open-Ended Questions
  - Manage Expectations
- Emotions
  - Triple F’s; Nervous system’s response to stress
    - Interaction between mind and body
    - Automatic response
    - Programing “Habits”
    - Anger: BATI Rule
    - Joy: Duping Delight
    - Sadness
      - SBCSD – Haro case
  - Memory / Perceptions
    - Awareness
    - Perceptual error
    - Experience with recall
- Bobby Knight Video Exercise
  - Recognizing certain both verbal/non-verbal behaviors

CHAPTER 2

Interview Protocol & Written Statements

VICTIM / WITNESS / SUSPECT INTERVIEWING

I. INTRODUCTION

A. There is no more important skill essential to the successful outcome of a criminal investigation than one's ability to interview effectively.

1. Mitigate resistance

2. Gather quality information

3. Motivate conversations – corroborate facts

B. There is a great deal more involved in conducting a successful interview than just asking a lot of questions.

- A few good questions are more valuable than a lot of mediocre questions

2. It is critical to have a plan in place before the interview begins

C. Direct v Open-ended Questions

D. In order to be a good interrogator, the investigator must first become an excellent interviewer

II. IMPORTANT INTERVIEW CONSIDERATIONS

A. Several decisions must be made before an interview starts.

1. Select an appropriate location

- Field / location
- Privacy is a must

2. Room configuration

a. Hard / soft room

b. Room size

c. Furnishings

B. The primary goal of the investigator is to get the witness committed to a story as soon as possible in the investigation by asking open-ended questions.

1. Whenever possible, collect a written statement before the actual interview

2. Basic principles of using open-ended questions

a. The witness's oral statement should be a detailed, uninterrupted narrative response to the "What happened?" question and should not be influenced by the interviewer in any way

1. Please describe in detail everything that happened

- The interviewer does not ask another question until the witness finishes answering this question completely

C. Collect a written statement before the first interview whenever possible.

- Written statements simplify your follow-up questioning as well as provide important investigative leads and insight that cannot be obtained in any other way.
- The sooner the investigator commits the witness to a story, the easier it will be to identify gaps in information and inconsistencies
- The first time the witness presents the story is called the Uncontaminated Statement
- The first is called the Commitment Question (commits the witness to a story, to what they know)

"Please write, in detail, everything that happened"

d. The second is called Alibi Question (commits the witness to what they did)

(1). Please write, in detail, everything you did between a start time (T1) and a finish / end time (T2)

(2). The Alibi Question must have two-time delimiters contained within the question – a beginning time and an ending time

(3). Essentially you are asking the witness to report what they did during the time the crime was committed

- Both Commitment and Alibi statements should have this opening phrase:

(1). "We are investigating…" (Describe the crime / event).

- Always ask the Commitment question first, and then ask the Alibi question, in that order
- Use the written answer to help develop your probing strategy
- Use their written statement as a "road map" for your interview
- Break their story / statement down into smaller segments and draw out more details in each of these "scenes" using the TMMAT formula (Tell Me More About That)
- Always write the question asked on top of the statement form
- Your Goal: Have the witness go through the story three times before bringing in direct questions (SIF)

a. Written statement = 1st time

b. First oral telling of the story = 2nd time

c. TMMAT execution of the probing strategy = 3rd time

III. BATI STANDARD INTERVIEW FORMAT (SIF)

A. Decide how to memorialize the interview

1. Written statement

2. Recording devices

3. Note taking

B. Develop a personal introduction that includes the purpose of your interview

1. Defines the authority and purpose of interview

C. Establish rapport

1. Something in common

2. Establish a common goal

3. Use BATI's Personal History Interview (PHI)

a. Unless time is important, then collect biographical data at the end of the interview

D. Free Narrative Phase

1. Listen to their story and develop your follow-up probing strategy

a. A prior secured written statement allows you to develop your probing strategies BEFORE that interview begins!

E. Direct Examination Phase

1. Execute probing strategy using TMMAT formula

2. Hold off using direct questions until the witness has verbally gone through the story two times in the narrative

a. First time = Free Narrative (What happened?)

b. Second time = Execute probing strategy using TMMAT formula

3. After that, it is okay to use direct questions to fill in any omitted details

F. Clarification Phase

- Use when the subject gives statements which appear to be conflicting

IV. PEACE Model; EVIDENCE BASED

- Framing Matrix (SIU)
- Utilizing best evidence
- Timing / Introducing evidence
- Improves effectiveness
- Fosters a degree of accountability
- Responsive and anticipatory
- PEACE Acronym

- Tell / Explain / Describe (TED)
- Rapport based methodology
- NOT seeking a confession
- Information Gathering
- Cues to deception
- Probable lies are just as valuable as a confession

V. Class Writing Assignment

A. Commitment Statement

CHAPTER 3

Legal Aspects

I. LEGAL DISCLAIMER

A. We do not offer legal advice, only educational opinions

B. Your District Attorney or the Attorney General has the final say on all case law issues

II. VARIOUS INTERVIEW SITUATION AND ISSUES

A. Why do suspects confess?

1. Because they are in a state of mind that makes them believe cooperation is the best course of action

2. The purpose of the Miranda court decision was that the suspect should be advised of his / her rights, not frightened by them

B. Voluntary Interviews

1. Beheler Admonition

- CA. V Beheler, 463 US 1121 (1983)
- People v. Jimenez 21 Cal. 3d (1978)
- People v. Murtishaw 29 Cal 3d (1981)

2. BATI recommendation

- All people in the suspect pool receive either a Beheler or Miranda Admonition

C. Class Exercise; Legal Update

III. FALSE CONFESSIONS

A. Why is it important to have a section on false confessions?

1. Prevention

2. Court testimony

B. The same procedures that secure true confessions can also motivate false confessions

1. Confessions are a result of a variety of reasons

a. Internal states

- Anxiety, fear, hope, stress, etc.

b. Environmental conditions

c. Past history

d. Interrogators tactics and / or characteristics

e. Perceptions of outside influences

- Eyewitness, Evidence

f. Cultural, religious personal pressures to tell the truth and take responsibility

C. Innocence Project

- Statistics
- Cross-Examination
- Over-Zealous Interrogation Tactics
- Video; Oakland, CA

CHAPTER 4

Behavior Analysis

I. THE PURPOSE OF BEHAVIOR ANALYSIS

A. Effective analysis of a subject's actions allows investigators to make two critical decisions:

1. Is the subject behaving more like candid / genuine or disingenuous, and

2. Is the subject being cooperative / helpful or uptight / jittery

II. Guidelines; Lessons in Personal Change

A. Stephen R. Covey

- 7 Habits of Highly Effective People
- Active Listening
- Empathy
- Rapport

B. When evaluating behavior:

- Look for deviations from the subject's NORM.
- Behavioral clusters are very important to identify
- Do NOT influence subject's behavior
- Your attitude should remain, "Help me to understand"

3. Joe Navarro; Ret. FBI

- Non-Verbal Behavior (Video)

4. NO Single behavior is proof of deception

C. True Emotions

1. Pamela Meyer, TED Talk (Video)

2. Chris Watts Interview

CHAPTER 5

Credibility Assessment Interview & Cognitive Workshop

“All techniques are influenced by an investigator’s ability, willingness to learn, and willingness to incorporate new techniques.”

I. THE CREDIBILITY ASSESSMENT INTERVIEW

Purpose: The Credibility Assessment Interview is designed for people of interest. It is structured interview technique in which the interviewer secures examples of the subject’s verbal and nonverbal behaviors to a specific set of questions.

Proposal: When investigating a criminal case, the investigator will conduct a Credibility Assessment Interview as a part of the interview protocol to observe and access the subject’s verbal and nonverbal responses. The assessment of this interview shall be one-criteria used to qualify the subject for an interrogation.

Procedure: Corroborate known evidence and facts:

A. An assessment interview that utilizes a standard format, which is designed to motivate verbal and nonverbal behavior that can be used to assist in determining truth or deception

II. EVALUATION PROCEDURE

CAI FORM

- Always Record
- Looking for cooperation

III. CONSIDERATIONS

- Q2: False Alibi
- Q3: Motive / Miranda

- Q7: Miranda
- Q9: Motive / Miranda
- Q11: Corroborate
- Q14: Beheler or Miranda

IV. Video Workshop; Student Evaluations and class discussions

V. Qualifying Question – Q15

- A question in which the interviewer asks the subject if there would be any other reason why…? No deception, no promises, no minimization
- Watch for a change in their story
- Procedure
- Lock subject into a statement
- Phrasing of the question:
- Can you think of any reason why…?”
- Allow the subject to speak first
  - Non-Accusatory, must present facts or evidence
  - Investigators must NOT falsify facts or evidence
- Class Exercise (Hotel Manager Statement)

VI. COGNITIVE INTERVIEWING WORKSHOP

CHAPTER 6

Phases of Interrogation & Final Workshop

- BATI General Rules; GOALS
- What does it take to be a successful interrogator?
- Credibility
- Collaboration (NOT confrontation)
- Self-confidence
- Autonomy v. Authority
- Understanding the other person's needs
- BATI General Rule
- Rapport is the main concept to define, observe and measure a subject's engagement and veracity
- Successful interrogations go through predictable phases
- The advantages of the BATI interrogation plan
- You will know exactly what phase you are in
- Advantages
- Non-Judgmental
- Confidence
- Strategic Approach
- Video (Heidi)
- Approach / Credibility (class discussion)

INTERROGATION – PHASE TWO

- Credibility / Evidence
  - Building on the facts
- Evidence
- Direct

- Circumstantial
- Display confidence in the case
- Rapport
- Professional
- Best practice; non-accusatorial, looking for the answers
  - Pause & Observe
  - Scott Peterson Interview

INTERROGATION – PHASE THREE

THE DEFENSIVE TACTICS PHASE

- Denials
- Subject denies involvement in the crime
- Common to both innocent and deceptive
- Truthful rarely use any other defensive tactic
- Rationalization

a. Excuses as to why they could not be the party responsible

C. Fontana 2018

D. Officer B.H. Video Interrogation

E. Group Exercises

INTERROGATION – PHASE FOUR

I. THEME DEVELOPMENT PHASE

A. Empathetic approach is usually the best approach

1. Always start empathetically

- DO NOT say: “I am here to help”
- “Things will go better for you if you tell the truth”
- BATI policy: NEVER LIE ABOUT PHYSICAL EVIDENCE
- BATI policy: NEVER LIE ABOUT EYEWITNESS TESTIMONY OF A MOST TRUSTED FAMILY MEMBER
- Do not use trickery or deceit
- This should never become a primary technique

II. Russell Williams Video

III. BATI Workshop Exercise; FINAL

APPENDIX A

Exercises

The following exercises provide realistic scenarios for practicing the interview and interrogation techniques covered in this course. Each scenario includes an incident report with background information to prepare for a simulated interview.

BATI Exercise #1

Incident Report – Felony Hit and Run with Injury

Date/Time of Incident: April 28, 2025, 5:42 PM
Location: 475 S. Van Ness Ave., South San Franciso, CA

Vehicle Involved:

- **Make/Model:** 2018 Ford F-150, gray
- **License Plate:** 6JXG741
- **Registered Owner:** Daniel Ross, 44 years old, Springfield resident

Victim:

- **Name:** Luis Mendoza, 27 years old
- **Mode of Transport:** Bicycle
- **Injuries:** Multiple fractures, internal bleeding – transported to Springfield Regional Medical Center; expected to survive

Summary of Events:
At approximately 5:42 PM, SSFPD and EMS responded to reports of a bicyclist struck by a vehicle on S. Van Ness Ave. near the intersection of 16th Street. Witnesses reported that a gray Ford F-150 was traveling eastbound at a high rate of speed. The vehicle abruptly swerved into the left lane and struck a bicyclist riding in the designated bike lane.

CCTV footage obtained from a nearby gas station clearly shows the truck swerving and making contact with the cyclist. The video shows the F-150 stop approximately 100 yards beyond the collision point. A male driver is seen exiting, appearing panicked, briefly looking back toward the scene, then re-entering the truck. The driver appears to use his cell phone—believed to be an aborted attempt to call 911—before driving away without rendering aid.

Multiple witness statements were taken at the scene, corroborating the video evidence. The victim, Luis Mendoza, suffered significant injuries but remained conscious at the scene and was transported by paramedics to the hospital.

Later that evening, the suspect vehicle was located abandoned in the parking lot of Springfield Regional Medical Center, less than two miles from the scene. The keys were left inside the vehicle, and no suspect was present. Vehicle registration led officers to Daniel Ross, the registered owner.

Ross was contacted at his residence the following morning and agreed to come to the station for an interview.

Evidence Collected:

- Business CCTV video capturing the collision and suspect actions
- Photos of the scene and vehicle, Cell Phone data, Vehicle recovered/impounded
- Statements from five witnesses, Victim's medical report

BATI Exercise #2

Incident Report – Negligent Discharge of a Firearm

Date/Time of Incident: February 9, 2025, 7:38 PM
Location: 1375 Crestline Drive, Orange, CA

Subject:

- **Name:** Michael J. Harmon, 57 years old
- **Background:** Retired Police Sergeant, Orange PD (retired 2022)
- **Legal Status:** Valid CCW permit, no known current restrictions

Summary of Events:
On the evening of February 9, officers were dispatched to a report of a gunshot heard in a residential neighborhood during a Super Bowl party. The call originated from a neighbor who stated they heard a loud bang, followed by yelling, and were concerned about a possible firearm being discharged.

Upon arrival, officers contacted multiple party guests outside the residence who appeared visibly shaken. They stated that the host, Michael Harmon, had fired a handgun into his backyard swimming pool in front of several witnesses.

According to statements, Harmon had been drinking moderately throughout the afternoon and was heard speaking to several guests about firearm ballistics. The conversation turned into a debate about whether a .45 caliber round could penetrate the bottom of a 14-foot in-ground pool. Guests reported that Harmon retrieved a 1911-style .45 caliber pistol from inside the home, walked to the edge of the pool, and—without warning—fired a single round directly into the water. The sound startled guests, causing some to leave immediately. Several individuals recorded the incident on their cell phones. Harmon agreed to come to the station for an interview

Investigation:

- Officers recovered a .45 caliber 1911 handgun from inside the home, which Harmon surrendered without resistance, No injuries reported
- The weapon was unloaded and secured.
- A single expended shell casing was recovered from the pool deck near the firing position.
- Divers were later dispatched to recover the projectile from the bottom of the pool.
- Multiple video recordings of the incident were collected from party guests.
- Statements were taken from seven witnesses, all of whom expressed concern over Harmon's judgment and the potential danger involved.

BATI Exercise #3

Incident Report – Felony Assault & Theft Investigation

Date/Time of Incident: April 22, 2025, 6:10 PM
Location: Home Depot – 7015 Telegraph Rd., Commerce, CA

Subject:

- **Name:** Marcus D. Hill, 29 years old
- **History:** Prior theft-related arrests, no current warrants

Victim:

- **Name:** Daniel Ruiz, 41 years old
- **Occupation:** Loss Prevention Officer, Home Depot
- **Injuries:** Traumatic head injury, currently in medically induced coma

Summary of Events:
On the evening of April 22, 2025, Home Depot staff contacted emergency services following a violent encounter between a suspected shoplifter and a loss prevention officer. According to witness accounts and surveillance footage, a male subject—later identified as Marcus Hill—entered the store and was observed selecting several high-value power tools (estimated value: $1,200). Hill concealed the tools in a large tote and exited the store without attempting to pay.

Loss Prevention Officer Daniel Ruiz made contact with Hill just outside the exit doors and identified himself. When Ruiz attempted to detain Hill, a physical struggle ensued. During the altercation, Hill shoved Ruiz forcefully, causing him to fall backward and strike his head on the concrete sidewalk. Hill immediately fled on foot, leaving the stolen merchandise behind.

First-Responders arrived and found Ruiz unresponsive. He was transported to Springfield General Hospital with a serious head injury. As of April 24, Ruiz remains in a medically induced coma due to swelling in the brain.

Investigation:

- Multiple witness statements were obtained from store staff and customers who observed the altercation.
- Surveillance video clearly shows Hill's face, actions, and direction of flight.
- Hill was identified by a patrol officer who reviewed the footage and recognized him from previous contacts.

On April 24, 2025, detectives located Hill at a relative's apartment on the east side of the city. He was taken into custody without incident.

Evidence Collected:

- Surveillance footage (store and parking lot), Scene Photographs, Recovered Merchandise
- Witness statements (6 total), Medical Reports from Hospital

BATI Exercise #4

Incident Report – Arson Investigation

Date/Time: April 26, 2025, 3:15 AM
Location: Rear alleyway of the Pavillion Plaza Strip Mall, 3100 W. Balboa Blvd, Newport Beach, CA.

Subjects:

- **Suspect:** Robert "Bobby" Lane, 42 years old, transient
- **Prior History:** Currently on probation for arson (conviction date: September 2023)

Summary of Events:
At approximately 3:00 AM, the Newport Fire Department responded to multiple reports of dumpster fires located behind the businesses at Pavillion Plaza. Three separate dumpsters, located behind a restaurant, a clothing store, and a pharmacy, were found actively burning. Fire crews quickly extinguished the fires before they could spread to the structures.

While securing the scene, officers were advised by a witness — a janitor working the overnight shift — that he observed a male subject loitering near the dumpsters shortly before the fires were noticed. The subject was described as a white male, mid-40s, wearing a dark hoodie and carrying a plastic jug.

Within minutes, patrol officers canvassing the immediate area, located a subject matching the description near the rear parking lot approximately two blocks away. The individual, later identified as Robert Lane, was detained without incident. A search incident to detention revealed Lane was carrying a partially full plastic jug containing gasoline and a disposable lighter.

Lane, known to officers from previous contacts, is currently on felony probation for an arson conviction involving a similar incident in 2023.

Evidence Collected:

- Plastic jug containing gasoline
- Disposable lighter
- Surveillance footage from nearby businesses (pending review)
- Witness statement from janitor
- Fire debris samples collected by Fire Investigators for laboratory analysis

BATI Exercise #5

Incident Report – Felony Vandalism Investigation

Date/Time of Incident: April 19, 2025, approx. 11:15 PM
Location: 722 Maple Ridge Court, La Verne, CA

Suspect:

- **Name:** Thomas "Tom" Kellerman, 38 years old
- **Background:** Regular patron at "Murphy's Taproom"; divorced from Amber Kellerman (now residing at incident location); no prior felony convictions

Victim:

- **Name:** Joshua Reid (vehicle owner), 34 years old
- **Relationship:** Current boyfriend of Amber Kellerman
- **Vehicle:** 2022 BMW 330i, black

Summary of Events:
On the night of April 19, La Verne Police received a vandalism report from Amber Kellerman, who stated she heard loud banging outside her residence. Upon investigating, she found her boyfriend's BMW parked in the driveway had been severely damaged. The vehicle had multiple broken windows, a shattered windshield, and significant damage to the hood, roof, and sides—consistent with blunt force impact from a heavy object.

A metal aluminum baseball bat, dented and scratched, was found lying next to the car. Officers processed the scene and recovered the bat for evidence.

Surrounding neighbors were canvassed, and several Ring camera videos were collected. The footage shows a dark-colored pickup truck matching Tom Kellerman's vehicle stopping briefly in front of the residence around 11:15 PM. A male subject, matching Tom's build and clothing frequently seen at Murphy's Taproom, is seen exiting the vehicle and walking toward the BMW with a bat in hand. Approximately one minute later, the subject is seen returning to the vehicle and driving off.

During the investigation, it was learned that Tom Kellerman routinely drives past his ex-wife's house after leaving the bar, often around the same time each evening. Employees at Murphy's Taproom confirmed Tom was present that night and left shortly before 11:00 PM. One bartender noted Tom appeared "angry and emotional" after overhearing a conversation involving Amber's new boyfriend. Detectives spoke with Tom Kellerman over the phone and he agreed to come in voluntarily for an interview.

Investigation:

- Bat recovered at scene was processed for prints and DNA.
- Multiple Ring camera videos obtained from neighbors clearly show the suspect's vehicle and actions.
- Damages to the BMW are estimated at over $10,000.

BATI Exercise #6

Incident Report - Domestic Violence Scenario

Date/Time: April 25, 2025, 11:45 PM
Location: 456 Oakwood Drive, Springfield

Subjects:

- **Husband:** Jason Miller, 35 years old
- **Wife:** Amanda Miller, 33 years old

Background:
Jason and Amanda have been married for seven years. There is one prior documented police contact at their residence from approximately one year ago for a verbal disturbance. No charges were filed at that time.

Summary of Events:
At approximately 11:30 PM, a neighbor, Mrs. Ellen Brooks, reported hearing a loud argument coming from the Miller residence. She stated she heard shouting, glass breaking, and what sounded like a slap, followed by crying. Concerned, Mrs. Brooks called 911.

Upon arrival, officers observed signs of a disturbance inside the home: an overturned chair, a broken picture frame, and spilled alcohol on the floor. Both Jason and Amanda appeared intoxicated, showing slurred speech and the odor of alcohol on their breath.

Amanda had visible bruising and redness to her left cheek. She appeared upset but initially hesitant to speak with officers. After some reassurance, Amanda stated that she and Jason had been drinking throughout the evening and began arguing over financial issues. During the argument, Jason allegedly struck her with an open hand across the face. Jason was taken into custody for domestic assault and interviewed at the station.

Actions Taken:

- Photographs were taken of Amanda's injuries and the scene.
- Amanda was offered medical assistance, which she declined.
- Amanda was provided with domestic violence resources and advised of her rights.
- A no-contact order was recommended to be issued at arraignment.

APPENDIX B

Forms

The following forms are used throughout the course as practical tools for conducting structured interviews and assessments.

CREDIBILITY ASSESSMENT INTERVIEW

B.A.T.I.

Investigator:	I.D.#	Date & Time:	Report #:
Subject's Name:		Crime(s):	

		QUESTION	I	Q	D
1	YOU TELL ME...	You tell me in your own words why you think we are talking today.			
2	OUTSIDE ISSUE...	How do you feel about talking to me about that?			
3	INVOLVEMENT...	If you had anything to do with this...(insert action word), tell me now			
4	KNOW...	Do you know for sure who did it?			
5	IDEA WHO...	Do you have any idea who...(insert action word)? If it is only suspicion I'll keep it to myself. But, who do you think...(insert action words)?			
6	ELIMINATE...	Is there anybody you can eliminate from the investigation?			
7	ALIBI...	Give me a reason that will convince my boss that you didn't do it			
8	CAPABLE...	Do you think you are capable of doing something like this?			
9	THINK...	Did you ever seriously think about doing something like this?			
10	ACTUALLY HAPPENED...	Do you think it actually happened the way they say it did?			
11	TALK...	Did you talk to anybody about being questioned today?			
12	TELL ANYBODY...	Did you tell anybody, even jokingly, that you...(insert action words)?			
13	CELL PHONE...	Do you have your cell phone? Would you be willing to let us take a look at your phone?			
14	CELL PHONE RESULTS...	What do you think the phone data records will show us?			
15	BAIT...	"Can you think of a reason why..." (Allow them to respond first - resist the temptation to speak first)			
		TOTALS:			

PERSONAL HISTORY INFORMATION

BEHAVIOR ANALYSIS TRAINING INSTITUTE

Investigator:	*I.D. #*	*Date:* - -	*Crime Classifications*:	*Report #:*
Subject's Name:			*Alias:*	
Home Address:				*Phone #'s: Hm ❑ Cell ❑*
Education:		*Type of Student:*		*Best Class:*
Hobbies & Sports:				
Marital Status:			*Spouse (Present/Past - Include Address, Phone, Work, Etc.):*	
Children: # ____				
Work (Include Type, Employer, Address, Phone, Etc):				
Military? Yes ❑ No ❑; Branch _____; Honorably Discharged? Yes ❑ No ❑; Reserve? Yes ❑ No ❑ *Specialty(s) & Locations Stationed:*				
Prior Arrests:			*Suspect Before?*	
How Do You Feel Today?			*Doctor's Care? Yes ❑ No ❑*	
Medications:			*Alcohol & Drug Use:*	

BATI PROCESS CHEAT SHEET – PROCEDURAL OUTLINES

Process Steps in Order – Suspect Pool

-
- Preparation (Background, etc.) / Personal Introduction / Miranda or Beheler / Written Statement / PHI / CAI / SIF / **Break** / Interrogation

Process Steps in Order – Victim / Witness

- Preparation (Background, etc.) / Personal Introduction / Written Statement / PHI / SIF

Written Statement – Securing the Pure Version

At the top of a blank sheet of paper write:

- *Commitment*: We are investigating *(insert soft terminology – action / verb)*. Please write, in detail, everything you know about that.
- *Alibi*: Please write, in detail, what you did on *(insert date of interest)* covering the time you woke up until the time you went to sleep.

C.A.I. Questions

1. You tell me…
2. How do you feel about…
3. Did you…
4. Know for sure who…
5. Suspect anyone…
6. Eliminate anyone…
7. ALIBI – Why not you…
8. Are you capable…
9. Ever think about…
10. Actually happened…
11. Talk about questioning…
12. Tell anyone…
13. Polygraph / Cell Phone Data…
14. Data results…
15. Bait Question…

Cognitive Interview Technique (C.I.T.)

- *Facilitate Recall*
  - Rapport
  - Reduce Anxiety
  - Subject Plays a Central Role
  - Must Concentrate – Work
  - Do Not Edit Anything
  - Report Everything
  - Want only the Truth
  - Closed Eye / Fixed Stare
- *Reconstruct the Context*
  - Involve all 5 Senses
- *Request Free Narrative*
  - Develop Probing Strategies
- *Probe Individual Codes*
  - Image First / Concept Last
- *Change the Order*
- *Closing*
  - Extend the Life of the Interview
  - Prepare for Future Contact

Standard Interview – SIF

- *Free Narrative*
  - Develop Probing Strategy
-
- *Direct Examination*
  - You mentioned (YMT) _____.
    - Tell Me More About That (TMMAT)
    - Describe it in detail
    - Pick up the story from there
- *Clarification*
  - How would you explain _____.
  - Innocent explanations make sense & come quickly (from memory)
  - Guilty explanations take time – signs of thinking – (from imagination)

6 Phases of Interrogation

1. *Introduction*
   a. General rule / preparation/ collaboration
2. *Credibility / Evidence*
   a. Building on facts
   b. Direct / circumstantial
3. *Defensive Tactics*
   a. Denials
   b. Rationalization
   c. Repression
4. *Theme Representation*
   a. No Threats / No Promises
5. *Transition*
6. *Confession*
   a. Something only guilty would know
   b. Something you did not know
   c. Gain confession using SIF

APPENDIX C

Handouts

The following reference materials, articles, and research papers supplement the course content and provide the scientific foundation for the techniques taught in this program.

REFERENCES

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Subtle Skills for Building Rapport

Using Neuro-Linguistic Programming in the Interview Room

By VINCENT A. SANDOVAL, M.A., and SUSAN H. ADAMS, M.A.

Mark Hamilton, a seasoned detective, slowly opens the door to the interview room. The witness to the drive-by shooting sits leaning forward in a chair with her head in her hands. Normally, Mark bellows out his introduction to establish immediate control, but not this time. He enters the room without speaking, pulls a chair close to the witness, leans forward, and, in a barely audible voice, slowly begins, "I'm Detective Mark Hamilton...."

Detective Hamilton is using techniques from Neuro-Linguistic Programming, a communication model with a name he might not even recognize. Yet, his years of interviewing have taught him the techniques. To establish rapport with this witness, Detective Hamilton knows that he needs to match her nonverbal behavior, or kinesics, by sitting down and leaning forward. When the witness begins to talk, Detective Hamilton listens carefully to her words and intentionally uses similar language. He also pays close attention to *how* she talks and matches her paralanguage (speech rate, volume, and pitch). In so doing, Detective Hamilton builds rapport with the witness and, hence, increases his chances of gathering pertinent information during the interview.

Detective Hamilton and other experienced investigators recognize the crucial role that rapport plays in an interview. Derived from the French verb *rapporter* meaning "to bring back," the English word *rapport* refers to a relationship or communication characterized by harmony.[1] With this in mind, the need for rapport applies to all interviews, but especially to those

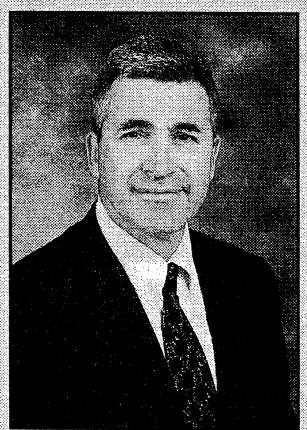
involving a victim or witness who has experienced physical or psychological abuse. The interviewer's task is similar to that of the clinical psychologist, who must initially develop a personal bond with his client before intimate feelings are shared.[2] Thus, investigators can enhance their rapport-building skills by examining some practical recommendations derived from the behavior modification technique known as *Neuro-Linguistic Programming.*

UNDERSTANDING NEURO-LINGUISTIC PROGRAMMING

In the early 1970s, John Grinder, an assistant professor of linguistics at the University of California in Santa Cruz, and Richard Bandler, a student of psychology, identified patterns used by successful therapists. They packaged them in a way that could be passed on to others through a model now known as Neuro-Linguistic Programming, or NLP.[3]

Neuro-Linguistic Programming embraces three simple concepts. First, the *neuro* part of NLP recognizes the fundamental idea that all human behavior originates from neurological processes, which include seeing, hearing, smelling, tasting, and feeling. In essence, people experience the world through their senses. Second, they communicate their experiences verbally, through language;[4] therefore, the *linguistic* part of NLP refers to this use of language to communicate thoughts. Finally, the *programming* aspect of NLP recognizes that individuals choose to organize their ideas and actions to produce results. Each person also decides how to organize these ideas in a specific manner.[5]

The NLP founders theorize that people think differently and that these differences correspond to individual programming or processing systems. People use their senses outwardly to perceive the world and inwardly to "re-present" this experience to themselves. In NLP, representational systems denote ways people take in, store, and code information in their minds.[6] These systems pertain to the principal human senses—seeing (visual), hearing (auditory), and feeling (kinesthetic). To a lesser degree, they involve tasting (gustatory) and smelling (olfactory). People constantly see, hear, and feel whatever transpires around them. When individuals relate these experiences to others, they mentally access the sights, sounds, or feelings associated with these experiences and communicate them through their predominant representational system.[7]



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BUILDING RAPPORT WITH NLP

Enhancing communication and, hence, building rapport represents the most applicable aspect of NLP to investigators. The ability to communicate effectively and build rapport stands as one of the major contributors to a police officer's success in dealing with the public.[8] In an interview setting, effective communication involves the interviewer's skill in establishing rapport through specific actions and words, thereby building trust and encouraging the interviewee to provide information.

Others besides successful law enforcement interviewers have found NLP techniques helpful in rapport building. For example,

some medical hypnotists use the concept of "matching" with highly resistant clients.[9] By simply conforming their nonverbal behavior to that of each client, by using language from the client's preferred representational system (visual, auditory, or kinesthetic), and by matching the client's volume, tone, and rate of speech (paralanguage), they often can overcome the client's reluctance to communicate.

When interviewers intentionally align themselves with a witness or suspect through these matching or mirroring techniques, the interviewee is more inclined to respond to the interviewer and subsequently provide information. As one researcher points out, "people like people who are like themselves."[10] Once interviewers establish rapport, barriers disappear, trust grows, and an exchange of information follows. To achieve these results, interviewers should match or "mirror" the interviewee's kinesics, language, and paralanguage.

Building Rapport by Matching Kinesics

Matching another person's body language or kinesics probably is the easiest and most obvious technique. Kinesic behavior typically includes gestures, posture, and movements of the body, such as the hands, arms, feet, and legs.[11] However, a difference exists between mimicry and matching. Interviewers should match another person's body language with subtlety and caution; otherwise, the person easily could become offended. People who have developed rapport tend to match each other in posture and gestures. For example, individuals conversing together often adopt the same posture. Like partners in a dance, they respond and mirror each other's movements with movements of their own, engaging in mutual responsive actions.[12]

Detective Hamilton employs the kinesics aspect of NLP in his interview. When he enters the interview room, he immediately notices the witness' posture and the position of her hands. He notes that she is leaning forward with her head down. Her posture and the position of her head speak volumes.

> ***"Once interviewers establish rapport, barriers disappear, trust grows, and an exchange of information follows."***

As Detective Hamilton introduces himself, he pulls his chair close to the witness and, just like her, leans forward in his chair with his hands in front of him. As the witness begins to open up and speak about what she has seen, her nonverbal behavior gradually follows suit, as she opens herself up by sitting back. Eventually, as her trust in Detective Hamilton grows, she feels comfortable enough to relax. She realigns her posture by sitting up and facing Detective Hamilton. Through each succeeding change in her body language, Detective Hamilton matches her behavior, thereby lending credence to the belief that the deeper the rapport has been built between two people, the closer the matching of body language.

Building Rapport by Matching Language

Because people use language to communicate thoughts, the words they choose reflect the way they think. When relating experiences, an individual uses the visual, auditory, or kinesthetic representational system to identify these experiences and communicate them to others. For example, a person whose predominant representational system is visual will say phrases, such as "I see what you mean," "that looks good to me," "we see eye to eye," or "I get the picture." On the other hand, a person whose preference is auditory will use language, such as "something tells me...," "that rings a bell," "we're on the same wave length," or "that sounds okay to me." Finally, a person who is kinesthetic or "feeling" oriented will make statements, such as "I'll get in touch with you," "how does that grab you?," "you don't have to get pushy," or "how do you think I feel?"[13]

Successful investigators listen closely to the choice of words witnesses and suspects use. Then, they conform their language to match the interviewee, using similar visual, auditory, or kinesthetic phrases.

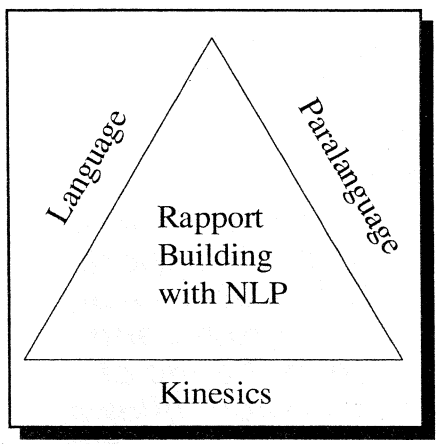
When Detective Hamilton's drive-by shooting witness finally begins to talk, she describes her situation with phrases, such as "tremendous pressure," "I feel like I'm

going to pieces," and "I can't come to grips with what's happening." The detective responds to the witness' account by matching her words. When she speaks of the "tremendous pressure," he explains ways to relieve the "pressure." He continues to use kinesthetic phrases, such as "take this load off your shoulders," to communicate in her preferred representational system.

Because individuals process information in different ways, through distinct representational systems, the investigator often acquires valuable insight into the interviewee's personal preference by paying close attention to the interviewee's eye movements. According to NLP, eye movements, referred to as "eye-accessing cues,"[14] reflect the manner in which an individual processes data. Therefore, the eyes move in specified directions, depending upon the person's preferred mode of thinking. The founders of NLP concluded that eye movements reflect whether the person has a visual preference (thinks in terms of pictures), an auditory preference ("hears" sounds), or a kinesthetic preference (feels or experiences emotion) to process information.[15]

Typically, individuals move their eyes up at an angle as they remember a picture. Some people look directly to the side, which indicates that they are using the auditory mode to recall something that they probably heard before. Finally, individuals who look down at an angle appeal to kinesthetic sensations as they recollect what they felt or experienced.[16]

If an investigator observes that a witness consistently looks up at an angle, particularly when responding to questions that require recall, the interviewer can conclude, with a measurable degree of confidence, that the person is "seeing" a picture while remembering information. In NLP terms, this individual's preferred representational system is visual. The investigator can facilitate the witness' recollection of events



by encouraging this visual recall through such phrases as "how did it look to you?" or "show me what you mean." If the witness looks to the side when asked a question concerning what the person saw, the investigator can encourage the witness to remember by using questions designed to stimulate auditory recall, such as "tell me what you heard" or "how did it sound to you?" Finally, if the witness looks down at an angle when asked a question by the investigator, this could indicate that the person has a kinesthetic preference. Therefore, the investigator can choose phrases that underscore the witness' feelings or emotions, such as "how did all of this feel to you?" or "can you get a handle on what took place?" By closely monitoring the movements of a person's eyes and aligning questions in accordance with the interviewee's observed preferences, investigators can build rapport, thereby enhancing communication between themselves and the people they interview. While NLP practitioners cite a direct neurological connection between eye movements and representational systems,[17] other researchers recognize the need for additional empirical studies.[18] Currently, investigators use interviewees' eye movements as another possible indicator of their preferred manner of communicating.

Building Rapport by Matching Paralanguage

Matching another person's speech patterns, or paralanguage, constitutes the final, and perhaps most effective, way to establish rapport. Paralanguage involves how a person says something or the rate, volume, and pitch of a person's speech. One researcher goes so far as to say that matching the other person's voice tone or tempo is the best way to establish rapport in the business world.[19] What may hold true in the business realm applies in the interview setting as well. Individuals can speak fast or slow, with or without pauses. They can talk in a loud or soft volume and in a high or low pitch. However, most people are unaware of their own speech rate or vocal tones. In fact, investigators do not have to match a person's voice exactly, just close

enough to encourage that individual to feel understood.[20]

In the interview setting, slowing the rate of speech to correspond with the pace of a halting witness allows for recall and communication at that person's pace. By the same token, if a witness speaks with more volume and at a quick rate, the investigator should try to match the person's animated and expressive manner of speech. By listening carefully and paying close attention to *how* people speak, investigators can, in NLP terms, get "in sync" with people by matching their paralanguage.

Experienced investigators continually employ this technique, usually without even thinking about the mechanics or the process involved. Detective Hamilton also uses this aspect of NLP in his interview.

The drive-by shooting witness speaks slowly, as if searching for the right words. Detective Hamilton slows the rate of his speech, giving ample time for the witness to get her point across without feeling rushed. He lowers his voice to match her soft volume and refrains from the urge to interrupt her. As the witness becomes more excitable, speeding up her speech rate and increasing her volume, Detective Hamilton increases his rate and volume as he attempts to mirror her. In so doing, he demonstrates to the witness that he is interested in her as an individual, and this allows her to communicate what she experienced in a way that is comfortable for her.

CONCLUSION

Detective Mark Hamilton's witness begins to feel support and understanding from the interviewer, who continues to match her kinesics, language, and paralanguage. When he sees her consistently looking down to her right, he realizes that she may be processing information on the kinesthetic level and encourages her to talk about her feelings. Slowly, she begins to trust Detective Hamilton.

Unbeknown to the witness, Detective Hamilton had been matching her in specified ways until she finally felt secure enough to provide full details of the drive-by shooter and his vehicle. As a result, the witness' emotional need was met and, from Detective Hamilton's perspective, the interview was a success.

> ***"Successful investigators listen closely to the choice of words witnesses and suspects use."***

This scenario illustrates the importance of carefully observing how witnesses and suspects communicate through nonverbal, verbal, and vocal means. Neuro-Linguistic Programming is not a new concept nor used rarely. In fact, most successful interviewers employ some variation of it to gain rapport. However, by being conscious of the process and the benefits associated with NLP, interviewers can use these techniques to their advantage. By matching interviewees' nonverbal behavior, the manner in which they say something, and even their choice of words, interviewers can increase rapport and enhance communication. As a result, the potential for gaining crucial information needed to help resolve investigations improves significantly. ✦

Endnotes

[1] Genie Z. Laborde, *Influencing with Integrity* (Palo Alto, CA: Syntony Publishing, 1987), 27.

[2] Ronald P. Fisher and Edward R. Geiselman, *Memory-Enhancing Techniques for Investigative Interviewing*, (Springfield, IL: Charles C. Thomas Publisher, 1992), 22.

[3] John O'Connor and John Seymour, *Introducing Neuro-Linguistic Programming* (London, England: Harper Collins Publishers, 1990), 2.

[4] Ibid., 3.

[5] Ibid., 3.

[6] Ibid., 26.

[7] Richard Bandler and John Grinder, *Frogs Into Princes* (Moab, UT: Real People Press, 1979), 5.

[8] P.B. Kincade, "Are You Both Talking the Same Language?" *Journal of California Law Enforcement* 20: 81.

[9] Ibid., 19.

[10] Jerry Richardson, *The Magic of Rapport, How You Can Gain Personal Power in Any Situation* (Cupertine, CA: Meta Publications, 1987), 21.

[11] Judith A. Hall and Mark L. Knapp, *Nonverbal Communication in Human Interaction* (Fort Worth, TX: Harcourt Brace Jovanovich College Publishers, 1992), 14.

[12] Supra note 3, 19.

[13] Supra note 7, 83.

[14] Supra note 7, 35.

[15] Supra note 7, 25.

[16] Supra note 7, 25.

[17] Supra note 7.

[18] Aldert Vrij and Shara K. Lochun, "Neuro-Linguistic Programming and the Police: Worthwhile or Not?" *Journal of Police and Criminal Psychology* 12, no. 1 (1997).

[19] Supra note 1, 30.

[20] Supra note 1, 31.

INSIGHTS & ANALYSIS SERIES

The Art of the Inquiry:

The LAPD's Journey with Science-Based Interview Techniques

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The Los Angeles Police Department's (LAPD's) foray into the world of science-based[1] interviewing began as many good crime stories do – with an unsolved murder and a suspect the cops couldn't crack. In a plot twist worthy of a Hollywood movie, the crime in question also involved a dismembered body and a case gone cold after two years with no arrest. Into the breach stepped two veteran detectives from the LAPD's Robbery-Homicide Division (RHD). They were the first local law enforcement officers in the country to be trained in science-based interview methods that, in many ways, turned the age-old approach to police interviewing on its head. What follows is an exploration of what these methods have meant for one of the nation's leading police departments and what the implications are for the rest of American law enforcement.

First, the crime story. In January 2012, the head of Hervey Medellin, a flight attendant in his mid-60s, was found by a dog walker and a golden retriever near the famed Hollywood sign. A more extensive search by coroner's investigators uncovered plastic bags containing two feet and a hand and, separately, a second hand. As the investigation progressed, RHD detectives homed in on Gabriel Campos-Martinez, Medellin's roommate and lover. Despite Campos-Martinez having researched an article titled, "Butchering of the Human Carcass for Human Consumption[2]," in the days leading up to the grim discovery, detectives could only gather circumstantial evidence against the man. He left the state and the case went cold until detectives, seeking a new approach, asked RHD detectives Greg Stearns and his partner, Tim Marcia, to take a crack at an interview using techniques they had just acquired from the High-Value Detainee Interrogation Group (HIG).

The HIG, administered by the Federal Bureau of Investigation (FBI) in partnership with the Department of Defense (DoD) and the Central Intelligence Agency (CIA), was formed in the wake of political and public outcry about the use of enhanced interrogation techniques on terrorism suspects by some U.S. military and intelligence interrogators at black sites and prison/detention facilities such as Guantánamo Bay (Cuba) and Abu Ghraib (Iraq). In January 2009, then-President Obama issued Executive Order 13491, which called for the formation of a Special Interagency Task Force on Interrogation and Transfer Orders[3] that would, as part of its mission, study and evaluate whether " … the interrogation practices and techniques in Army Field Manual 2 22.3, when employed by departments or agencies outside the military, provide an appropriate means of acquiring the intelligence necessary to protect the Nation,

[1] Science-based interviewing refers to the principles, strategies, and tactics of interviewing that have been developed and examined in empirical experiments and field validation studies. The key components of this approach include: thorough preparation on the part of an interviewer in advance of an interview; thoughtful preparation of the environment in which the interview will take place; a dynamic that emphasizes active listening rather than talking on the part of the interviewer; the use of specific techniques such as open-ended questioning to elicit accurate memories and information; and an approach to detecting deception that focuses on the suspect's narrative versus non-verbal indicators.

[2] Winton, Richard. "Man gets 25 years to life in Hollywood sign body parts murder." Los Angeles Times (Los Angeles). November 16, 2015. https://www.latimes.com/local/lanow/la-me-ln-life-in-hollywood-body-parts-case-20151116-story.html.

[3] Office of the Director of National Intelligence. Ensuring Lawful Interrogation. Executive Order 13491. Washington: Federal Register, Vol. 74, No. 16, January 27, 2009, Section 5. https://www.dni.gov/index.php/ic-legal-reference-book/executive-order-13491

and, if warranted, to recommend any additional or different guidance for other departments or agencies; … [4] " In August of that year, the task force recommended to the Obama Administration that a special interrogation group, the HIG, be created to ensure that interrogations from that point on were conducted in a way that would "strengthen national security consistent with the rule of law."[5]

The task force made specific recommendations that provided the broad strokes outline of the HIG's activities. One of them paved the way for the HIG's eventual overtures to the LAPD and other local law enforcement agencies: " … [The] Task Force recommended that a scientific research program for interrogation be established to study the comparative effectiveness of interrogation approaches and techniques, with the goal of identifying the existing techniques that are most effective and developing new lawful techniques to improve intelligence interrogations."[6] This HIG research program and the training that grew out of it laid the foundation for the techniques that detectives Stearns and Marcia would employ as they sat in a Texas hotel room with Campos-Martinez, who left Los Angeles to start a new life in San Antonio.

Taking a page from the HIG's playbook, Stearns recalled the intensive planning and preparation he and Marcia did before sitting down with Campos-Martinez that afternoon. They purposely met in a hotel room versus a more formal setting. The detectives offered the suspect a warm beverage, coffee. Through these techniques and others, they established a rapport with Campos-Martinez and carefully had him walk them through his memories of Medellin, at some points asking him to close his eyes, from the early days of their relationship to when Medellin was last seen – all techniques that have been meticulously studied and confirmed as effective by the HIG's behavioral scientists, a global network of researchers and, in the field, interrogators. In contrast to conventional practice, the detectives' objective was not to obtain a confession. Instead they sought to elicit new information from Campos-Martinez that would hopefully revive the now-cold case. Campos-Martinez told the detectives at the outset that he only had about 30 minutes to talk; he ended up staying about five hours. During that time, Stearns and Marcia listened carefully for another mainstay in the science-based approach – "checkable," or verifiable details – and picked up on the clue that would end up advancing the case: Campos-Martinez talked about a plant called Datura[7] that could be toxic and could potentially be used to incapacitate someone. The RHD investigative team followed up on that detail and Campos-Martinez was eventually sentenced to 25-years-to-life

[4] Ibid, Section 5, (e) (i).
[5] U.S. Department of Justice, "Special Task Force on Interrogations and Transfer Policies Issues Its Recommendations to the President," published on August 24, 2009. https://www.justice.gov/opa/pr/special-task-force-interrogations-and-transfer-policies-issues-its-recommendations-president
[6] Ibid
[7] Kolker, Robert. "Nothing But The Truth, A radical new interrogation technique is transforming the art of detective work: Shut up and let the suspect do the talking." The Marshall Project. May 24, 2016. https://www.themarshallproject.org/2016/05/24/nothing-but-the-truth

for the murder of his lover – a successful outcome and a validation of the techniques that had been used for the first time in an American criminal case[8].

The HIG made a more formal offer to the LAPD in 2015: We will offer you HIG training on the methods that have been researched that are backed by empirical data. In return, you will provide the HIG with the opportunity to further our research mandate by providing video and/or audiotapes of interviews of real interrogations from LAPD cases that have been adjudicated. The HIG's objective was to provide the training and then have researchers study and code[9] videotaped interviews conducted before and after the training so the use and efficacy of the specific techniques could be catalogued; the term of art in the science world is "field validation." To date, more than a hundred LAPD detectives from the Robbery-Homicide Division and the Major Crimes Division have received training on these science-based interview methods from the HIG, according to Stearns and Severino, this Brief's co-author. Over time, this arrangement has also built a bridge between the LAPD's investigators and the global community of scientists who are exploring these techniques. These relationships have led to new avenues of research for the scientists and a clearer understanding of the science by the investigators.

This science-based interviewing-LAPD engagement is far from the first intersection between science and law enforcement. Police agencies around the world have embraced innovative scientific techniques in areas such as forensics (e.g., DNA analysis, ballistics, the collection and analysis of crime scene evidence), crisis negotiation and officer wellness (e.g., clinical psychology informing assessment and treatment). An area of American policing that has remained relatively uninfluenced by science-based techniques – meaning techniques that have been scientifically studied and are empirically validated – is law enforcement interrogations[10]. While the terms interview and interrogation are both commonly used in police vernacular and sometimes interchanged, this article will use the term interview.

Law enforcement interviewing, particularly in the context of investigations, is an area of American policing that is heavily influenced by the culture and mores of an individual organization, the knowledge that is passed down from cop to cop, the experiences and learning curves over time of individual detectives, the short courses – sometimes merely hours – of interview training during detective school and from outside entities, the checklist- or template-based approaches to interviewing, and, last but not least, the legal restrictions and requirements imposed at the federal, state and department levels. The one thing investigative interviewing has not been heavily influenced by until now is science and the careful study and validation of whether, or how, techniques used in an 8- by 10-foot police interview room work. This is a curious gap for a culture that often requires validation of the effectiveness of everything from software to police gear before it embraces its usage.

[8] Kolker, Robert. "A Severed Head, Two Cops, and the Radical Future of Interrogation." Wired. May 24, 2016. https://www.wired.com/2016/05/how-to-interrogate-suspects/

[9] The researchers systematically identified and logged specific behaviors.

[10] Police forces in the United Kingdom and Canada have both dedicated resources to the study and usage of the PEACE model of investigative interviewing. This model includes five steps: preparation and planning, engage and explain, account, closure and evaluation.

Ironically, investigative interviewing carries some of the greatest legal and reputational liability for agencies and yet there remains very little standardization, monitoring or validation of existing practices. Layered over this multi-faceted process of learning is the way many cops have been trained to comport themselves both in and out of the interview room – be in control, be guarded and, when it comes to an interview, presume guilt and minimize the seriousness of the suspected offense in order to get a confession – an approach that has resulted in the use of confrontational methods and, in some cases, false confessions.

When the HIG ramped up its training efforts with the LAPD in 2015, the federal entity's instructors and the methodologies they taught ran smack into all of these dynamics. For the detectives who experienced the training, some aspects of the science-based approach ran completely counter to what they had been taught throughout their careers and even the role they thought they were supposed to play as interviewers. Veteran sex crimes Detective Ninette Toosbuy, who recently retired from the LAPD, remembered her first impressions of the HIG-sponsored course on science-based methods. "The first gut reaction was this won't really work with our types of cases," she said. "I think that, at the time, the idea of not being able to confront your suspect with your accusation or allegation seemed really foreign and it seemed like, 'Where do you go from there if you can't confront?'." The material also seemed very academic with techniques taught in ways that weren't translated directly into an operational law enforcement context. This led to an initial lack of common lexicon between the instructors and the cops.

The training also held other surprises for the cops:

- non-verbal indices of deception that they had traditionally been told were solid – lack of eye contact or fidgeting during an interview – were not validated by science, they learned;
- the focus during a science-based interview was not to elicit a confession but instead to gather information and facts about a crime or suspect that could be checked later to advance the existing investigation, inform an old (or new) one or exonerate a suspect;
- putting time and effort into planning and preparation for an interview was as important as the interview itself;
- every word in an interview counted and there was no such thing as "idle chatter"; and
- stepping out of "cop mode" to become a good, active listener and even empathizer (on the surface) with a suspect was one of the keys to building rapport.

In short, the emphasis in the science-based approach was on finding the truth of the matter versus closing the case and getting the arrest. That is not to say that detectives have not been interested in the truth; rather, the emphasis has traditionally been on driving investigative activities, including the interviews with a suspect, toward a confession.

For busy detectives under immense pressure to solve cases, many aspects of these approaches were foreign. Others validated techniques that detectives had learned along the way and considered common sense, like knowing that treating suspects with respect and using a non-confrontational approach got suspects talking.

The "aha" moment for Toosbuy came after she delved into the open-source research that backs these techniques. For example, she read up on the use of the Tell, Explain, Describe (TED) technique. "Once I started deploying TED with victims and suspects, I started seeing how I obtained more detailed information and much richer information from the parties that I interviewed," she said. "What would happen with that victim was that he or she would provide details that may be irrelevant to the specifics of the alleged crime but those details, if later corroborated by the suspect, would solidify the confession. The other thing [the TED technique] did was help enhance people's ability to recall."

Toosbuy, who was the lead instructor on interview and interrogation for the LAPD before her retirement, said she changed her approach to interviewing and revamped the department's curriculum. By casting a wider net during an interview than the traditional "what, where, when" questions, Toosbuy said she developed "greater rapport," which led to more information that was useful to her cases.

"[B]y letting them talk and by showing interest in the narrative … you convey that you really care about what they're telling you and that makes people, subconsciously, want to tell you more," she said. Often, she added, officers and detectives "wear [their] emotions on [their] sleeves. [If] we have contempt, we treat the suspect accordingly. If we do that, nobody is going to want to talk to you. … No matter how wretched a human being that person may be, if you treat them with respect, the likelihood of [the suspect] telling you what he did will increase tremendously."

Her revamp of the department's interview and interrogation curriculum included teaching her students not to rely as much on body language and verbal cues to "supposedly detect deception," she said, and to phrase questions in a way that was much more open-ended, geared toward helping victims, witnesses and suspects alike with their memory recall, and punctuated by pauses when the interviewers would simply listen.

The science-based methods' collective emphasis on getting to the truth, Toosbuy said, provided the greatest potential value for law enforcement. "I think we would see an increase in successful investigations, meaning getting closer to the truth," she said. "In some instances, we would be able to get charges filed on cases that currently we are not getting filed on and we would, in some cases, be able to exonerate the suspect." Toosbuy said she thinks the way forward for science-based methods is "not just to teach but to show. When you show that it will make you better as a detective and better as a cop, there is [how] you're going to [effect] change."

According to the authors of this Brief, the benefits of the science-based techniques also include:

- a greater understanding of the importance of looking for cues of truth-telling as well as searching for cues of deception;

- the critical importance of developing rapport, which at its foundation enables a sense of autonomy in a suspect, and how that rapport can overcome resistance and the withholding of information;
- the development of insights into areas relevant to threat assessment such as a suspect's future intentions;
- a new awareness of the resources available to law enforcement from the research community; and
- how a science-based understanding of memory recall aids in investigations.

This search for the truth versus the obtaining of a specific outcome is the foundation of the science-based methods, according to Steven Kleinman, a veteran military interrogator[11] and outspoken critic of enhanced interrogation techniques who serves as chair of the HIG's Research Committee[12]. "Law enforcement has essentially rewarded a certain style of interviewing with an emphasis on eliciting a confession," said Kleinman, who was part of the HIG's cadre of instructors who taught the LAPD detectives. "To have a cultural change is to uncover the truth. … There's a big cultural shift." Law enforcement culture currently "assumes that at some point you've mastered the skill and there's nothing more to learn," he added.

What the science-based methods do not offer law enforcement is a template, Kleinman said. Instead, what they collectively offer is "an empirical vehicle [and an] increasing understanding of what goes on in an interview based on data and not just that someone has done this for 20 years."

"That's the value. It's helping them improve practice with a more objective, systematic way to look at what they do," he said. "People's civil liberties are at stake and the trust people have in their police department. Each false confession has such a crushing effect on a community." Ultimately, Kleinman added, "there are no shortcuts" when it comes to interviewing.

The integration of science-based interview methods into state and local law enforcement culture may face an uphill battle on several fronts, according to the detectives interviewed for this Issue Brief and the authors of this Brief. There is the aspect of appearing that one is "trying to shove PC [political correctness] down a cop's throat," the perception that rapport-building would be "touchy feely" or take too much time during a fast-moving investigation, the reliance on a more collaborative approach (between detectives and their support teams) to the interview, and importantly, the idea that cops may believe that they already know what they need to know when it comes to interviewing. As Stearns put it, "[E]very cop thinks they know how to talk to anyone and if someone won't talk, they'll just say, 'Well, that guy's an

[11] Mr. Kleinman, a retired colonel, served as the director of the U.S. Air Force strategic interrogation training program. A career intelligence professional, he was the first military officer to speak out against the interrogation methods he witnessed in Iraq during the early years of the war and their impact on the interrogators' ability to gain accurate, timely and actionable intelligence.

[12] The HIG's Research Committee is an informal group of individuals from non-governmental organizations, government, and academia who meet occasionally with HIG staff to discuss the state of the science on interviewing, according to the HIG.

[expletive]. That's probably the biggest step forward, is that there are new things to learn in interview and interrogation."

The authors of this Brief see a path forward for science-based interviewing techniques that would involve a clear, operationally relevant translation of these methods for a law enforcement audience and expanded access to training in these techniques. As a complement to these activities, it would be beneficial to identify a way to bring law enforcement professionals from across the country together to discuss best practices in interviewing and identify areas that could be strengthened by these science-based techniques. In the opinion of the authors of this Brief, a critical ingredient of any attempt to influence existing law enforcement interview techniques would be an approach that emphasized having science-based techniques supplement, rather than supplant, existing interview methods. Cops would also have to be shown specifically – using real-world cases – how these techniques work and why they should be considered. Finally, as an outgrowth of the existing body of scientific research on these techniques, it will be important to identify ways to study them in context (e.g., as applied by law enforcement) to further examine their efficacy and true value to the field of police interviewing.

From the HIG's perspective, the methods that have come out of this global, years-long research effort may have been proven to work by the research findings but there is a long way to go before they have a lasting effect on law enforcement culture. Dr. Joeanna Arthur, who headed the HIG's research arm from late 2017 to early 2019, said she thinks there is a "serious need to modernize training" for law enforcement, particularly when it comes to areas like detecting deception. "We do have a long road ahead in terms of changing the culture," she said. When asked about the return on investment for the HIG, Arthur said, "LAPD really offered an operationally relevant context where the HIG could test and evaluate [science-based techniques]."

Dr. Debbie Frankfort, who took the helm of the HIG's research arm as program manager in 2019, said that the LAPD-HIG partnership has "opened up the dialogue between academia and practitioners" and given the research community more ideas about potential field applications. "Part of the return on investment is that we see … the science-based, rapport-based, non-coercive techniques being applied [in the field]," Frankfort said. "We're seeing it work in routine daily contact. Beyond that, the relationship with the LAPD and other local law enforcement gives us the opportunity to have this feedback loop between practitioners and the HIG." Frankfort said that seeing science-based interview training implemented on a national scale "would be great." "When we have an organization like the LAPD that is a standard that everyone looks to and they're using it and getting successes from it, it helps to change the culture nationally," Frankfort said.

Policing in the 21st Century requires law enforcement agencies to continuously assess their approaches to virtually every aspect of their business. It stands to reason that a high-profile and potential high-liability area like investigative interviewing should be included in this process.

Whether a national cultural change in law enforcement interviewing will happen remains to be seen but, in the interview rooms at the LAPD, those changes are happening incrementally day by day. As of this writing, the department has used these science-based interview methods on major cases with measurable success. It also now regularly uses science-based techniques during interviews conducted by select units that, for the purposes of protecting LAPD's tradecraft, will not be detailed here. It is the opinion of the authors of this Brief that, ultimately, cultural change will require a more holistic translation of science-based methods to the operational environments of local law enforcement, and an approach that does not intend to supplant existing interview methods and approaches but rather supplement them. Ultimately, the way to change culture in law enforcement has always been to "show it, don't say it." Case by case, interview by interview, these methods will lead to change only when they meet the real-world laboratory of American law enforcement and are shown to be effective.

The opinions expressed herein are those of the authors alone.

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Behavior Analysis Interview: Detection of Deception and truthfulness of Suspects and Legal Impact in Criminal Justice System

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ABSTRACT

Psycho physiological Detection of Deception examinations are often used in criminal investigation when there is uncertainty not only regarding guilt or innocence but also about the roles of Guilty suspects which may be distributed among perpetration, complicity or knowledge. Investigation officer starts any interrogation with an interview process to gather maximum information about the crime. The police ask many questions and the subject provides answers, the Police decide in the mind if the subject is an innocent or a suspect. Psychological based investigating techniques help the criminal justice system by supplying valuable information, which cannot be detected solely with the help of legal brain. The Behavior Analysis Interview (BAI) is a procedure used by the investigators to distinguish between suspects who are concealing their involvement in a crime and are deceptive from those who are not involved in that particular crime and are truthful.

INTRODUCTION

Deception has been linked to increased anxiety and mental burden. The current paper focuses whether deceivers still show clearly divergent mental and affective responses from truth-tellers when they just have the aim to fake in the interrogation situation. In terms of SNS activity, personal cognitive load, and anxiety, it is observed that deceivers who lie frequently differ from truth-tellers. SNS activity was shown to be more closely connected to self-report of cognitive load than stress in all interviews, supporting the cognitive load method. Moreover, deceivers who spoke the truth and lied on only one vital question had self-reported stress that was significantly different from truth-tellers [1-5].

The most common problem a police officer faces during interrogation is how far he can believe the statement given by witness/Suspects/Accused. It is not easy for any officer to judge a person deceptive or Truthful based on the interrogation by police alone. Nowadays police investigations are much more critical and technical and Forensic Psychological based investigating techniques helps the Police personnel by supplying relevant information about the case.

Behavior Analysis Interview assess the Verbal, Nonverbal behavior of the subject. The most common technique used across the world is the 'Behavior Analysis Interview Technique', to find out the deception and truthfulness of the suspect. During the interview, a set of questions is asked and suspect's verbal responses and nonverbal behaviors along with attitudinal characteristics are assessed by the investigator. Based on this assessment the involvement of a person in the criminal activity can be determined [6-8].

During the interview, the investigator establishes the rapport with the suspect to gain trust and respect during the interrogation. The suspect can be profiled for the interrogation by identifying information about his personality, background, social economic status and justifications for committing the crime, fears in his/her mind regarding the consequences. Expert can measure suspect's intelligence, physical and mental health, emotion, attitude his/her ability to understand the language, verbal and non-verbal behavior etc. during 'Behavior Analysis Interview'.

The purpose of this interview is to determine the effectiveness with which investigators are able to distinguish between truthful and deceptive suspects who are brought for

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interview. During this interview, both guilty and innocent suspects try to show the innocence. Innocent suspects have a blind faith in the power of innocence to show that they are not guilty. Deceptive suspects manifest theoretically predicted behaviors and attitudes of deceptiveness to a significantly greater degree than the truthful suspects [9-11].

The behavior analysis interview predicts that guilty and innocent suspects differ in their verbal responses and also in their nonverbal behavior. It is assumed that guilty suspects feel more uncomfortable than innocent suspects in their nonverbal responses, guilty suspects show more nervous behaviors, such as crossing their legs, less eye contact, shifting about in their chairs, performing grooming behaviors, or looking away from the investigator while answering questions during interview procedure. Regarding the verbal responses, the guilty suspects are non-cooperative and manipulative as compared to innocent suspects who are expected to be exonerated and are cooperative by providing helpful information [12-14].

Lying necessitates the deceiver's ability to keep information straight, create a credible tale, and resist inspection. When people are honest, they frequently go out of their way to make sure that others realize. Liars, on the other hand, try to manipulate others' impressions. As a result, people unknowingly use physical and vocal clues to convey dishonesty. Regrettably, no one nonverbal or vocal indication indicates deceit. The capacity of investigators to identify dishonest activity is primarily dependent on their ability to monitor, catalogue, and distinguish human behavior. They must find clusters of behaviors that, when added together, reinforce deceptive behaviors that are unique to the person being questioned. Investigators formulate verbal questions and observe non-verbal response in order to make deception and truthfulness of subject during behavior analysis interview.

The Supreme Court of India in its recent ruling Smt. Selvi & Others Vs. St. of Karnataka and regulated the application of the Forensic psychological techniques through the NHRC guidelines. In some important cases referred by Law Enforcement agencies 'Behavior Analysis Interview' has been done before Polygraph examination and Layered Voice Analysis technique and it focus on probe area and to find out any misleading clues presented by the subject. In India 'Behavior Analysis Interview Techniques' has provided scientific support in crime investigation to different Law enforcement agencies in many important cases. Before conducting an Interrogation by the Investigating Officer, the Expert can conduct BAI and collect much information about the suspect believed to be innocent or Guilty.

PROCEDURE

The BAI is a non-accusatory diagnostic procedure that allows an examiner to collect physiological data to infer whether a subject's statement is truthful or otherwise. It can eliminate the innocent suspect and it can point out the guilty individual or the one who is withholding pertinent information. Expert utilize his/her interview skills based on the observation of verbal, non-verbal responses of subject and analyzed in a scientific manner and no permission of the Court is required for its administration. Many researches indicate that only few behaviors consistently differentiate deceptive subjects from truthful subjects. Behavioral Analysis Interview maintains that there are differences within the non-verbal, verbal and written behavior of truthful and deceptive suspects, and that these differences can be quantified for legitimate evaluations of factor deception. The objective of 'Behavioral Analysis Interview' is to help the investigator to find out whether the person is guilty or not. During the course of interview, the subject's Verbal, Behavioral Assessment and Non-verbal Behavioral Assessment, Cognitive Ability, Appearance, emotional mood, speech and thought pattern will be noted down carefully.

THE INTERVIEW SETTING

The main psychological factor contributing to a 'Behavior Analysis Interview' is Privacy and the expert should be alone with the subjects. Interview room requires special environment, free of artifact that might interfere with the behavior of subject such as noise, excessively low or high room temperature, distractive décor and lack of privacy. There should be no lock on the door where the Expert conducts 'Behavior Analysis Interview'. 'Behavior Analysis Interview' is conducted in absolute privacy where no outsider is allowed including the Investigating officer of the case. Police officer, counsel or any outsider are never allowed inside the room during the interview. If need be, only assistant of the expert or interpreter (in case of language barrier) is allowed inside the room during the 'Behavior Analysis Interview'. The Interview room is designed to provide complete privacy in a professional surrounding that will convey confidence in the expertise of the Forensic Psychologist/ Criminologist.

EXPERT PERSONALITY

The personality, educational background, integrity, objectivity, impartiality and experience of an Expert play an important role in his/her success to identify truthfulness and deception of the subject. There are various factors due to which misleading behavior response similar to deception and truthfulness can easily mislead an inexperienced examiner. It is very essential part of behavior Analysis Interview that Expert should be objective and nonjudgmental and perceives his/her role as determine the truth and not passing the judgment on the subject 'behavior'. The Expert should have an easygoing confidence that allows the suspect to feel comfortable telling the truth but feels uncomfortable lying. Expert also should discover ways to formulate questions to facilitate behavioral observations. Expert should be aware of

laws and new developments of procedure of interrogation and understanding of psychological principal of behavior.

In terms of personal qualities, the Expert should have the following most important quality:

- Good intelligence
- Good emotional control and Even temperament
- A good listener
- Patience and endurance
- Good inner confidence in the ability to detect deception
- Good understanding of human nature
- Ability to get on well with others
- A good communicator
- A high degree of suspicion

He or she should be familiar with new developments in the art of interrogation and be aware of the laws and regulations that govern interrogation procedures. An understanding of the psychological principles and theories of interrogation and confessions is considered very important.

INITIAL INTERVIEW PROCEDURE IN BEHAVIOR ANALYSIS INTERVIEW

There are three ways available to the Expert to decide whether the suspect is guilty or innocent

a. Conduct Behavior Analysis interview of the subject upon the idea of guilt

b. Conduct Behavior Analysis interview of the subject upon the idea of innocence

c. Conduct Behavior Analysis interview of the subject upon the idea of neutral situation and do not make any inferences.

The general nervousness, personality, general mental status and the language spoken and understood by him are assessed during the interview.

Expert use different cognitive based question technique during BAI in the following ways:

a. Asking unanticipated questions

b. Compelling cognitive load

c. Using evidence in a critical manner

DIFFERENT APPROACHES TO DIFFERENT SUBJECTS

The interview of a subject is quite challenging task and requires great skill and creativity to obtain maximum relevant information in a criminal investigation without violating subject's rights. During interview, the examiner pays attention to the behavior of the subject to distinguish between truth tellers and lie tellers which is an important task and can be achieved through measurement of physiological responses, brain activity, non-verbal behavior and statement analysis. The interview of different subjects needs different techniques and time as it is information gathering process.

a. Interview of a nervous subject: The interview of a nervous subject is time consuming as a subject needs to be made comfortable to disclose important issues. The nervous behavior is more in lie tellers as compared to the truth tellers and the truthful subjects feel more comfortable during interview. The role of investigator is very important during interview to make rapport with the subject. Therefore, investigator needs to assume a relaxed posture and calm tone of voice to reduce nervousness of the subject. It is very important for the investigator not to make the subject feel uncomfortable and nervous while asking the questions related to particular crime for which the subject has been called for interview. During interview the investigator obtain background information about the subject by having a casual talk and then explain the purpose of the interview rather than addressing the issues under investigation. The relevant conversation includes office family details friends. This will help the investigator to obtain as much as the relevant information from the subject.

b. Interview of angry subject: The purpose of investigative interview is to obtain accurate and reliable information from the subjects. The psychology of angry subject is different from that of the nervous one. During interview, if the subject is angry, it will be difficult to obtain meaningful information from him due to his state of mind. Therefore, the investigator should appropriately sympathize the subject and try to resolve the anger by talking to him softer and slower and by remaining composed. The angry behavior of subject may be due to any reason like he has been mistreated by society or tortured by police. But anger is also commonly used by deceptive subjects to justify their lie. They may try to challenge the investigator by creating adversarial relationship. The role of investigator is to release anger of the subject so that maximum information can be obtained.

c. Interview of narcissistic subject: Narcissistic person is self-centered, arrogant, manipulative and selfish. When interview of such person is conducted it is observed that the subject tries to act as superior or condescending behavior, sending to investigator and try to control the interview. Therefore, the investigator maintains and emotional detachment and professional demeanor. Also, investigator voids apologies for asking any question because it would make the subject to be emotionally superior. Narcissistic subject shows off his position and tries to threaten the investigator and retaliates. But the

investigator should not accept such challenge; rather more productive response should be stated like he is not the first-person interview by the investigator. It is the experience and skill of the investigator to tackle the situation by making the narcissistic subject to be cooperative for fair assessment of his credibility and truthfulness so that relevant issues can be discussed.

UNDERLYING PRINCIPAL OF BEHAVIOR ANALYSIS

There are three distinct different channels in which we communicate. An 'abecedarian principle of behavior symptom analyses is that Innocent subjects send the same communication on all three channels of communication. Deceptive suspects may send different message within the three channels of communication. One order of this possible symptom of deception is called 'incongruous behavior' because the suspect's non-verbal behavior contradicts what the suspect is saying on the verbal position. Emotional and cognitive components play important role in Deception framework. Emotionally the process of deception can initiate a stress reaction via guilt regarding the deceptive act or from fear of detection and the potential response to such a revelation. The resulting stress reaction manifests itself with the activation of the sympathetic nervous system. This activation drives a number of potential innate verbal, non-verbal, and paralinguistic behavioral responses designed instinctually as a component of the fight and flight system typically activated in times of stress.

VERBAL BEHAVIORAL ASSESSMENT

At the time of interview on the basis of verbal Behavioral Assessment Expert can identify deceptive suspects who write their statements from creation rather than from real facts. Expert can ask questions in following different ways:

1. Open questions to get information from the suspects
2. Goal directed questions to force the guilty to lie
3. Projective questions to assess unconscious verbal cues
4. After - interview questions to find out the truthful subjects

During Interview generally deceptive Subject attempts to ignore the portion of time when the actual crime was committed. Any verbal statement given by the subject can be divided into three portions before the crime event, during the crime event and after the event. If the statement is balanced in three portions the probability is greater that the statement is true. If any portion of the statement is missing or incomplete, then the probability is greater that the statement is false. The usage of words is the third type of emotional sign. Anxiety and maybe lying might be signaled by one-word replies or needlessly elaborated responses. When questioned "Where is your friend's baggage?" a brief reply of "checked" or a long-winded description about what was in the baggage could suggest anxiousness and probable fraud. In one important case of Murder during interview the statement written by a subject shows a great deviation from the balanced norm. Expert conclude the subject is telling lie and after other Forensic input it was clear that subject was involved in the case under investigation.

EVALUATING THE PARALINGUISTIC BEHAVIOR

The paralinguistic is a part of communication and is considered to be the best source of deception indication during an interview in a criminal investigation as it is less controlled by conscious mind.

Various parameters on which paralinguistic behavior has been evaluated are being discussed below:

Response latency: Response latency is the length of time between the last word of question of the Expert and the first word of answer started by the subject. It is mentioned that the truthful subject takes very less time to answer where as a deceptive subject takes time to respond to any question. Generally delayed responses to any factual question should be considered doubtful. All parameters of response latency should be established by the investigator to determine whether the subject is truthful or deceptive. Deceptive subjects show consciousness during their delayed latencies and also try to disguise by stalling tactics. Deceptive subject sometimes tries to manipulate by repeating the same question asked by the investigator but truthful subjects are straight forward with their answers.

Response delivery: It is the clarity rate and pitches shown during the response by the subjects which are variable. It can be consistent or inconsistent within the verbal content of the person. The truthful subjects show high rate and pitch to relieve the events and to disclose the facts whereas the rate and pitch of deceptive subject decreases as they edit the information or manipulate the incident. A truthful subject speaks clearly in an appropriate manner to get his response understood by the investigator but the deceptive subject tries to hide information, talks quietly, mumble during his response.

Early Responses: It is another parameter to evaluate the paralinguistic behavior related to response timings. Truthful subjects show nervousness and anxiety with their early responses especially at the beginning of the interview while the deceptive subject show ambitious behavior to get prepared to lie in their answers and generally show early response during middle or end of the interview.

Continuity of the Response: The flow of content is very important to understand by the investigator what subject is conveying in his response. A truthful subject is spontaneous, maintains flow and continuity in his statement. A deceptive subject show stops and start behavior in which he starts with his answer but suddenly stops and changes the direction of his response.

NON-VERBAL BEHAVIORAL ASSESSMENT

During Interview Deceptive Subject feel internal anxiety and different emotional state to Innocent Subjects. During Internal anxiety situation the Mind "turns the body off" and the subject will focus only on verbal level. The actual meaning of the verbal word may be modified by one or many Non-Verbal Cues such as facial expressions, micro-expression, Gesture and Posture and other bodily activities. Additional nonverbal cues indications of anxiety and possibly lying include continually touching themselves, such as plucking through clothing or rubbing the forehead, sitting in a stiff stance, or twisting and signaling continuously.

Facial action, the reaction of different body parts, wordings, and way of speaking are the four categories of indications. Although no one cluster may be deemed reliable as an indicator of deception, the collection as a whole is beneficial. To put it differently, any one of these signs will not go far in detecting deceit, but when used collectively, the chances of finding a liar are much increased. Frequent blinking is perhaps the most striking physical indication of mental discomfort. A spike in blinking rate gives a bad hedonic (thinking) attitude and maybe lying, until there is a neurological disorder of some kind of actual problem, such as a particle of grit stuck under the contact lens.

During 'Behavior Analysis Interview' Subject's posture, gesture reveals his/her confidence, emotional involvement and Interest. The truthful subject's posture will be upright in the chair and assure direct communication to the Expert. A deceptive Subject may crouch in the chair and appear distant and disinterested in the interviewing process. Lastly, an exceptionally high-pitched condescending tone, severe pitch fluctuation, or a stoic, monotone voice could all be symptoms of anguish and lying.

LEGAL ISSUES

The role and function of judiciary and Forensic Psychologist are entirely different but to gain the common man of effective judiciary system Forensic Psychological techniques help the judiciary to draw conclusion. Courts have perceived many difficulties with expert evidence and the court must satisfy that evidence is relevant or not.

The report submitted in the court must be one which can affect rationally the decision arrived at. Forensic Psychologist make an observation on some aspect of the case based on the Forensic Psychological techniques submits the observation, result and inferences to the court and how to continue it with other scientific evidence that is the work of the judge and the jury.

A forensic psychological technique is the provision of psychological information for the purpose of deriving a legal decision.

BAI is an invaluable aid to investigation and it should be emphasized that it is an aid and it does not supplant or replace other method of investigation. The opinion of the Forensic Psychologist will have the persuasive value and needs to be read and interpreted in conjunction with other material evidences, interviews, interrogation reports and the professional opinion thereof.

It can be cited as the corroborative evidence. Besides, the same may be admitted subjected to judicial scrutiny and discretion. The expert witness by virtue of his/her education, profession, and experience is considered to have special knowledge of the subject beyond that of the average person. So that he/she may believe when he/she makes statement as it would be authentic and factual loaded with thorough knowledge, evidence, facts and figures.

Judicial officer assign the probative value of the evidence and it is based on facts of the case and it differs from case to case. Courts are not bound to accept the opinion of the Forensic Expert and the discretionary power has been given vide section 293(i) criminal procedure code. Forensic Psychologist deposes in the court as an Expert witness to provide professional Expertise based on his/her experience, education and profession. Along with other supporting material evidence and it have greater persuasive value and the report given by Forensic Psychologist used as corroborative evidence.

CONCLUSION

Lying calls for the deceiver to maintain information straight, make the tale believable, and resist scrutiny.

In both corporate sector and police-crime investigations when a defendant declined to undergo a polygraph test, the BAI functioned admirably. Hundreds of examiners have been trained to perform behavioral assessment interviews, and their testimony verifies the interview's efficacy in prosecution and defense cases. During any interview process in crime investigation there are basically four opportunities, per question, to assess if the person is hiding something, troubled by a question, has some sort of guilty knowledge or lying.

There are three ways to catch liars: (1) by observing how they behave (2) by listening to what they say and (3) by measuring their physiological responses.

The interview of suspects generally forms an essential part of criminal investigation. The quality and fairness of those interviews are crucial to guarantee justice within the process and forms a successful investigation. To identify possible psychological vulnerabilities of a suspect, police officers have to apply the knowledge of psychology to their work. The role of Psychology based investigation techniques has become broader and all investigation agencies are much more aware about its importance in court room. A comprehensive psychology assessment to investigate crime

cases helps in assessing the involvement or innocence of an individual in an offence under investigation. Success of any investigating officer depends on how quickly and efficiently he is able to identify the genuine offender from the crime scene. During investigation police raise their level of interrogation skills and also supplement with the use of other aids to interrogation with the help of different Forensic Psychological techniques.

Police has lot of pressure from seniors, victim, media, public etc. to arrest the culprit, solve the case early. Behavioral Assessment Interview is used in early stages of any investigation to eliminate the suspects. It's another crucial role is to extract the truth from the individual who have committed the crime and concealing the information or providing misleading details. It is a structured interview technique designed to assist the investigator in forming an opinion about the suspect of his innocence or involvement in a crime by analyzing his verbal, non-verbal responses in a scientific manner.

There is no common or universal behavioral cue set that identifies deception across all individuals. The verbal, non-verbal responses are analyzed in a scientific manner based on the observation derived from Behavior Assessment Interview. While the presence of a universal cue would be convenient, the usage of behavioral information still can contribute a great deal to deception prediction if appropriately analyzed. For many years psychologists have done laboratory experiments in an endeavor to explain differences between the behavior of liars and of people telling the reality. By studying large groups of participants, researchers have identified certain general behaviors that liars are more likely to exhibit than are people telling the truth.

The report given by Forensic Psychologist on the basis of 'Behavioral Analysis Interview' and the interpretation help the Law enforcement agency to draw a logical conclusion as to whether the subject is guilty or not. Behavioral Analysis Interview technique is a non-accusatory investigative interview technique that allows an examiner to collect information from the suspect to infer whether his statement is truthful or otherwise.

This technique saves time, properties and verifies that the information provided is accurate. To be a good interrogator the Investigating officer need to be a good actor and must have an insight of human psychology. Police officer should be able to act according to age, profession and intellect of the individual suspect. It has been recognized that the examiner's skill has an important effect on the validity of Behavioral Analysis Interview. Examiner's experience is an essential element reported by investigators and has often been used to explain differences in accuracy rates. As a Police officer and I.O. of many cases, Behavioral assessment interview techniques helped in verifying statements of accused, suspects, witnesses and complainants. The interpretation given by the Expert helped to come to a logical conclusion as to whether the subject is guilty or not. Behavioral Assessment Interview Technique allows the interviewer to assess nonverbal and verbal behavior without the need of attachments to make accurate determinations of truth or deception. As neither Supreme Court, nor the NHRC guidelines restricts the applicability and utility of the Behavioral Analysis Interview. No permission of the Court is required for its administration, except written informed consent of the suspect.

In India during a short span of years' Behavioral Assessment interview has provided scientific support in criminal investigation in many cases of national and international importance. The Behavioral Assessment Interview in conjunction with other forensic reports and other material evidence provided to further lead to the investigation. With the help of much Forensic Psychological technique various criminal cases have been successfully solved by the Investigating officer and accepted in various courts as corroborative evidence. In India, a good beginning was made by different Forensic Science Laboratory by providing the facility of different Behavioral Analysis Interview for the crime investigation purposes.

Behavioral Analysis Interview are applicable by law enforcement professionals in criminal and civil cases to investigator or identify the deceptive person and to exclude the innocent person from the list of the suspects through noninvasive analysis of verbal, nonverbal, behavioral and psychological cues. Psychological based Investigation techniques will help to obtain maximum understanding of the crime that has been committed from in all possible angles, so that justice can be done to the innocent and the real criminal is punished in criminal trials.

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Cues to Deception

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Do people behave differently when they are lying compared with when they are telling the truth? The combined results of 1,338 estimates of 158 cues to deception are reported. Results show that in some ways, liars are less forthcoming than truth tellers, and they tell less compelling tales. They also make a more negative impression and are more tense. Their stories include fewer ordinary imperfections and unusual contents. However, many behaviors showed no discernible links, or only weak links, to deceit. Cues to deception were more pronounced when people were motivated to succeed, especially when the motivations were identity relevant rather than monetary or material. Cues to deception were also stronger when lies were about transgressions.

Do people behave in discernibly different ways when they are lying compared with when they are telling the truth? Practitioners and laypersons have been interested in this question for centuries (Trovillo, 1939). The scientific search for behavioral cues to deception is also longstanding and has become especially vigorous in the past few decades.

In 1981, Zuckerman, DePaulo, and Rosenthal published the first comprehensive meta-analysis of cues to deception. Their search for all reports of the degree to which verbal and nonverbal cues occurred differentially during deceptive communications compared with truthful ones produced 159 estimates of 19 behavioral cues to deception. These estimates were from 36 independent samples. Several subsequent reviews updated the Zuckerman et al. (1981) meta-analysis (B. M. DePaulo, Stone, & Lassiter, 1985a; Zuckerman, DePaulo, & Rosenthal, 1986; Zuckerman & Driver, 1985), but the number of additional estimates was small. Other reviews have been more comprehensive but not quantitative (see Vrij, 2000, for the most recent of these). In the present review, we summarize quantitatively the results of more than 1,300 estimates of 158 cues to deception. These estimates are from 120 independent samples.

We define deception as a deliberate attempt to mislead others. Falsehoods communicated by people who are mistaken or self-deceived are not lies, but literal truths designed to mislead are lies. Although some scholars draw a distinction between *deceiving* and *lying* (e.g., Bok, 1978), we use the terms interchangeably. As Zuckerman et al. (1981) did in their review, we limit our analysis to behaviors that can be discerned by human perceivers without the aid of any special equipment. We also limit our review to studies of adults, as the dynamics of deceiving may be markedly different in children (e.g., Feldman, Devin-Sheehan, & Allen, 1978; Lewis, Stanger, & Sullivan, 1989; Shennum & Bugental, 1982).

Predicting Cues to Deception: Previous Approaches

Ekman and Friesen (1969)

In 1969, Ekman and Friesen published the first influential theoretical statement about cues to deception. They described two broad categories of cues, leakage cues and deception cues. Leakage cues reveal what the liars are trying to hide—typically, how they really feel. Anticipating the self-presentational perspective that would become important later, Ekman and Friesen (1969) noted that the operation of display rules (i.e., culturally and socially determined norms for managing facial expressions of emotions) can result in leakage cues. For example, when deceivers try to squelch the facial expression of an emotion they are trying to conceal, the resulting expression—a micro affect display—may be briefer than it is ordinarily, but the nature of the affect may still be identifiable. If instead the facial expression is so brief that the

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emotion cannot be discerned, then the resulting micro affect display functions as a deception cue. Deception cues indicate that deception may be occurring, without indicating the nature of the information that is being concealed. Almost all of the cues that have been reported in the literature are deception cues.

Ekman and Friesen (1969) described various conditions under which liars would be especially likely to succeed in their deception attempts (e.g., perhaps by evidencing fewer or less obvious cues). Their formulation was based on the psychology of both the liars and the targets of lies as they relate to each other. For example, they predicted that success is more likely when the salience of deception is asymmetrical such that the liars are focused on getting away with their lies while the issue of deception is not salient to the targets or that the liars are focusing primarily on deceiving while the targets are simultaneously trying to deceive and detect deceit.

Zuckerman et al. (1981)

Zuckerman et al. (1981) began their formulation with the widely accepted premise that no one behavior or set of behaviors would ever be found that always occurs when people are lying and never occurs any other time. Instead, they argued, the search should be for the kinds of thoughts, feelings, or psychological processes that are likely to occur more or less often when people are lying compared with when they are telling the truth and for the behavioral cues that may be indicative of those states. They then delineated four factors that could be used to predict cues to deception: generalized arousal, the specific affects experienced during deception, cognitive aspects of deception, and attempts to control behavior so as to maintain the deception.

Arousal

Citing the research and theory available at the time on the psychophysiological detection of deception, Zuckerman et al. (1981) proposed that liars may experience greater undifferentiated arousal than truth tellers. That arousal could be evidenced by liars' greater pupil dilation, increased blinking, more frequent speech disturbances, and higher pitch. However, Zuckerman et al. (1981) also acknowledged that autonomic responses that seem characteristic of deception may be explained by the specific affects experienced while lying without invoking the notion of diffuse arousal.

Feelings While Lying

To the extent that liars experience guilt about lying or fear of getting caught lying, behaviors indicative of guilt and fear are shown more often by liars than truth tellers. Zuckerman et al. (1981) suggested that liars might fidget more than truth tellers, and they may also sound more unpleasant. They also suggested that guilt and anxiety could become apparent in liars' distancing of themselves from their deceptive communications. Drawing from Wiener and Mehrabian's (1968; see also Mehrabian, 1972) account of the verbal and nonverbal cues indicative of distancing (which they called *nonimmediacy*), Zuckerman et al. (1981) predicted that liars would communicate in more evasive and indirect ways than truth tellers and that they would maintain less eye contact with their interaction partners.

Cognitive Aspects of Deception

Zuckerman et al. (1981) conceptualized lying as a more cognitively complex task than telling the truth. Liars, they claimed, need to formulate communications that are internally consistent and consistent with what others already know. The greater cognitive challenges involved in lying (relative to truth telling) were predicted to result in longer response latencies, more speech hesitations, greater pupil dilation, and fewer illustrators (hand movements that accompany and illustrate speech).

Attempted Control of Verbal and Nonverbal Behaviors

Liars' attempts to control their behaviors so as to maintain their deception can paradoxically result in cues that instead betray it. For example, liars' behaviors may seem less spontaneous than truth tellers'. Also, liars' inability to control all aspects of their behavior equally effectively could result in verbal and nonverbal discrepancies.

Ekman (1985/1992)

Ekman (1985/1992) described two major categories of cues, thinking cues and feeling cues. Liars who prepare their deceptions inadequately or who cannot keep their stories straight produce inconsistencies that betray their deceits. Those who overprepare produce stories that seem rehearsed. If liars need to think carefully about their lies as they tell them, they may speak more slowly than truth tellers. These are all thinking cues.

Ekman's (1985/1992) more important contribution, however, was his conceptualization of the role of emotions in deceiving. By understanding the emotions that liars are experiencing, Ekman argued, it is possible to predict behaviors that distinguish liars from truth tellers. For example, the cues indicative of detection apprehension are fear cues. These include higher pitch, faster and louder speech, pauses, speech errors, and indirect speech. The greater the liars' detection apprehension, the more evident these fear cues should be. For example, liars should appear more fearful as the stakes become higher and the anticipated probability of success becomes lower.

Similarly, liars who feel guiltier about their lies, such as those who are lying to people who trust them, should show more behavioral indicators of guilt. Ekman (1985/1992) noted that guilt cues have not been clearly determined, but they could include cues to sadness such as lower pitch, softer and slower speech, and downward gazing.

Liars' feelings about lying are not necessarily negative ones. Ekman (1985/1992) suggested that liars sometimes experience "duping delight," which could include excitement about the challenge of lying or pride in succeeding at the lie. This delight could become evident in cues to excitement such as higher pitch, faster and louder speech, and more use of illustrators. The duping delight hypothesis has not yet been tested.

Ekman (1985/1992) pointed out that emotions become significant not only when liars feel apprehensive, guilty, or excited about their lies but also when liars are experiencing emotions that they are trying to hide or when they are faking emotions that they are not really experiencing. The particular cues that signal lying depend on the particular emotions that the liars are experiencing and

simulating. For example, people who are only pretending to be enjoying a film would show fewer genuine enjoyment smiles and more feigned smiles than people who really are enjoying a film. These differences in smiling would not be predicted if the feelings that people really were experiencing or just pretending to experience were, for example, feelings of pain instead of enjoyment. From this perspective, cues to emotions that liars are trying to hide or to simulate cannot be combined across all studies in the literature. Instead, the relevant subset of studies must be selected (e.g., only those in which liars are hiding or simulating enjoyment). This is also a perspective that eschews the notion of undifferentiated arousal and instead argues for the study of specific emotions (Ekman, Levenson, & Friesen, 1983; Levenson, Ekman, & Friesen, 1990).

Buller and Burgoon (1996)

From a communications perspective, Buller and Burgoon (1996) argued that to predict the behavior of deceivers, it is important to consider not just individual psychological variables such as motivations and emotions but also interpersonal communicative processes. Reiterating Ekman and Friesen's (1969) point about the importance of multiple roles, Buller and Burgoon noted that when people are trying to deceive, they are engaged in several tasks simultaneously. They are attempting to convey their deceptive message, and at the same time, they are continually monitoring the target of their deception for signs of suspiciousness and then adapting their behavior accordingly. Although these multiple demands can prove challenging at first, compromising effectiveness at maintaining credibility, "these difficulties should typically dissipate over time as participants acquire more feedback, attempt further repairs, and gain greater control over their performance" (Buller & Burgoon, 1996, p. 220). They therefore predicted that "deceivers in interactive contexts should display increasing immediacy and involvement, pleasantness, composure, fluency, and smooth turn taking over the course of the interaction" (Buller & Burgoon, 1996, p. 220). They also noted that patterns of behavior vary with factors such as the deceivers' expectations, goals, motivations, and relationship with the targets and with the targets' degree of suspiciousness, so that there would be no one profile of deceptive behaviors.

One of the moderator variables for which Buller and Burgoon (1996) made predictions is deceivers' motivations. A number of taxonomies of motivations for deceiving have been proposed (e.g., Camden, Motley, & Wilson, 1984; B. M. DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996; Hample, 1980; Lippard, 1988; Metts, 1989; Turner, Edgley, & Olmstead, 1975), and some are quite complex. For example, Metts (1989) described four categories of motives (partner focused, teller focused, relationship focused, and issue focused) and 15 subcategories. Buller and Burgoon considered three motivations: instrumental, relational (e.g., avoiding relationship problems), and identity (e.g., protecting the liar's image). They predicted that liars would experience more detection apprehension when motivated by self-interest than by relational or identity goals. As a result, instrumentally motivated liars exhibit more nonstrategic behaviors (unintentional behaviors that Buller & Burgoon, 1996, have described as *arousal cues*). Those liars were also predicted by Buller and Burgoon to engage in more strategic behaviors, which are behaviors used in the pursuit of high level plans.

The Present Approach to Predicting Cues to Deception: A Self-Presentational Perspective

In 1992, B. M. DePaulo described a self-presentational perspective for understanding nonverbal communication. Her formulation was not specific to the communication of deception. In this section, we further articulate her perspective, incorporating subsequent research and theory and specifying the implications of a self-presentational perspective for the prediction of cues to deception. We begin with a review of the incidence and nature of lying in everyday life and a comparison of the lies people typically tell in their lives with the lies studied in the research literature on deception.

Lies in Social Life

Lying is a fact of everyday life. Studies in which people kept daily diaries of all of their lies suggest that people tell an average of one or two lies a day (B. M. DePaulo & Kashy, 1998; B. M. DePaulo, Kashy, et al., 1996; Kashy & DePaulo, 1996; see also Camden et al., 1984; Feldman, Forrest, & Happ, 2002; Hample, 1980; Lippard, 1988; Metts, 1989; Turner et al., 1975). People lie most frequently about their feelings, their preferences, and their attitudes and opinions. Less often, they lie about their actions, plans, and whereabouts. Lies about achievements and failures are also commonplace.

Occasionally, people tell lies in pursuit of material gain, personal convenience, or escape from punishment. Much more commonly, however, the rewards that liars seek are psychological ones. They lie to make themselves appear more sophisticated or more virtuous than they think their true characteristics warrant. They lie to protect themselves, and sometimes others, from disapproval and disagreements and from getting their feelings hurt. The realm of lying, then, is one in which identities are claimed and impressions are managed. It is not a world apart from nondeceptive discourse. Truth tellers edit their self-presentations, too, often in pursuit of the same kinds of goals, but in ways that stay within boundaries of honesty. The presentations of liars are designed to mislead.

There are only a few studies in which people have been asked how they feel about the lies they tell in their everyday lives (B. M. DePaulo & Kashy, 1998; B. M. DePaulo, Kashy, et al., 1996; Kashy & DePaulo, 1996). The results suggest that people regard their everyday lies as little lies of little consequence or regret. They do not spend much time planning them or worrying about the possibility of getting caught. Still, everyday lies do leave a smudge. Although people reported feeling only low levels of distress about their lies, they did feel a bit more uncomfortable while telling their lies, and directly afterwards, than they had felt just before lying. Also, people described the social interactions in which lies were told as more superficial and less pleasant than the interactions in which no lies were told.

Interspersed among these unremarkable lies, in much smaller numbers, are lies that people regard as serious. Most of these lies are told to hide transgressions, which can range from misdeeds such as cheating on tests to deep betrayals of intimacy and trust,

such as affairs (B. M. DePaulo, Ansfield, Kirkendol, & Boden, 2002; see also Jones & Burdette, 1993; McCornack & Levine, 1990; Metts, 1994). These lies, especially if discovered, can have serious implications for the liars' identities and reputations.

Lies in Studies of Cues to Deception

In the literature on cues to deception, as in everyday life, lies about personal feelings, facts, and attitudes are the most commonplace. Participants in studies of deception might lie about their opinions on social issues, for example, or about their academic interests or musical preferences. Sometimes emotions are elicited with video clips, and participants try to hide their feelings or simulate entirely different ones. The literature also includes lies about transgressions, as in studies in which participants are induced to cheat on a task and then lie about it. There are a few studies (Hall, 1986; Horvath, 1973; Horvath, Jayne, & Buckley, 1994) of lies about especially serious matters, such as those told by suspects in criminal investigations, and one study (Koper & Sahlman, 2001) of the truthful and deceptive communications of people whose lies were aired in the media (e.g., Richard Nixon, Pete Rose, Susan Smith).

Self-Presentation in Truthful and Deceptive Communications

The prevalence of self-presentational themes in the kinds of lies that people most often tell and in their reasons for telling them suggests the potential power of the self-presentational perspective for predicting cues to deception. Following Schlenker (1982, 2002; Schlenker & Pontari, 2000), we take a broad view of self-presentation as people's attempts to control the impressions that are formed of them. In self-presenting, people are behaving "in ways that convey certain roles and personal qualities to others" (Pontari & Schlenker, 2000, p. 1092). From this perspective, all deceptive communications involve self-presentation—so do all truthful communications.

Fundamental to the self-presentational perspective is the assumption, based on our understanding of the nature of lying in everyday life, that cues to deception ordinarily are quite weak. There are, however, conditions under which cues are more apparent. As we explain, such moderators of the strength of deception cues can be predicted from the self-presentational processes involved in communicating truthfully and deceptively.

The Deception Discrepancy

Lies vary markedly in the goals they serve and in the kinds of self-presentations enacted to achieve those goals. Yet this vast diversity of lies is united by a single identity claim: the claim of honesty. From the friend who feigns amusement in response to the joke that actually caused hurt feelings to the suspect who claims to have been practicing putts on the night of the murder, liars succeed in their lies only if they seem to be sincere.[1] However, this claim to honesty does not distinguish liars from truth tellers either. Truth tellers fail in their social interaction goals just as readily as liars if they seem dishonest. The important difference between the truth teller's claim to honesty and the liar's is that the liar's claim is illegitimate. From this discrepancy between what liars claim and what they believe to be true, we can predict likely cues to deceit.

Implications of the Deception Discrepancy

Two implications of the deception discrepancy are most important: First, deceptive self-presentations are often not as convincingly embraced as truthful ones. Second, social actors typically experience a greater sense of deliberateness when their performances are deceptive than when they are honest. These predictions are the starting point for our theoretical analyses. There are also qualifications to the predictions, and we describe those as well.

Deceptive Self-Presentations Are Not as Fully Embraced as Truthful Ones

The most significant implication of the deception discrepancy is that social actors typically are unwilling, or unable, to embrace their false claims as convincingly as they embrace their truthful ones (cf. Mehrabian, 1972; Weiner & Mehrabian, 1968). Several factors undermine the conviction with which liars make their own cases. First, liars, in knowingly making false claims, may suffer moral qualms that do not plague truth tellers. These qualms may account for the faint feelings of discomfort described by the tellers of everyday lies (B. M. DePaulo, Kashy, et al., 1996). Second, even in the absence of any moral misgivings, liars may not have the same personal investment in their claims as do truth tellers. When social actors truthfully describe important aspects of themselves, their emotional investment in their claims may be readily apparent (B. M. DePaulo, Epstein, & LeMay, 1990). Furthermore, those self-relevant claims are backed by an accumulation of knowledge, experience, and wisdom that most liars can only imagine (Markus, 1977). Liars may offer fewer details, not only because they have less familiarity with the domain they are describing, but also to allow for fewer opportunities to be disproved (Vrij, 2000).

In sum, compared with truth tellers, many liars do not have the moral high ground, the emotional investment, or the evidentiary basis for staking their claims. As a result, liars relate their tales in a less compelling manner, and they appear less forthcoming, less pleasant, and more tense.

Deceptive Self-Presenters Are Likely to Experience a Greater Sense of Deliberateness Than Truthful Ones

Cues to deliberateness. When attempting to convey impressions they know to be false, social actors are likely to experience a sense of deliberateness. When instead people are behaving in ways they see as consistent with their attitudes, beliefs, emotions, and self-images, they typically have the sense of "just acting

[1] We could have described our theoretical formulation as impression management rather than self-presentation. Impression management includes attempts to control the impressions that are formed of others, as well as impressions formed of oneself (e.g., Schlenker, 2002). We chose self-presentation because of the central role in our formulation of the impression of sincerity conveyed by the actor. Even when people are lying about the characteristics of another person, the effectiveness of those lies depends on their own success at appearing sincere.

naturally." They are presenting certain roles and personal qualities to others, and they expect to be seen as truthful, but they do not ordinarily experience this as requiring any special effort or attention. Our claim is not that people acting honestly never experience a sense of deliberateness. Sometimes they do, as for example, when the thoughts or feelings they are trying to communicate are difficult to express or when the stakes for a compelling performance are high; however, the focus of their deliberateness is typically limited to the content of their performance and not its credibility. Liars usually make an effort to seem credible; truth tellers more often take their credibility for granted (B. M. DePaulo, LeMay, & Epstein, 1991).[2]

Deliberate attempts to manage impressions, including impressions of credibility, are attempts at self-regulation, and self-regulation consumes mental resources (Baumeister, 1998). Social actors who are performing deceptively may experience greater self-regulatory busyness than those who are performing honestly. Even when the attempted performance is the same (e.g., conveying enthusiasm), the self-regulatory demands may be greater for the liar. Enthusiasm flows effortlessly from those who truly are experiencing enthusiasm, but fakers have to marshal theirs. Liars can be preoccupied with the task of reminding themselves to act the part that truth tellers are not just role-playing but living.

Other thoughts and feelings could also burden liars more than truth tellers (Ekman, 1985/1992). These include thoughts about whether the performance is succeeding, feelings about this (e.g., anxiety), and feelings about the fabricated performance (e.g., guilt) or about discreditable past acts that the liar is trying to hide.

To the extent that liars are more preoccupied with these intrusive mental contents than are truth tellers, their performance could suffer. For example, they could seem less involved and engaged in the interaction, and any attempts at cordiality could seem strained. People busy with self-regulatory tasks, compared with those who are not so busy, sometimes process concurrent information less deeply (Gilbert & Krull, 1988; Gilbert, Krull, & Pelham, 1988; Richards & Gross, 1999) and perform less well at subsequent self-regulatory tasks (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Muraven, Tice, & Baumeister, 1998). One potential implication of this regulatory depletion may be that liars fail to notice some of the ways in which the targets of their lies are reacting (cf. Butterworth, 1978). (This is contrary to Buller & Burgoon's, 1996, assumption that liars monitor targets closely for feedback.) Another implication is that liars' busyness could compromise their attempts to generate detailed responses of their own.

One likely response to the offending thoughts and feelings liars experience is to try to control them. For example, liars can try not to think about their blemished past or the insincerity of their ongoing performance. However, attempts at thought suppression can backfire, resulting in even greater preoccupation with those thoughts (Wegner, 1994). Attempts to regulate emotional experiences can also augment rather than dissipate the targeted feelings (e.g., Wegner, Erber, & Zanakos, 1993) and increase physiological activation (Gross, 1998; Gross & Levenson, 1993; Richards & Gross, 1999).

The primary target of liars' efforts at self-regulation, though, is probably not their thoughts and feelings but their overt behaviors. In theory, liars could adopt the goal of trying to appear honest and sincere, which in some instances could involve trying to behave in the generally positive and friendly way that they believe to be more characteristic of truth tellers than of liars (Malone, DePaulo, Adams, & Cooper, 2002). Especially confident and skilled liars may do just that, and succeed (cf. Roney, Higgins, & Shah, 1995). However, it may be more commonplace for people who are misleading others to adopt the defensive goal of trying not to get caught (e.g., Bell & DePaulo, 1996; B. M. DePaulo & Bell, 1996). Liars pursuing this strategy may try to avoid behaving in the ways that they think liars behave. One risk to this strategy is that some of their beliefs about how liars behave may be wrong. For example, social perceivers typically believe that liars cannot stay still; they expect them to fidget, shift their posture, and shake their legs (Malone et al., 2002; Vrij, 2000). In trying to avoid these movements (either directly or as a result of the higher level goal of trying not to give anything away), liars may appear to be holding back. A sense of involvement and positive engagement would be lacking.

Deliberate attempts by liars at controlling expressive behaviors, such as attempts to control thoughts and feelings, can be the seeds of their own destruction (e.g., B. M. DePaulo, 1992; B. M. DePaulo & Friedman, 1998). One route to failure is to try to regulate expressive behaviors, such as tone of voice, that may not be so amenable to willful control (e.g., Scherer, 1986). It is possible, for example, that people's attempts not to sound anxious would result in an even higher pitched and anxious sounding tone of voice than would have resulted if they had not deliberately tried to quiet the sounds of their insecurity. Another path to self-betrayal is to direct efforts at expressive control at the wrong level (Vallacher & Wegner, 1987; Vallacher, Wegner, McMahan, Cotter, & Larsen, 1992). For example, social actors who ordinarily convey convincing impressions of sincerity and friendliness may instead seem phony if they deliberately try to smile and nod. In focusing on specific behaviors, they may be unwittingly breaking apart the components of the well-practiced and established routine of acting friendly (e.g., Kimble & Perlmuter, 1970). The process may be akin to what happens to experienced typists who try to focus on the location of each of the characters on the keyboard instead of typing in their usual un-self-conscious way. Finally, if some behaviors are more controllable than others, or if liars only try to control some behaviors and not others, discrepancies could develop.

In sum, we predicted that to the extent that liars (more than truth tellers), deliberately try to control their expressive behaviors, thoughts, and feelings, their performances would be compromised. They would seem less forthcoming, less convincing, less pleasant, and more tense.

Moderators of the strength of cues to deliberateness. As the motivation to tell a successful lie increases, liars may redouble their deliberate efforts at self-regulation, resulting in an even more debilitated performance (B. M. DePaulo & Kirkendol, 1989; B. M.

[2] Certain deceptive exchanges are so often practiced that they, too, unfold in a way that feels effortless (e.g., looking at the baby picture proffered by the proud parents and exclaiming that the bald wrinkled blob is just adorable). Lies told in these instances may be guided by what Bargh (1989) described as *goal-dependent automaticity*. Although they may not feel like deliberate lies, the critical intent to mislead is clearly present. The flatterer would feel mortified if the parents realized he or she thought the baby was hideous. It is in part because the sense of deliberateness is critical to people's sense of having lied that these exchanges are so often unrecognized as lies.

DePaulo, Kirkendol, Tang, & O'Brien, 1988; B. M. DePaulo, Stone, & Lassiter, 1985b; see also Ben-Shakhar & Elaad, in press). We tested this proposed moderator of cues to deception by comparing the results of studies in which inducements were offered for success at deceit with studies in which no special attempts were made to motivate the participants.

As we have noted all along, identity-relevant concerns are fundamental to deceptive and nondeceptive communications. They appear even in the absence of any special motivational induction. Such concerns can, however, be exacerbated by incentives that are linked specifically to people's identities and images. In the literature we are reviewing, identity-relevant motivators include ones in which skill at deception was described as indicative of people's competence or of their prospects for success at their chosen careers. Other identity-relevant motivators raised the self-presentational stakes by informing participants that their performances would be evaluated or scrutinized. Compared with other kinds of incentives such as money or material rewards, identity-relevant incentives are more likely to exacerbate public self-awareness, increase rumination, and undermine self-confidence. All of these factors can further disrupt performance (e.g., Baumeister, 1998; Carver & Scheier, 1981; B. M. DePaulo et al., 1991; Wicklund, 1982; Wine, 1971; see also Gibbons, 1990). Consequently, tellers of identity-relevant lies seem especially less forthcoming, less pleasant, and more tense. They also tell tales that seem less compelling.

In sum, our predictions were that cues to deception would be stronger and more numerous among people who have been motivated to succeed in their self-presentations than for those who have not been given any special incentive. This predicted impairment would be even more evident when incentives are identity relevant than when they are not.

Qualifications. There are two important qualifications to our discussion of the effects of deliberate attempts at self-regulation. One is that an increase in self-regulatory demands does not always result in a decrement in performance. When attempts at self-regulation shift the focus of attention away from negative self-relevant thoughts (Pontari & Schlenker, 2000) or from the individual components of the task (Lewis & Linder, 1997), performance can improve.

The second is that the self-regulatory demands of lying do not always exceed those of telling the truth. For example, honest but insecure actors may be more preoccupied with thoughts of failure than deceptive but cocky ones. In addition, for most any social actor, the telling of truths that impugn the truth teller's character or cause pain or harm to others may pose far greater self-regulatory challenges than the telling of lies about the same topics.

Finally, it is important, as always, to bear in mind the nature of the lies that people tell in their everyday lives. Most are little lies that are so often practiced and told with such equanimity that the self-regulatory demands may be nearly indistinguishable from the demands of telling the truth. Therefore, we expected the consequences of deliberate self-regulation that we have described to be generally weak and that stronger effects of attempted control would be evident in studies in which participants were motivated to get away with their lies, particularly if the motivations were identity relevant.

The Formulation of Deceptive and Nondeceptive Presentations

The self-regulatory demands we have just described are those involved in executing the deceptive and nondeceptive performances. Earlier descriptions of deceptive communications focused primarily on the processes involved in formulating lies. We consider those next. As we elaborate below, we reject the argument that lies are necessarily more difficult to construct than truths. Still, we predicted that lies would generally be shorter and less detailed than truths. In doing so, we drew from the literatures on the use of scripts as guides to storytelling, the differences between accounts of events that have or have not been personally experienced, and lay misconceptions about the nature of truthful communications.

Cues to the Formulation of Lies

Previous formulations have typically maintained that it is more difficult to lie than to tell the truth because telling lies involves the construction of new and never-experienced tales whereas telling the truth is a simple matter of telling it like it is (e.g., Buller & Burgoon, 1996; Miller & Stiff, 1993; Zuckerman et al., 1981; but see McCornack, 1997, for an important exception). We disagree with both assumptions—that lies always need to be assembled and that truths can simply be removed from the box. When the truth is hard to tell (e.g., when it would hurt the other person's feelings), then a careful piecing together of just the right parts in just the right way would be in order. But even totally mundane and nonthreatening truths can be conveyed in a nearly infinite variety of shapes and sizes. For example, in response to the question "How was your day?" on a day when nothing special happened, the answer could be "Fine," a listing of the main events (but, what counts as a main event?), or a description of a part of the day. Even in the latter instance, there is no one self-evident truth. As much work on impression management has indicated (e.g., Schlenker, 1980, 1985), presentations are edited differently depending on identity-relevant cues, such as the teller's relationship with the other person and the interaction goals. Yet all of this editing can occur within the bounds of truthfulness.

Truths, then, are not often prepackaged. But lies can be. A teenage girl who had permission to spend the night at a girlfriend's home but instead went camping with a boyfriend may have no difficulty spinning a tale to tell to her parents the next morning. For example, she can easily access a script for what spending the night at a girlfriend's home typically involves. Or, she could relate her best friend's favorite story about an evening at the home of a girlfriend. Lies based on scripts or familiar stories are unlikely to be marked by the signs of mental effort (described below) that may characterize lies that are fabricated. The teller of scripts and of familiar stories may also be less likely to get tangled in contradictions than the liar who makes up a new story.

Even prepackaged lies, however, may be shorter and less detailed than truthful answers. Liars working from scripts may have only the basics of the scripted event in mind (e.g., Smith, 1998), and liars who have borrowed their stories have at hand only those details they were told (and of those, only the ones they remember).

All lies, whether scripted, borrowed, or assembled anew, could be shorter and less detailed than truthful accounts for another reason: The truthful accounts are based on events that were actu-

ally experienced, whereas the lies are not. The literature on reality monitoring (e.g., Johnson & Raye, 1981) suggests ways in which memories of past experiences or perceptions (i.e., memories based on external sources) differ from memories of experiences that were imagined (i.e., memories based on internal sources). This perspective can be applied to the prediction of cues to deception only by extrapolation, because reality monitoring describes processes of remembering whereas deception describes processes of relating (Vrij, 2000). In relating a story, even a truthful one, people often fill in gaps and in other ways create a more coherent tale than their memories actually support. Nonetheless, deceptive accounts may differ from truthful ones in ways that weakly parallel the ways in which memories of imagined experiences differ from memories of externally based experiences. If so, then truthful accounts would be clearer, more vivid, and more realistic than deceptive ones, and they would include more sensory information and contextual cues. Deceptive accounts, in contrast, should be more likely to include references to cognitive processes such as thoughts and inferences made at the time of the event.

The conventional wisdom that lies are more difficult to formulate than truths is most likely to be supported when liars make up new stories. Lies that are fabricated mostly from scratch are likely to be shorter and more internally inconsistent than truths and to be preceded by longer latencies. Signs of mental effort may also be evident. These could include increases in pauses and speech disturbances (Berger, Karol, & Jordan, 1989; Butterworth & Goldman-Eisler, 1979; Christenfeld, 1994; Goldman-Eisler, 1968; Mahl, 1987; Schachter, Christenfeld, Ravina, & Bilous, 1991; Siegman, 1987), more pupil dilation (E. H. Hess & Polt, 1963; Kahneman, 1973; Kahneman & Beatty, 1967; Kahneman, Tursky, Shapiro, & Crider, 1969; Stanners, Coulter, Sweet, & Murphy, 1979; Stern & Dunham, 1990), decreased blinking (Bagley & Manelis, 1979; Holland & Tarlow, 1972, 1975; Wallbott & Scherer, 1991), and decreased eye contact (Fehr & Exline, 1987). People who are preoccupied with the formulation of a complex lie may appear to be less involved and expressive, as well as less forthcoming.

Unfortunately, in the literature we are reviewing, liars were almost never asked how they came up with their lies, and truth tellers were not asked how they decided which version of the truth to relate (e.g., a short version or a long one). In the only study we know of in which liars were asked about the origins of their lies (Malone, Adams, Anderson, Ansfield, & DePaulo, 1997), the most common answer was not any we have considered so far. More than half the time, liars said that they based their lies on experiences from their own lives, altering critical details. With this strategy, liars may be just as adept as truth tellers at accessing a wealth of details, including clear and vivid sensory details.

Still, even the most informed and advantaged liars may make mistakes if they share common misconceptions of what truthful accounts really are like (Vrij, Edward, & Bull, 2001). For example, if liars believe that credible accounts are highly structured and coherent, with few digressions or inessential details, their accounts may be smoother and more pat than those of truth tellers. The embedding of a story in its spatial and temporal context and the relating of the specifics of the conversation may provide a richness to the accounts of truth tellers that liars do not even think to simulate. Liars may also fail to appreciate that memory is fallible and reporting skills are imperfect even when people are telling the truth and that truth tellers who are not concerned about their credibility may not be defensive about admitting their uncertainties. Consequently, truth tellers may express self-doubts, claim they do not remember things, or spontaneously correct something they already said, whereas liars would scrupulously avoid such admissions of imperfection. The stories told by liars, then, would be too good to be true.

Liars can also fail if they know less than their targets do about the topic of the deceit. The babysitter who claims to have taken the kids to the zoo and relates how excited they were to see the lion, would be undone by the parent who knows that there are no lions at that zoo. The man suspected of being a pedophile who points to his service as leader of his church's youth group may believe he is painting a picture of a pillar of the community, whereas instead he has unwittingly described just the sort of volunteer work that is a favorite of known pedophiles (Steller & Kohnken, 1989; Undeutsch, 1989; Yuille & Cutshall, 1989).[3]

Moderators of Cues to the Formulation of Lies

Factors that alter the cognitive load for liars are candidates for moderators of cognitive cues to deception. We consider two such moderators in this review: the opportunity to plan a presentation and the duration of that presentation.

Liars who have an opportunity to plan their difficult lies, relative to those who must formulate their lies on the spot, may be able to generate more compelling presentations (e.g., H. D. O'Hair, Cody, & McLaughlin, 1981; Vrij, 2000). Because they can do some of their thinking in advance, their response latencies could be shorter and their answers longer. However, mistakes that follow from misconceptions about the nature of truthful responses would not be averted by planning and may even be exacerbated.

We think that, in theory, cues to deception could occur even for the simplest lies. For example, when just a "yes" or "no" answer is required, a lie could be betrayed by a longer response latency in instances in which the truth comes to mind more readily and must be set aside and replaced by the lie (Walczyk, Roper, & Seeman, in press). However, we believe that the cognitive burdens generally would be greater when a short answer would not suffice and that cues to deception would therefore become clearer and more numerous as the duration of the response increases. For example, lies may be especially briefer than truths when people are expected to tell a story rather than to respond with just a few words. Also,

[3] Statement Validity (or Reality) Analysis was developed initially by Undeutsch (1989) to assess the credibility of child witnesses in cases of alleged sexual abuse. The overall assessment includes an evaluation of the characteristics and possible motives of the child witness. It also includes a set of 19 criteria to be applied to transcripts of statements made by the witness (Steller & Kohnken, 1989). This analysis of witness statements, called Criteria-Based Content Analysis (CBCA), was subsequently applied to the analysis of statements made by adults in other kinds of criminal proceedings and in experimental research (e.g., Yuille & Cutshall, 1989). All of the characteristics discussed in this section of our review, from the excessive structure and coherence of accounts to the typical characteristics of criminals or crimes related by people who do not realize their significance, are drawn from CBCA, though some of the interpretations are our own. The use of CBCA to analyze statements made by adults is controversial (e.g., Vrij, 2000).

liars who are experiencing affects and emotions that they are trying to hide may be more likely to show those feelings when they need to sustain their lies longer (cf. Ekman, 1985/1992).

The Role of Identity-Relevant Emotions in Deceptive and Nondeceptive Presentations

People experience the unpleasant emotional state of guilt when they have done something wrong or believe that others may think that they have (Baumeister, Stillwell, & Heatherton, 1994). Even more aversive is the feeling of shame that occurs when people fail to meet their own personal moral standards (Keltner & Buswell, 1996; Tangney, Miller, Flicker, & Barlow, 1996; see also Scheff, 2001). Some lies, especially serious ones, are motivated by a desire to cover up a personal failing or a discreditable thought, feeling, or deed (e.g., B. M. DePaulo, Ansfield, et al., 2002). Yet those who tell the truth about their transgressions or failings may feel even greater guilt and shame than those whose shortcomings remain hidden by their lies. If the behavior of truthful transgressors was compared with that of deceptive transgressors, cues to these self-conscious emotions would be more in evidence for the truth tellers, if they distinguished them from the liars at all. In most studies, however (including all of the studies of transgressions included in this review), liars who had transgressed were compared with truth tellers who had not. For those comparisons, then, we expected to find that liars, compared with truth tellers, showed more shame and guilt cues.

There is no documented facial expression that is specific to guilt; therefore, we expected to find only more general cues to negativity and distress (Keltner & Buswell, 1996; Keltner & Harker, 1998). Shame, however, does seem to have a characteristic demeanor that includes gaze aversion, a closed posture, and a tendency to withdraw (Keltner & Harker, 1998).

Lies about transgressions, though, are the exceptions, both in everyday life and in the studies in this review. The more commonplace lies cover truths that are not especially discrediting. For example, people may not feel that it is wrong to have an opinion that differs from someone else's or to hide their envy of a coworker's success. In most instances, then, we did not, on the basis of the hidden information alone, expect to find more guilt cues in liars than in truth tellers.

By definition, though, there is a sense in which all liars are candidates for experiencing guilt and shame, as they all have done something that could be considered wrong: They have intentionally misled someone. Truth tellers have not. It is important to note, however, that liars do not always feel badly about their lies, and truth tellers do not always feel good about their honesty. In fact, liars often claim that in telling their lies, they have spared their targets from the greater distress that would have resulted had they told the truth (B. M. DePaulo, Kashy, et al., 1996).

Guilt and shame are not the only emotions that have been hypothesized to betray liars. Fear of being detected has also been described as responsible for cues to deception (e.g., Ekman, 1985/1992). We believed fear of detection would also vary importantly with factors such as the nature of the behavior that is covered by the lie. Liars would fear detection when hiding behaviors such as transgressions, which often elicit punishment or disapproval. But the more typical liars, those who claim that their movie preferences match those of their dates or who conceal their pride in their own work, would have little to fear from the discovery of that hidden information.

People may fear detection not only because of the nature of the behavior they are hiding but also because of the implications of being perceived as dishonest (Schlenker, Pontari, & Christopher, 2001). The blemishes in perceived and self-perceived integrity that could result from a discovered deception depend on factors such as the justifiability of the deceit and are often quite minimal. But even utterly trivial lies told in the spirit of kindness, such as false reassurances about new and unbecoming hairstyles, have identity implications if discovered. For instance, the purveyors of such kind lies may be less often trusted when honest feedback really is desired.

Across all of the lies in our data set, we expected to find weak cues to anxiety and negativity. For example, liars may look and sound more anxious than truth tellers (Slivken & Buss, 1984) and speak less fluently (Kasl & Mahl, 1965; Mahl, 1987) and in a higher pitch (Kappas, Hess, & Scherer, 1991; Scherer, 1986). They may also blink more (Harrigan & O'Connell, 1996), and their pupils may be more dilated (Scott, Wells, Wood, & Morgan, 1967; Simpson & Molloy, 1971; Stanners et al., 1979). Relative to truth tellers, liars may also make more negative statements and complaints, sound less pleasant, and look less friendly and less attractive. In a moderator analysis comparing lies about transgressions with other kinds of lies, we expected to find more pronounced distress cues in the lies about transgressions.

Convergent Perspectives on the Strength of Cues to Deceit

Our self-presentational perspective has led us to reject the view that lie telling is typically a complicated, stressful, guilt-inducing process that produces clear and strong cues. Instead, we believe that most deceptive presentations are so routinely and competently executed that they leave only faint behavioral residues. Fiedler and Walka (1993) offered a similar point of view. They argued that ordinary people are so practiced, so proficient, and so emotionally unfazed by the telling of untruths that they can be regarded as professional liars. Therefore, they also expected to find mostly only weak links between verbal and nonverbal behaviors and the telling of lies. Bond, Kahler, and Paolicelli (1985), arguing from an evolutionary perspective, drew a similar conclusion. Any blatantly obvious cues to deceit, they contended, would have been recognized by human perceivers long ago; evolution favors more flexible deceivers.

Methodological Implications of the Self-Presentational Perspective

Our self-presentational perspective suggests that social actors try to convey particular impressions of themselves, both when lying and when telling the truth, and that social perceivers routinely form impressions of others. We have conceptualized the ways in which lies could differ from truths in terms of the different impressions that deceptive self-presentations could convey. For example, we hypothesized that liars would seem more distant than truth tellers. One way to assess differences in distancing is to code the many behaviors believed to be indicative of nonimmediacy, such as the use of the passive rather than the active voice, the use

of negations rather than assertions, and looking away rather than maintaining eye contact. This approach, which is the usual one, has the advantage that the behaviors of interest are clearly defined and objectively measured. However, for many of the kinds of impressions that social actors attempt to convey, the full range of behaviors that contribute to the impression may be unknown. For example, Wiener and Mehrabian (1968; Mehrabian, 1972) have described a precise set of behaviors that they believed to be indicative of verbal and nonverbal immediacy and have reported some supportive data. However, others who have discussed immediacy and related constructs have included other cues (e.g., Brown & Levinson, 1987; Fleming, 1994; Fleming & Rudman, 1993; Holtgraves, 1986; Searle, 1975). This raises the possibility that social perceivers, who can often form valid impressions even from rather thin slices of social behavior (e.g., Ambady & Rosenthal, 1992), can discriminate truths from lies by their subjective impressions of the constructs of interest (e.g., distancing) just as well, if not better, than can objective coding systems (cf. B. M. DePaulo, 1994; Malone & DePaulo, 2001). To test this possibility, we used objective and subjective measurement as levels of a moderator variable in analyses of cues for which multiple independent estimates of both levels were available.

Summary of Predictions

Predicted Cues

The self-presentational perspective predicts five categories of cues to deception. First, liars are predicted to be less forthcoming than truth tellers. The model predicts they will respond less, and in less detail, and they will seem to be holding back. For example, liars' response latencies would be longer (an indication of cognitive complexity in the Zuckerman et al., 1981, model) and their speech would be slower (a thinking cue in Ekman's, 1985/1992, formulation). Second, the tales told by liars are predicted to be less compelling than those told by truth tellers. Specifically, liars would seem to make less sense than truth tellers (e.g., there would be more discrepancies in their accounts), and they would seem less engaging, less immediate, more uncertain, less fluent, and less active than truth tellers. Zuckerman et al. (1981) predicted that discrepancies would occur as a result of attempted control, and Ekman (1985/1992) regarded them as a thinking cue. Less immediacy (more distancing) was described as a possible cue to detection apprehension and guilt by Ekman (1985/1992) and Zuckerman et al. (1981), and it was regarded as a strategic behavior by Buller and Burgoon (1996).

The self-presentational perspective also predicts that liars will be less positive and pleasant than truth tellers, as is also suggested by the description of cues to guilt and apprehensiveness put forth by Ekman (1985/1992) and Zuckerman et al. (1981). The fourth prediction of the self-presentational perspective is that liars will be more tense than truth tellers. Some cues to tension, such as higher pitch, have sometimes been conceptualized as indicative of undifferentiated arousal (e.g., Zuckerman et al., 1981). Finally, the self-presentational perspective alone predicts that liars will include fewer ordinary imperfections and unusual contents in their stories than will truth tellers.

Predicted Moderators

A number of perspectives, including the self-presentational one, maintain that cues to deception, when combined across all lies, will be weak. However, several factors are predicted to moderate the strength of the cues. From a self-presentational point of view, cues to negativity and tension should be stronger when lies are about transgressions than when they are not. The self-presentation formulation also maintains that cues will be clearer and more numerous when told under conditions of high motivation to succeed, especially when the motivation is identity relevant. Buller and Burgoon (1996), in contrast, predicted stronger cues when the liars' motives are instrumental. They also predicted more pleasantness, immediacy, composure, and fluency with increasing interactivity.

The self-presentation model predicts that for social actors who have an opportunity to plan their performances, compared with those who do not, response latency will be a less telling cue to deception. Also, as the duration of a response increases, cues to deception will be more in evidence. Finally, the model predicts that cues assessed by subjective impressions will more powerfully discriminate truths from lies than the same cues assessed objectively.

A predicted moderator of cues to deception can be tested only if the moderator variable can be reliably coded from the information that is reported and if multiple estimates of the relevant cues are available for each of the levels of the moderator. Some of the predictions generated by the perspectives we have reviewed could not be tested, and that obstacle limited our ability to evaluate each of the perspectives comprehensively. The self-presentational perspective, for example, points to the potential importance of a number of moderators we could not test, such as the communicator's confidence and focus of attention and the emotional implications of the truths or lies for the targets of those messages. The self-presentational perspective, as well as the formulations of Ekman (1985/1992) and Buller and Burgoon (1996), all suggest that the liar's relationship with the target may be another important moderator of cues to deception (see also Anderson, DePaulo, & Ansfield, 2002; Levine & McCornack, 1992; Stiff, Kim, & Ramesh, 1992). However, the number of studies in which the liars and targets were not strangers was too small to test this moderator.

Method

Literature Search Procedures

We used literature search procedures recommended by Cooper (1998) to retrieve relevant studies. First, we conducted computer-based searches of *Psychological Abstracts* (PsycLIT) and *Dissertation Abstracts International* through September of 1995 using the key words *deception*, *deceit*, *lie*, and *detection* and combinations of those words. Second, we examined the reference lists from previous reviews (B. M. DePaulo et al., 1985a; Zuckerman et al., 1981; Zuckerman & Driver, 1985). Third, we reviewed the reference lists from more than 300 articles on the communication of deception from Bella M. DePaulo's personal files and the references lists from any new articles added as a result of the computer search. Fourth, we sent letters requesting relevant papers to 62 scholars who had published on the communication of deception. We also asked those scholars to continue to send us their papers in the coming years. We repeated our computer search in October of 1999. No other reports were added after that date.

Criteria for Inclusion and Exclusion of Studies

We included reports in which behavior while lying was compared with behavior while telling the truth. Behaviors that were measured objectively, as well as those based on others' impressions (e.g., impressions that the social actors seemed nervous or evasive), were all included. Physiological indices with no discernible behavioral manifestation (e.g., galvanic skin response, heart rate) were not included, nor were senders' (i.e., social actors') reports of their own behaviors. We excluded reports that were not in English and reports in which the senders were not adults (i.e., under 17 years old). We included data from adult senders in reports of children and adults if we could compute effect sizes separately for the subset of the data in which both the senders and the judges were adults. We excluded reports in which senders role-played an imagined person in an imagined situation because we were concerned that the imaginary aspects of these paradigms could sever the connection between social actors and their self-presentations that is important to our theoretical analysis.

There were several reports from which we could not extract useful data. For example, Yerkes and Berry (1909) reported one experiment based on just one sender and another based on two. Studies comparing different kinds of lies without also comparing them with truths (e.g., di Battista & Abrahams, 1995) were not included. Studies describing individual differences in cues to deception that did not also report overall differences between truths and lies (e.g., Siegman & Reynolds, 1983) were also excluded. A series of reports based on the same independent sample (e.g., Buller, Burgoon, Buslig, & Roiger, 1996, Study 2) were excluded as well. (For a detailed explanation, see B. M. DePaulo, Ansfield, & Bell, 1996).

Determining Independent Samples

Our final data set consisted of 120 independent samples from 116 reports (see Table 1). Of those 120 samples in our review, only 32 were included in the Zuckerman et al. (1981) review.[4]

Most often, the behaviors of a particular sample of senders were described in just one report. For example, Bond et al. (1985) coded 11 different cues from 34 different senders. The behaviors of those 34 senders were not described in any other report. Therefore, we considered the sample of senders from that study to be an independent sample. Sometimes senders were divided into different subgroups (e.g., men and women, Jordanians and Americans, senders who planned their messages and different senders who did not), and cues to deception were reported separately for each of those subgroups. In those instances, we considered each of the subgroups to be an independent sample. For example, Bond, Omar, Mahmoud, and Bonser (1990) coded 10 different cues separately for the 60 Jordanian senders and the 60 American senders. Therefore, the Jordanian senders were one independent sample and the Americans were another. In 11 instances, data from the same senders were published in different reports. For example, Hadjistavropoulos and Craig (1994) coded 11 cues from 90 senders, and Hadjistavropoulos, Craig, Hadjistavropoulos, and Poole (1996) coded two cues from the same 90 senders. Therefore, the samples described in those two reports were not independent. In Table 1, they have the same letter code in the column labeled "Ind. sample code." Most samples listed in Table 1 have no letter code in that column; all of those samples are independent samples.

All estimates of a particular cue were included in the analyses of that cue. We used independent sample codes, not to exclude data, but to estimate degrees of freedom properly and to weight estimates appropriately. As we explain in more detail below, multiple estimates of the same cue that came from the same independent sample were averaged before being entered into the analyses.

Cue Definitions

Within the sample of studies, 158 different behaviors or impressions, which we call *cues to deception,* were reported. These are defined in Appendix A. We categorized most of the 158 cues into the five categories that followed from our theoretical analysis. To determine whether liars are less forthcoming than truth tellers, we looked at cues indicative of the amount of their responding (e.g., response length), the level of detail and complexity of their responses, and the degree to which they seemed to be holding back (e.g., pressing lips; Keltner, Young, Heerey, Oemig, & Monarch, 1998). To explore whether liars tell less compelling tales than truth tellers, we examined cues indicating whether the presentations seemed to make sense (e.g., plausibility), whether they were engaging (e.g., involving), and whether they were immediate (e.g., eye contact) instead of distancing. Self-presentations that fell short on characteristics such as certainty, fluency, or animation may also seem less compelling, so we included those cues, too. In the third category, we included cues indicating whether liars are less positive and pleasant than truth tellers, and in the fourth, we collected behaviors indicating whether liars are more tense than truth tellers. Finally, in the last category, we determined whether deceptive self-presentations included fewer ordinary imperfections and unusual contents than truthful ones by examining cues such as spontaneous corrections and descriptions of superfluous details.

For clarity, we assigned a number, from 1 to 158, to each cue. Cue numbers are shown along with the cue names and definitions in Appendix A. The last column of Table 1 lists all of the cues reported in each study and the number of estimates of each.

Variables Coded From Each Report

From each report, we coded characteristics of the senders, characteristics of the truths and lies, publication statistics, and methodological aspects of the studies (see Table 2). In the category of sender characteristics we coded the population sampled (e.g., students, suspects in crimes, patients in pain clinics, people from the community), the senders' country, and the relationship between the sender and the interviewer or target of the communications (e.g., strangers, acquaintances, friends). We also coded senders' race or ethnicity and their precise ages, but this information was rarely reported and therefore could not be analyzed.

To test our predictions about the links between senders' motivations and cues to deception, we determined whether senders had identity-relevant incentives, instrumental incentives, both kinds of incentives, or no special incentives. Coded as identity-relevant were studies in which senders' success was described as indicative of their competence at their chosen profession or reflective of their intelligence or other valued characteristics. Also included were studies in which senders expected to be evaluated or scrutinized. Studies in which senders were motivated by money or material rewards were coded as primarily instrumental. Studies in which both incentives were offered to senders were classified separately.

The characteristics of the messages that we coded included their duration and whether senders had an opportunity to prepare. If senders had an opportunity to prepare some but not all of their messages, but behavioral differences were not reported separately, we classified the study as having some prepared and some unprepared messages. In other studies, the messages were scripted. For example, senders may have been instructed to give a particular response in order to hold verbal cues constant so that investigators could assess nonverbal characteristics of truths and lies more precisely.

We also coded the experimental paradigm used to elicit the truths and lies or the context in which they occurred. In some studies, senders lied or told the truth about their beliefs or opinions or about personal facts. In others, senders looked at videotapes, films, slides, or pictures and described

(*text continues on page 89*)

[4] There were three unpublished reports (describing results from four independent samples) in the Zuckerman et al. (1981) review that we were unable to retrieve for this review.

Table 1
Summary of Studies Included in the Meta-Analysis

Report	*N*	No. of effect sizes	No. of cues	Ind. sample code[a]	Mot[b]	Trans[c]	Msg	Int[d]	Cues[e]
Alonso-Quecuty (1992)							P		
Unplanned messages	11	5	5		0	0			001, 005, 037, 076, 085
Planned messages	11	5	5		0	0			001, 005, 037, 076, 085
Anolli & Ciceri (1997)	31	36	12		0	0	L	1	001 (8), 004 (2), 010 (6), 032 (2), 039 (2), 063 (2), 094 (2), 097 (2), 110 (2), 112 (2), 113 (2), 140 (4)
Berrien & Huntington (1943)	32	1	1		2	1		1	155
Bond et al. (1985)	34	11	11		2	0		1	003, 022, 027, 035, 038, 044, 045, 046, 052, 058, 068
Bond et al. (1990)									
Jordanians	60	10	10		0	0	L	1	001, 027, 037, 038, 045, 046, 052, 058, 066, 068
Americans	60	10	10		0	0	L	1	001, 027, 037, 038, 045, 046, 052, 058, 066, 068
Bradley & Janisse (1979/1980)	60	1	1		0	0	L	1	065
Bradley & Janisse (1981)	192	1	1		2	1		1	065
Buller & Aune (1987)	130	17	15		0	0		1	016, 018, 026, 027, 028, 044 (2), 053, 054 (2), 055, 064, 067, 068, 069, 105, 119
Buller et al. (1996)	120	4	4	A	0	0	L	1	021, 022, 023, 101
Buller et al. (1989)	148	18	16		0	0	L	1	001 (2), 009, 017, 018, 027 (2), 034, 037, 040, 044, 055, 058, 067, 068, 069, 111, 119
Burgoon & Buller (1994)	120	4	4	A	0	0		1	026, 053, 054, 061
Burgoon, Buller, Afifi, et al. (1996)	61	8	5		0	0		1	001, 015 (4), 064, 104, 106
Burgoon, Buller, Floyd, & Grandpre (1996)									
Interactants	18	11	8		0	0		1	004, 015 (2), 025 (2), 026, 031, 049, 061, 115 (2)
Observers	10	11	8		0	0		1	004, 015 (2), 025 (2), 026, 031, 049, 061, 115 (2)
Burgoon, Buller, Guerrero, et al. (1996)	40	4	2		0	0		1	004, 025 (3)
Burns & Kintz (1976)	20	2	1		0	1		1	027 (2)
Chiba (1985)	16	4	2		0	0	L	1	033 (2), 066 (2)
Christensen (1980)	12	6	3		0	0		1	016 (2), 049 (2), 061 (2)
Ciofu (1974)	16	1	1		2	0		1	063
Cody et al. (1989)	66	85	17	B	2	0	P	1	001 (5), 004 (5), 009 (5), 010 (5), 018 (5), 021 (5), 022 (5), 027 (5), 038 (5), 039 (5), 041 (5), 046 (5), 055 (5), 058 (5), 066 (5), 070 (5), 119 (5)
Cody et al. (1984)	42	54	8		0	0	P	1	001 (6), 004 (27), 007 (3), 009 (3), 010 (3), 035 (3), 039 (6), 041 (3)
Cody & O'Hair (1983)									
Men	36	8	4	C1	0	0		1	009 (2), 018 (2), 048 (2), 069 (2)
Women	36	8	4	C2	0	0		1	009 (2), 018 (2), 048 (2), 069 (2)
Craig et al. (1991)	120	28	13		0	0	L	1	033 (2), 056 (2), 057 (2), 059 (2), 060 (2), 066 (2), 129 (4), 130 (2), 131 (2), 132 (2), 133 (2), 146 (2), 148 (2)
Cutrow et al. (1972)	63	3	3		3	0		1	009, 066, 144
B. M. DePaulo et al. (1992)	32	2	2		1	0		0	015, 051
B. M. DePaulo et al. (1990)	96	3	3	D	1	0		1	001, 004, 016
B. M. DePaulo, Jordan, et al. (1982)	8	1	1		0	0	L	0	014
B. M. DePaulo et al. (1983)	32	2	2		1	0		1	061, 091
B. M. DePaulo et al. (1991)	96	1	1	D	1	0		1	012
B. M. DePaulo & Rosenthal (1979a)	40	1	1	E	0	0	L	0	014
B. M. DePaulo, Rosenthal, Green, & Rosenkrantz (1982)	40	4	3	E	0	0	L	0	014 (2), 061, 090
B. M. DePaulo, Rosenthal, Rosenkrantz, & Green (1982)	40	16	11	E	0	0	L	0	006 (2), 010 (2), 022, 023, 024 (2), 035, 038, 052 (3), 096, 136, 137
P. J. DePaulo & DePaulo (1989)	14	16	15		2	0		0	001, 004, 010, 014 (2), 021, 034, 035, 039, 044, 049, 052, 055, 066, 070, 091
deTurck & Miller (1985)									
Unaroused truth tellers	36	10	10		1	1		1	001, 009, 028, 037, 042, 046, 048, 058, 066, 070
Aroused truth tellers	36	10	10		1	1		1	001, 009, 028, 037, 042, 046, 048, 058, 066, 070

Table 1 (*continued*)

Report	*N*	No. of effect sizes	No. of cues	Ind. sample code[a]	Mot[b]	Trans[c]	Msg	Int[d]	Cues[e]
Dulaney (1982)	20	20	10		0	1		1	001 (2), 004, 007 (3), 009, 019 (6), 020 (3), 022, 024, 042, 139
Ekman & Friesen (1972)	21	3	3	F	1	0		1	034, 069, 070
Ekman et al. (1988)	31	2	2	F	1	0	L	1	117, 118
Ekman et al. (1976)	16	1	1	F	1	0		1	034
Ekman et al. (1985)	14	40	20		0	0		1	011 (2), 044 (2), 045 (2), 056 (2), 057 (2), 059 (2), 060 (2), 088 (2), 129 (2), 130 (2), 131 (2), 132 (2), 133 (2), 146 (2), 147 (2), 148 (2), 149 (2), 156 (2), 157 (2), 158 (2)
Ekman et al. (1991)	31	2	2	F	1	0	L	1	018, 063
Elliot (1979)	62	4	4		2	0	L	1	012, 049, 050, 115
Exline et al. (1970)	34	2	2		2	1		1	027, 061
Feeley & deTurck (1998)									
Unsanctioned liars	58	15	14		0	1		1	001 (2), 009, 010, 022, 024, 027, 035, 037, 038, 044, 046, 048, 058, 068
Sanctioned liars	68	15	14		0	1		1	001 (2), 009, 010, 022, 024, 027, 035, 037, 038, 044, 046, 048, 058, 068
Fiedler (1989)									
Study 1	23	1	1		0	0		1	012
Study 2	64	1	1		0	0			012
Fiedler et al. (1997)	12	8	6		0	0		1	001, 004 (3), 008, 012, 016, 061
Fiedler & Walka (1993)	10	10	10		0	0	L	1	010, 012, 014, 015, 016, 039, 045, 063, 068, 118
Finkelstein (1978)	20	14	10	E	0	0	L	0	017, 043, 045 (3), 046 (2), 047 (2), 051, 058, 064, 067, 068
Frank (1989)	32	12	12		3	0		0	001, 009, 018, 027, 034, 040, 044, 045, 048, 058, 066, 068
Gagnon (1975)									
Men	16	11	9		2	0		1	001 (2), 010, 027, 040 (2), 044, 045, 046, 047, 048
Women	16	11	9		2	0		1	001 (2), 010, 027, 040 (2), 044, 045, 046, 047, 048
Galin & Thorn (1993)	60	26	12		0	0	L	0	011 (4), 033 (2), 056 (2), 059 (2), 060 (2), 066 (2), 129 (2), 130 (2), 132 (2), 133 (2), 147 (2), 149 (2)
Goldstein (1923)	10	2	1		2	0		1	009 (2)
Greene et al. (1985)	39	45	15		0	0	P	1	001 (3), 009 (3), 018 (3), 027 (3), 034 (3), 044 (3), 045 (3), 046 (3), 048 (3), 055 (3), 058 (3), 067 (3), 068 (3), 069 (3), 119 (3)
Hadjistavropoulos & Craig (1994)	90	24	11	G	0	0	L	1	011 (2), 033 (2), 056 (2), 057 (2), 059 (2), 060 (2), 066 (2), 129 (4), 130 (2), 131 (2), 132 (2)
Hadjistavropoulos et al. (1996)	90	2	2	G	0	0	L	1	054, 088
Hall (1986)	80	3	3		3	1		1	010, 032, 063
Harrison et al. (1978)	72	2	2		0	0	L	1	001, 009
Heilveil (1976)	12	1	1		0	0		1	065
Heilveil & Muehleman (1981)	26	9	9		0	0		1	001, 009, 027, 037, 040, 046, 048, 055, 058
Heinrich & Borkenau (1998)	40	6	1		0	0	L	0	014 (6)
Hemsley (1977)	20	13	10		0	0		1	008, 009, 027 (2), 029, 042, 043, 044, 058 (2), 066, 068 (2)
Hernandez-Fernaud & Alonso-Quecuty (1977)	73	12	4		2	0		1	004 (9), 005, 076, 083
U. Hess (1989)	35	5	4	H	0	0		0	011 (2), 057, 117, 132
U. Hess & Kleck (1990)									
Study 1	35	2	2	H	0	0		0	089, 150
Study 2	48	2	2	H	0	0		0	089, 150
U. Hess & Kleck (1994)	35	3	3	H	0	0		0	029, 058, 066
Hocking & Leathers (1980)	16	25	21		1	0		1	009, 010, 018, 027 (2), 036, 037 (2), 038, 044, 045, 048 (2), 054, 058, 061 (2), 062, 069, 070, 107, 108, 109, 144, 145
Horvath (1973)	100	11	8		3	1		1	002, 025, 027, 049, 050, 052 (3), 061 (2), 121

(*table continues*)

Table 1 (*continued*)

Report	*N*	No. of effect sizes	No. of cues	Ind. sample code[a]	Mot[b]	Trans[c]	Msg	Int[d]	Cues[e]
Horvath (1978)	60	1	1		0	0		1	062
Horvath (1979)	32	1	1		2	0	L	1	062
Horvath et al. (1994)	60	6	4		3	1		1	025, 050, 064 (3), 090
Janisse & Bradley (1980)	64	1	1		0	0	L	1	065
Kennedy & Coe (1994)	19	10	8		0	0		1	027, 056, 058, 064, 066, 120, 122 (3), 129
Knapp et al. (1974)	38	32	23		2	0	L	1	001 (3), 002, 003, 004, 007, 018, 020 (2), 021 (2), 022 (2), 023, 024 (2), 027 (2), 030 (2), 036, 037, 038, 048, 052, 055, 058, 070, 126 (2), 138
Kohnken et al. (1995)	59	19	18		0	0		1	004, 013, 041, 071, 072, 073 (2), 074, 077, 078, 079, 080, 082, 123, 124, 127, 128, 142, 143
Koper & Sahlman (2001)	83	37	27		3	1	L		001, 009, 012, 014, 015 (2), 017, 018, 025 (2), 028, 031 (3), 035, 039, 043, 044, 054, 055, 058, 061 (3), 062, 066, 067, 068, 104, 105 (2), 119, 134 (4), 153
Krauss (1981)									
High arousal, face to face	8	11	11	I1	1	0	L	1	001, 009, 027, 031, 042, 046, 051, 061, 086, 089, 093
High arousal, intercom	8	11	11	I2	1	0	L	0	001, 009, 027, 031, 042, 046, 051, 061, 086, 089, 093
Low arousal, face to face	8	11	11	I3	0	0	L	1	001, 009, 027, 031, 042, 046, 051, 061, 086, 089, 093
Low arousal, intercom	8	11	11	I4	0	0	L	0	001, 009, 027, 031, 042, 046, 051, 061, 086, 089, 093
Kraut (1978)	5	9	9		1	0	L	1	001, 004, 009, 012, 014, 040, 044, 058, 068
Kraut & Poe (1980)	62	14	14		2	1		1	001, 003, 008, 009, 018, 025, 028, 031, 035, 044, 058, 061, 064, 068
Kuiken (1981)	48	1	1		0	0		0	019
Kurasawa (1988)	8	1	1		0	0	L	0	092
Landry & Brigham (1992)	12	14	13		0	0	L	0	004, 013, 072, 073, 074, 075, 076, 077 (2), 078, 079, 080, 082, 083
Manaugh et al. (1970)	80	2	2		0	0		1	006, 009
Marston (1920)	10	1	1		0	0		1	009
Matarazzo et al. (1970)									
Discuss college major	60	4	4		0	0		1	006, 009, 027, 119
Discuss living situation	60	4	4		0	0		1	006, 009, 027, 119
McClintock & Hunt (1975)	20	5	5		0	0		1	018, 027, 044, 058, 070
Mehrabian (1971)									
Study 1									
Men, reward	14	11	10		2	0		0	001, 010, 026, 035, 044, 046, 048 (2), 054, 055, 064
Men, punishment	14	11	10		1	0		0	001, 010, 026, 035, 044, 046, 048 (2), 054, 055, 064
Women, reward	14	11	10		2	0		0	001, 010, 026, 035, 044, 046, 048 (2), 054, 055, 064
Women, punishment	14	11	10		1	0		0	001, 010, 026, 035, 044, 046, 048 (2), 054, 055, 064
Study 2									
Men	24	10	9		2	0		0	001, 010, 026, 029, 046, 048 (2), 054, 055, 064
Women	24	10	9		2	0		0	001, 010, 026, 029, 046, 048 (2), 054, 055, 064
Study 3	32	13	12		2	1		1	001, 002, 010, 026, 032, 044, 046, 048 (2), 054, 055, 064, 070
Miller et al. (1983)	32	10	10		3	0	P	1	001, 007, 009, 029, 036, 037, 038, 046, 048, 070
Motley (1974)	20	3	3		0	0		1	001, 032, 063
D. O'Hair & Cody (1987)							P		
Men	21	2	1		2	0		1	062 (2)
Women	26	2	1		2	0		1	062 (2)
D. O'Hair et al. (1990)							P		
Men	36	2	1	B1	2	0		1	062 (2)
Women	25	2	1	B2	2	0		1	062 (2)

Table 1 (*continued*)

Report	*N*	No. of effect sizes	No. of cues	Ind. sample code[a]	Mot[b]	Trans[c]	Msg	Int[d]	Cues[e]
H. D. O'Hair et al. (1981)	72	22	11	C	0	0	P	1	001 (2), 009 (2), 018 (2), 027 (2), 034 (2), 044 (2), 048 (2), 055 (2), 058 (2), 069 (2), 070 (2)
Pennebaker & Chew (1985)	20	2	2		0	0		1	029, 089
Porter & Yuille (1996)	60	18	18		2	1		1	001, 004, 007, 008, 013, 022, 030, 038, 071, 072, 073, 078, 079, 080, 081, 083, 103, 141
Potamkin (1982)									
Heroin addicts	10	6	6		2	0	L	1	018, 044, 048, 070, 151, 152,
Nonaddicts	10	6	6		2	0	L	1	018, 044, 048, 070, 151, 152
Riggio & Friedman (1983)	63	12	11		0	0	L	0	010, 027, 029, 035, 038, 044, 045, 046, 048, 058, 068 (2)
Ruby & Brigham (1998)	12	16	15		0	0		0	001, 004, 013, 071, 072, 073, 074, 075, 076, 077 (2), 078, 079, 080, 081, 083
Rybold (1994)	34	4	4		3	0		1	001, 010, 035, 039
Sayenga (1983)	14	24	16		2	0		1	001 (2), 004 (2), 006 (3), 009 (2), 010 (2), 020, 022, 032 (2), 036, 037, 038, 041, 052, 062 (2), 063, 102
Scherer et al. (1985)	15	2	2	F	1	0	L	1	053, 062
Schneider & Kintz (1977)									
Men	14	2	2		0	0		1	048, 154
Women	16	2	2		0	0		1	048, 154
Sitton & Griffin (1981)	28	1	1		0	0		1	027
Sporer (1997)	40	22	17		0	0		0	001 (2), 004, 005, 006, 013, 071, 076 (3), 077 (2), 078, 079, 080, 082, 083 (2), 087, 098, 099, 100
Stiff & Miller (1986)	40	19	16		2	1		1	001 (2), 004, 009, 012, 022, 023, 024, 037, 040, 044, 046, 048, 058, 066, 068, 134 (3)
Streeter et al. (1977)									
High arousal, face to face	8	1	1	I1	1	0	L	1	063
High arousal, intercom	8	1	1	I2	1	0	L	0	063
Low arousal, face to face	8	1	1	I3	0	0	L	1	063
Low arousal, intercom	8	1	1	I4	0	0	L	0	063
Todd-Mancillas & Kilber (1979)	37	11	9		2	0		1	001 (3), 002, 004, 007, 020, 021, 022, 023, 052
Vrij (1993)	20	1	1	J	2	1	L	1	046
Vrij (1995)	64	11	11	J	2	1	L	1	018, 028, 035, 038, 044, 045, 048, 058, 068, 095, 114
Vrij et al. (1997)	56	1	1		0	1	L	1	114
Vrij & Heaven (1999)	40	6	4		0	0		1	004, 030, 035 (2), 038 (2)
Vrij et al. (1996)	91	3	1		1	1	L	1	043 (3)
Vrij & Winkel (1990/1991)	92	11	10		0	1	L	1	010, 027, 035, 038, 044 (2), 045, 046, 058, 070, 094
Vrij & Winkel (1993)	64	1	1	J	2	1	L	1	001
Wagner & Pease (1976)	49	1	1		0	0		0	019
Weiler & Weinstein (1972)	64	13	8		2	0		1	004 (2), 008, 016, 027, 031, 116 (4), 123, 135 (2)
Zaparniuk et al. (1995)	40	18	16		0	0		1	004, 013, 071, 072, 073, 074, 075, 077 (2), 078, 079, 080, 081 (2), 082, 083, 124, 125
Zuckerman et al. (1979)	60	6	5		0	0	L	0	016, 031 (2), 053, 054, 063
Zuckerman et al. (1982)	59	1	1	K	0	0	L	0	014
Zuckerman et al. (1984)	59	1	1	K	0	0	L	0	084

Note. *N* = number of senders; Ind. = independent; Mot = motivation of the senders; Trans = transgression; Msg = message; Int = interactivity; P = compared cues to deception for planned messages with cues to deception for unplanned messages; L = length (duration) of the messages was reported. [a] Samples with the same letter code report data from the same senders; that is, they are not independent. All samples without a letter code are independent samples. [b] Motivation of the senders; 0 = none; 1 = identity-relevant; 2 = instrumental; 3 = identity-relevant and instrumental. [c] Transgression: 0 = lie is not about a transgression; 1 = lie is about a transgression. [d] Interactivity: 0 = no interaction between sender and target; 1 = interaction. [e] Cue numbers are of the cues described in the current article. The number in parentheses indicates the number of estimates of that cue (if more than one). The cue names corresponding to the cue numbers are shown in Appendix A.

Table 2
Summary of Study Characteristics

Characteristic	*k*
Senders	
Population sampled	
Students	101
Suspects	3
Community members and students	3
Patients in a pain clinic	2
Community members	2
Immigrants to United States	2
Salespersons and customers	1
Travelers in an airport	1
Shoppers in a shopping center	1
Heroin addicts (and nonaddicts)	1
Publicly exposed liars	1
Unable to determine from report	2
Country	
United States	88
Canada	9
Germany	7
England	4
Spain	3
Japan	2
Immigrants to United States	2
Jordan	1
Italy	1
Romania	1
The Netherlands and England	1
The Netherlands and Surinam	1
Relationship between sender and interviewer or target	
Strangers	103
Acquaintances	2
Acquaintances or friends and strangers	2
Friends	1
Intimates, friends, and strangers	1
No interviewer	9
Unable to determine from report	2
Motivation for telling successful lies	
None	68
Identity relevant	13
Instrumental	31
Identity and instrumental	8
Truths and lies	
Length of messages	
Under 20 s	14
20–60 s	14
More than 60 s	8
Unable to determine from report	84
Message preparation	
No preparation	44
Messages were prepared	43
Some prepared, some unprepared	18
Messages were scripted	7
Unable to determine from report	8
Paradigm	
Described attitudes or facts	44
Described films, slides, or pictures	16
Cheating	8
Mock crime	8
Card test or guilty knowledge test	8

Characteristic	*k*
Truths and lies (*continued*)	
Paradigm (*continued*)	
Person descriptions	7
Simulated job interview	6
Described personal experiences	5
Naturalistic	4
Responded to personality items	3
Reactions to pain	3
Other paradigms	7
Unable to determine from report	1
Lies were about transgressions	
No	99
Yes	21
Publication statistics	
Year of report	
Before 1970	3
1970–1979	34
1980–1989	46
1990–2000	37
Source of study	
Journal article	96
Dissertation, thesis	10
Book chapter	4
Unpublished paper	3
Multiple sources	7
Methodological aspects	
Sample size (no. of senders)	
5–20	41
21–59	43
60–192	36
Experimental design	
Within-sender (senders told truths and lies)	78
Between-senders (senders told truths or lies)	42
In between-senders designs, no. of liars	
Fewer than 20	15
20–32	16
More than 32	11
In between-senders designs, no. of truth tellers	
Fewer than 20	15
20–32	13
More than 32	14
No. of messages communicated by each sender	
1	21
2–4	59
More than 4	40
Degree of interaction between sender and interviewer or target	
No interaction	12
Partial interaction	83
Fully interactive	8
No one else present	12
Unable to determine from report	4
Reliability of measurement of cues[a]	
Under .70	36[b]
.70–.79	43[b]
.80–.89	251[b]
.90–1.00	239[b]
Unable to determine from report	769[b]

[a] Includes correlational measures as well as percentage of agreement (divided by 100). [b] Number of estimates (not number of independent estimates).

what they were seeing truthfully or deceptively. In cheating paradigms, senders were or were not induced to cheat and then lie about it. Mock crime paradigms included ones in which some of the senders were instructed to "steal" money or to hide supposed contraband on their persons and to then lie to interviewers about their crime. Some paradigms involved card tests (in which the senders chose a particular card and answered "no" when asked if they had that card) and guilty knowledge tests (in which senders who did or did not know critical information, such as information about a crime, were asked about that information); most of these were modeled after tests often used in polygraph testing. In person-description paradigms, senders described other people (e.g., people they liked and people they disliked) honestly and dishonestly. Some paradigms were simulations of job interviews; typically in those paradigms, senders who were or were not qualified for a job tried to convince an interviewer that they were qualified. In other paradigms, participants described personal experiences (e.g., times during which they acted especially independently or dependently; traumatic experiences that did or did not actually happen to them). Naturalistic paradigms were defined as ones in which the senders were not instructed to tell truths or lies but instead did so of their own accord. These included interrogations of suspects later determined to have been lying or telling the truth (Hall, 1986; Horvath, 1973; Horvath, Jayne, & Buckley, 1994) and a study (Koper & Sahlman, 2001) of people who made public statements later exposed as lies. In another paradigm, senders indicated their responses to a series of items on a personality scale, then later lied or told the truth about their answers to those items. In a final category, senders who really were or were not experiencing pain sometimes expressed their pain freely and other times masked their pain or feigned pain that they were not experiencing. A few other paradigms used in fewer than three independent samples were assigned to a miscellaneous category.

We recoded the paradigms into two categories to test our prediction that lies about transgressions would produce clearer cues than lies that were not about transgressions. The lies about mock crimes or real crimes, cheating, and other misdeeds were categorized as lies about transgressions, the others as lies that were not about transgressions.

The two publication statistics that we coded were the year of the report and the source of the report (e.g., journal article, dissertation, thesis). In some instances, the same data were reported in two places (typically a dissertation and a journal article); in those cases, we coded the more accessible report (i.e., the journal article).

The methodological aspects of the studies that we coded included the sample size and the design of the study. The design was coded as within senders if each sender told both truths and lies or between senders if each sender told either truths or lies. This determination was based on the messages that were included in the analyses of the behavioral cues. For example, if senders told both truths and lies, but the cues to deception were assessed from just one truth or one lie told by each sender, the design was coded as between senders. For each between-senders study, we coded the number of liars and the number of truth tellers. For all studies, we coded the total number of messages communicated by each sender.

We also coded the degree of interaction between the sender and the interviewer or target person. Fully interactive paradigms were ones in which the senders and interviewers interacted freely, with no scripts. In partially interactive paradigms, the senders and interviewers interacted, but the interviewers' behavior was typically constrained, usually by a predetermined set of questions they were instructed to ask. In noninteractive paradigms, an interviewer or target person was present in the room but did not interact with the sender. In still other paradigms, the senders told truths and lies (usually into a tape recorder) with no one else present.

We categorized each cue as having been either objectively or subjectively assessed. Behaviors that could be precisely defined and measured (often in units such as counts and durations) were coded as objectively assessed. Cues were coded as subjectively assessed when they were based on observers' impressions.

Behavioral cues were usually coded from videotapes, audiotapes, or transcripts of the truths and lies. If reliabilities of the measures of the cues were reported (percentages or correlations), we recorded them.

We attempted to compute the effect size for each cue in each study. To this end, we indicated whether the effect sizes were (a) ones that could be precisely calculated (which we call *known effects*), (b) ones for which only the direction of the effect was known, or (c) effects that were simply reported as not significant (and for which we were unable to discern the direction).

Coding decisions were initially made by James J. Lindsay, Laura Muhlenbruck, and Kelly Charlton, who had participated in standard training procedures (discussion of definitions, practice coding, discussion of disagreements) before beginning their task. Each person coded two thirds of the studies. Therefore, each study was coded by two people and discrepancies were resolved in conference. For objective variables such as the year and the source of the report, the percentage of disagreements was close to zero. The percentage ranged as high as 12 for more subjective decisions, such as the initial categorization of paradigms into more than 12 different categories. However, agreement on the two levels of the paradigm variable that were used in the moderator analysis (transgressions vs. no transgressions) was again nearly perfect. Bella M. DePaulo also independently coded all study characteristics, and any remaining discrepancies were resolved in consultation with Brian E. Malone, who was not involved in any of the previous coding. A meta-analysis of accuracy at detecting deception (Bond & DePaulo, 2002) included some of the same studies that are in this review. Some of the same study characteristics were coded for that review in the same manner as for this one. Final decisions about each characteristic were compared across reviews. There were no discrepancies.

Meta-Analytic Techniques

Effect Size Estimate

The effect size computed for each behavioral difference was *d*, defined as the mean for the deceptive condition (i.e., the lies) minus the mean for the truthful condition (i.e., the truths), divided by the mean of the standard deviations for the truths and the lies (Cohen, 1988). Positive *d*s therefore indicate that the behavior occurred more often during lies than truths, whereas negative *d*s indicate that the behavior occurred less often during lies than truths. In cases in which means and standard deviations were not provided but other relevant statistics were (e.g., *r*s, χ^2s, *t*s, or *F*s with 1 *df*) or in which corrections were necessary because of the use of within-sender designs (i.e., the same senders told both truths and lies), we used other methods to compute *d*s (e.g., Hedges & Becker, 1986; Rosenthal, 1991).

With just a few exceptions, we computed effect sizes for every comparison of truths and lies reported in every study. For example, if the length of deceptive messages relative to truthful ones was measured in terms of number of words and number of seconds, we computed both *d*s. If the same senders conveyed different kinds of messages (e.g., ones in which they tried to simulate different emotions and ones in which they tried to mask the emotions they were feeling) and separate *d*s were reported for each, we computed both sets of *d*s. We excluded a few comparisons in cases in which the behavior described was uninterpretable outside of the context of the specific study and in which an effect size could be computed but the direction of the effect was impossible to determine. Also, if preliminary data for a particular cue were reported in one source and more complete data on the same cue were reported subsequently, we included only the more complete data.

If the difference between truths and lies was described as not significant, but no further information was reported, the *d* for that effect was set to zero. If the direction of the effect could be determined, but not the precise magnitude, we used a conservative strategy of assigning the value $+0.01$ when the behavior occurred more often during lies than truths and -0.01 when it occurred less often during lies than truths. This procedure resulted in a total of 1,338 effect sizes. Of these, 787 could be estimated precisely,

396 were set to zero, and 155 were assigned the values of ±0.01. Twenty-seven (2%) of the effect sizes (*d*s) were greater than ±1.50 and were windsorized to ±1.50.

Estimates of Central Tendency

The most fundamental issue addressed by this review is the extent to which each cue is associated with deceit. To estimate the magnitude of the effect size for each cue, we averaged within cues and within independent samples. For example, within a particular independent sample, all estimates of response length were averaged. As a result, each independent sample could contribute to the analyses no more than one estimate of any given cue. Table 1 shows the number of effect sizes computed for each report and the number of cues assessed in each report. If the number of effect sizes is greater than the number of cues, then there was more than one estimate of at least one of the cues.

The mean *d* for each cue within each independent sample was weighted to take into account the number of senders in the sample.[5] Sample sizes ranged from 5 to 192 ($M = 41.73$, $SD = 31.93$) and are shown in the second column of Table 1. Because larger samples provide more reliable estimates of effect sizes than do smaller ones, larger studies were weighted more heavily in the analyses. For within-sender designs, we weighted each effect size by the reciprocal of its variance. For between-senders designs, we computed the weight from the formula: $[2(n_1 + n_2)\, n_1\, n_2\,]/\,[2(n_1 + n_2)^2 + (n_1\, n_2\, d^2)]$. A mean *d* is significant if the confidence interval does not include zero.

To determine whether the variation in effect sizes for each cue was greater than that expected by chance across independent samples, we computed the homogeneity statistic *Q*, which is distributed as chi-square with degrees of freedom equal to the number of independent samples (*k*) minus 1. The *p* level associated with the *Q* statistic describes the likelihood that the observed variance in effect sizes was generated by sampling error alone (Hedges & Olkin, 1985).

Moderator Analyses

We have described several factors that have been predicted to moderate the size of the cues to deception: whether an incentive was provided for success, the type of incentive that was provided (identity relevant or instrumental), whether the messages were planned or unplanned, the duration of the messages, whether the lies were about transgressions, and whether the context was interactive. All of the moderator variables except planning were ones that could be examined only on a between-studies basis. For example, it was usually the case that in any given study, all of the senders who lied were lying about a transgression or they were all lying about something other than a transgression. Conclusions based on those analyses (e.g., that the senders' apparent tension is a stronger cue to lies about transgressions than to lies that are not about transgressions) are open to alternative interpretations. Any way that the studies differed (other than the presence or absence of a transgression) could explain the transgression differences.

Stronger inferences can be drawn when the levels of the moderator variable occur within the same study. Seven independent samples (indicated in Table 1) included a manipulation of whether senders' messages were planned or unplanned.[6] For each cue reported in each of these studies, we computed a *d* for the difference in effect sizes between the unplanned and planned messages. We then combined these *d*s in the same manner as we had in our previous analyses.

Of the remaining moderator variables, all except one (the duration of the message) were categorical variables. For the categorical moderator variables, we calculated fixed-effect models using the general linear model (regression) program of the Statistical Analysis System (SAS Institute, 1985). The model provides a between-levels sum of squares, Q_B, that can be interpreted as a chi-square, testing whether the moderator variable is a significant predictor of differences in effect sizes. A test of the homogeneity of effect sizes within each level, Q_W, is also provided. For the continuous moderator variable (the duration of the messages), we also used the general linear model (leaving duration in its continuous form) and tested for homogeneity (Hedges & Olkin, 1985). A significant Q_B indicates that duration did moderate the size of the effect, and the direction of the unstandardized beta (*b*) weight indicates the direction of the moderation.

Results

Description of the Literature

Characteristics of the Senders

As indicated in Table 2, the senders in most of the studies were students from the United States who were strangers to the interviewer or target of their communications. In 52 of the 120 independent samples, incentives for success were provided to the senders.

Characteristics of the Truths and Lies

The duration of the messages was 1 min or less for 28 of the 36 samples for which that information was reported. The number of samples in which senders were given time to prepare their communications was about the same as the number in which they were not given any preparation time.

In 44 of the 120 samples, senders told truths and lies about their attitudes or personal facts. In 16 others, they looked at films, slides, or pictures and described them honestly or dishonestly. All other paradigms were used in fewer than 9 samples. In 21 of the samples, senders told lies about transgressions.

Publication Statistics and Methodological Aspects

Table 2 also shows that only 3 of the 120 independent samples were published before 1970. Most reports were journal articles.

In 84 of the samples, there were fewer than 60 senders. The samples included a mean of 22.4 male senders ($SD = 24.6$) and a mean of 19.2 female senders ($SD = 19.2$). In 25 samples, all of the senders were men, and in 15 samples, all were women. In 16 samples, the sex of the senders was not reported.

Within-sender designs (in which senders told truths and lies) were nearly twice as common as between-senders designs (in which senders told truths or lies). In the between-senders designs, the number of liars was typically the same as the number of truth tellers. Senders usually communicated between one and four messages.

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[5] Only weighted mean *d*s are reported, and all estimates of a given cue are included in each mean. A table of all 1,338 individual effect sizes is available from Bella M. DePaulo. The table includes the weights for each effect size and information about the independence of each estimate. The table also indicates whether each estimate was a known effect (i.e., the magnitude could be determined precisely) or if only the direction of the effect or its nonsignificance was reported. Therefore, the information in that table can be used to calculate weighted effect sizes for each cue that include only the known estimates or to compute unweighted means that include all effect sizes or only the precisely estimated ones.

[6] We did not include studies in which planning was confounded with another variable (e.g., Anolli & Ciceri, 1997).

In most studies, there was some interaction between the sender and the interviewer or target. In 24 of the 120 samples, there was no interaction or there was no one else present when the senders were telling their truths or lies.

When the reliability of the measurement was reported, the reliability was usually high (see Table 2). Of the 1,338 estimates of the 158 cues to deception, 273 (20%) were based on the subjective impressions of untrained raters.

Meta-Analysis of the Literature

Overview

We first present the combined effect sizes for each individual cue to deception. The individual cues to deception are grouped by our five sets of predictions. Cues suggesting that liars may be less forthcoming than truth tellers are shown in Table 3; cues suggesting that liars may tell less compelling tales than truth tellers are shown in Table 4; cues suggesting that liars communicate in a less positive and more tense way are shown in Tables 5 and 6, respectively; and cues suggesting that liars tell tales that are too good to be true are shown in Table 7. Any given cue is included in Tables 3–7 only if there are at least three independent estimates of it, at least two of which could be calculated precisely (as opposed to estimates of just the direction of the effect or reports that the effect was not significant). All other cues are reported in Appendix B. Five of the 88 cues that met the criteria for inclusion in the tables but did not fit convincingly into any particular table are also included in Appendix B (brow raise, lip stretch, eyes closed, lips apart, and jaw drop).

The placement of cues into the five different categories was to some extent arbitrary. For example, because blinking may be indicative of anxiety or arousal, we included it in the "tense" category (see Appendix A). However, decreased blinking can also be suggestive of greater cognitive effort; therefore, we could have placed it elsewhere. Rate of speaking is another example. We included that cue under "forthcoming" because people who are speaking slowly may seem to be holding back. However, faster speech can also be indicative of confidence (C. E. Kimble & Seidel, 1991); thus, we could have included it under "compelling" (certainty) instead.

In Table 8, we have arranged the 88 cues (the ones based on at least three estimates) into four sections by the crossing of the size of the combined effect (larger or smaller) and the number of independent estimates contributing to that effect (more or fewer). We also present a stem and leaf display of the 88 combined effect sizes in Table 9. The results of our analyses of the factors that might moderate the magnitude of the differences between liars and truth tellers are presented in subsequent tables.

Individual Cues to Deception

Are liars less forthcoming than truth tellers? Table 3 shows the results of the cues indicating whether liars were less forthcoming than truth tellers. We examined whether liars had less to say, whether what they did say was less detailed and less complex, and whether they seemed to be holding back.

We had more independent estimates of the length of the responses ($k = 49$) than of any other cue, but we found just a tiny and nonsignificant effect in the predicted direction ($d = -0.03$). When amount of responding was operationalized in terms of the percentage of the talking time taken up by the social actor compared with the actor's partner, then liars did take up less of that time than did truth tellers ($d = -0.35$). The entire interaction tended to terminate nonsignificantly sooner when 1 person was lying than when both were telling the truth ($d = -0.20$).

Our prediction that liars would provide fewer details than would truth tellers was clearly supported ($d = -0.30$). Extrapolating from reality monitoring theory, we also predicted that there would be less sensory information in deceptive accounts than in truthful ones. There was a nonsignificant trend in that direction ($d = -0.17$). The finding that liars pressed their lips more than truth

Table 3
Are Liars Less Forthcoming Than Truth Tellers?

Cue	*N*	k_1	k_2	*d*	CI	*Q*
Amount of responding						
001 Response length	1,812	49	26	−0.03	−0.09, 0.03	92.1*
002 Talking time	207	4	3	**−0.35***	−0.54, −0.16	8.1
003 Length of interaction	134	3	2	−0.20	−0.41, 0.02	0.7
Detailed, complex responses						
004 Details	883	24	16	**−0.30***	−0.38, −0.21	76.2*
005 Sensory information (RM)	135	4	3	−0.17	−0.39, 0.06	13.2*
006 Cognitive complexity	294	6	3	−0.07	−0.23, 0.10	0.9
007 Unique words	229	6	3	−0.10	−0.26, 0.06	6.2
Holding back						
008 Blocks access to information	218	5	4	0.10	−0.13, 0.33	19.8*
009 Response latency	1,330	32	20	0.02	−0.06, 0.10	112.4*
010 Rate of speaking	806	23	14	0.07	−0.03, 0.16	21.7
011 Presses lips	199	4	3	**0.16***	0.01, 0.30	30.9*

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. *N* = total number of participants in the studies; k_1 = total number of independent effect sizes (*d*s); k_2 = number of *d*s that could be estimated precisely; CI = 95% confidence interval; *Q* = homogeneity statistic (significance indicates rejection of the null hypothesis of homogeneity of *d*s); RM = reality monitoring.
* $p < .05$.

Table 4
Do Liars Tell Less Compelling Tales Than Truth Tellers?

Cue	*N*	k_1	k_2	*d*	CI	*Q*
Makes Sense						
012 Plausibility	395	9	6	**−0.23***	−0.36, −0.11	13.1
013 Logical structure	223	6	6	**−0.25***	−0.46, −0.04	21.5*
014 Discrepant, ambivalent	243	7	3	**0.34***	0.20, 0.48	14.3*
Engaging						
015 Involved, expressive (overall)	214	6	4	0.08	−0.06, 0.22	23.3*
016 Verbal and vocal involvement	384	7	3	**−0.21***	−0.34, −0.08	5.8
017 Facial expressiveness	251	3	2	0.12	−0.05, 0.29	9.6*
018 Illustrators	839	16	10	**−0.14***	−0.24, −0.04	23.9
Immediate						
019 Verbal immediacy (all categories)	117	3	2	**−0.31***	−0.50, −0.13	2.4
020 Verbal immediacy, temporal	109	4	3	0.15	−0.04, 0.34	2.3
021 Generalizing terms	275	5	3	0.10	−0.08, 0.28	1.7
022 Self-references	595	12	9	−0.03	−0.15, 0.09	30.1*
023 Mutual and group references	275	5	4	−0.14	−0.31, 0.02	4.4
024 Other references	264	6	5	0.16	−0.01, 0.33	5.6
025 Verbal and vocal immediacy (impressions)	373	7	4	**−0.55***	−0.70, −0.41	26.3*
026 Nonverbal immediacy	414	11	3	−0.07	−0.21, 0.07	6.9
027 Eye contact	1,491	32	17	0.01	−0.06, 0.08	41.1
028 Gaze aversion	411	6	4	0.03	−0.11, 0.16	7.4
029 Eye shifts	218	7	3	0.11	−0.03, 0.25	43.8*
Uncertain						
030 Tentative constructions	138	3	3	−0.16	−0.37, 0.05	12.5*
031 Verbal and vocal uncertainty (impressions)	329	10	4	**0.30***	0.17, 0.43	11.0
032 Amplitude, loudness	177	5	3	−0.05	−0.26, 0.15	2.2
033 Chin raise	286	4	4	**0.25***	0.12, 0.37	31.9*
034 Shrugs	321	6	3	0.04	−0.13, 0.21	3.3
Fluent						
035 Non-ah speech disturbances	750	17	12	0.00	−0.09, 0.09	60.5*
036 Word and phrase repetitions	100	4	4	**0.21***	0.02, 0.41	0.5
037 Silent pauses	655	15	11	0.01	−0.09, 0.11	18.5
038 Filled pauses	805	16	14	0.00	−0.08, 0.08	22.2
039 Mixed pauses	280	7	3	0.03	−0.11, 0.17	3.6
040 Mixed disturbances (ah plus non-ah)	283	7	5	0.04	−0.14, 0.23	7.0
041 Ritualized speech	181	4	3	0.20	−0.06, 0.47	2.3
042 Miscellaneous dysfluencies	144	8	5	0.17	−0.04, 0.38	13.9
Active						
043 Body animation, activity	214	4	4	0.11	−0.03, 0.25	11.7*
044 Posture shifts	1,214	29	16	0.05	−0.03, 0.12	14.1
045 Head movements (undifferentiated)	536	14	8	−0.02	−0.12, 0.08	9.4
046 Hand movements	951	29	11	0.00	−0.08, 0.08	28.0
047 Arm movements	52	3	3	−0.17	−0.54, 0.20	3.5
048 Foot or leg movements	857	28	21	−0.09	−0.18, 0.00	20.5

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. *N* = total number of participants in the studies; k_1 = total number of independent effect sizes (*d*s); k_2 = number of *d*s that could be estimated precisely; CI = 95% confidence interval; *Q* = homogeneity statistic (significance indicates rejection of the null hypothesis of homogeneity of *d*s).
* $p < .05$.

tellers did ($d = 0.16$) was the only cue in the "holding back" subcategory that was statistically reliable.

In sum, the most reliable indicator (in terms of the size of the effect and the number of independent estimates) that liars may have been less forthcoming than truth tellers was the relatively smaller number of details they provided in their accounts. The directions of the cues in Table 3 tell a consistent story: All except 1 of the 11 cues (rate of speaking) was in the predicted direction, indicating that liars are less forthcoming than truth tellers, though usually nonsignificantly so.

Are deceptive accounts less compelling than truthful ones? To determine whether deceptive accounts were less compelling than truthful ones, we asked whether the lies seemed to make less sense than the truths and whether they were told in a less engaging and less immediate manner. We also asked whether liars seemed more uncertain or less fluent than truth tellers and whether they seemed less active or animated. The results are shown in Table 4.

By all three of the indicators, the lies made less sense than the truths. They were less plausible ($d = -0.23$); less likely to be structured in a logical, sensible way ($d = -0.25$); and more likely to be internally discrepant or to convey ambivalence ($d = 0.34$).

For the four cues to the engagingness of the message, the results of two were as predicted. Liars seemed less involved verbally and vocally in their self-presentations than did truth tellers ($d =$

Table 5
Are Liars Less Positive and Pleasant Than Truth Tellers?

Cue	*N*	k_1	k_2	*d*	CI	*Q*
049 Friendly, pleasant (overall)	216	6	3	−0.16	−0.36, 0.05	11.3
050 Cooperative (overall)	222	3	3	**−0.66***	−0.93, −0.38	11.2*
051 Attractive (overall)	84	6	3	−0.06	−0.27, 0.16	3.1
052 Negative statements and complaints	397	9	6	**0.21***	0.09, 0.32	21.5*
053 Vocal pleasantness	325	4	2	−0.11	−0.28, 0.05	1.4
054 Facial pleasantness	635	13	6	**−0.12***	−0.22, −0.02	25.1*
055 Head nods	752	16	3	0.01	−0.09, 0.11	1.5
056 Brow lowering	303	5	4	0.04	−0.08, 0.16	9.0
057 Sneers	259	4	3	0.02	−0.11, 0.15	38.1*
058 Smiling (undifferentiated)	1,313	27	16	0.00	−0.07, 0.07	18.3
059 Lip corner pull (AU 12)	284	4	3	0.00	−0.12, 0.12	1.9
060 Eye muscles (AU 6), not during positive emotions	284	4	4	−0.01	−0.13, 0.11	3.6

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. *N* = total number of participants in the studies; k_1 = total number of independent effect sizes (*d*s); k_2 = number of *d*s that could be estimated precisely; CI = 95% confidence interval; *Q* = homogeneity statistic (significance indicates rejection of the null hypothesis of homogeneity of effect sizes); AU = facial action unit (as categorized by Ekman & Friesen, 1978).
* $p < .05$.

−0.21). They also displayed fewer of the gestures used to illustrate speech ($d = -0.14$).

The set of immediacy cues includes three composite measures and a number of individual immediacy measures. The individual cues were the ones described by Mehrabian (1972) that were reported separately in several studies or other cues that seemed to capture the immediacy construct (e.g., Fleming, 1994). The composite measures were verbal immediacy (all categories), verbal and vocal immediacy, and nonverbal immediacy. The verbal immediacy composite is an index consisting of all of the linguistic categories described by Wiener and Mehrabian (1968). They are all verbal constructions (e.g., active vs. passive voice, affirmatives vs. negations) that are typically coded from transcripts. The verbal and vocal immediacy measure is based on raters' overall impressions of the degree to which the social actors seemed direct, relevant, clear, and personal. The nonverbal immediacy measure includes the set of nonverbal cues described by Mehrabian (1972) as indices of immediacy (e.g., interpersonal proximity, leaning and facing toward the other person).

The verbal composite and the verbal and nonverbal composite both indicated that liars were less immediate than truth tellers ($d = -0.31$ and -0.55, respectively). Liars used more linguistic constructions that seemed to distance themselves from their listeners or from the contents of their presentations, and they sounded more evasive, unclear, and impersonal. The nonverbal composite was only weakly (nonsignificantly) suggestive of the same conclusion ($d = -0.07$).

The results of other individual indices of immediacy were inconsistent and unimpressive. It is notable that none of the measures of looking behavior supported the widespread belief that liars do not look their targets in the eye. The 32 independent estimates of eye contact produced a combined effect that was almost exactly zero ($d = 0.01$), and the *Q* statistic indicated that the 32 estimates were homogeneous in size. The estimates of gaze aversion were

Table 6
Are Liars More Tense Than Truth Tellers?

Cue	*N*	k_1	k_2	*d*	CI	*Q*
061 Nervous, tense (overall)	571	16	12	**0.27***	0.16, 0.38	37.3*
062 Vocal tension	328	10	8	**0.26***	0.13, 0.39	25.4*
063 Frequency, pitch	294	12	11	**0.21***	0.08, 0.34	31.2*
064 Relaxed posture	488	13	3	−0.02	−0.14, 0.10	19.6
065 Pupil dilation	328	4	4	**0.39***	0.21, 0.56	1.1
066 Blinking	850	17	13	0.07	−0.01, 0.14	54.4*
067 Object fidgeting	420	5	2	−0.12	−0.26, 0.03	4.0
068 Self-fidgeting	991	18	10	−0.01	−0.09, 0.08	19.5
069 Facial fidgeting	444	7	4	0.08	−0.09, 0.25	7.7
070 Fidgeting (undifferentiated)	495	14	10	**0.16***	0.03, 0.28	28.2*

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. *N* = total number of participants in the studies; k_1 = total number of independent effect sizes (*d*s); k_2 = number of *d*s that could be estimated precisely; CI = 95% confidence interval; *Q* = homogeneity statistic (significance indicates rejection of the null hypothesis of homogeneity of *d*s).
* $p < .05$.

Table 7
Do Lies Include Fewer Ordinary Imperfections and Unusual Contents Than Truths?

Cue	*N*	k_1	k_2	*d*	CI	*Q*
071 Unstructured productions	211	5	4	−0.06	−0.27, 0.15	24.8*
072 Spontaneous corrections	183	5	5	**−0.29***	−0.56, −0.02	3.8
073 Admitted lack of memory	183	5	5	**−0.42***	−0.70, −0.15	18.7*
074 Self-doubt	123	4	3	−0.10	−0.42, 0.21	5.1
075 Self-deprecation	64	3	3	0.21	−0.19, 0.61	0.9
076 Contextual embedding	159	6	6	−0.21	−0.41, 0.00	21.5*
077 Verbal and nonverbal interactions	163	5	4	−0.03	−0.25, 0.19	8.6
078 Unexpected complications	223	6	5	0.04	−0.16, 0.24	2.2
079 Unusual details	223	6	5	−0.16	−0.36, 0.05	9.5
080 Superfluous details	223	6	5	−0.01	−0.21, 0.19	11.0
081 Related external associations	112	3	3	**0.35***	0.02, 0.67	2.1
082 Another's mental state	151	4	4	0.22	−0.02, 0.46	7.2
083 Subjective mental state	237	6	6	0.02	−0.18, 0.22	8.1

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. All of the cues in this table were coded using the Criteria-Based Content Analysis system that is part of Statement Validity Analysis (e.g., Steller & Kohnken, 1989). *N* = total number of participants in the studies; k_1 = total number of independent effect sizes (*d*s); k_2 = number of *d*s that could be estimated precisely; CI = 95% confidence interval; *Q* = homogeneity statistic (significance indicates rejection of the null hypothesis of homogeneity of *d*s).
* $p < .05$.

equally unimpressive ($d = 0.03$). Estimates of eye shifts produced just a nonsignificant trend ($d = 0.11$).

The one cue that was consistent with our prediction that liars would seem less certain than truth tellers was verbal and vocal uncertainty (as measured by subjective impressions); liars did sound more uncertain than truth tellers ($d = 0.30$). One other behavior unexpectedly produced results in the opposite direction. More often than truth tellers, liars raised their chins ($d = 0.25$). In studies of facial expressions in conflict situations, a particular facial constellation, called a *plus face*, has been identified (Zivin, 1982). It consists of a raised chin, direct eye contact, and medially raised brows. People who show this plus face during conflict situations are more likely to prevail than those who do not show it or who show a *minus face*, consisting of a lowered chin, averted eyes, and pinched brows (Zivin, 1982). That research suggests that raising the chin could be a sign of certainty.

Mahl and his colleagues (e.g., Kasl & Mahl, 1965; Mahl, 1987) have suggested that the large variety of disturbances that occur in spontaneous speech can be classified into two functionally distinct categories: non-ah disturbances, which indicate state anxiety (Mahl, 1987), and the commonplace filled pauses such as "ah," "um," and "er," which occur especially often when the available options for what to say or how to say it are many and complex (Berger, Karol, & Jordan, 1989; Christenfeld, 1994; Schachter et al., 1991). Of the non-ah disturbances, the most frequently occurring are sentence changes, in which the speaker interrupts the flow of a sentence to change its form or content, and superfluous repetitions of words or phrases. The other non-ah disturbances are stutters, omissions of words or parts of words, sentences that are not completed, slips of the tongue, and intruding incoherent sounds.

Most studies reported a composite that included all non-ah disturbances, or one that included non-ahs as well as ahs. When individual disturbances were reported separately, we preserved the distinctions. In the fluency subcategory, we also included silent pauses, mixed pauses (silent plus filled, for studies in which the two were not reported separately), ritualized speech (e.g., "you know," "well," "I mean"), and miscellaneous dysfluencies, which were sets of dysfluencies that were not based on particular systems such as Mahl's (1987).

Results of the fluency indices suggest that speech disturbances have little predictive power as cues to deceit. The categories of disturbances reported most often, non-ah disturbances, filled pauses, and silent pauses, produced combined effect sizes of 0.00, 0.00, and 0.01, respectively. Only one type of speech disturbance, the repetition of words and phrases, produced a statistically reliable effect ($d = 0.21$).

Under the subcategory of "active," we included all movements except those defined as expressive (i.e., illustrators were included in the subcategory of "engaging" cues) and those believed to be indicative of nervousness (i.e., forms of fidgeting, included in the tense category). There were nearly 30 independent estimates of posture shifts ($d = 0.05$), hand movements ($d = 0.00$), and foot or leg movements ($d = -0.09$), but we found little relationship with deceit for these or any of the other movements.

In sum, there were three ways in which liars told less compelling tales than did truth tellers. Their stories made less sense, and they told those stories in less engaging and less immediate ways. Cues based on subjective impressions of verbal and vocal cues (typically rated from audiotapes) were most often consistent with predictions. Specifically, liars sounded less involved, less immediate, and more uncertain than did truth tellers.

Are liars less positive and pleasant than truth tellers? All of the cues that assessed pleasantness in a global way produced results in the predicted direction, although some of the effects were small and nonsignificant (see Table 5). A small number of estimates ($k = 3$) indicated that liars were less cooperative than truth tellers ($d = -0.66$). Liars also made more negative statements and complaints ($d = 0.21$), and their faces were less pleasant ($d = -0.12$).

Table 8
Cues With Larger and Smaller Effect Sizes Based on Larger and Smaller Numbers of Estimates

Larger effect size ($d > \|0.20\|$)	d	k	Smaller effect size ($d \leq \|0.20\|$)	d	k
			Larger no. of estimates ($k > 5$)		
025 Verbal and vocal immediacy (impressions)	−0.55*	7	042 Miscellaneous dysfluencies	0.17	8
014 Discrepant, ambivalent	0.34*	7	070 Fidgeting (undifferentiated)	0.16*	14
004 Details	−0.30*	24	049 Friendly, pleasant	−0.16	6
031 Verbal and vocal uncertainty (impressions)	0.30*	10	024 Other references	0.16	6
061 Nervous, tense (overall)	0.27*	16	079 Unusual details	−0.16	6
062 Vocal tension	0.26*	10	018 Illustrators	−0.14*	16
013 Logical structure	−0.25*	6	054 Facial pleasantness	−0.12*	13
012 Plausibility	−0.23*	9	029 Eye shifts	0.11	7
063 Frequency, pitch	0.21*	12	007 Unique words	−0.10	6
052 Negative statements and complaints	0.21*	9	048 Foot or leg movements	−0.09	28
016 Verbal and vocal involvement	−0.21*	7	069 Facial fidgeting	0.08	7
076 Contextual embedding	−0.21	6	015 Involved, expressive (overall)	0.08	6
			010 Rate of speaking	0.07	23
			066 Blinking	0.07	17
			026 Nonverbal immediacy	−0.07	11
			006 Cognitive complexity	−0.07	6
			051 Attractive	−0.06	6
			044 Posture shifts	0.05	29
			040 Mixed disturbances (ah plus non-ah)	0.04	7
			034 Shrugs	0.04	6
			078 Unexpected complications	0.04	6
			001 Response length	−0.03	49
			022 Self-references	−0.03	12
			039 Mixed pauses	0.03	7
			028 Gaze aversion	0.03	6
			009 Response latency	0.02	32
			045 Head movements (undifferentiated)	−0.02	14
			064 Relaxed posture	−0.02	13
			083 Subjective mental state	0.02	6
			027 Eye contact	0.01	32
			068 Self-fidgeting	−0.01	18
			055 Head nods	0.01	16
			037 Silent pauses	0.01	15
			080 Superfluous details	−0.01	6
			046 Hand movements	0.00	29
			058 Smiling (undifferentiated)	0.00	27
			035 Non-ah speech disturbances	0.00	17
			038 Filled pauses	0.00	16
			Smaller no. of estimates ($k \leq 5$)		
050 Cooperative (overall)	−0.66*	3	041 Ritualized speech	0.20	4
073 Admitted lack of memory	−0.42*	5	003 Length of interaction	−0.20	3
065 Pupil dilation	0.39*	4	005 Sensory information	−0.17	4
002 Talking time	−0.35*	4	047 Arm movements	−0.17	3
081 Related external associations	0.35*	3	011 Presses lips	0.16*	4
019 Verbal immediacy (all categories)	−0.31*	3	030 Tentative constructions	−0.16	3
072 Spontaneous corrections	−0.29*	5	020 Verbal immediacy, temporal	0.15	4
033 Chin raise	0.25*	4	023 Mutual and group references	−0.14	5
082 Another's mental state	0.22	4	067 Object fidgeting	−0.12	5
036 Word and phrase repetitions	0.21*	4	017 Facial expressiveness	0.12	3
075 Self-deprecation	0.21	3	043 Body animation, activity	0.11	4
			053 Vocal pleasantness	−0.11	4
			008 Blocks access to information	0.10	5
			021 Generalizing terms	0.10	5
			074 Self-doubt	−0.10	4
			132 Lips apart (AU 25)	−0.08	5
			071 Unstructured productions	−0.06	5
			131 Eyes closed	−0.06	3
			032 Amplitude, loudness	−0.05	5
			056 Brow lowering	0.04	5
			130 Lip stretch (AU 20)	−0.04	4
			077 Descriptions of verbal and nonverbal interactions	−0.03	5
			057 Sneers	0.02	4
			129 Brow raise (AU 1)	0.01	5
			060 Eye muscles (AU 6), not during positive emotions	−0.01	4
			133 Jaw drop (AU 26)	0.00	5
			059 Lip corner pull (AU 12)	0.00	4

Note. AU = facial action unit (as categorized by Ekman & Friesen, 1978).
* $p < .05$.

Table 9
Stem and Leaf Plot of Combined Effect Sizes (ds) for Individual Cues to Deception

Stem	Leaf
0.6	6
0.6	
0.5	5
0.5	
0.4	
0.4	2
0.3	559
0.3	0014
0.2	55679
0.2	0011111123
0.1	5666666777
0.1	000011122244
0.0	5566677778889
0.0	000000111111122222333334444 4

Note. Included are the 88 cues for which at least three independent effect size estimates were available (at least two of which could be computed precisely).

Each of the more specific cues to positivity or negativity (e.g., head nods, brow lowering, sneers) produced combined effects very close to zero. The most notable finding was that the 27 estimates of smiling produced a combined effect size of exactly zero. The measures of smiling in those studies did not distinguish among different types of smiles. Ekman (1985/1992) argued that for smiling to predict deceptiveness, smiles expressing genuinely positive affect (distinguished by the cheek raise, facial action unit 6 [AU; as categorized by Ekman & Friesen, 1978], produced by movements of the muscles around the outside corner of the eye) must be coded separately from feigned smiles. Because our review contained only two estimates of genuine smiling and two of feigned smiling, the results are reported in Appendix B with the other cues for which the number of estimates was limited. The combined effects tend to support Ekman's position. When only pretending to be experiencing genuinely positive affect, people were less likely to show genuine smiles ($d = -0.70$) and more likely to show feigned ones ($d = 0.31$). There were no differences in the occurrence of the cheek raise for liars versus truth tellers in studies in which the participants were not experiencing or faking positive emotions ($d = -0.01$; e.g., studies of the expression and concealment of pain). Also as predicted by Ekman, the easily produced lip corner pull (AU 12) did not distinguish truths from lies either, again producing a combined effect size of exactly zero.

Are liars more tense than truth tellers? Except for two types of fidgeting, the results of every cue to tension were in the predicted direction, though again some were quite small and nonsignificant (see Table 6). Liars were more nervous and tense overall than truth tellers ($d = 0.27$). They were more vocally tense ($d = 0.26$) and spoke in a higher pitch ($d = 0.21$). Liars also had more dilated pupils ($d = 0.39$).

In studies in which different kinds of fidgeting were not differentiated, liars fidgeted more than truth tellers ($d = 0.16$). However, the effect was smaller for facial fidgeting (e.g., rubbing one's face, playing with one's hair; $d = 0.08$), and the results were in the opposite direction for object fidgeting (e.g., tapping a pencil, twisting a paper clip; $d = -0.12$) and self-fidgeting (e.g., scratching; $d = -0.01$). The best summary of these data is that there is no clear relationship between fidgeting and lying.

Do lies include fewer ordinary imperfections and unusual contents than do truths? The people who made spontaneous corrections while telling their stories were more likely to be telling truths than lies ($d = -0.29$). This is consistent with our prediction that liars would avoid behaviors they mistakenly construe as undermining the convincingness of their lies (see Table 7). Liars also seemed to avoid another admission of imperfection that truth tellers acknowledge: an inability to remember something ($d = -0.42$). There were also indications that liars stuck too closely to the key elements of the story they were fabricating. For example, like good novelists, truth tellers sometimes describe the settings of their stories; liars were somewhat less likely to do this ($d = -0.21$ for contextual embedding), and they provided nonsignificantly fewer unusual details ($d = -0.16$). However, liars did mention events or relationships peripheral to the key event ($d = 0.35$ for related external associations) more often than truth tellers did.

Summary of individual cues to deception. The most compelling results in this review are the ones based on relatively large numbers of estimates that produced the biggest combined effects. In Table 8, the 88 cues are arranged into four sections according to the number of independent estimates and the size of the combined effects. On the top half of the table are the cues for which six or more independent estimates were available. These were the 50 cues that were above the median in the number of estimates on which they were based (see also Field, 2001). On the bottom half are the 38 cues for which just three, four, or five estimates were available. In the first column are the 23 cues with combined effect sizes larger than |0.20|. In the second column are the 65 effect sizes equal to |0.20| or smaller. The value of |0.20| was selected based on Cohen's (1988) heuristic that effect sizes (d) of |0.20| are small effects. Within each section, cues with the biggest effect sizes are listed first; within cues with the same effect sizes, those based on a larger number of estimates (k) are listed first.

Twelve cues are in the larger d and k section. These cues were based on at least six independent estimates and produced combined effects greater than |0.20|. Half of these cues were from the compelling category, including all three of the cues in the subcategory "makes sense." The effects for those three cues indicate that self-presentations that seem discrepant, illogically structured, or implausible are more likely to be deceptive than truthful. Verbal and vocal immediacy, from the "immediacy" subcategory, tops the list. Verbal and vocal uncertainty, from the subcategory "uncertain," is in this section, as is verbal and vocal involvement, a cue in the subcategory "engaging."

The larger d and k section also includes one of the cues in the forthcoming category (details) and one from the "positive, pleasant" category (negative statements and complaints). There are also three cues from the tense category (overall tension, vocal tension, and pitch) and one from the category of "ordinary imperfections and unusual details" (contextual embedding).

In the larger d and smaller k section of Table 8 are cues that produced relatively bigger effects but were based on smaller numbers of estimates. For example, a handful of estimates suggest that liars were less cooperative than truth tellers, were less likely to admit that they did not remember something, and had more dilated pupils.

Some of the cues in the smaller *d* and larger *k* section of Table 8 are noteworthy because the very tiny cumulative *d*s were based on large numbers of estimates. For example, response length, response latency, and eye contact were all based on more than 30 independent estimates, but they produced cumulative effect sizes of just −0.03, 0.02, and 0.01, respectively.

Table 9 is a stem and leaf display of the absolute values of the 88 effect sizes. The median effect size is just |0.10|. Only two of the effect sizes meet Cohen's (1988) criterion of |0.50| for large effects.

Moderators of Cues to Deception

In Tables 3–7, in which we present the combined results of the estimates of individual cues to deception, we included cues only if they were based on at least three effect sizes, at least two of which were precise estimates. In our moderator analyses, we needed to use a more stringent criterion to have a sufficient number of estimates at each level of the moderator variables. We began by considering all cues for which we had at least 10 precise estimates. Eighteen cues met that criterion: response length, details, response latency, rate of speaking, illustrators, eye contact, non-ah speech disturbances, silent pauses, filled pauses, posture shifts, hand movements, foot or leg movements, smiling (undifferentiated), nervous, pitch, blinking, self-fidgeting, and fidgeting (undifferentiated). Our initial analyses that combined across all estimates (as reported in Tables 3–7) indicated that for some of these cues, the estimates were homogeneous. Because our predictions were theoretically driven, we proceeded to test the moderator variables for all 18 of the cues. Four of the cues for which the estimates were homogeneous—illustrators, posture shifts, smiling (undifferentiated), and hand movements—produced no significant effects in any of our moderator analyses, indicating that the size of the effects was also homogeneous across levels of the moderators.

For the moderator analyses, we report three homogeneity statistics for each moderator. The Q_T statistic indicates the variability among all of the estimates of the cue included in the analysis. The Q_B statistic indicates between-groups variation. Significant between-groups effects indicate that the size of the effects differed across the levels of the moderator. The Q_W statistic indicates variability within each level of the moderator variable; a significant value indicates additional variability that has not been explained.

Motivation to succeed at lying. We predicted that cues to deception would be stronger in studies in which the social actors were motivated to get away with their lies than in studies in which no special incentives were provided. Table 10 shows the effect sizes for each cue for those two kinds of studies. Patterns of eye contact differed significantly between the motivated senders and the senders with no special motivation. When social actors were motivated to succeed, they made significantly less eye contact when lying than when telling the truth ($d = -0.15$). When no special incentive was provided to social actors, they made nonsignificantly more eye contact when lying ($d = 0.09$).

Two of the fluency cues, non-ah disturbances and filled pauses, varied with the motivation moderator. In studies in which no special incentive was provided, there was a small positive effect for both cues; deceptive self-presentations were nonsignificantly more likely to include non-ah disturbances ($d = 0.13$) and filled pauses ($d = 0.09$) than truthful ones. However, when incentives were provided, this effect reversed, and deceptive self-presentations included nonsignificantly fewer non-ah speech disturbances ($d = -0.10$) and filled pauses ($d = -0.13$) than truthful ones.

Several cues to tension also discriminated cues to deception under the two motivational conditions. Social actors were more tense overall when lying compared with when telling the truth, and this effect was significant only when they were motivated to succeed ($d = 0.35$ vs. 0.15). Also, it was only in the incentive condition that lies were communicated in more highly pitched voices than were truths ($d = 0.59$ vs. -0.02).

Differences in the magnitude of the effects (absolute values) for studies in which social actors were or were not motivated to succeed are also telling. For studies in which there was no special incentive for succeeding, cues to deception were generally weak. Overall, the size of the effects increased somewhat when some incentive was provided.

Identity-relevant motivations to succeed. We had predicted that across all of the estimates in our data set, we would find that liars' responses would be shorter than those of truth tellers', would be preceded by a longer response latency, and would include more silent pauses. None of these predictions was supported in the overall analyses. However, all of these predictions were significantly more strongly supported under conditions of identity-relevant motivation than under no-motivation conditions (see Table 11). Within the identity-relevant condition, the effect sizes were nearly significant for response length ($d = -0.23$) and silent pauses ($d = 0.38$) but not significant for response latency ($d = 0.36$).

In the identity-relevant condition, the voice pitch of liars was significantly higher than that of truth tellers; the effect size was significant ($d = 0.67$), and it differed significantly from the effect size in the no-motivation condition ($d = -0.02$). Liars in the identity-relevant condition also made significantly fewer foot or leg movements than truth tellers ($d = -0.28$); however, the size of the effect was not significantly different when compared with the no-motivation condition ($d = -0.02$).

Instrumental motivations. Table 11 also shows cues to deception for studies in which the incentives were primarily instrumental (e.g., financial). Only two cues differed significantly in size between the studies that provided no incentives to the social actors and those that provided instrumental incentives. Non-ah disturbances ($d = -0.17$) and filled pauses ($d = -0.14$) occurred nonsignificantly less often in the speech of the liars than of the truth tellers in the studies that provided instrumental incentives. In the studies in which no incentives were provided, the speech of liars included somewhat more non-ah disturbances ($d = 0.13$) and filled pauses ($d = 0.09$) than the speech of truth tellers. Within the instrumental-motivation condition, there were no effect sizes that differed significantly from chance.

Identity-relevant versus instrumental motivations. The self-presentational perspective predicts stronger effects when incentives are identity relevant than when they are instrumental. Results (also shown in Table 11) indicate that the responses of liars tended to be even shorter than those of truth tellers when the social actors were motivated by identity-relevant incentives than when they were instrumentally motivated ($d = -0.23$ vs. -0.05; for the difference between conditions, $p = .06$). Response latencies were significantly longer ($d = 0.36$ vs. -0.01), and there were some-

Table 10
Cues to Deception When Incentives for Success Were or Were Not Provided

Cue	Condition		Q_T (*df*)	Q_B (1)
	No motivation	Motivation		
001 Response length				
d (CI)	−0.03 (−0.15, 0.09)	−0.03 (−0.14, 0.08)	92.1* (48)	0.0
Q_W (*k*)	59.6* (21)	32.5 (28)		
009 Response latency				
d (CI)	0.04 (−0.17, 0.26)	0.00 (−0.22, 0.22)	112.4* (32)	0.3
Q_W (*k*)	50.1* (18)	62.0* (15)		
010 Rate of speaking				
d (CI)	0.10 (−0.04, 0.25)	0.04 (−0.10, 0.17)	21.7 (22)	0.5
Q_W (*k*)	8.7 (8)	12.5 (15)		
027 Eye contact				
d (CI)	0.09 (−0.01, 0.19)	**−0.15*** (−0.29, −0.01)	41.1 (31)	9.0*
Q_W (*k*)	13.3 (20)	18.8 (12)		
035 Non-ah disturbances				
d (CI)	0.13 (−0.15, 0.41)	−0.10 (−0.34, 0.14)	60.5* (16)	6.3*
Q_W (*k*)	24.6* (7)	29.7* (10)		
037 Silent pauses				
d (CI)	−0.02 (−0.18, 0.15)	0.06 (−0.16, 0.29)	18.5 (14)	0.5
Q_W (*k*)	7.1 (8)	10.8 (7)		
038 Filled pauses				
d (CI)	0.09 (−0.03, 0.22)	−0.13 (−0.28, 0.02)	22.2 (15)	6.5*
Q_W (*k*)	8.3 (8)	7.4 (8)		
048 Foot or leg movements				
d (CI)	−0.02 (−0.15, 0.11)	**−0.13*** (−0.22, −0.03)	20.4 (27)	1.4
Q_W (*k*)	5.0 (9)	14.0 (19)		
061 Nervous, tense				
d (CI)	0.15 (−0.15, 0.44)	**0.35*** (0.11, 0.58)	37.3* (15)	3.0
Q_W (*k*)	10.8 (8)	23.4* (8)		
063 Frequency, pitch				
d (CI)	−0.02 (−0.23, 0.20)	**0.59*** (0.31, 0.88)	31.2* (11)	18.6*
Q_W (*k*)	2.9 (6)	9.7 (6)		
066 Blinking				
d (CI)	0.05 (−0.14, 0.25)	0.09 (−0.19, 0.36)	54.4* (16)	0.5
Q_W (*k*)	23.9* (9)	30.3* (8)		
068 Self-fidgeting				
d (CI)	0.08 (−0.03, 0.18)	−0.12 (−0.25, 0.01)	19.5 (17)	5.5*
Q_W (*k*)	10.1 (11)	3.9 (7)		
070 Fidgeting (undifferentiated)				
d (CI)	0.09 (−0.33, 0.53)	0.18 (−0.08, 0.43)	28.2* (13)	0.3
Q_W (*k*)	11.3* (3)	16.6* (11)		

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. The *Q* statistics are homogeneity statistics; significance indicates rejection of the hypothesis of homogeneity of effect sizes (*d*s). Therefore, bigger *Q*s indicate less homogeneity. Q_T = homogeneity among all estimates for a particular cue; *df* = degree of freedom; Q_B = homogeneity between the two levels of the moderator being compared. CI = 95% confidence interval; Q_W = homogeneity of *d*s within the level of the moderator; *k* = number of independent estimates.
* $p < .05$.

what more silent pauses ($d = 0.38$ vs. -0.03; for the difference between conditions, $p = .07$). There were no cues that were significantly or nearly significantly stronger in the instrumental-motivation condition.

Unplanned and planned presentations. Seven independent samples (described in eight reports) included a manipulation of whether the senders' messages were unplanned or planned. Results for 33 specific cues were reported by the authors. However, there were only two cues (response length and response latency) that met our criterion of being based on at least three independent estimates (at least two of which were estimated precisely). Table 12 shows the results for those cues as well as several others that met a less stringent criterion: At least two independent estimates were available, and at least one was estimated precisely. Those results should be interpreted with caution.

We computed the effect sizes in Table 12 by subtracting the effect size for the planned messages from the effect size from the unplanned messages. Therefore, more positive effect sizes indicate that the relationship of the cue to deception was more positive for the unplanned messages than for the planned messages.

As predicted, the combined effect for response latency was statistically reliable ($d = 0.20$). When social actors did not plan their messages, there was a longer latency between the end of the question and the beginning of their answer when they were lying

Table 11
Cues to Deception Under Conditions of No Motivation, Identity-Relevant Motivation, and Instrumental Motivation

Cue	Condition					
	No motivation (NM)	Identity-relevant (IR)	Instrumental (IN)	NM vs. IR	NM vs. IN	IR vs. IN
001 Response length						
d (CI)	−0.03 (−0.17, 0.11)	−0.23 (−0.48, 0.02)	−0.05 (−0.21, 0.12)			
Q_W (*k*)	59.6* (21)	5.0 (8)	12.0 (16)			
Q_T (*df*)				69.5* (28)	71.6* (36)	20.5 (23)
Q_B (1)				4.9*	0.1	3.6
009 Response latency						
d (CI)	0.04 (−0.15, 0.24)	0.36 (−0.11, 0.84)	−0.01 (−0.43, 0.40)			
Q_W (*k*)	50.2* (18)	10.1 (6)	2.8 (5)			
Q_T (*df*)				64.9* (23)	53.2* (22)	17.1 (10)
Q_B (1)				4.6*	0.2	4.2*
010 Rate of speaking						
d (CI)	0.10 (−0.05, 0.26)	0.06 (−0.28, 0.40)	−0.03 (−0.22, 0.17)			
Q_W (*k*)	8.7 (8)	0.3 (3)	10.0 (10)			
Q_T (*df*)				9.0 (10)	20.0 (17)	10.5 (12)
Q_B (1)				0.1	1.3	0.2
027 Eye contact						
d (CI)	**0.09*** (0.01, 0.17)	−0.19 (−0.50, 0.12)	−0.08 (−0.25, 0.09)			
Q_W (*k*)	13.3 (20)	1.2 (3)	10.3 (7)			
Q_T (*df*)				16.8 (22)	26.8 (26)	11.9 (9)
Q_B (1)				2.3	3.2	0.3
035 Non-ah disturbances						
d (CI)	0.13 (−0.17, 0.43)		−0.17 (−0.53, 0.18)			
Q_W (*k*)	24.6* (7)		16.8* (6)			
Q_T (*df*)					49.2* (12)	
Q_B (1)					8.0*	
037 Silent pauses						
d (CI)	−0.02 (−0.16, 0.13)	0.38 (−0.01, 0.77)	−0.03 (−0.36, 0.31)			
Q_W (*k*)	7.1 (8)	1.8 (3)	4.4 (3)			
Q_T (*df*)				13.5 (10)	11.5 (10)	9.8 (5)
Q_B (1)				4.6*	0.0	3.5
038 Filled pauses						
d (CI)	0.09 (−0.04, 0.23)		−0.14 (−0.32, 0.04)			
Q_W (*k*)	8.3 (8)		6.2 (6)			
Q_T (*df*)					20.9 (13)	
Q_B (1)					6.4*	
048 Foot or leg movements						
d (CI)	−0.02 (−0.14, 0.11)	**−0.28*** (−0.51, −0.06)	−0.09 (−0.22, 0.03)			
Q_W (*k*)	5.0 (9)	2.6 (5)	9.0 (12)			
Q_T (*df*)				10.8 (13)	14.6 (20)	13.3 (16)
Q_B (1)				3.2	0.6	1.7
061 Nervous, tense						
d (CI)	0.15 (−0.15, 0.44)	−0.02 (−0.35, 0.31)				
Q_W (*k*)	10.8 (8)	3.3 (4)				
Q_T (*df*)				15.2 (11)		
Q_B (1)				1.2		
063 Frequency, pitch						
d (CI)	−0.02 (−0.15, 0.11)	**0.67*** (0.43, 0.92)				
Q_W (*k*)	2.9 (6)	0.0 (3)				
Q_T (*df*)				17.0* (8)		
Q_B (1)				14.1*		
066 Blinking						
d (CI)	0.05 (−0.11, 0.22)	0.05 (−0.50, 0.39)				
Q_W (*k*)	23.9* (9)	0.3 (3)				
Q_T (*df*)					24.2* (1.1)	
Q_B (1)					0.0	
068 Self-fidgeting						
d (CI)	0.08 (−0.03, 0.19)	−0.09 (−0.27, 0.09)				
Q_W (*k*)	10.1 (11)	1.3 (4)				
Q_T (*df*)					13.8 (14)	
Q_B (1)					2.4	
070 Fidgeting (undifferentiated)						
d (CI)	0.09 (−0.43, 0.61)	0.11 (−0.43, 0.65)	0.33 (−0.12, 0.78)			
Q_W(*k*)	11.3* (3)	0.6 (4)	10.6 (6)			
Q_T (*df*)				11.9* (6)	23.8* (8)	12.8 (9)
Q_B (1)				0.0	1.9	1.6

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. The *Q* statistics are homogeneity statistics; significance indicates rejection of the hypothesis of homogeneity of effect sizes (*d*s). Therefore, bigger *Q*s indicate less homogeneity. Q_T = homogeneity among all estimates for a particular cue; *df* = degree of freedom; Q_B = homogeneity between the two levels of the moderator being compared. CI = 95% confidence interval; Q_W = homogeneity of *d*s within the level of the moderator; *k* = number of independent estimates.
* $p < .05$.

Table 12
Cues to Deception: Differences Between Unplanned and Planned Communications

Cue	k_1	k_2	*d*	CI	*Q*
001 Response length	6	3	0.07	−0.06, 0.20	6.3
009 Response latency	4	1	**0.20***	0.07, 0.34	8.7
018 Illustrators	3	1	0.03	−0.18, 0.11	0.4
027 Eye contact	3	1	−0.09	−0.23, 0.06	0.8
037 Silent pauses	2	2	0.57	0.00, 1.14	10.1*
055 Head nods	3	1	−0.11	−0.25, 0.04	3.1
058 Smiling	3	1	0.07	−0.08, 0.22	1.2
070 Fidgeting (undifferentiated)	3	2	−0.03	0.19, 0.14	1.6

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. Effect sizes (*d*s) were computed by subtracting the *d* for planned messages from the *d* for unplanned messages. Therefore, more positive *d*s indicate that the behavior was more positively associated with deception for the unplanned messages than for the planned ones. k_1 = total number of *d*s; k_2 = number of *d*s that could be estimated precisely; CI = 95% confidence interval; *Q* = homogeneity statistic (significance indicates rejection of the hypothesis of homogeneity of *d*s; therefore, bigger *Q*s indicate less homogeneity).
* $p < .05$.

than when they were telling the truth, but when the senders planned their messages, they began responding relatively more quickly when lying than when telling the truth. There were also somewhat more silent pauses in the deceptive presentations than the truthful ones when those presentations were not planned than when they were planned ($d = 0.57$, $p = .05$).

Duration of the presentations. We predicted that if social actors needed to sustain their presentations for greater lengths of time, cues to deception would be clearer and more numerous. We used the mean duration of the messages in each study as an approximation of the degree to which social actors needed to sustain their presentations over time. Because duration is a continuous variable, there are no separate groups. Instead, a significant Q_B statistic indicates that the effect sizes were not homogeneous (i.e., the moderator was significant), and the unstandardized beta indicates the direction of the effect.

There were three cues for which at least eight independent estimates were available: response length ($Q_B = 5.4$, $k = 13$); response latency ($Q_B = 6.1$, $k = 8$); and pitch ($Q_B = 6.6$, $k = 8$), and for all three, Q_B indicated that the effect sizes were not homogeneous across message lengths. This means that all three cues varied significantly with the duration of the presentations. When presentations were sustained for greater amounts of time, deceptive responses were especially shorter than truthful ones ($b = -0.008$), and they were preceded by a longer latency ($b = 0.034$). Lies, relative to truths, were also spoken in an especially higher pitched voice when the presentations lasted longer ($b = 0.002$).

Communications that were or were not about transgressions. We expected to find stronger cues to negativity and tension in studies in which social actors lied about transgressions than in those in which the lies were not about transgressions. As shown in Table 13, this was an important moderator of cues to deception.

When the lie was about a transgression, compared with when it was not, liars took longer to begin responding than did truth tellers ($d = 0.27$ vs. -0.01). Once they started talking, they talked significantly faster than truth tellers ($d = 0.32$ vs. 0.01). They also seemed more tense overall ($d = 0.51$ vs. 0.09), and they blinked more ($d = 0.38$ vs. 0.01). A trend suggested that they tended to avoid eye contact more ($d = -0.13$ vs. 0.04, $p = .07$). There were also some cues suggestive of inhibition: People lying about transgressions made fewer foot or leg movements ($d = -0.24$ vs. -0.04), and they fidgeted less ($d = -0.14$ vs. 0.07 for self-fidgeting, $d = -0.16$ vs. 0.24 for undifferentiated fidgeting). Once again, the effect for non-ah disturbances was contrary to expectations: Lies about transgressions included fewer such disturbances than truths; the lies that were not about transgressions included relatively more of them ($d = -0.24$ vs. 0.17). Within the transgression condition, the effect sizes for response latency, rate of speaking, non-ah disturbances, foot or leg movements, tension, blinking, and self-fidgeting all differed significantly, or nearly so, from zero. Within the no-transgression condition, only the effect for undifferentiated fidgeting differed from zero.

Overall differences in the magnitude of the cues to deception for lies about transgressions compared with lies about other topics are also noteworthy. For 11 of the 12 cues, the absolute value of the effect was bigger for the lies about transgressions than for the other lies. In some instances, however, the direction of the effect was contrary to predictions (e.g., non-ah disturbances, fidgeting).

Interactivity. Buller and Burgoon's (1996) formulation predicts greater pleasantness, fluency, composure, involvement, and immediacy with increasingly interactive contexts. Effect sizes differed significantly for interactive paradigms relative to noninteractive ones for three cues: details ($Q_B = 4.41$), pitch ($Q_B = 8.21$), and blinking ($Q_B = 13.15$). Liars offered significantly fewer details than truth tellers in interactive contexts ($d = -0.33$; 95% confidence interval [CI] $= -0.51, -0.15$; $k = 20$); for noninteractive contexts, the effect was negligible ($d = -0.06$; CI $= -0.51, 0.39$; $k = 4$). This result does not seem consistent with Buller and Burgoon's predictions. Liars in interactive contexts spoke in a significantly higher pitched voice than did truth tellers ($d = 0.35$; CI $= 0.07, 0.64$; $k = 9$); for noninteractive contexts, there was a very small effect in the opposite direction ($d = -0.06$; CI $= -0.45, 0.33$; $k = 3$). In that pitch typically rises with stress, this result is inconsistent with the prediction that liars would show more composure with increasing interactivity. Finally, liars in noninteractive contexts blinked significantly more than truth tellers ($d = 0.29$; CI $= 0.03, 0.56$; $k = 4$); in interactive contexts, there was little difference ($d = -0.06$; CI $= -0.21, 0.80$; $k = 12$). In that blinking can be a sign of tension, this result is consistent with predictions.

Cues measured objectively and subjectively. To test our prediction that cues based on subjective impressions would more powerfully discriminate truths from lies than cues measured objectively, we searched the data set for cues that were assessed subjectively and objectively and that had at least three estimates per assessment type. Five cues that met the criterion are shown in Table 14. In addition, we compared the verbal immediacy composite (Cue 019), which is based on the objective scoring of linguistic forms, with the verbal and vocal immediacy cue (Cue 025), which is based on subjective impressions.

Three of the six comparisons were significant, and all of them showed that the effect sizes were stronger when the cues were assessed subjectively than when they were measured objectively. Impressions of immediacy separated truths from lies more power-

Table 13
Cues to Deception When Senders Did and Did Not Commit a Transgression

Cue	Condition		Q_T (*df*)	Q_B (1)
	No transgression	Transgression		
001 Response length				
d (CI)	−0.02 (−0.11, 0.08)	−0.08 (−0.25, 0.10)	92.1* (48)	0.7
Q_W (*k*)	74.6* (38)	16.7 (11)		
009 Response latency				
d (CI)	−0.07 (−0.24, 0.11)	0.27 (−0.02, 0.55)	112.4* (31)	13.7*
Q_W (*k*)	67.4* (24)	31.3* (8)		
010 Rate of speaking				
d (CI)	0.01 (−0.08, 0.10)	**0.32*** (0.13, 0.52)	21.7 (22)	6.6*
Q_W (*k*)	8.7 (18)	6.4 (5)		
027 Eye contact				
d (CI)	0.04 (−0.05, 0.14)	−0.13 (−0.33, 0.07)	41.1 (31)	3.3
Q_W (*k*)	24.4 (26)	13.3* (6)		
035 Non-ah disturbances				
d (CI)	0.17 (−0.04, 0.38)	−0.24 (−0.49, 0.01)	60.5* (16)	19.7*
Q_W (*k*)	6.5 (11)	34.3* (6)		
037 Silent pauses				
d (CI)	−0.01 (−0.15, 0.14)	0.10 (−0.24, 0.43)	18.5 (14)	0.5
Q_W (*k*)	11.8 (10)	6.2 (5)		
038 Filled pauses				
d (CI)	0.01 (−0.13, 0.14)	−0.03 (−0.26, 0.21)	22.2 (15)	0.1
Q_W (*k*)	9.5 (11)	12.6* (5)		
048 Foot or leg movements				
d (CI)	−0.04 (−0.12, 0.04)	**−0.24*** (−0.38, −0.09)	20.4 (27)	3.8*
Q_W (*k*)	11.4 (21)	5.2 (7)		
061 Nervous, tense				
d (CI)	0.09 (−0.11, 0.29)	**0.51*** (0.28, 0.75)	37.3* (15)	13.9*
Q_W (*k*)	15.2 (12)	8.2 (4)		
066 Blinking				
d (CI)	0.01 (−0.14, 0.16)	**0.38*** (0.03, 0.73)	54.4* (16)	12.2*
Q_W (*k*)	40.5* (13)	1.7 (4)		
068 Self-fidgeting				
d (CI)	0.07 (−0.03, 0.17)	−0.14 (−0.28, −0.00)	19.5 (17)	5.7*
Q_W (*k*)	8.2 (12)	5.5 (6)		
070 Fidgeting (undifferentiated)				
d (CI)	**0.24*** (0.02, 0.46)	−0.16 (−0.58, 0.27)	28.2* (13)	6.1*
Q_W (*k*)	18.1 (10)	4.1 (4)		

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. The *Q* statistics are homogeneity statistics; significance indicates rejection of the hypothesis of homogeneity of effect sizes (*d*s). Therefore, bigger *Q*s indicate less homogeneity. Q_T = homogeneity among all estimates for a particular cue; *df* = degree of freedom; Q_B = homogeneity between the two levels of the moderator being compared. CI = 95% confidence interval; Q_W = homogeneity of *d*s within the level of the moderator; *k* = number of independent estimates.
* $p < .05$.

fully than did objective measures of immediacy ($d = -0.55$ vs. −0.31; only the *d* for subjective impressions was significant). When eye contact was based on subjective impressions, liars showed somewhat less eye contact than truth tellers ($d = -0.28$); there was virtually no difference when eye contact was measured objectively ($d = 0.04$). Similarly, subjective impressions of facial pleasantness indicated that liars were significantly less facially pleasant than truth tellers ($d = -0.20$), but this did not occur when facial pleasantness was measured objectively ($d = 0.07$).

Discussion

Previous perspectives on cues to deception have pointed to the predictive value of factors such as the feelings of guilt or apprehensiveness that people may have about lying, the cognitive challenges involved in lying, and the attempts people make to control their verbal and nonverbal behaviors (e.g., Ekman, 1985/1992; Ekman & Friesen, 1969; Zuckerman et al., 1981). Unlike past formulations, our self-presentational perspective is grounded in psychology's growing understanding of the nature of lying in everyday life. Lying, we now know, is a fact of daily life, and not an extraordinary event. Lies, like truths, are often told in the pursuit of identity-relevant goals. People frequently lie to make themselves (or sometimes others) look better or feel better; they try to appear to be the kind of person they only wish they could truthfully claim to be (B. M. DePaulo, Kashy, et al., 1996). Now that we have recognized the pedestrian nature of most lie telling in people's lives, the factors underscored by others assume their rightful place.

Table 14
Cues to Deception Based on Objective and Subjective Measures

Cue	Measurement		Q_T (*df*)	Q_B (1)
	Objective	Subjective		
004 Details				
d (CI)	**−0.27*** (−0.50, −0.04)	**−0.32*** (−0.58, −0.07)	76.2* (23)	0.3
Q_W (*k*)	34.9* (14)	41.0* (10)		
019 Verbal immediacy with 025 Verbal, vocal immediacy				
d (CI)	−0.31 (−0.73, 0.10)	**−0.55*** (−0.88, −0.23)	28.7* (8)	3.9*
Q_W (*k*)	2.4 (3)	26.3* (7)		
026 Nonverbal immediacy				
d (CI)	−0.08 (−0.26, 0.11)	−0.07 (−0.28, 0.14)	6.9 (10)	0.0
Q_W (*k*)	2.2 (7)	4.6 (4)		
027 Eye contact				
d (CI)	0.04 (−0.05, 0.12)	−0.28 (−0.58, 0.02)	41.1 (31)	5.1*
Q_W (*k*)	30.0 (27)	5.9 (5)		
054 Facial pleasantness				
d (CI)	0.07 (−0.18, 0.33)	**−0.20*** (−0.37, −0.03)	25.1 (12)	6.7*
Q_W (*k*)	2.3 (8)	16.1* (5)		
064 Relaxed posture				
d (CI)	−0.00 (−0.24, 0.24)	−0.05 (−0.33, 0.23)	19.6 (12)	0.2
Q_W (*k*)	0.0 (9)	19.5* (4)		

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. Bold type indicates statistical significance. The *Q* statistics are homogeneity statistics; significance indicates rejection of the hypothesis of homogeneity of effect sizes (*d*s). Therefore, bigger *Q*s indicate less homogeneity. Q_T = homogeneity among all estimates for a particular cue; *df* = degree of freedom; Q_B = homogeneity between the two levels of the moderator being compared. CI = 95% confidence interval; Q_W = homogeneity of *d*s within the level of the moderator; *k* = number of independent estimates.
* $p < .05$.

Previous Perspectives on Cues to Deception

Feelings While Lying

In that the behaviors or feelings that people try to hide with their lies are usually only mildly discrediting, feelings of guilt should be mild as well. Similarly, for most lies, the sanctions attendant on getting caught are minimal; thus, liars should ordinarily seem only slightly more apprehensive than truth tellers. Perhaps these faint feelings of guilt and apprehensiveness account for the twinge of discomfort reported by the tellers of everyday lies. We believe that the discomfort is also born of the one identity-relevant implication that is common to all liars: They are willing to make claims they believe to be untrue.

Two predictions follow from this analysis. First, cues to negativity and tension will generally be weak. However, when liars have reason to feel especially guilty about their lies or apprehensive about the consequences of them, as when they are lying about transgressions, then those cues should be stronger. Consistent with predictions, we did find some of the expected cues in our analyses that combined across all studies. For example, liars made more negative statements than did truth tellers, and they appeared more tense. When we looked separately at the lies that were and were not about transgressions, we found that the cues to lies about transgressions were more plentiful and more robust than the cues to deception for any level of any of the other moderators we examined. In contrast, lies that were not about transgressions were barely discriminable from the truths.

The self-presentational perspective accords importance, not only to the feelings that liars experience more routinely than do truth tellers, but also to the feelings that truth tellers genuinely experience and that liars can only try to fake. When social actors are truthfully presenting aspects of themselves that are especially important to them, they have an emotional investment that is not easily simulated by those who only pretend to have such personal qualities. They also have the support of a lifetime of experiences at living the part. Liars' performances, then, would pale in comparison. Consistent with this formulation is our finding that liars were generally less forthcoming than truth tellers, and their tales were less compelling. For example, liars provided fewer details than did truth tellers. In contrast, truth tellers sounded more involved, more certain, more direct, and more personal.

Arousal

Pupil dilation and pitch did function as cues to deception and could be regarded as supportive of the hypothesized importance of generalized arousal. However, we believe that it is theoretically and empirically more precise and defensible to interpret these cues as indicative of particular attentional or information-processing activities or of specific affective experiences (e.g., Cacioppo, Petty, & Tassinary, 1989; Ekman et al., 1983; Neiss, 1988; Sparks & Greene, 1992).

Cognitive Complexities

Several theoretical statements share the assumption that lie telling is more cognitively challenging than telling the truth (e.g., Buller & Burgoon, 1996; Zuckerman et al., 1981). From our

self-presentational perspective, we instead agree with McCornack (1997) in questioning that assumption. Because lie telling is so routinely practiced, it may generally be only slightly more challenging than telling the truth.

In the overall analyses combining all estimates of a given cue, we found some indications that liars may have been more preoccupied and more cognitively taxed than truth tellers. The level of involvement in their words and in their voices, which does not quite measure up to that of truth tellers, is one such possibility. So, too, is the impression of uncertainty that they convey. The discrepancies in their self-presentations may also be telling. Some of the expected cues, such as the longer response latencies, the shorter responses, and the more hesitant responses, did not emerge in the analyses that combined results across all studies. However, moderator analyses show that, as we had predicted, these cues were more revealing when the self-presentations may have been more challenging to generate. When social actors could not plan their presentations, compared with when they could, the response latencies of deceivers were greater than those of truth tellers, and their presentations tended to include more silent pauses. When presentations were sustained for greater lengths of time, liars' latencies to respond were again greater than those of truth tellers, and their responses were briefer and spoken in a higher pitch.

Attempted Control

From our self-presentational perspective, liars are attempting to control not just their behaviors (e.g., Zuckerman et al., 1981) but also their thoughts and feelings. Truth tellers attempt these forms of self-regulation as well, but liars' efforts are experienced as more deliberate. Deliberate self-regulatory efforts may be especially likely to usurp mental resources, leaving liars more preoccupied than truth tellers. Liars' tales therefore seem less compelling and less forthcoming. Because so many of the little lies that people tell require scant self-regulatory effort, the resulting cues generally are weak. However, when self-regulatory efforts intensify, as when social actors are highly motivated (especially by identity-relevant goals) to get away with their lies, then cues intensify, too.

Consistent with our formulation is our finding that motivated liars (compared with less motivated ones) had even higher pitched voices than truth tellers, and they seemed even more tense and inhibited. When the motivation was one that linked success at deceit to identity and self-presentational concerns, cues became clearer still. When social actors saw their success as reflective of important aspects of themselves, compared with when there were no particular incentives, their lies were betrayed by the time it took them to begin their deceptive responses (relative to their truthful ones), the relative brevity of those responses, the silent hesitations within them, and the higher pitch in which they were spoken. Incentives that were not self-relevant resulted in cues to deception that differed less markedly from the cues that occurred when no special incentive was in place.

Interactivity

In Buller and Burgoon's (1996) interpersonal model of deception, the central theoretical construct is the degree of interaction between the liar and the target of the lies. The model predicts greater involvement and immediacy with greater interactivity, but our review found that liars in interactive contexts, relative to noninteractive ones, provided fewer details than did truth tellers. Eye contact, a nonverbal immediacy cue, did not differentially predict deception in interactive versus noninteractive contexts. Buller and Burgoon's model predicts greater composure with greater interaction, but we found that higher pitch—an indicator of lack of composure—was a cue to deception in interactive contexts only. Blinking was a more powerful cue to deception in noninteractive contexts. Other cues to composure, such as nervousness and fidgeting, did not vary with the interactivity of the context. Their model predicts greater fluency with increasing interaction, but our analysis indicates interactivity was not a significant moderator of any of the cues to fluency (non-ah speech disturbances, silent pauses, filled pauses).

We think Buller and Burgoon's (1996) interactivity predictions failed because their construct is theoretically imprecise (B. M. DePaulo, Ansfield, & Bell, 1996). Totally noninteractive contexts (e.g., leaving a lie on a target person's voicemail) differ from totally interactive ones (e.g., unscripted face-to-face interactions) in many important ways. One is the mere presence of the other person, even apart from any interaction with that person. That presence has the potential to affect self-awareness, awareness of the potential impact of the lie on that person, the salience of self-presentational goals, and feelings of accountability (e.g., Schlenker, 2002; Schlenker, Britt, Pennington, Murphy, & Doherty, 1994; Wicklund, 1982). Interactive exchanges entangle participants in multiple roles and tasks (Buller & Burgoon, 1996; Ekman & Friesen, 1969), which can be cognitively challenging. However, to the extent that interactive exchanges are the more familiar mode of communication, participants may find them less challenging than noninteractive communications. From a conversational analysis perspective, the significance of interactive processes may lie in the interpretive frame they provide (e.g., Brown & Levinson, 1987; Grice, 1989; Jacobs, Brashers, & Dawson, 1996; McCornack, 1992). For example, whether a person has provided too little, too much, unclear, or irrelevant information in response to an inquiry is more readily assessed within the context of the conversation than apart from it. To Buller and Burgoon, what was especially important about interaction is the opportunity it affords the participants to evaluate the effectiveness of their attempts (e.g., the liars can determine whether their targets seem suspicious) and adjust their behavior accordingly.

Some of the ways in which interactive contexts differ from noninteractive ones may be inconsistent with each other in their implications for cues to deception. Clarity should follow, not from Buller and Burgoon's (1996) approach of enumerating variables that moderate the effects of interactivity, but from looking separately at the important component processes. An example of this approach is Levine and McCornack's (1996, 2002) analysis of the "probing effect," which is the counterintuitive finding that communicators who are probed by their targets are perceived as more honest than those who are not probed. The initial explanation for this effect was behavioral adaptation: Probed communicators recognized the skepticism of their targets, and adapted their behavior to appear more truthful (e.g., Buller & Burgoon, 1996; Stiff & Miller, 1986). However, when Levine and McCornack (2002) manipulated the presence of probes in videotaped interviews in which the communicators' behavior was held constant (ruling out

the behavioral adaptation explanation) the probing effect still occurred.

The Self-Presentational Perspective on Cues to Deception

Ordinary Imperfections and Unusual Contents

Only the self-presentational perspective predicts that lies are characterized by fewer ordinary imperfections and unusual contents than truths. Drawing from research and theory on credibility assessment (e.g., Yuille, 1989), we suggested that liars try to anticipate the kinds of communications that targets would find credible and that in doing so, fall prey to their own misconceptions about the nature of truth telling. Some of our results were consistent with that prediction. People who spontaneously corrected themselves and who admitted that they could not remember everything about the story they were relating, were more likely to be telling the truth than to be lying. It was also truth tellers who were somewhat more likely to tell stories richer in contextual embedding and unusual details.

The Looks and Sounds of Deceit Are Faint

We found evidence for all five of the categories of cues we predicted: Deceptive presentations (relative to truthful ones) were in some ways less forthcoming, less compelling, more negative, more tense, and suspiciously bereft of ordinary imperfections and unusual details. Fundamental to the self-presentational perspective is the prediction that these cues would be weak. In fact, they were. The median effect size of the 88 cues was just |0.10|. Only 3 of these cues had effect sizes greater than |0.40|.

Results of the moderator analyses suggest that pronouncements about the faintness of the signs of deceit are both understated and exaggerated. Lies told by social actors who have no special motivation to succeed in their presentations and lies that are not about transgressions leave almost no discernible cues. Even some of the cues that did seem promising in the results combined across all estimates—for example, cues to tension and to pitch—lost a bit of their luster for self-presentations that were not about transgressions and that were not driven by any particular incentives. These nearly cueless lies most closely resemble the deceptive presentations of self in everyday life. However, when social actors were using their lies to hide matters that could spoil their identities (such as when they were lying about transgressions), and when their success at lying was linked to important aspects of their self-concepts, then cues to deception were no longer quite so faint.

When Will Cues to Deception Be Clearer?

Using our self-presentational perspective, we were able to predict some important moderators of the strength of cues to deception. In this section, we consider five other ways in which the results of our overall analyses may have underestimated the potential for verbal and nonverbal cues to separate truths from lies.

First, perhaps effect sizes for cues to deception would be more impressive if they were computed separately for the different emotions that senders may be trying to conceal or to convey (Ekman, 1985/1992). There were not enough relevant studies available to test this possibility adequately in the present review. Second, in this review, as in most of the studies in the literature, we tested the predictive power of each behavioral cue individually. However, the degree to which lies can be discriminated from truths could potentially be improved if combinations of cues were considered (e.g., Ekman, O'Sullivan, Friesen, & Scherer, 1991; Vrij, Edward, Roberts, & Bull, 2000). Third, if the replicability of a set of cues within a particular context can be established, the implications could be important even if the particular cues could not be generalized to different contexts. For example, behavioral cues believed to be indicative of deceit in the context of polygraph testing (e.g., Reid & Arthur, 1953) or criminal interrogations (e.g., Macdonald & Michaud, 1987) are worth establishing even if some of them occur infrequently outside of those contexts. Fourth, it is possible that particular individuals telegraph their lies in idiosyncratic yet highly reliable ways (Vrij & Mann, 2001) that are not captured by our meta-analytic approach. Finally, our results suggest that truths and lies may be discriminated more powerfully by using subjective measures rather than objective ones. However, detailed coding systems that are carefully validated and used to test theoretically based predictions may enable more precise discriminations than untrained observers could achieve with their subjective impressions (e.g., Ekman & Friesen, 1978; Scherer, 1982).

When Truths and Lies Switch Sides

It is important to emphasize that there are exceptions to the predictions we derived from the self-presentational perspective. There are times when people more readily embrace their deceptive presentations than their truthful ones. For example, a man who has long fantasized about being a war hero and has claimed repeatedly to have been one may eventually make that false claim more convincingly than he can describe his actual war-year experiences teaching in his homeland, which was at peace. There are also times when truthful presentations are enacted with a greater sense of deliberateness than are deceptive ones. Self-incriminating truths are examples of this (cf. Kraut, 1978). When the tables are turned, the cues are too; it is the truth tellers who seem less forthcoming, more tense, and more negative, and it is they who tell stories that sound less compelling.

The behaviors we have described as cues to deception, then, may be more accurately described as cues to the hypothesized processes (e.g., attempts to regulate thoughts, feelings, and behaviors) and to psychological states (e.g., investment in, and familiarity with, the attempted performance). Experimental research that directly tests the role of these processes in producing the predicted cues remains to be done.

Cues to Truths, to Personalities, and to Situations

Our use of the term *cues to deception* could suggest that we are describing the ways that liars behave, but in fact we are describing the ways in which liars act differently than truth tellers. Experimental manipulations and individual differences can be linked to cues to deception by their implications for the behavior of liars or truth tellers, or both. For example, in a study in which participants were selected because they saw themselves as very independent (B. M. DePaulo et al., 1991), the truthful life stories they told that showcased their independence were more responsive to the experimental manipulations than were the life stories that were fabricated.

Caution is also in order in interpreting the moderators of cues to deception. For example, when we say that eye contact is a cue to deception when senders are motivated to get away with their lies but not when they are not motivated, we are not necessarily claiming that liars more often avoid eye contact when they have an incentive to succeed than when they do not (though they may). Instead, we are saying that the degree to which liars avoid eye contact more than truth tellers do is greater when they are motivated to succeed than when they are not. The cues we describe in our analyses of motivation as a moderator are not cues to motivation (that is a different question), they are cues to deception under different levels of motivation.

For example, people telling lies in high stakes circumstances (e.g., while on trial for murder) may be expected to seem more nervous than people telling comparable lies when the stakes are lower (e.g., in traffic court). But truth tellers may also seem more nervous in the high stakes setting. Nervousness would only be a cue to deception in the murder trial if liars feel even more nervous than truth tellers. It would be a stronger cue to deception in the murder trial than in traffic court only if the degree to which liars are more nervous than truth tellers is greater in the murder trial than in traffic court.

To make these important distinctions clearer in future research, we suggest investigators adopt a reporting style that has rarely been used in the deception literature: Mean levels of the cues should be reported separately for truths and lies at each level of the experimental manipulations and for each of the individual difference categories. Results could then be analyzed in the familiar factorial. That would clearly indicate, for example, whether people seem more nervous when the stakes are high than when they are low, regardless of whether they are lying or telling the truth; whether they are more nervous when lying than when telling the truth, regardless of the stakes; and whether the degree to which they are more nervous when lying than when telling the truth is greater when the stakes are high than when they are low.

The implications for our understanding of individual differences are also important. For example, we claimed above that liars make an effort to seem credible whereas truth tellers take their credibility for granted. This may seem readily countered by the familiar finding from the social anxiety literature indicating that socially anxious people rarely take anything positive about themselves for granted (e.g., B. M. DePaulo, Kenny, Hoover, Web, & Oliver, 1987; Leary & Kowalski, 1995; Schlenker & Leary, 1982), but that is a main-effect finding about the ways in which socially anxious people differ from socially secure people. If socially anxious people do indeed feel insecure about the credibility of their truths, but they feel even more insecure about the credibility of their lies, then the predictions we outlined should apply to them as well as to others.

When Confounded Designs Are of Practical Significance

All of the studies of transgressions were marred by a confound: The people who lied were only those who committed a transgression, and the people who told truths were only those who did not. It is not clear, then, whether any of the resulting cues were cues to deception at all. They may have been cues to the transgression. From a scientific stance, we have no unambiguous data from these studies about the ways that lies differ from truths. However, when considered from an applied perspective, these studies may tell practitioners exactly what they want to know. We do not wish to minimize the frequency or significance of false confessions (Kassin, 1997), but ordinarily, credibility is not much at issue when people admit to discrediting acts. Of greater interest are the ways in which truthful denials can be distinguished from deceptive ones.

Blurring the Line Between Truths and Lies

In the studies we reviewed, the line between truths and lies was drawn clearly. There were good methodological reasons for this. To distinguish the characteristics of lies from those of truths, it is of course necessary to first distinguish lies from truths. However, outside of the lab, the line between them is often blurred.

The self-presentational perspective underscores the similarities between truths and lies. Telling the whole truth and nothing but the truth is rarely possible or desirable. All self-presentations are edited. The question is one of whether the editing crosses the line from the honest highlighting of aspects of identity that are most relevant in the ongoing situation to a dishonest attempt to mislead. This suggests that truthful and deceptive self-presentations may be construed more aptly as aligned along a continuum rather than sorted into clear and distinct categories. But there may be categorical aspects as well. For example, B. R. Schlenker (1982) distinguished among self-presentations that fit within people's private latitudes of acceptance, neutrality, or rejection (cf. Sherif & Hovland, 1961). Self-presentations that are well within the boundaries of the latitude of acceptance are clearly truths. These presentations capture attitudes, feelings, and personal qualities that people unambiguously accept as their own. Self-presentations that are at the cusp of the latitude of acceptance just barely pass as truths. Self-presentations that are well within people's private latitudes of rejection are clearly lies. The most elusive statements are those falling in the latitude of neutrality; the editing of these self-statements slips beyond the bounds of honesty but stops just short of the brink of deceit. One implication of this conceptualization is that the effect sizes we reported for cues to deception, though generally small, may actually be overestimates of the true differences between truths and lies in everyday life (McCornack, 1997). In the studies we reviewed, the truths and lies were typically well within the bounds of acceptance and rejection. In many naturalistic situations, they are not.

Definitional dilemmas also arise in situations in which neither truths nor lies are entirely satisfying to people trying to decide what to say. Bavelas, Black, Chovil, and Mullett (1990a, 1990b) have described many of these intriguing predicaments in which people may prefer not to lie but dislike the alternative of telling a hurtful or costly truth. For example, what do people say when an acquaintance asks their opinion of a class presentation that was poorly organized and badly delivered? Bavelas et al.'s (1990a, 1990b) answer was that they equivocate: They make themselves unclear; they refrain from answering the question directly and avoid stating their true opinions. Yet, Bavelas et al. (1990a, 1990b) argued that equivocal answers are truthful. When participants in those studies read the responses to the classmate, they rated the responses as closer to the truthful end of the scale (labeled as *presentation was poorly organized and badly delivered*) than closer to the deceptive end (labeled as *well organized and well delivered*). This criterion of truthfulness bypasses the question of

intentionality. The perceivers of self-presentations have the full authority to make the judgments that determine what counts as deceptive.

We are not yet ready to hand over that authority to the perceivers. Definitional issues aside, though, we think that studies of social actors' responses to communicative dilemmas such as the ones described by Bavelas et al. (1990a, 1990b) are important for another reason. They point to some of the ways in which people's self-presentational strategies can be more imaginative and their goals more complex than much of the current literature on cues to deception might suggest.

In a pair of studies, B. M. DePaulo and Bell (1996) created the kind of dilemma that Bavelas et al. (1990a, 1990b) described. Students chose their favorite and least favorite paintings from the ones on display in the room, and then each interacted with an artist who claimed that the student's least favorite painting was one of her own. When students were asked what they thought of that painting, they amassed misleading evidence (i.e., they mentioned aspects of the painting they really did like while neglecting to note all of the aspects they disliked), and they implied that they liked the painting by emphasizing how much they disliked other paintings in the room that were painted by other artists (without stating directly that they liked the painting in question). B. M. DePaulo and Bell (1996) posited a "defensibility postulate" to account for these ploys. The students were trying to communicate in ways that could be defended as truthful (e.g., they really did like the aspects of the paintings they mentioned, and they really did dislike the other artists' work) but that would also mislead the artist about their true opinions. These strategies are not captured by any of the objectively measured cues we reviewed. Yet, they provide hints about what people are trying to accomplish in these challenging situations that are perhaps more telling than what can be learned by counting behaviors such as foot movements and speech disturbances.

Laboratory Lies

The studies we reviewed included lies told by criminal suspects and people in the news, but in most of the studies, college students told truths and lies in laboratory experiments. One common critique of such studies (e.g., Miller & Stiff, 1993) is that the participants typically are not highly motivated to get away with their lies. In many of these studies, there were neither rewards for successful lies nor sanctions for unsuccessful ones. Moreover, the participants often told their truths and lies because they were instructed to do so as part of the experimental procedures; they did not freely choose to lie or to tell the truth. A related critique (Miller & Stiff, 1993) is that in many studies, the degree of interaction between the social actor and another person was minimal; sometimes participants told their truths and lies with little or no feedback or skepticism from any other person.

Although these critiques are often cast as attacks on the ecological validity of studies of deception, as such they may be largely wrong. The critiqued characteristics of studies of deception may in fact aptly capture the nature of the vast majority of lies (B. M. DePaulo, Ansfield, & Bell, 1996; B. M. DePaulo, Kashy, et al., 1996). The everyday lies that people tell are rarely consequential. In many instances, they are essentially obligatory. The guest who is treated to an extensively prepared but unpalatable dinner rarely feels free to say truthfully that the food was disgusting. The students whose late-night partying has interfered with the timely completion of their take-home exams tell lies to the course instructor just as readily as if they had been explicitly instructed to do so. Furthermore, the little lies of everyday life rarely trigger an extended discourse. The host or hostess nods in appreciation, and the course instructor waits for the students to depart before rolling his or her eyes.

One way that truths and lies told in the laboratory really may fail to reflect the dynamics of self-presentation outside of the lab is that people may be more self-conscious about their truthful presentations than they are ordinarily. If this is so, then the feeling of deliberateness that we have underscored in our analysis may separate truths from lies less definitively in the lab. In this respect, the effect sizes of the cues to deception we have reported may underestimate the true magnitude of the effects.

Discriminating Cues to Deception From Cues to Other Processes and States

We have combined the results of more than 1,300 estimates of the relationship between behaviors and deceit; therefore, we can name with some confidence some of the cues to deceit. But the behaviors that are indicative of deception can be indicative of other states and processes as well. In fact, we used a consideration of such states and processes to generate predictions about the kinds of behaviors we might expect to be indicative of deceit. However, the issue of discriminant validity still looms large. For example, is it possible to distinguish the anxiety that is sometimes associated with lying from the fear of being unfairly accused of lying (e.g., Bond & Fahey, 1987) or even from anxiety that has no necessary connection to deceit (e.g., nervousness about public speaking, shyness, distress about a personal problem)? Lying sometimes results in verbal and nonverbal inconsistencies, but so does genuine ambivalence (B. M. DePaulo & Rosenthal, 1979a, 1979b). Can the two be differentiated? Some attempts have been made to begin to address these kinds of issues (e.g., deTurck & Miller, 1985), and we expect to see some progress in the future. However, we also expect most future reports to end with the same cautionary note we issue here: Behavioral cues that are discernible by human perceivers are associated with deceit only probabilistically. To establish definitively that someone is lying, further evidence is needed.

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Appendix A

Definitions of Cues to Deception

	Cue	Definition
		Are Liars Less Forthcoming Than Truth Tellers?
001	Response length	Length or duration of the speaker's message
002	Talking time	Proportion of the total time of the interaction that the speaker spends talking or seems talkative
003	Length of interaction	Total duration of the interaction between the speaker and the other person
004	Details	Degree to which the message includes details such as descriptions of people, places, actions, objects, events, and the timing of events; degree to which the message seemed complete, concrete, striking, or rich in details
005	Sensory information (RM)	Speakers describe sensory attributes such as sounds and colors
006	Cognitive complexity	Use of longer sentences (as indexed by mean length of the sentences), more syntactically complex sentences (those with more subordinate clauses, prepositional phrases, etc.), or sentences that includes more words that precede the verb (mean preverb length); use of the words *but* or *yet*; use of descriptions of people that are differentiating and dispositional
007	Unique words	Type–token ratio; total number of different or unique words
008	Blocks access to information	Attempts by the communicator to block access to information, including, for example, refusals to discuss certain topics or the use of unnecessary connectors (*then*, *next*, etc.) to pass over information (The volunteering of information beyond the specific information that was requested was also included, after being reversed.)
009	Response latency	Time between the end of a question and the beginning of the speaker's answer
010	Rate of speaking	Number of words or syllables per unit of time
011	Presses lips (AU 23, 24)	Lips are pressed together
		Do Liars Tell Less Compelling Tales Than Truth Tellers?
012	Plausibility	Degree to which the message seems plausible, likely, or believable
013	Logical structure (CBCA)	"Consistency and coherence of statements; collection of different and independent details that form a coherent account of a sequence of events" (Zaparniuk, Yuille, & Taylor, 1995, p. 344)
014	Discrepant, ambivalent	Speakers' communications seem internally inconsistent or discrepant; information from different sources (e.g., face vs. voice) seems contradictory; speaker seems to be ambivalent
015	Involved, expressive (overall)	Speaker seems involved, expressive, interested
016	Verbal and vocal involvement	Speakers describe personal experiences, or they describe events in a personal and revealing way; speakers seems vocally expressive and involved
017	Facial expressiveness	Speaker's face appears animated or expressive
018	Illustrators	Hand movements that accompany speech and illustrate it
019	Verbal immediacy	Linguistic variations called *verbal nonimmediacy devices*, described by Wiener and Mehrabian (1968) as indicative of speakers' efforts to distance themselves from their listener, the content of their communications, or the act of conveying those communications. Wiener and Mehrabian (1968) described 19 categories and subcategories, such as spatial nonimmediacy (e.g., "There's Johnny" is more nonimmediate than "Here's Johnny"), temporal nonimmediacy (the present tense is more immediate than other tenses), and passivity (the passive voice is more nonimmediate than the active voice).
020	Verbal immediacy, temporal	A subcategory of verbal immediacy in which speakers use the present tense instead of past or future tenses
021	Generalizing terms	Generalizing terms (sometimes called *levelers*) such as *everyone*, *no one*, *all*, *none*, and *every*; statements implying that unspecified others agree with the speaker
022	Self-references	Speakers' references to themselves or their experiences, usually indexed by the use of personal pronouns such as *I*, *me*, *mine*, and *myself*
023	Mutual and group references	Speakers' references to themselves and others, usually indexed by the use of second-person pronouns such as *we*, *us*, and *ours*

(*Appendixes continue*)

Appendix A (*continued*)

	Cue	Definition
	Do Liars Tell Less Compelling Tales Than Truth Tellers? (*continued*)	
024	Other references	Speakers' references to others or their experiences, usually indexed by the use of third-person pronouns such as *he*, *she*, *they*, or *them*
025	Verbal and vocal immediacy (impressions)	Speakers respond in ways that seem direct, relevant, clear, and personal rather than indirect, distancing, evasive, irrelevant, unclear, or impersonal
026	Nonverbal immediacy	Speakers are nonimmediate when they maintain a greater distance from the other person, lean away, face away, or gaze away, or when their body movements appear to be nonimmediate.
027	Eye contact	Speaker looks toward the other person's eyes, uses direct gaze
028	Gaze aversion	Speakers look away or avert their gaze
029	Eye shifts	Eye movements or shifts in the direction of focus of the speaker's eyes
030	Tentative constructions	Verbal hedges such as "may," "might," "could," "I think," "I guess," and "it seems to me" (Absolute verbs, which include all forms of the verb *to be*, were included after being reversed.)
031	Verbal and vocal uncertainty (impressions)	Speakers seem uncertain, insecure, or not very dominant, assertive, or emphatic; speakers seem to have difficulty answering the question
032	Amplitude, loudness	Intensity, amplitude, or loudness of the voice
033	Chin raise (AU 17)	Chin is raised; chin and lower lip are pushed up
034	Shrugs	Up and down movement of the shoulders; or, the palms of the hand are open and the hands are moving up and down
035	Non-ah speech disturbances	Speech disturbances other than "ums," "ers," and "ahs," as described by Kasl and Mahl (1965); categories include grammatical errors, stuttering, false starts, incomplete sentences, slips of the tongue, and incoherent sounds
036	Word and phrase repetitions	Subcategory of non-ah speech disturbances in which words or phrases are repeated with no intervening pauses or speech errors
037	Silent pauses	Unfilled pauses; periods of silence
038	Filled pauses	Pauses filled with utterances such as "ah," "um," "er," "uh," and "hmmm"
039	Mixed pauses	Silent and filled pauses (undifferentiated)
040	Mixed disturbances (ah plus non-ah)	Non-ah speech disturbances and filled pauses (undifferentiated)
041	Ritualized speech	Vague terms and cliches such as "you know," "well," "really," and "I mean"
042	Miscellaneous dysfluencies	Miscellaneous speech disturbances; speech seems dysfluent
043	Body animation, activity	Movements of the head, arms, legs, feet, and/or postural shifts or leans
044	Postural shifts	Postural adjustments, trunk movements, or repositionings of the body
045	Head movements (undifferentiated)	Head movements (undifferentiated)
046	Hand movements (undifferentiated)	Hand movements or gestures (undifferentiated)
047	Arm movements	Movements of the arms
048	Foot or leg movements	Movements of the legs and/or feet
	Are Liars Less Positive and Pleasant Than Truth Tellers?	
049	Friendly, pleasant (overall)	Speaker seems friendly, pleasant, likable (Impressions of negative affect were also included after being reversed.)
050	Cooperative	Speaker seems cooperative, helpful, positive, and secure
051	Attractive	Speaker seems physically attractive
052	Negative statements and complaints	Degree to which the message seems negative or includes negative comments or complaints (Measures of positive comments were included after being reversed.)
053	Vocal pleasantness	Voice seems pleasant (e.g., positive, friendly, likable)
054	Facial pleasantness	Speaker's face appears pleasant; speakers show more positive facial expressions (such as smiles) than negative expressions (such as frowns or sneers)
055	Head nods	Affirmative head nods; vertical head movements
056	Brow lowering (AU 4)	Eyebrows are lowered
057	Sneers (AU 9, 10)	Upper lip is raised
058	Smiling (undifferentiated)	Smiling as perceived by the coders, who were given no specific definition or were given a definition not involving specific AUs (e.g., "corners of the mouth are pulled up"); laughing is sometimes included too
059	Lip corner pull (AU 12)	Corners of the lips are pulled up and back

Appendix A (*continued*)

	Cue	Definition
		Are Liars More Tense Than Truth Tellers?
060	Eye muscles (AU 6), not during positive emotions	Movement of the orbicularis oculi, or muscles around the eye, during emotions that are not positive
061	Nervous, tense (overall)	Speaker seems nervous, tense; speaker makes body movements that seem nervous
062	Vocal tension	Voice sounds tense, not relaxed; or, vocal stress as assessed by the Psychological Stress Evaluator, which measures vocal micro-tremors, or by the Mark II voice analyzer
063	Frequency, pitch	Voice pitch sounds high; or, fundamental frequency of the voice
064	Relaxed posture	Posture seems comfortable, relaxed; speaker is leaning forward or sideways
065	Pupil dilation	Pupil size, usually measured by a pupillometer
066	Blinking (AU 45)	Eyes open and close quickly
067	Object fidgeting	Speakers are touching or manipulating objects
068	Self-fidgeting	Speakers are touching, rubbing, or scratching their body or face
069	Facial fidgeting	Speakers are touching or rubbing their faces or playing with their hair
070	Fidgeting (undifferentiated)	Object fidgeting and/or self-fidgeting and/or facial fidgeting (undifferentiated)
		Do Lies Include Fewer Ordinary Imperfections and Unusual Contents Than Do Truths?
071	Unstructured production (CBCA)	"Narratives are presented in an unstructured fashion, free from an underlying pattern or structure." (Zaparniuk et al., 1995, p. 344)
072	Spontaneous corrections (CBCA)	"Spontaneous correction of one's statements" (Zaparniuk et al., 1995, p. 344)
073	Admitted lack of memory, unspecified (CBCA)	Admission of lack of memory
074	Self-doubt (CBCA)	"Raising doubts about one's own testimony; raising objections to the accuracy of recalled information" (Zaparniuk et al., 1995, p. 344)
075	Self-deprecation (CBCA)	"Inclusion of unfavorable, self-incriminating details" (Zaparniuk et al., 1995, p. 344)
076	Contextual embedding (CBCA)	"Statements that place the event within its spatial and temporal context" (Zaparniuk et al., 1995, p. 344)
077	Verbal and nonverbal interactions (CBCA)	"Verbatim reproduction of dialogue" and "descriptions of interrelated actions and reactions" (Zaparniuk et al., 1995, p. 344)
078	Unexpected complications (CBCA)	"The reporting of either an unforseen interruption or difficulty, or spontaneous termination of the event" (Zaparniuk et al., 1995, p. 344)
079	Unusual details (CBCA)	"Inclusion of detail that is not unrealistic, but has a low probability of occurrence" (Zaparniuk et al., 1995, p. 344)
080	Superfluous details (CBCA)	"Vivid and concrete descriptions of superfluous details" (Zaparniuk et al., 1995, p. 344)
081	Related external associations (CBCA)	"Reference to events or relationships that are external to the event of immediate focus" (Zaparniuk et al., 1995, p. 344)
082	Another's mental state (CBCA)	"Statements inferring the cognitive and emotional state of others involved in the event" (Zaparniuk et al., 1995, p. 344)
083	Subjective mental state (CBCA)	"Accounts of the witness's own cognitive and emotional state at the time of the event" (Zaparniuk et al., 1995, p. 344)
		Cues Listed in Appendix B[a]
084	Number of segments	Perceived number of behavioral units
085	Idiosyncratic information (RM)	Speakers mention idiosyncratic information
086	Facial shielding	Speakers appear to be shielding their face
087	Realism (RM)	The story is realistic and makes sense
088	Intensity of facial expression	Speaker's facial expression appears to be intense; rated intensity of AUs
089	Face changes	Changes in facial expressions; onset, offset, and apex phases; face seems mobile
090	Indifferent, unconcerned	Speaker seems indifferent, unconcerned
091	Seems planned, not spontaneous	Message seems planned or rehearsed
092	Cognitively busy	Speaker seems to be making mental calculations
093	Serious	Speaker seems serious, formal
094	Pitch variety	Variation in fundamental frequency
095	Pitch changes	Frequency of changes in the pitch of the voice
096	Rate change	Rate of speaking in the second half of the message minus rate of speaking in the first half

(*Appendixes continue*)

Appendix A (*continued*)

	Cue	Definition
	Cues Listed in Appendix B[a] (*continued*)	
097	Loudness variety	Standard deviation of amplitude
098	Clarity (RM)	"Clarity and vividness of the statement" (Vrij, 2000, p. 160)
099	Reconstructability (RM)	The event can be reconstructed with the information given
100	Cognitive processes (RM)	"Descriptions of inferences made by the participant at the time of the event" (Vrij, 2000, p. 160)
101	Modifiers	A subcategory of verbal nonimmediacy in which speakers qualify their responses (e.g., "sometimes") or objectify them (e.g., "it is obvious")
102	Verbally distal versus proximal	Ratio of distal (nonimmediacy) indices to proximal (immediacy) indices
103	Pronoun and tense deletion	Deviations from the use of the first person and the past tense
104	Facial immediacy (eye contact, head orientation)	Speaker is facing the other person and gazing at that person; speaker's face seems direct and intense
105	Direct orientation	Degree to which the body and head were directly oriented to the other person
106	Proximity	Speaker seems to be in close physical proximity to the other person
107	Sentence changes	Subcategory of non-ah speech disturbances in which the flow of the sentence is interrupted by a correction in the form or content (e.g., "Well she's . . . already she's lonesome"; "That was . . . it will be 2 years ago in the fall"; Mahl, 1987, p. 167)
108	Stutters	Subcategory of non-ah speech disturbances in which the speaker stutters
109	Intruding sounds	Subcategory of non-ah speech disturbances in which the speaker makes intruding sounds that are totally incoherent and are not stutters
110	Subset of non-ah	Subset of non-ah speech disturbances (interrupted words and repeated words)
111	Interruptions	Interruptions; simultaneous talk that results in a change in turns
112	Filled pause length	Duration of filled pauses
113	Unfilled pause length	Duration of unfilled pauses
114	Specific hand and arm movements	Hand movements that do not include arm movements and finger movements that do not include hand movements
115	Competent	Speaker's performance seems successful; speaker manages the conversation smoothly; speaker makes a good impression
116	Ingratiation	Speakers' use of tactics of ingratiation, such as agreeing with others' opinions or values, expressing approval of others, or revealing their own values that are relevant to the conversational context
117	Genuine smile (AU 6)	Movement of the muscles around the eye, orbicularis oculi, as well as the zygomatic major, during positive emotions
118	Feigned smile	Masking smiles involving the action of the zygomatic major and muscle movements associated with emotions that are not positive ones; incomplete smiling that appears masked or unnatural
119	Head shakes	Negative head shakes; side-to-side head movements
120	Mouth asymmetry	Mouth is asymmetrical
121	Relaxed face	Speakers appear to show nervous facial movements (reversed)
122	Hand, arm, and leg relaxation	Hands or legs are asymmetrical; hands are relaxed
123	Admitted uncertainties	Qualifying descriptions by expressions of uncertainty such as "I'm not sure but" or "at least I believe it was like that"
124	Details misunderstood (CBCA)	"Inclusion of actions and details that are not understood by the witness but may be understood by the interviewer" (Zaparniuk et al., 1995, p. 344)
125	Pardoning the perpetrator (CBCA)	"Providing explanations or rationalizations for the offender's actions" (Zaparniuk et al., 1995, p. 344)
126	Self-interest statements	Speakers' references to benefits to themselves (References to benefits to others were also included, after being reversed.)
127	Issue-related reporting style	Speakers' description stays on topic
128	Reasons for lack of memory	Speakers describe reasons for inability to provide a complete description
129	Brow raise (AU 1, 2)	Inner (AU 1) or outer (AU 2) corner of the brow is raised
130	Lip stretch (AU 20)	Lips are stretched sideways
131	Eyes closed (AU 43)	Eyes are closed
132	Lips apart (AU 25)	Lips are relaxed, parted slightly, as jaws remain closed
133	Jaw drop (AU 26)	Jaw is dropped open
134	Mentions responsibility	All mentions of responsibility for behavior, including accepting responsibility, blaming others, offering excuses or justifications, or denying participation in the behavior
135	Claims qualifications and truthfulness	Speakers' explicit claims that they have the necessary qualifications or that they are telling the truth
136	Extreme descriptions	Speakers' use of extreme descriptions of others (e.g., "the most aggressive person I know," "extremely intelligent")
137	Neutral descriptions	Speakers' use of evaluatively neutral descriptions

Appendix A (*continued*)

	Cue	Definition
	Cues Listed in Appendix B[a] (*continued*)	
138	Hypothetical statements	Speakers' references to conditions that did not currently exist but might exist in the future
139	Nonsensory-based words	Words referring to concepts not verifiable by the senses, such as *love*, *accidentally*, *interesting*, and *dishonesty*
140	Provides standard description	Speaker provides a description in a standard way (as instructed) (Modifications of the standard description were included after being reversed.)
141	Ratio of conclusion to introduction	Ratio of the number of words in the conclusion of a story to the number of words in the introduction
142	Repetition of story elements	Aspects of the story that were previously described are repeated without elaboration
143	Comments and interpretations	Speakers comment on others involved in an event or interpret the event
144	Eye blink latency	Time until the first eye blink
145	Eye flutters	"A barely discernible movement of the eyes in which, without fully breaking eye contact, the eyes 'jiggle'" (Hocking & Leathers, 1980, p. 127)
146	Eyelids tight (AU 7)	Eyelids are tightened
147	Eyelids droop (AU 41)	Eyelids are drooping
148	Lip pucker (AU 18)	Mouth is pushed forward in such a way that the lips pucker
149	Tongue out (AU 19)	Speaker's tongue is out
150	Duration of facial expression	Total duration of a facial expression
151	Hands together	Speakers' hands are clasped, folded, or otherwise touching or resting on their lap
152	Hands apart	Each hand rests separately on a different part of the body
153	Emblems	Hand movements with direct verbal translations
154	Changes in foot movements	Changes in the number of foot or leg movements over time (absolute value)
155	Pupillary changes	Changes in pupil size
156	Biting lips	Speakers are biting their lips
157	Facial reaction time	Time until the first facial movement
158	Neck muscles tightened	Neck muscles (typically the platysma muscle) are tightened

Note. RM = reality monitoring; AU = facial action unit (as categorized by Ekman & Friesen, 1978); CBCA = Criteria-Based Content Analysis.

[a] Any given cue is included in Tables 3–7 only if there are at least three independent estimates of it, at least two of which could be calculated precisely. All other cues are reported in Appendix B.

(*Appendixes continue*)

Appendix B

Cues Based on a Small Number of Estimates (Organized by Category of the Self-Presentational Perspective) and Miscellaneous Cues

	Cue	k_1	k_2	d	CI
	Are Liars Less Forthcoming Than Truth Tellers?				
084	Number of segments	1	1	−0.47*	−0.73, −0.20
085	Idiosyncratic information	2	0	0.01	−0.41, 0.43
086	Facial shielding	4	0	0.00	−0.35, 0.35
	Do Liars Tell Less Compelling Tales Than Truth Tellers?				
087	Realism	1	1	−0.42*	−0.74, −0.10
088	Intensity of facial expression	2	2	−0.32*	−0.52, −0.12
089	Face changes	7	1	−0.06	−0.24, 0.11
090	Indifferent, unconcerned	2	2	0.59*	0.31, 0.87
091	Seems planned, not spontaneous	2	1	0.35*	0.05, 0.65
092	Cognitively busy	1	1	0.61	−0.14, 1.36
093	Serious	4	0	0.00	−0.35, 0.35
094	Pitch variety	2	1	0.12	−0.15, 0.39
095	Pitch changes	1	1	0.42	0.16, 0.68
096	Rate change	1	1	0.12	−0.19, 0.43
097	Loudness variety	1	0	0.00	−0.35, 0.35
098	Clarity	1	0	−0.01	−0.32, 0.30
099	Reconstructability	1	0	−0.01	−0.32, 0.30
100	Cognitive processes	1	0	0.01	−0.30, 0.32
101	Modifiers	1	1	−0.52*	−1.03, −0.01
102	Verbally distal versus proximal	1	1	−0.10	−0.63, 0.43
103	Pronoun and tense deletion	1	1	0.24	−0.27, 0.75
104	Facial immediacy (eye contact, head orientation)	2	1	0.13	−0.04, 0.29
105	Direct orientation	2	1	−0.20*	−0.38, −0.01
106	Proximity	1	0	0.00	−0.25, 0.25
107	Sentence changes	1	1	0.35	−0.15, 0.85
108	Stutters	1	1	0.22	0.28, 0.72
109	Intruding sounds	1	1	0.16	−0.34, 0.65
110	Subset of non-ah	1	1	0.38*	0.01, 0.74
111	Interruptions	3	0	0.01	−0.24, 0.25
112	Filled pause length	1	0	−0.01	−0.36, 0.34
113	Silent pause length	1	0	0.00	−0.35, 0.35
114	Specific hand and arm movements	2	2	−0.36*	−0.54, −0.17
	Are Liars Less Positive and Pleasant Than Truth Tellers?				
115	Competent	3	1	−0.08	−0.39, 0.22
116	Ingratiation	1	0	0.00	−0.49, 0.49
117	Genuine smile	2	2	−0.70*	−0.97, −0.43
118	Feigned smile	2	1	0.31	0.00, 0.63
119	Head shakes	5	1	−0.12	−0.27, 0.03
120	Mouth asymmetry	1	1	0.14	−0.79, 1.07
	Are Liars More Tense Than Truth Tellers?				
121	Relaxed face	1	1	−0.29	−0.68, 0.10
122	Hand, arm, and leg relaxation	1	1	−0.26	−1.19, 0.68
	Do Lies Include Fewer Ordinary Imperfections and Unusual Contents Than Do Truths?				
123	Admitted uncertainties	2	1	−0.63*	−1.00, −0.25
124	Details misunderstood	2	2	−0.22	−0.62, 0.18
125	Pardoning the perpetrator	1	1	0.00	−0.62, 0.62
126	Self-interest statements	1	1	−0.32	−0.64, 0.01
127	Issue-related reporting style	1	1	−0.87*	−1.40, −0.34
128	Reasons for lack of memory	1	1	−0.75*	−1.28, −0.22
	Miscellaneous Cues				
129	Brow raise	5	5	0.01	−0.10, 0.13
130	Lip stretch	4	4	−0.04	−0.15, 0.08
131	Eyes closed	3	3	−0.06	−0.19, 0.07
132	Lips apart	5	4	−0.08	−0.19, 0.03
133	Jaw drop	3	2	0.00	−0.14, 0.14
134	Mentions responsibility	2	2	0.34*	0.13, 0.55
135	Claims qualifications and truthfulness	1	1	0.00	−0.50, 0.50
136	Extreme descriptions	1	1	−0.16	−0.47, 0.15
137	Neutral descriptions	1	1	0.26	−0.06, 0.58
138	Hypothetical statements	1	1	0.08	−0.24, 0.40
139	Non-sensory based words	1	0	0.00	−0.44, 0.44
140	Provides standard description	1	1	0.18	−0.19, 0.55
141	Ratio of conclusion to introduction	1	1	0.12	−0.39, 0.63
142	Repetition of story elements	1	1	−0.65*	−1.17, −0.13
143	Comments and interpretations	1	1	−0.14	−0.65, 0.37
144	Eye blink latency	2	2	0.21	−0.01, 0.44
145	Eye flutters	1	1	−0.08	−0.57, 0.42
146	Eyelids tight	2	1	−0.02	−0.19, 0.15
147	Eyelids droop	2	1	0.09	−0.14, 0.32
148	Lip pucker	2	1	−0.08	−0.25, 0.09
149	Tongue out	2	1	−0.16	−0.40, 0.07
150	Duration of facial expression	2	0	0.00	−0.22, 0.21
151	Hands together	2	2	−0.21	−0.66, 0.24
152	Hands apart	2	2	−0.15	−0.59, 0.29
153	Emblems	1	1	0.01	−0.21, 0.23
154	Changes in foot movements	2	2	1.05*	0.60, 1.49
155	Pupillary changes	1	1	0.90*	0.17, 1.63
156	Biting lips	1	0	0.00	−0.52, 0.52
157	Facial reaction time	1	1	0.49	−0.09, 1.06
158	Neck muscles tightened	1	1	−0.10	−0.63, 0.43

Note. Cue numbers are of the cues described in the current article as indexed in Appendix A. All independent effect sizes (*d*s) were statistically significant. k_1 = total number of *d*s; k_2 = number of *d*s that could be estimated precisely; CI = 95% confidence interval.
* $p < .05$.

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A Different Approach to Investigative Interviewing

About Us

Forensic Interview Solutions FIS® is a collaborative team of international experts specializing in P.E.A.C.E investigative interviewing. We have developed a global reputation in delivering customized training and consultancy solutions to public and private sector organizations.

We believe in the forensic application of the ‘science of interviewing’ in the workplace, to improve investigative decision-making, efficacy and quality.

We are the leading global provider and preferred supplier of ethical investigative interviewing scenario based training in the marketplace.

Jonathan Davison BA (Hons)

Jonathan Davison has more than 12 years of investigation and interview experience as a detective with Greater Manchester Police. In his last role with Greater Manchester Police, he was an Advanced Specialist Tier 3 Interviewer and a qualified trainer in the field of investigative interviewing. Davison is the founder and CEO of Forensic Interview Solutions FIS®.

Investigative Interviewing

A critical component of any investigation is the ability of investigators to obtain accurate and reliable information from victims, witnesses and the suspects or any interviewee.

The interview process is an essential part of the information gathering procedure for any investigation.

The importance of improving the quality of the interviewing with the potential for visual recording of all interviews should be placed high on the agenda of all organizations across the globe.

‘Solid interviewing skills stand as the cornerstone in law enforcement’s arsenal of crime-fighting weapons.’ (Einspahr, 2000, p20).

Interviews that are professionally undertaken and quality assured can have several advantages for your organization.

They:

- Direct an investigation
- Support the prosecution case, which saves time, money and resources
- Increases public confidence in your organization.

(NPIA 2009)

In this paper we will examine the evolution of investigative interviewing, the benefits of adopting the P.E.A.C.E investigative interviewing approach and consider the principles of conducting investigative interviews.

What Is Investigative Interviewing?

As with every conversation, it involves a relationship between two people.

In an investigations context, the term ‘investigative interviewing’ is used instead of ‘interrogation’ for questioning any interviewee.

Interviewing is a much broader concept than interrogation, originally meaning an occasion when two people can examine each other’s views (hence ‘inter-view’).

The term ‘interviewing’ has largely taken over from ‘interrogation’ to describe the task of obtaining information from witnesses or suspects (the interviewee).

The term ‘interrogation’ has negative connotations arising from its association with oppressive tactics and false confessions.

Investigative Interviewing is a more suitable term in the context of any investigation with its definition being:

‘Investigative interviewing is the questioning of victims, witnesses, and suspects (interviewee) to obtain complete, accurate and reliable information to discover the truth about the matter under investigation’.

Know Your Audience—The Personal Approach

Adopting an assured personal approach in which matters can be raised openly and without embarrassment does not come naturally to many interviewers. However, it is not true that one must be “born” with it and that training cannot help. People can be taught to interview in this way, and it is very effective in encouraging people to discuss what they might otherwise be reluctant to talk about.

A Scandinavian psychologist compared interviewers who adopted either a formal or a personal approach. The results clearly showed that interviewees who experienced the personal interview approach were more forthcoming, more accurate, and as a result more relevant than those interviewed in a formal style. When interviewed in the personal style, they felt more inclined to be helpful to an interviewer who showed a friendly, helpful interest in them and were less suggestible. They became sticklers for the truth and defended their own views more than those people interviewed in the formal way.

History of Investigative Interviewing

Over the years studies have identified that amongst public and private organizations conducting investigations there was a culture of expediency in undertaking investigations and confirmation bias.

Confirmation bias means to question and interpret information provided during the interview as a confirmation of the interviewers' existing beliefs or case theories.

This culture was often the primary influence in dysfunctional and unethically conducted investigations, particularly in how interviews were conducted with witnesses and suspects of the investigation.

In addition to the detected confirmation bias, many interviews had a foundation based in interrogation-based practice – a confession culture, with obtaining a confession from a suspect being the only objective of the interview.

These practices attempt to sap the interviewee's will, to render them silent and compliant; to give up resisting, to give in and to give the interviewer what was demanded.

This conduct was found to be oppressive and during interviews suspects were being induced to say things that they otherwise would not say or they may falsely confess to offences they had not committed.

This has found to breach ethical practices, be ineffective and cause harm to the:

- individuals on the receiving end
- reputation of the investigating agency
- public perception of the investigating agency
- public faith in the criminal, civil or administrative justice systems.

Origins of P.E.A.C.E.

In England and Wales in the 1970s and 1980s the national Court of Appeal decided that in a number of very high profile cases people who had been convicted of serious crimes had made confessions that were not 'voluntary'.

So, in the early 90s, a collaborative effort between law enforcement and psychologists in England and Wales developed an investigative interviewing framework to stem the proliferation of false confessions that were resulting from an accusatory style of interviewing and to make interviews less confrontational and more transparent.

In 1992, Professor John Baldwin (a leading researcher into investigative interviewing) was part of this collaborative effort and published a report based on police interviews in which he stated that:

"The main weaknesses that were identified were a lack of preparation, a general ineptitude, poor technique, an assumption of guilt, unduly repetitive, persistent or labored questioning, a failure to establish the relevant facts and the exertion of too much pressure."

These comments reflected police interviews that frequently led directly or indirectly to cases being lost at court thus highlighting the needs to train investigators to conduct interviews with professionalism and integrity at all times.

Professor Baldwin's model of investigative interviewing addressed these issues and is now an internationally accepted method of conducting investigative interviews known as P.E.A.C.E. model.

This framework known as the P.E.A.C.E model has been widely praised and adopted by numerous law enforcement, regulatory agencies, and private and public sectors throughout the world in conducting investigative interviews.

The acronym - P.E.A.C.E - summarizes and assists remembrance of the five stages of managing the interview process:

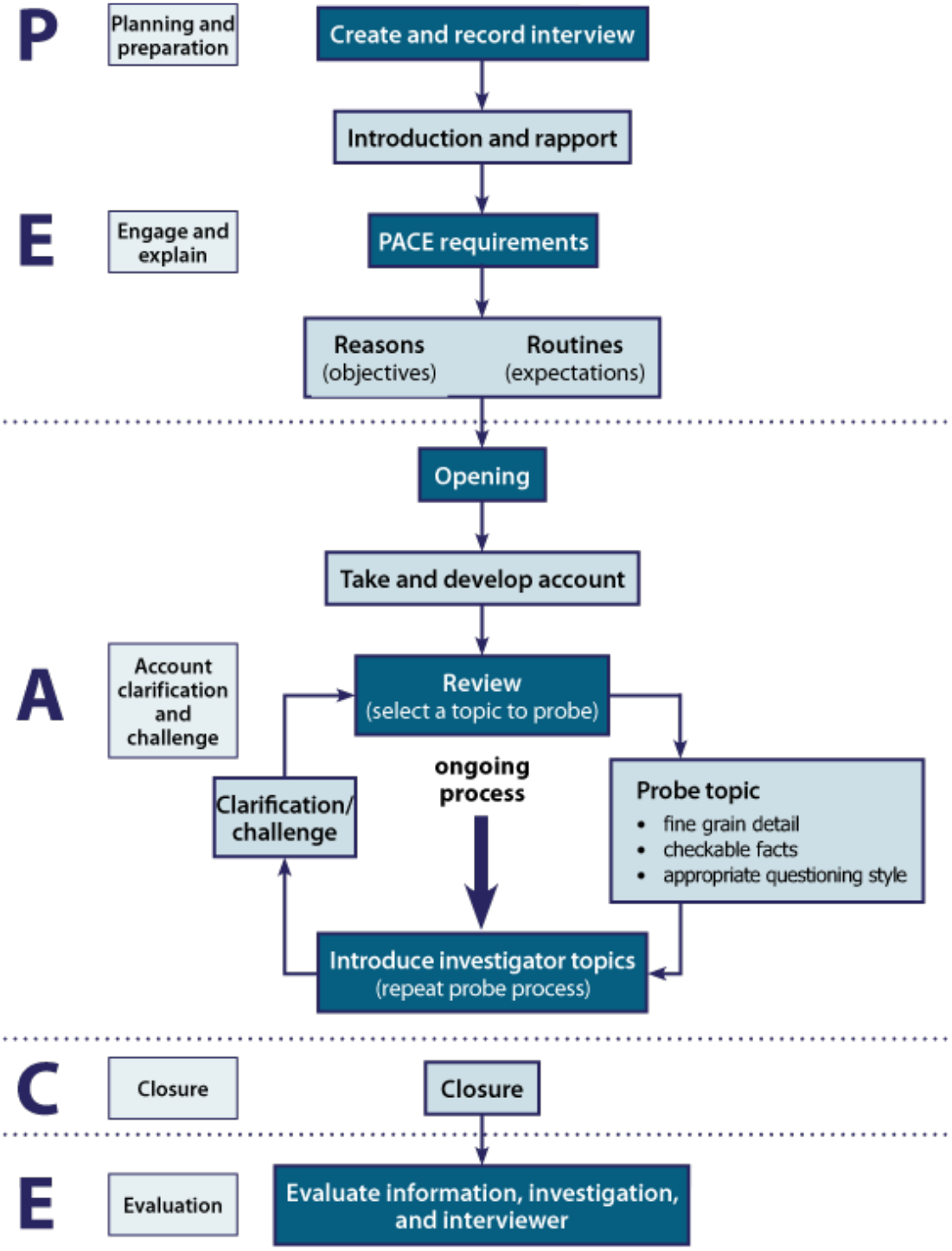
- Preparation and Planning
- Engage and Explain
- Account, Clarification, Challenge
- Closure
- Evaluation.

The P.E.A.C.E model and its application is explained in more detail in our trainings and courses.

While are other investigative interviewing models have been developed to address the issues, none have been as successful as the P.E.A.C.E framework.

The adoption of this method known as P.E.A.C.E and although it has significantly improved the effectiveness of investigative interviewing; it needs monitoring to ensure continuous development.

In recent research, CLARKE and MILNE (2001) state that this development must be reinforced in the workplace by supervision of all types of interviews.



College of Policing (2015)

What are the benefits of adopting the P.E.A.C.E model of investigative interviewing?

The non-accusatory, information gathering approach to investigative interviewing, the P.E.A.C.E model is considered to be best practice and is suitable for any type of interviewee, victim, witness, suspect or interviewee.

In this model, interviewers are encouraged to be fair and open-minded and to pursue reliable, true, and accurate information.

The P.E.A.C.E Framework has evolved and since been adopted by numerous Police forces and agencies worldwide including the United Kingdom, Canada, Hong Kong, Australia, New Zealand, Singapore, Malaysia, United Arab Emirates and the Republic of Ireland.

Principles of Investigative Interviewing

Interviewing is at the heart of any investigation. Interviewing victims, witnesses and suspects is essential to establish the facts on which later decisions are taken.

A set of principles has been established to provide you with an authoritative guide to conducting ethical interviews. These Principles of Investigative Interviewing are based on first guide, which were introduced into UK policing in 1992 (Home Office Circular 22/92) to establish a set of ethical guidance for police officers tasked with interviewing witness, victims and suspects.

These principles were revised in 2007 and published in the National Investigative Interviewing Strategy 2009.

You should approach every interview with these principles in mind and use them to actively examine your own attitudes and behavior. Also think how these principles could be adopted and edited accordingly to your organization.

1. The aim of investigative interviewing is to obtain accurate and reliable information from a victim, witness or suspect of an investigation in order to discover the truth about matters under investigation.

   To be accurate, information should be as complete as possible without any omissions or distortion. To be reliable, the information must have been given truthfully and be able to withstand further scrutiny, e.g., in court.

   Accurate and reliable accounts ensure that the investigation can be taken further by opening up other lines of enquiry and acting as a basis for questioning others.

2. Investigators must act fairly when questioning victims/ victims, witnesses or suspects.

   They must ensure that they comply with all the provisions and duties under the Equality Act 2010 and the Human Rights Act 1998.

   Acting fairly means that the investigator must not approach any interview with prejudice. The interviewer should be prepared to believe the account that they are being given, but use common sense and judgment rather than personal beliefs to assess the accuracy of what is being said.

3. Investigative interviewing should be approached with an investigative mindset.

   Accounts obtained from the person who is being interviewed should always be tested against what the interviewer already knows or what can be reasonably established.

   The main purpose of obtaining information in an interview is to further the enquiry by establishing facts. This point highlights the importance of effective planning in line with the whole investigation.

   Interviewers should think about what they want to achieve by interviewing the victim, witness or suspect, and set objectives which will help to corroborate or disprove information already known.

   Investigators should try to fill the gaps in the investigation by testing and corroborating the information by other means where possible.

4. Investigators are free to ask a wide range of questions in an interview in order to obtain material, which may assist an investigation and provide sufficient evidence or information.

   Conducting an investigative interview is not the same as proving an argument in court. This means that interviewers are not bound by the same rules of evidence that lawyers must abide by. Although the interviewer may ask a wide range of questions, the interviewing style must not be unfair or oppressive. The interviewer should act in accordance with relevant laws or codes of practice.

5. Investigators should recognize the positive impact of an early admission in the context of the criminal justice system.

   Obviously this principle may not be applicable in some regions but in most commonwealth countries the following benefits could apply:

   ***Victim** – has an opportunity to claim compensation in respect of an offence that has been admitted by the defendant, detected, and acknowledged by the criminal justice system.*

   ***Court** – has a fuller and more accurate picture of the offending and is able to sentence more appropriately. There is the potential for savings too as offences can be dealt with promptly without additional court hearings.*

   ***Defendant** – may receive credit for early admission of guilt. They may be eligible for a lesser sentence – possibly allowing for tailored sentencing and access to rehabilitative programmes, and being able to 'clear the slate' to avoid the risk of subsequent prosecution for other offences.*

   ***Agency** – gain valuable intelligence, increase detected offences rates, record a fuller picture of offending for possible use in future cases or to support applications for anti-social behavior orders, or other restrictive orders.*

   ***Prosecution** – has a fuller and more accurate picture of, for example, the offender's criminal history when considering the public interest test, bail decisions, bad character, level of danger, and what information to give the court.*

   ***Resources** – are used efficiently, and the public's confidence in the criminal justice system is improved.*

6. Investigators are not bound to accept the first answer given. Questioning is not unfair merely because it is persistent.

An investigator has the duty to obtain accurate and reliable information. A complete and reliable account from witnesses, victims and suspects may not always be easy to obtain.

There may be different reasons why an investigator needs to be persistent:

- *they may have reasonable belief that the interviewee is not telling the truth*
- *they may believe further information could be provided.*

It is acceptable for interviewers to be persistent as long as they are also careful and consistent but not unfair or oppressive.

7. Even when a suspect exercises the right to silence, investigators have a responsibility to put questions to them.

   This principle extends the right of an investigator to put questions to those they believe can help them to establish the truth of a matter under investigation.

   Suspects have the right to remain silent, but they are warned during the caution or during special cautions of possible adverse inferences being drawn should they choose to exercise that right within England and Wales. Again this principle may not be applicable in America or other countries.

Investigative Mind-set

As an investigative interviewer you will be required to examine and make sense of variety material such as, witness and victim accounts cctv, exhibits, intelligence reports, etc. Having examined the source material, you will need to bring some order to the way you will use it.

The investigative mind-set is an investigative technique that investigators are encouraged to adopt in order to remain open minded throughout the process of an investigation. Its application can lessen the risks of the investigator making premature decisions and developing personal biases. Premature decision-making is often cited as a common cause for miscarriages of justice. Therefore, any technique that could lessen that risk is extremely important to the investigative process and should be critically discussed and evaluated to assess how it can be improved.

An investigative mind-set is a state of mind or attitude; which investigators develop over time. It requires the investigator to apply a set of principles to the investigation, which become a consistent approach to all elements of your investigative processes. Over time the investigator becomes disciplined in applying a consistent approach to decision-making, which can be rationalized and explained to others.

There are five suggested principles of the investigative mind-set:

- Understanding the source of the material
- Planning and preparation
- Examination
- Recording and collation
- Evaluation

Understanding the provenance and characteristics of the source of material is essential in order to conduct an effective examination of it. An interviewer must invest time at the planning and preparation stage in order to fully understand the material that will be at the heart of the questioning of the suspect.

Planning and preparation cannot be over stated. It is potentially the most important aspect of any investigation and especially the investigative interview. Victims and witnesses memory of an event will fade or become contaminated over time therefore it is crucial that they are interviewed as soon as possible. This is also true of many other sources of material.

The examination process can replicate the ‘Account Phase’ of P.E.A.C.E. in that the process will include the obtaining of an account; clarification of points raised; and where necessary the challenging the reliability of the material. It is here that the investigator should apply the ABC approach:

- **Assume nothing**
- **Believe nothing**
- **Challenge everything**

The Memory Process and Questioning

The Memory Process

Introduction

Human memory is a very complex process. Some of its theories and applications are explained in this section.

Memory is Not Total

Before you read any further, think back to your last journey to work. Try to describe all the vehicles and people you saw during your journey. Unless you live next to your workplace, you will probably find it impossible to recall every vehicle or person that you must have seen. If you travel the same route regularly, the chances are that you were on 'auto pilot' and can remember very little about the journey.

This should demonstrate that memory is not like a video recorder that records everything. In fact, memory is more like a pocket notebook in which you jot down references that will help you to write up a full report later. When you come to write your full report, you will fill in the gaps. To do this you will rely on your knowledge. However, you will also be influenced by your prejudices, opinions, social and cultural background, expectations and even later experiences or conversations.

Your final report, while being truthful, may not be absolutely factual. Memory is selective: people do not remember everything that they see, hear or sense Memory is reconstructed: it is not reproduced like a video recording.

Memory is Organized

To understand this particular point, it will help if you list what you did from the time you woke up this morning to the time you left for work.

Also, ask a friend to list what he or she did in similar circumstances a week ago.

The chances are that both of you will have produced a list which is similar to the following:

- got out of bed
- went to the toilet
- had wash/bath/shower
- shaved/dried hair
- dressed
- put kettle on/made tea or coffee
- had breakfast
- drew curtains
- tidied up/washed dishes
- read mail/skim read newspaper
- got ready for work
- said goodbye to family
- left home.

Most people will produce a similar list. Compare your list with that of your friend. Are they similar?

Could anyone looking at both lists readily tell that they referred to two different people on two separate days?

Memory is organized to assist us to remember. One theory suggests that we organize knowledge in a similar way to a filing system. While completing the list, your recall worked like a clerk. It went to the filing cabinet marked 'daily routine' and opened the drawer marked 'getting up'. Inside it found a number of labelled folders. You have written down the labels as your list.

However, if you looked into each folder you may find a store of detailed information ready to be recalled.

The way memory is organized can have a powerful influence on what is remembered. When you experience a situation, you file the details in your memory. If the experience is repeated, new information may be added. Your memory is reinforced. Regularly repeating the experience influences your memory to the point that you respond without thinking about it. It becomes routine. This may even occur despite the fact that you have subsequently undergone a contradictory experience. The following example may demonstrate this.

Investigators working at an agency were informed that the property office on the first floor was to be moved to the ground floor for a period of two weeks during redecoration. Despite that knowledge, many of the officers continued to visit the first floor office only to be reminded, on seeing the notice on the door that the office had temporarily moved. They had established the normal location of the office through continued use. When they wanted to see the property officer, the more recent information about the ground floor office had not been etched into their memory routine.

We organize the way we store information. In a first attempt to remember an incident or specifics, we are likely to recall broad outlines, but little detail. Because of the way we organize the information stored, we may add or miss unexpected detail in a first attempt to remember what has happened.

Retrieval – Cognitive instruction

Setting the scene

One way you can help yourself and others to recall, is to recreate, as near as possible, the same conditions which existed when the information was stored. Go back to when you woke up this morning. Now mentally put yourself back into bed. How were you feeling? If you were feeling fed up, then feel fed up now. If you were cold, feel cold now. Concentrate on going back and recreate the exact conditions that existed then. Next concentrate on getting a

clear mental picture of what you were doing. Now, take your time, and write down everything you experienced as you relive what you did this morning, from the time you got up until you left for work. Do not edit anything out. You should obtain a fairly detailed account of what you did. Compare this with your original list.

Recall

What you have produced is the result of free recall. Free recall produces information that is invariably accurate.

The more attempts you have at recall, the more you will remember. It is impossible to remember everything at once. As interviewers we need to ensure that we increase the amount of accurate 'freely recalled' information, and minimize the need for questions.

The Way People Remember Varies

Experience shows that the ability of witnesses to remember varies. There may be several reasons for this. Firstly, some people are naturally better at remembering certain facts than others. Secondly, the more attention that we pay to the 'to be remembered' event, the more detail we are likely to encode. Also, rehearsal of detail is likely to strengthen the 'memory', making it harder to forget. Conversely, over a prolonged period of time, a failure to refer to an event may cause memory relating to it to deteriorate.

Influences on Memory Reconstruction

Assumption

This is where the Frame of Reference really has an effect on memory storage. Consider some of the contents of your Frame of Reference:

- upbringing
- attitudes
- beliefs
- knowledge
- values
- education
- prejudice
- stereotypes

All this can cause people to store in their memory, as having happened, something they merely expected to happen or they assumed happened. Trying to remember an incident completely can be hard work. If you recognize something about which you think you already have information in the forefront of your mind (frame of reference), it is terribly tempting to be satisfied and stop digging further.

It would be so much easier to use your previous knowledge, stereotypes, prejudices, beliefs, assumptions or expectations of what actually happened to save the effort of going further. Certainly this would be easier. Indeed, it is as a common characteristic of memory recall as it is of memory storage, but it is not accurate.

Accurate memory recall relies upon the individual making the effort to sift to the very depths of his or her memory store for the information - not short-cutting the process. Unfortunately, many people do short-cut the process. One of the skills of good interviewing is to prevent that short-cut process.

Effective Interview Communication

Communication and perceptions are inextricably linked. How we communicate to our colleagues, boss, subordinates, friends and partners will depend on our perception of them.

Research into questioning has shown that several factors influence the outcome of an interview with a suspect, one of the most important is the attitude of the investigator. The interview technique will also have a bearing on the interview.

Betari Box

The Betari Box, is a model that helps us understand the impact that our own attitudes and behaviors have on the attitudes and behaviors of the people around us.

Our attitude plays a large role in the behavior we exhibit. When we're feeling motivated and positive, we smile, we complement our team, and we empower those around us. When we're feeling negative, the reverse is often true – we can be impatient, we get angry at our people, and we might even yell or argue.

These behaviors often affect the people around us. They then turn those negative behaviors back on us, and the conflict gets worse.

Remember that your attitude, good or bad, affects everyone around you, including the suspect.

Transactional Analysis (TA)

Transactional Analysis (TA) is one of the most popular ways of explaining the dynamics of interpersonal communication. It is a theory that encompasses personality, perception and communication.

Personality is made up of three ego states that are revealed in distinct ways of behaving. The ego states manifest themselves in gesture, tone of voice and action, almost as if they are different people within ourselves.

The three stages are:

- Parent
- Adult
- Child

At the core of Berne's theory is the rule that effective transactions (i.e. successful communications) must be complementary. They must go back from the receiving ego state to the sending ego state. For example, if the stimulus is Parent to Child, the response must be Child to Parent, or the transaction is 'crossed', and there will be a problem between sender and receiver.

If a crossed transaction occurs, there is an ineffective communication. Worse still either or both parties will be upset. In order for the relationship to continue smoothly the agent or the respondent must rescue the situation with a complementary transaction.

In serious break-downs, there is no chance of immediately resuming a discussion about the original subject matter. Attention is focused on the relationship. The discussion can only continue constructively when and if the relationship is mended.

Here are some simple clues as to the ego state sending the signal. You will be able to see these clearly in others, and in yourself:

Parent

- Physical - angry or impatient body-language and expressions, finger-pointing, patronising gestures,
- Verbal - always, never, for once and for all, judgmental words, critical words, patronising language, posturing language.
- N.B. beware of cultural differences in body-language or emphases that appear 'Parental'.

Child

- Physical - emotionally sad expressions, despair, temper tantrums, whining voice, rolling eyes, shrugging shoulders, teasing, delight, laughter, speaking behind hand, raising hand to speak, squirming and giggling.
- Verbal - baby talk, I wish, I dunno, I want, I'm gonna, I don't care, oh no, not again, things never go right for me, worst day of my life, bigger, biggest, best, many superlatives, words to impress.

Adult

- Physical - attentive, interested, straight-forward, tilted head, non-threatening and non-threatened.
- Verbal - why, what, how, who, where and when, how much, in what way, comparative expressions, reasoned statements, true, false, probably, possibly, I think, I realise, I see, I believe, in my opinion.

In any investigative interview setting we should always strive for the adult ego state even when the interviewee moves to parent. If we see the interviewee operating in the child ego state then this may be indicator of vulnerability, but not always.

Questioning Skills

Introduction

The object of questioning is to discover the truth about the matter under investigation, to gather information and to obtain evidence. A knowledge of questioning technique is a necessity for effective interviewing.

The subject is considerable, but an outline is sufficient for your current needs.

Questions should be:

- simple words used should be easily understood
- short long-winded questions may be misinterpreted.

Questions should be put:

- logically - they are less confusing in a logical sequence
- singularly - put one question or make one point at a time
- politely - being polite, quiet and calm will lessen the likelihood of unnecessary confrontation
- set calmly the tone of the interview and heighten your status with the other person.

Use of Silence

Silence in an interview can be unnatural and uncomfortable for both interviewer and interviewee alike. We all have a natural urge to fill pauses and gaps. Having asked a question, pause so that the interviewee may process it. During such pauses, interviewees may then begin to think about how they are going to answer before they actually reply.

Questions which begin with 'Why did you do it?' or 'How do you feel?' require individuals to search for words which will adequately describe why they did it or how they feel. It may take longer for them to begin to answer such questions, so allow them this time.

You should also allow the interviewee and yourself space and thinking time to assimilate information and formulate questions or replies. Breaking eye contact may encourage this to occur. However, a listener who uses an encouraging gesture and refrains from speaking can supportively invite the speaker to continue. When people concentrate hard, they remain silent and normally focus on a neutral space such as the floor or ceiling. Do not interrupt this process and you may obtain that extra piece of information.

Coupled with eye contact, silence can be a powerful tool to prompt an interviewee to speak. After a question has been put to a person who is reluctant to answer, or after receiving a reply which you want elaborating, consider remaining silent. The interviewee may break the silence.

Oppression

Finally, remember that no investigator may try to obtain answers to questions by the use of oppression, so use silence with discretion. Other examples of oppression would include for example asking the same question over and over again (repeat questions) or intimidating the interviewee by using an overly aggressive style of questioning.

Remember the seven principles to investigative interviewing!

Appropriate Questions

Open questions

This is the best kind of question for information gathering. It leads to an open, unrestricted answer. Open questions elicit more free recall and this is found to be the most accurate form of remembering. The answers to open questions are more elaborate and (studies show) more accurate.

Examples- “Tell me everything you remember….” Please describe”…..

This questioning style also minimizes the chances of the interviewer imposing his /her own “view” on the person being interviewed. Some interviewees are very susceptible to suggestion and an interviewer can influence them quite easily and as such impact on their recollection and integrity.

Not all open questions are 5 WH = (Who, Why, What, Where, When and How), they are however good question leads to use and are associated to ‘Good Practice’.

T.E.D. = Tell, Explain, Describe - Good examples of very open questions.

Closed Probing Questions

Closed probing questions are the second best type of question. These questions are more specific and tend to be relied on when the interviewee has omitted some detail in the free recall phase.

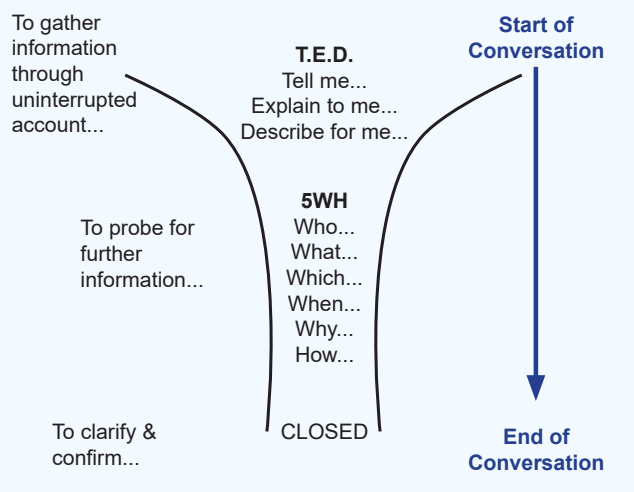
These are specific questions that give a limited response (i.e. one word or short phrase answer.)

Examples-“What color was the car?” “Black”. “Who said that?” “Teresa Green”

”Where was that?” “Stanford”

This type of question is advantageous in that it allows the interviewer to assert more control over the interview and minimizes irrelevant detail from the interviewee being provided. However, too many specific closed questions may cause the interviewee to “switch off” and concentrate less. This also gives more scope to the interviewee to provide an incorrect answer (a lie). Opt for open questions first. An overused closed question style will influence the structure and product of the interview, in other words the interviewer will take the interviewee where he or she perceives they are required to go to recover of the facts and may subsequently miss important information on wider issues.

If you were to draw a shape illustrating a questioning sequence it should be like an hourglass. Wide at the top, narrowing down to a closed position and then opening out again.



Notetaker

Introduction

Notetaker system has been developed, after extensive and on-going research to improve the quality of the gathering of information and subsequent analysis by providing a system to help investigators:

- Plan and prepare for interviews and gathering information;
- Take notes during interviews;
- Summarise the information from interviews and other sources; and
- Evaluate the quality of the interviews and sources of information.

The system can also be used to assist enquiries in effective information processing for:

- Briefing and debriefing
- Planning the briefing of HR legal advisers/teams
- Planning the briefing of health professionals

The purpose of this paper is to outline the operating principles and methods of the notetaker system and to consider its applications for improving the quality of information processing.

Operating Principles of the Notetaker System

The notetaker system divides information into four categories:

People

Location(s)

Actions

Time(s)

People

This category refers to all the people referred to by the interviewee, potential witnesses or alleged perpetrators. All the information given by the witness that might be used to identify the person in question, including any names, addresses and descriptions, should be included in this category. Where a name and/or address is given, details as to how the interviewee knew such information should also be included here.

Location(s)

This category refers to the scene(s) of the incident and other locations including those of the interviewee before, during and after the incident took place.

Actions

This category refers to the physical movements and verbal actions of the interviewee and all the people mentioned by the interviewee. During each stage of the verbal and physical action it includes what the interviewee was thinking about at that precise time. It also refers to the description and movement of vehicles and other objects such as weapons.

Time(s)

This category refers to the times reported by the interviewee for the occurrence of the actions and in respect of the locations referred to above.

Operating Methods for the Notetaker System

Two operating methods have been developed to apply the principles of the notetaker system: Spidergraph and Clockface.

Spidergraph

Spidergraph consists of a series of circles drawn up to represent each topic as the interviewee introduces them. Such a topic could be a person, location or action. The initial topic in the majority of interviews is the incident followed by case specific material.

Once identified, the nature of the topic is noted on the inside of the circle. PLAT information relating to the topic is then recorded in a clock-wise direction on a series of “spider’s legs” drawn off the circle. The “spider’s leg” can then be extended in the event of the information recorded on it leading to the disclosure of further information.

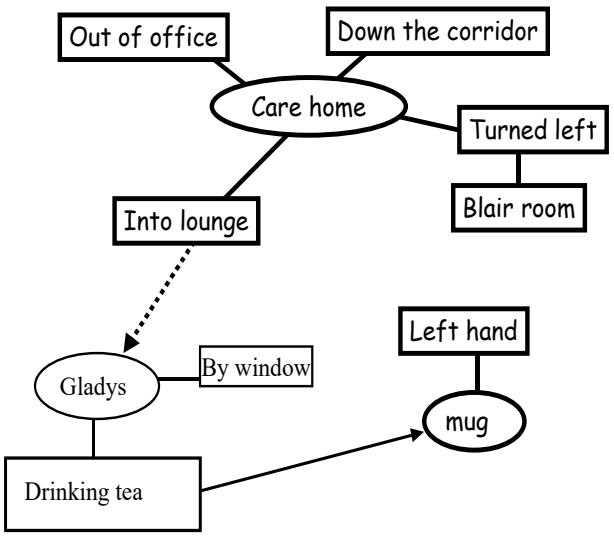


Figure 1 Example of a “Spidergraph”

Clockface

Clockface consists of a circle on the outside of which the numbers 1 to 12 are recorded to represent the hours of the day when an interviewee reports the time(s) for the occurrence of the actions and in respect of the locations.

Plus (+) and minus (-) symbols should be used in circumstances where the interviewee reports approximate time(s) preceded with phases such as “just before” or “not long after”.

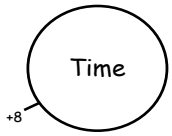


Figure 2 Example of a “Clockface”

Cognitive Interviewing (CI)

What is Cognitive Interviewing?

The CI was initially developed in an attempt to improve witness memory performance by using various techniques derived from cognitive psychology to gain as much correct information as possible without jeopardizing the quality of the information reported.

The original CI comprised a set of four instructions given by the interviewer to the witness:

(i) Report everything;

(ii) Mentally reinstate the context;

(iii) Recall events in a variety of different temporal orders; and

(iv) Change perspective.

Subsequently, the originators of the Cognitive Interview (CI) Fisher & Geiselman, (1984) found that real-life interviewing of witnesses lacked much that the psychology of interpersonal communication deemed important. They, therefore, developed the Enhanced Cognitive Interview (ECI) (1992).

ECI, which incorporated several new principles from memory research and the social psychology of communication.

The ECI therefore consists of the original CI techniques noted above plus some additional techniques (e.g. transfer of control and witness-compatible questioning).

Application of Cognitive Interviewing

Application of CI in interviewing source, victim or witnesses (key considerations)

The CI was initially developed in an attempt to improve witness memory performance by using various techniques derived from cognitive psychology to gain as much correct information as possible without jeopardizing the quality of the information reported.

The CI/ECI mnemonics typically can only be used with co-operative witnesses. If the witness is not co-operative, then the interviewer should resort to either the phased interview or, as the next step, a more managed communication.

The CI/ECI mnemonics are only intended for use in respect of the memory for an event, they were not developed for use in remembering the kind of background material that usually makes up the case-specific information important to an investigation.

Planning considerations

The purpose of an investigative interview is to ascertain the witness’s account of the alleged event(s) and any other information that would assist the investigation. A well-conducted interview will only occur if appropriate planning has taken place. The importance of planning cannot be overstated. The success of an interview and, thus, an investigation could hinge on it. Even if the circumstances necessitate an early interview, an appropriate planning session that takes account of all the information available about the witness at the time and identifies the key issues and objectives is required. Time spent anticipating and covering issues early in the investigation will be rewarded with an improved interview later on.

Planning;

“the mental process of getting ready to interview…”

Preparation;

“considering what needs to be made ready..”

Planning Phase Considerations

- Information about the witness;
- Information about the alleged offence(s); and
- Information important to the investigation

Processes

1. The opening phase of an interview will often determine the success of the interview as a whole. At the outset it is necessary to establish trust and lay the foundations for successful communication. The interviewer is often a person who is unfamiliar to the witness and thus, in order to reduce possible tension and insecurity felt by the witness, it is essential that the interviewer should introduce themselves by name and greet the witness by name (i.e. personalize the interview). Greeting should occur because it is at the heart of effective rapport development, the next step of the interview process.

2. The interviewer needs to treat the witness as an individual with a unique set of needs as opposed to being ‘just another witness’. Obtaining maximum retrieval is a difficult task requiring deep concentration. A witness therefore needs to feel that they are an integral part of the interview in order to be motivated to work hard.

3. First impressions count, and the clothing an interviewer wears is a matter that can be considered before an interview. For example, interviewers in too formal attire may have more difficulty in personalizing the interview

and developing rapport, especially when interviewing younger individuals.

Steps

The below steps are seen as critical in the successful application of the model.

Building Rapport and Engaging the Witness

Rapport is essential and good rapport between interviewer and witness can improve both the quantity and quality of information gained in the interview. Rapport therefore has a direct impact on the interview process itself. Rapport is especially important where the type of information required is highly personal. Rapport should not be regarded as something that is confined to the first phase of an interview; it begins when the interviewer first meets the witness and continues throughout the interview.

The witness's anxiety, whether induced by the incident/ event and/or the interview situation (or otherwise), needs to be reduced for maximum remembering. The interviewer therefore needs to start to create a relaxing atmosphere and to make the witness feel secure and confident both with the interviewer and with the interview situation. One way to achieve this is to start by briefly asking some neutral questions not related to the event which can be answered positively and, therefore, create a positive mood.

The use of open-ended questions in the developing of rapport will teach the witness at the earliest phase in the interview what will be required later, i.e. elaborated responses. The interviewer should encourage the witness to speak without interruptions when they are describing a familiar event (e.g. a recent holiday). Thus, rapport is also a 'training' phase of the interview, training the witness what to expect later (i.e. that detailed responses are required).

Opening the Interview: Explaining the Ground Rules

It is important to explain to the witness what is to be expected from them, as for most witnesses an investigative interview is an alien situation. People typically fear the unexpected, and by describing the interview process this fear can be reduced.

The interviewer needs to give an explanation of the outline of the interview. Typically the outline will take the form of the interviewer asking the witness to give a free narrative account of what they remember and following this with a few questions in order to clarify what the witness has said. Witnesses should also be told that:

If the interviewer asks a question that the witness does not understand or asks a question that the witness does not know the answer to, they should say so; and

If the interviewer misunderstands what the witness has said or summarizes what has been said incorrectly, then they should point this out.

In addition, it should be explained that the interviewer might take a few brief notes.

Transfer of Control

This instruction is an ECI technique, which would be helpful in almost all interviews. The witness may expect the interviewer, usually an authority figure, to control the interview. Therefore a witness may well be expecting an active interviewer asking a series of questions to a more or less passive witness whose only task is to answer these questions and wait for the next one. This is not the typical behavior of a skillful interviewer. Instead their role is as a facilitator, a person to help the witness remember, to facilitate retrieval and to help the witness, as and when they require it, to recall as much information as possible. It is the witness who has been witness to the event and who has all the information. Remember, the main person in this exercise is the witness, and not the interviewer.

The interviewer should therefore pass the control of the information flow to the witness. After all, it is the witness who holds the necessary information. Thus, at the start of the interview the witness needs to be informed explicitly of this. It is the witness who should do most of the mental work and most of the communicating throughout the course of the interview.

Report Everything

Witnesses are unlikely to volunteer a great amount of detailed information unless told to do so. Interviewers therefore should explicitly state their need for detail. Thus, as with the transfer of control instruction, the 'report everything' instruction encourages witnesses to report everything they remember without any editing, even if the witnesses think the details are not important or trivial, or cannot remember completely a particular aspect of the event.

Initiating and Supporting a Free Narrative Account

In this phase of the interview the interviewer should initiate an uninterrupted free narrative account from the witness through the use of an open-ended invitation. The interviewer can also use this phase as the planning stage for the forthcoming questioning phase of the interview. This is because the free narrative account allows the interviewer an insight into the way in which the witness holds the information about the event in their memory.

Active Listening and Appropriate Non-Verbal Behavior

Appropriate non-verbal behavior during the interview is just as important for a successful interview as are the verbal instructions.

Questioning

During the free narrative phase of an interview most witnesses will not be able to recall everything relevant that is in their memory. Therefore, their accounts could greatly benefit from the interviewer asking appropriate questions that assist further recall.

Interviewers need to appreciate fully that there are various types of questions that vary in how directive they are. The questioning phase should, whenever possible, commence with open-ended questions and then proceed, if necessary, to specific-closed questions.

Witness-Compatible Questioning

Good questioning should avoid asking a series of predetermined questions. Instead, the sequence of questions should be adjusted according to the witness's own memory processes. This is what 'witness-compatible questioning' means. Each witness will store information concerning the event in a unique way. Thus, for maximum retrieval, the order of the questioning should resemble the structure of the witness's knowledge of the event and should not be based on the interviewer's notion or a set protocol. It is the interviewer's task to deduce how the relevant information is stored by the witness (via the free narrative account) and to organize the order of questions accordingly. Retrieval may also be varied by probing different senses.

Closing the Interview

Interviewers should in this final main phase consider briefly summarizing what the witness has said, using the words and phrases used by the witness as far as possible. This allows the witness to check the interviewer's recall for accuracy. The interviewer must explicitly tell the witness to correct them if they have missed anything out or have got something wrong.

Interviewers should not attempt to summarize what the witness has said where the witness is fatigued, in an emotional condition or otherwise distracted because they may not be in position to listen properly to the summary. Similar issues may arise where the witness appears to have a short attention span (as may be the case, for example, with young children and some adults with a learning disability).

The interviewer should always try to ensure that the interview ends appropriately. Every interview must have a closing phase. In this phase it may be useful to discuss again some of the 'neutral' topics mentioned in the rapport phase.

In this phase, regardless of the outcome of the interview, every effort should be made to ensure that the witness is not distressed but is in a positive frame of mind. Even if the witness has provided little or no information, they should not be made to feel that they have failed or disappointed the interviewer. However, praise or congratulations for providing information should not be given.

Note:

The aim of closure should be that, as far as possible, the witness should leave the interview in a positive frame of mind. In addition to the formal elements, it will be useful to revert to neutral topics discussed in the rapport phase to assist this. This point has important repercussions, one of which is that a well-managed interview can positively influence organization–community relations. Many witnesses will tell friends, family, etc. about the skill of the interviewer and their feelings about the interview process as a whole.

Benefits/Advantages/ Disadvantages

Benefits

Significantly more pieces of correct information are obtained through this application 30-50%.

Advantages

Allows the interviewee to take control of the 'to be remembered event' and present their information in a way that is compatible with their memory of that event.

Disadvantages

May only be significantly effective for events which are rich in detail. Limited in events where violence plays a significant part in the event. May not influence the recall of highly emotive events because the use of some of the techniques may be too traumatic for the interviewee.

Conversation Management

What is Conversation Management (CM)

Conversation Management is another main approach incorporated into the interview stage of P.E.A.C.E. and is used by Organizations in various countries. Psychologist, Eric Shepherd, coined the term 'conversation management' in 1983 when he was a training member of the City of London Police.

The conversation management technique was developed specifically for use on unwilling interviewees. In these interviews the interviewer has to take control much earlier in the interview and manage it differently from interviews with willing suspects.

Eric Shepherd devised a 'script' for managing any conversation with any person with whom the Police converse on a day-to-day basis.

In 1986 conversation management was further developed into a formal model of investigative interviewing that was subsequently incorporated into the P.E.A.C.E. package of investigative interviewing.

What is a conversation?

Interviewing is essentially a conversation with a purpose and therefore needs to be appropriately managed. Conversation management aims to provide an interviewer with an appropriate framework to manage a conversation. Interviewers need to be able to manage both verbal and non-verbal behavior of themselves, the interviewee and possibly a third party.

Managing a conversation

Five key elements have been put forward as being necessary for the appropriate management of an interview:

1. **Contact**—establishing rapport and setting out the aims and objectives of the meeting.

2. **Content**—obtaining facts using appropriate questioning.
3. **Conduct**—the way in which the content is covered.
4. **Credibility**—the way in which the interviewer is perceived.
5. **Control**—directing the overall flow of the interview.

Interviewing the suspect

Conversation Management (Shepherd, 1991) is based upon extensive memory research. This approach has most commonly been used with suspects; however, it is also used with non-compliant witnesses of misconduct. It has three distinct phases, the suspect agenda; the investigator agenda; and the challenge.

The Conversation Management Model

Application of CM in interviewing a suspect

The phases of application of CM in interviewing a suspect are:

- Account
- Challenge – the Challenge phase

Account

The interviewer starts the suspect agenda by asking an open question related to the offence in question. The suspect is permitted to say whatever they wish concerning their knowledge and recollections of the offence. The interviewer allows the suspect to speak in his or her own words and does not interrupt. Following the suspect agenda, the interview moves onto the Interviewers agenda.

Within the investigator agenda, the interviewer's aim is to clarify the suspect's account, not challenge it, to obtain as much detail as possible and to explore topics and issues of concern to the investigator not otherwise covered in the suspect's agenda. Here the interviewer attempts to obtain so called fine-grained-detail about the objects, actions and events described in the suspect's account.

For example, if the suspect suggests that they were driving a yellow car, the interviewer would ask for more details of the car; its registration, the interior color etc. The advantage of this is that the more detail the Interviewer has, the more information there is to further the Interviewer's inquiry either as new leads and/or as to test the suspect's account.

Two terms highlight the useful information that can be obtained during this interview phase: checkable-lies and provable facts. Should a suspect not provide an account during the suspect agenda phase the interview moves into the Interviewer's agenda phase directly.

Challenge – Challenge phase

However, only following the completion of the Interviewers agenda, should the interviewer move into the challenge phase.

In the challenge or 'Challenge' phase investigators explore the suspect's account using inconsistencies and inaccuracies identified from other sources (including forensic evidence).

By coming to this stage at the end of the interview, there is less likelihood that the interview process will create suspect uncertainty about their account and with it an increased risk of suggestibility and/or confabulation.

Moreover, it also limits the chances of a willfully deceitful suspect changing their account to accommodate the information provided by Interviewer's in their challenges.

Challenges/clarification requests should be delivered in a calm and controlled manner that merely asks the suspect to account for the disparity in their account. Anger or threats should be avoided as these raise risk of suggestibility.

This approach to challenge/clarification also limits the possibility that interview evidence will be dismissed from tribunal on the grounds of oppressive or coercive interview tactics.

Between each of the three phases, the conversations management structure suggests taking a break in order to allow time for the Interviewer to evaluate the process and products of the phase.

This evaluation can shape the development of further questions and ensure that all areas have been covered before moving on to the next stage; for example, a break after the Interviewer agenda allows interviewers to reflect on the extent to which they have covered all areas they wished to cover.

Within this approach the interviewer obtains information in a systematic and planned manner. However, it is important to note that this is not like question and answer approaches in that the interview begins with an opportunity for the suspect to give their version of events uninterrupted.

It is also noteworthy that this method does not aim to extract a confession or to embarrass a suspect with evidence contrary to their account. Instead the aim is to maximize information and to highlight inconsistencies only when the suspect has provided their own version of events.

Post Interview processes

Interviewers need to complete accurate summaries of the interview and decide through information processing mechanisms whether further investigation is required. This difficult task and would require an open-minded approach.

Interviewing is an intricate, complex and difficult process. Conversation Management goes a long way to outline a structured, systematic way to interview appropriately.

For this reason it is important to evaluate the information obtained against the aims and objectives of the interview.

Evaluation

Evaluation is an integral part of an interview, just as much as any other phase. The interview is only effective if you:

- know why and how it is to be carried out (Planning and Preparation); and
- assess its significance (Evaluation)

Evaluation concludes the P.E.A.C.E. procedure.

You need to evaluate from the interview:

- the information obtained
- the whole investigation in the light of the information obtained
- your performance, either alone or jointly in the case of more than one interviewer.

Evaluate the Information Obtained

Evaluate the information provided during the interview and ask yourself the following question:

“What effect has this new information had on the investigation as a whole?”

Often this can be accomplished by posing a series of questions to yourself and evaluating the answers.

Aims and Objectives

Consider first your interview plan and your initial aims and objectives:

- Were these revised during the interview? If so, why?
- Have you achieved your (possibly revised) objectives?
- Have you covered the points needed to prove the offence(s) in question?

New Information

You should consider:

- What new information do you now have?
- Is it consistent with evidence already obtained?
- Are there any conflicts to be resolved?
- What further enquiries do you need to make?

Re-evaluate the Evidence in this Investigation

The above questions will assist you to assess what impact the interview has had on the investigation and what action you need to take next.

Consider how your investigation has changed as a result of this interview.

For example the person suspected of assault may now appear to have been acting in self-defense.

The interview may have given you new lines of enquiry to follow, such as the involvement of another person not previously known about.

Perhaps it has merely confirmed and strengthened your previous view of the investigation. Be precise about what evidence you actually have to support your understanding of this incident and identify where you are merely putting forward an opinion.

In the case of interviews with suspects you should now ask the following questions:

- Should the suspect now be eliminated from your enquiry?
- What evidence do you have to support the allegation that the suspect committed the breach or misconduct?
- Is there sufficient evidence to proceed to formal proceedings?

You will have to answer these questions carefully. You should make a careful note of the reasons for your conclusions and what further action needs to be taken.

Evaluate Your Performance

To improve your interviewing skills, you need to learn from experience.

This means that in addition to evaluating the evidence you must also evaluate your own performance:

- What did you do well?
- What could you have done better?
- What areas can you develop?
- How do I acquire these skills?

Evaluate the whole P.E.A.C.E. process. Look back at your Planning and Preparation.

Establish where your interviewing can be improved. Evaluate your performance and set goals to improve it where necessary. The more interviews you conduct the more proficient you should become.

If you are working with a colleague, feedback should be sought and given on each other's interviewing.

Many organizations have a formal evaluation and supervision process whose trained supervisors examine interviews, give feedback and advise on how to develop interview skills.

The important point in evaluating performance is the setting of appropriate aims and objectives whether by yourself or with a supervisor. This is a way to develop your skills as a professional investigative interviewer.

Conclusion

A recurrent theme throughout suspect interviews is that, at the end of the day, the onus is on interviewers themselves because it is their attitudes and behaviors, which directly affects the outcome of the investigation process.

For more information on the FIS P.E.A.C.E Investigative Interviewing Technique® please contact:

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ORIGINAL ARTICLE

Police-Induced Confessions: Risk Factors and Recommendations

Saul M. Kassin · Steven A. Drizin · Thomas Grisso · Gisli H. Gudjonsson · Richard A. Leo · Allison D. Redlich

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Abstract Recent DNA exonerations have shed light on the problem that people sometimes confess to crimes they did not commit. Drawing on police practices, laws concerning the admissibility of confession evidence, core principles of psychology, and forensic studies involving multiple methodologies, this White Paper summarizes what is known about police-induced confessions. In this review, we identify suspect characteristics (e.g., adolescence; intellectual disability; mental illness; and certain personality traits), interrogation tactics (e.g., excessive interrogation time; presentations of false evidence; and minimization), and the phenomenology of innocence (e.g., the tendency to waive *Miranda* rights) that influence confessions as well as their effects on judges and juries. This article concludes with a strong recommendation for the mandatory electronic recording of interrogations and considers other possibilities for the reform of interrogation practices and the protection of vulnerable suspect populations.

Keywords Police interviews · Interrogations · Confessions

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In recent years, a disturbing number of high-profile cases, such as the Central Park jogger case, have surfaced involving innocent people who had confessed and were convicted at trial, only later to be exonerated (Drizin & Leo, 2004; Gudjonsson, 1992, 2003; Kassin, 1997; Kassin & Gudjonsson, 2004; Lassiter, 2004; Leo & Ofshe, 1998). Although the precise incidence rate is not known, research suggests that false confessions and admissions are present in 15–20% of all DNA exonerations (Garrett, 2008; Scheck, Neufeld, & Dwyer, 2000; http://www.innocenceproject.org/). Moreover, because this sample does not include those false confessions that are disproved before trial, many that result in guilty pleas, those in which DNA evidence is not available, those given to minor crimes that receive no post-conviction scrutiny, and those in juvenile proceedings that contain confidentiality provisions, the cases that are discovered most surely represent the tip of an iceberg.

In this new era of DNA exonerations, researchers and policy makers have come to realize the enormous role that psychological science can play in the study and prevention of wrongful convictions. In cases involving wrongfully convicted defendants, the most common reason (found in three-quarters of the cases) has been eyewitness misidentification. Eyewitness researchers have thus succeeded at identifying the problems and proposing concrete reforms. Indeed, following upon an AP-LS White Paper on the subject (Wells et al., 1998), the U.S. Department of Justice assembled a working group of research

psychologists, prosecutors, police officers, and lawyers, ultimately publishing guidelines for law enforcement on how to minimize eyewitness identification error (Technical Working Group for Eyewitness Evidence, 1999; see Doyle, 2005; Wells et al., 2000). While other problems have been revealed—for example, involving flaws in various forensic sciences (see Faigman, Kaye, Saks, & Sanders, 2002), the number of cases involving confessions—long considered the "gold standard" in evidence—has proved surprising (http://www.innocenceproject.org/).

Wrongful convictions based on false confessions raise serious questions concerning a chain of events by which innocent citizens are judged deceptive in interviews and misidentified for interrogation; waive their rights to silence and to counsel; and are induced into making false narrative confessions that form a sufficient basis for subsequent conviction. This White Paper summarizes much of what we know about this phenomenon. It draws on core psychological principles of influence as well as relevant forensic psychology studies involving an array of methodologies. It identifies various risk factors for false confessions, especially in police interviewing, interrogation, and the elicitation of confessions. It also offers recommendations for reform.

Citing the impact on policy and practice of the eyewitness White Paper, Wiggins and Wheaton (2004) called for a similar consensus-based statement on confessions. Fulfilling this call, the objectives of this White Paper are threefold. The first is to review the state of the science on interviewing and interrogation by bringing together a multidisciplinary group of scholars from three perspectives: (1) clinical psychology (focused on individual differences in personality and psychopathology); (2) experimental psychology (focused on the influence of social, cognitive, and developmental processes); and (3) criminology (focused on the empirical study of criminal justice as well as criminal law, procedure, and legal practice). Our second objective is to identify the dispositional characteristics (e.g., traits associated with *Miranda* waivers, compliance, and suggestibility; adolescence; mental retardation; and psychopathology) and situational-interrogation factors (e.g., prolonged detention and isolation; confrontation; presentations of false evidence; and minimization) that influence the voluntariness and reliability of confessions. Our third objective is to make policy recommendations designed to reduce both the likelihood of police-induced false confessions and the number of wrongful convictions based on these confessions.

BACKGROUND

The pages of American legal history are rich in stories about false confessions. These stories date back to the Salem witch trials of 1692, during which about 50 women confessed to witchcraft, some, in the words of one observer, after being "tyed… Neck and Heels till the Blood was ready to come out of their Noses" (Karlsen, 1989, p. 101). Psychologists' interest as well can be traced to its early days as a science. One hundred years ago, in *On the Witness Stand*, Hugo Munsterberg (1908) devoted an entire chapter to the topic of "Untrue Confessions." In this chapter, he discussed the Salem witch trials, reported on a contemporary Chicago confession that he believed to be false, and sought to explain the causes of this phenomenon (e.g., he used such words as "hope," "fear," "promises," "threats," "suggestion," "calculations," "passive yielding," "shock," "fatigue," "emotional excitement," "melancholia," "auto-hypnosis," "dissociation," and "self-destructive despair").

DNA Exonerations and Discoveries in the U.S.

In 1989, Gary Dotson was the first wrongfully convicted individual to be proven innocent through the then-new science of DNA testing. Almost two decades later, more than 200 individuals have been exonerated by post-conviction DNA testing and released from prison, some from death row. In 15–20% of these cases, police-induced false confessions were involved (Garrett, 2008; www.innocenceproject.org). A disturbing number of these have occurred in high-profile cases, such as New York City's Central Park Jogger case, where five false confessions were taken within a single investigation. In that case, five teenagers confessed during lengthy interrogations to the 1989 brutal assault and rape of a young woman in Central Park. Each boy retracted his statement immediately upon arrest, saying he had confessed because he expected to go home afterward. All the boys were convicted and sent to prison, only to be exonerated in 2002 when the real rapist gave a confession, accurately detailed, that was confirmed by DNA evidence (*People of the State of New York v. Kharey Wise et al.*, 2002).

Post-conviction DNA tests and exonerations have offered a window into the causes of wrongful conviction. Researchers and legal scholars have long documented the problem and its sources of error (Borchard, 1932; Frank & Frank, 1957; see Leo, 2005 for a review). Yet criminal justice officials, commentators, and the public have tended until recently to be highly skeptical of its occurrence, especially in death penalty cases (Bedau & Radelet, 1987). The steady stream of post-conviction DNA exonerations in the last two decades has begun to transform this perception. Indeed, these cases have established the leading causes of error in the criminal justice system to be eyewitness misidentification, faulty forensic science, false informant testimony, and false confessions (Garrett, 2008).

The Problem of False Confessions

A false confession is an admission to a criminal act—usually accompanied by a narrative of how and why the crime occurred—that the confessor did not commit. False confessions are difficult to discover because neither the state nor any organization keeps records of them, and they are not usually publicized. Even if they are discovered, false confessions are hard to establish because of the difficulty of proving the confessor's innocence. The literature on wrongful convictions, however, shows that there are several ways to determine whether a confession is false. Confessions may be deemed false when: (1) it is later discovered that no crime was committed (e.g., the presumed murder victim is found alive, the autopsy on a "shaken baby" reveals a natural cause of death); (2) additional evidence shows it was physically impossible for the confessor to have committed the crime (e.g., he or she was demonstrably elsewhere at the time or too young to have produced the semen found on the victim); (3) the real perpetrator, having no connection to the defendant, is apprehended and linked to the crime (e.g., by intimate knowledge of nonpublic crime details, ballistics, or physical evidence); or (4) scientific evidence affirmatively establishes the confessor's innocence (e.g., he or she is excluded by DNA test results on semen, blood, hair, or saliva).

Drizin and Leo (2004) analyzed 125 cases of proven false confession in the U.S. between 1971 and 2002, the largest sample ever studied. Ninety-three percent of the false confessors were men. Overall, 81% of the confessions occurred in murder cases, followed by rape (8%) and arson (3%). The most common bases for exoneration were the real perpetrator was identified (74%) or that new scientific evidence was discovered (46%). With respect to personal vulnerabilities, the sample was younger than the total population of murderers and rapists: A total of 63% of false confessors were under the age of 25, and 32% were under 18; yet of all persons arrested for murder and rape, only 8 and 16%, respectively, are juveniles (Snyder, 2006). In addition, 22% were mentally retarded, and 10% had a diagnosed mental illness. Surprisingly, multiple false confessions to the same crime were obtained in 30% of the cases, wherein one false confession was used to prompt others. In total, 81% of false confessors in this sample whose cases went to trial were wrongfully convicted.

Although other researchers have also documented false confessions in recent years, there is no known incidence rate, and to our knowledge empirically based estimates have never been published. There are several reasons why an incidence rate cannot be determined. First, researchers cannot identify the universe of false confessions because no governmental or private organization keeps track of this information. As noted earlier, the sample of discovered cases is thus incomplete. Second, even if one could identify a nonrandom set of hotly contested and possibly false confessions, it is often difficult if not impossible as a practical matter to obtain the primary case materials (e.g., police reports; pretrial and trial transcripts; and electronic recordings of the interrogations) needed to determine "ground truth" with sufficient certainty to prove that the confessor is innocent. Also, it is important to note that although most case studies are based in the U.S. and England, proven false confessions have been documented in countries all over the world—including Canada (CBC News, August 10, 2005), Norway (Gudjonsson, 2003), Finland (Santtila, Alkiora, Ekholm, & Niemi, 1999), Germany (Otto, 2006), Iceland (Sigurdsson & Gudjonsson, 2004), Ireland (Inglis, 2004), The Netherlands (Wagenaar, 2002), Australia (Egan, 2006), New Zealand (Sherrer, 2005), China (Kahn, 2005), and Japan (Onishi, 2007).

For estimating the extent of the problem, self-report methods have also been used. Sigurdsson and Gudjonsson (2001) conducted two self-report studies of prison inmates in Iceland and found that 12% claimed to have made a false confession to police at some time in their lives, a pattern that the authors saw as part of the criminal lifestyle. In a more recent study of Icelandic inmates, the rate of self-reported false confessions had increased (Gudjonsson, Sigurdsson, Einarsson, Bragason, & Newton, 2008). Similar studies have been conducted in student samples within Iceland and Denmark. Among those interrogated by police, the self-reported false confession rates ranged from 3.7 to 7% among college and older university students (Gudjonsson, Sigurdsson, Asgeirsdottir, & Sigfusdottir, 2006; Gudjonsson, Sigurdsson, & Einarsson, 2004; Steingrimsdottir, Hreinsdottir, Gudjonsson, Sigurdsson, & Nielsen, 2007; Gudjonsson, Sigurdsson, Bragason, Einarsson, & Valdimarsdottir, 2004). In a North American survey of 631 police investigators, respondents estimated from their own experience that 4.78% of innocent suspects confess during interrogation (Kassin et al., 2007). Retrospective self-reports and observer estimates are subject to various cognitive and motivational biases and should be treated with caution as measures of a false confession rate. In general, however, they reinforce the wrongful conviction data indicating that a small but significant minority of innocent people confess under interrogation.

POLICE INTERROGATIONS IN CONTEXT

The practices of interrogation and the elicitation of confessions are subject to historical, cultural, political, legal, and other contextual influences. Indeed, although this article is focused on confessions to police within in a

criminal justice framework, it is important to note that similar processes occur, involving varying degrees of pressure, within the disparate frameworks of military intelligence gathering and corporate loss-prevention investigations. Focused on criminal justice, we examine American interrogation practices of the past and present; the role played by *Miranda* rights; the admissibility and use of confession evidence in the courts; and current practices not only in the U.S. but in other countries as well.

"Third-Degree" Practices of the Past

From the late nineteenth century through the 1930s, American police occasionally employed "third-degree" methods of interrogation—inflicting physical or mental pain and suffering to extract confessions and other types of information from crime suspects. These techniques ranged from the direct and explicit use of physical assaults to tactics that were both physically and psychologically coercive to lesser forms of duress. Among the most commonly used "third-degree" techniques were physical violence (e.g., beating, kicking, or mauling suspects); torture (e.g., simulating suffocation by holding a suspect's head in water, putting lighted cigars or pokers against a suspect's body); hitting suspects with a rubber hose (which seldom left marks); prolonged incommunicado confinement; deprivations of sleep, food, and other needs; extreme sensory discomfort (e.g., forcing a suspect to stand for hours on end, shining a bright, blinding light on the suspect); and explicit threats of physical harm (for a review, see Leo, 2004). These methods were varied and commonplace (Hopkins, 1931), resulting in large numbers of coerced false confessions (Wickersham Commission Report, 1931).

The use of third-degree methods declined precipitously from the 1930s through the 1960s. They have long since become the exception rather than the rule in American police work, having been replaced by interrogation techniques that are more professional and psychologically oriented. The twin pillars of modern interrogation are behavioral lie-detection methods and psychological interrogation techniques, both of which have been developed and memorialized in interrogation training manuals. By the middle of the 1960s, police interrogation practices had become entirely psychological in nature (Wald, Ayres, Hess, Schantz, & Whitebread, 1967). The President's Commission on Criminal Justice and the Administration of Justice declared in 1967: "Today the third degree is virtually non-existent" (Zimring & Hawkins, 1986, p. 132). Still, as the United States Supreme Court recognized in *Miranda v. Arizona* (1966), psychological interrogation is inherently compelling, if not coercive, to the extent that it relies on sustained pressure, manipulation, trickery, and deceit.

Current Law Enforcement Objectives and Practices in the U.S.

American police typically receive brief instruction on interrogation in the academy and then more sustained and specialized training when promoted from patrol to detective. Interrogation is an evidence-gathering activity that is supposed to occur after detectives have conducted an initial investigation and determined, to a reasonable degree of certainty, that the suspect to be questioned committed the crime.

Sometimes this determination is reasonably based on witnesses, informants, or tangible evidence. Often, however, it is based on a clinical hunch formed during a pre-interrogation interview in which special "behavior-provoking" questions are asked (e.g., "What do you think should happen to the person who committed this crime?") and changes are observed in aspects of the suspect's behavior that allegedly betray lying (e.g., gaze aversion, frozen posture, and fidgety movements). Yet in laboratories all over the world, research has consistently shown that most commonsense behavioral cues are not diagnostic of truth and deception (DePaulo et al., 2003). Hence, it is not surprising as an empirical matter that laypeople on average are only 54% accurate at distinguishing truth and deception; that training does not produce reliable improvement; and that police investigators, judges, customs inspectors, and other professionals perform only slightly better, if at all—albeit with high levels of confidence (for reviews, see Bond & DePaulo, 2006; Meissner & Kassin, 2002; Vrij, 2008).

The purpose of interrogation is therefore not to discern the truth, determine if the suspect committed the crime, or evaluate his or her denials. Rather, police are trained to interrogate only those suspects whose culpability they "establish" on the basis of their initial investigation (Gordon & Fleisher, 2006; Inbau, Reid, Buckley, & Jayne, 2001). For a person under suspicion, this initial impression is critical because it determines whether police proceed to interrogation with a strong presumption of guilt which, in turn, predisposes an inclination to ask confirmatory questions, use persuasive tactics, and seek confessions (Hill, Memon, & McGeorge, 2008; Kassin, Goldstein, & Savitsky, 2003). In short, the single-minded purpose of interrogation is to elicit incriminating statements, admissions, and perhaps a full confession in an effort to secure the conviction of offenders (Leo, 2008).

Designed to overcome the anticipated resistance of individual suspects who are presumed guilty, police interrogation is said to be stress-inducing by design—structured to promote a sense of isolation and increase the anxiety and despair associated with denial relative to confession. To achieve these goals, police employ a number of tactics. As

described in Inbau et al.'s (2001) *Criminal Interrogation and Confessions*, the most influential approach is the so-called Reid technique (named after John E. Reid who, along with Fred Inbau, developed this approach in the 1940s and published the first edition of their manual in 1962). First, investigators are advised to isolate the suspect in a small private room, which increases his or her anxiety and incentive to escape. A nine-step process then ensues in which an interrogator employs both negative and positive incentives. On one hand, the interrogator confronts the suspect with accusations of guilt, assertions that may be bolstered by evidence, real or manufactured, and refuses to accept alibis and denials. On the other hand, the interrogator offers sympathy and moral justification, introducing "themes" that minimize the crime and lead suspects to see confession as an expedient means of escape. The use of this technique has been documented in naturalistic observational studies (Feld, 2006b; Leo, 1996b; Simon, 1991; Wald et al., 1967) and in recent surveys of North American investigators (Kassin et al., 2007; Meyer & Reppucci, 2007).

Miranda Warnings, Rights, and Waivers

One of the U.S. legal system's greatest efforts to protect suspects from conditions that might produce involuntary and unreliable confessions is found in the U.S. Supreme Court decision in *Miranda v. Arizona* (1966). The Court was chiefly concerned with cases in which the powers of the state, represented by law enforcement, threatened to overbear the will of citizen suspects, thus threatening their Constitutional right to avoid self-incrimination.

In *Miranda*, the Court offered a remedy, requiring that police officers had to inform suspects of their rights to remain silent and to the availability of legal counsel prior to confessions. This requirement aimed to strike a balance against the inherently threatening power of the police in relation to the disadvantaged position of the suspect, thus reducing coercion of confessions. In cases involving challenges to the validity of the waiver of rights, courts were to apply a test regarding the admissibility of the confession at trial. Statements made by defendants would be inadmissible if a waiver of the rights to silence and counsel was not made "voluntarily, knowingly, and intelligently." One year after the *Miranda* decision, *In re Gault* (1967) extended these rights and procedures to youth when they faced delinquency allegations in juvenile court.

Forty years later, there is no research evidence that *Miranda* and *Gault* achieved their ultimate objective. Police officers routinely offer the familiar warnings to suspects prior to taking their statements. But research has not unequivocally determined whether confessions became more or less likely, are any more or less reliable, or are occurring in ways that are more or less "voluntary, knowing, and intelligent" than in the years prior to *Miranda*. Several years ago, Paul Cassell, an outspoken critic of *Miranda*, had maintained (based on pre–post studies as well as international comparisons) that the confession and conviction rates have dropped significantly as a direct result of the warning and waiver requirements, thus triggering the release of dangerous criminals (Cassell, 1996a, 1996b; Cassell & Hayman, 1996). Yet others countered that his analysis was based on selective data gathering methods and unwarranted inferences (Donahue, 1998; Feeney, 2000; Thomas & Leo, 2002); that these declines, if real, were insubstantial (Schulhofer, 1996); that four out of five suspects waive their rights and submit to questioning (Leo, 1996a, 1996b); and that the costs to law enforcement were outweighed by social benefits—for example, that *Miranda* has had a civilizing effect on police practices and has increased public awareness of constitutional rights (Leo, 1996c; Thomas, 1996).

In recent years, the U.S. Supreme Court has upheld the basic warning-and-waiver requirement (*Dickerson v. United States*, 2000)—for example, refusing to accept confessions given after a warning that was tactically delayed to produce an earlier inadmissible statement (*Missouri v. Seibert*, 2004). Practically speaking, however, research has suggested that the Court's presumption concerning the protections afforded by *Miranda* warnings is questionable. At minimum, a valid waiver of rights requires that police officers provide suspects an understandable description of their rights and that suspects must understand these warnings to waive them validly. What empirical evidence do we have that *Miranda's* procedural safeguards produce these conditions?

First, the *rights* of which suspects must be informed were clearly defined in Miranda, but the *warnings* were not. The *Miranda* decision included an appendix wherein the Court offered an example of the warnings that were suggested, but police departments were free to devise their own warnings. A recent study examined 560 *Miranda* warning forms used by police throughout the U.S. (Rogers, Harrison, Shuman, Sewell, & Hazelwood, 2007). A host of variations in content and format were identified, and metric analysis of their wording revealed reading-level requirements ranging from third-grade level to the verbal complexity of postgraduate textbooks (see Kahn, Zapf, & Cooper, 2006, for similar results; also see Rogers, Hazelwood, Sewell, Harrison, & Shuman, 2008). Moreover, *Miranda* warning forms varied considerably in what they conveyed. For example, only 32% of the forms told suspects that legal counsel could be obtained without charge. Thus, many warning forms raise serious doubts about the knowing and intelligent waiver of rights by almost any suspect who is "informed" by them.

Second, studies have repeatedly shown that a substantial proportion of adults with mental disabilities, and "average" adolescents below age 16 have impaired understanding of *Miranda* warnings when they are exposed to them. Even adults and youth who understand them sometimes do not grasp their basic implications. Many of these studies have examined actual adult or juvenile defendants, using reliable procedures that allow the quality of an individual's understanding to be scored according to specified criteria. For example, do people after warnings factually understand that "I don't have to talk" and that "I can get an attorney to be here now and during any questioning by police?" To answer this question, respondents have been examined in the relatively benign circumstance of a testing session with a researcher rather than in the context of an accusatory, highly stressful interrogation using standardized *Miranda* warnings that have about an average sixth- to seventh-grade reading level. Thus, the results obtained in these studies represent people's grasp of the *Miranda* warnings under relatively favorable circumstances. Under these conditions, average adults exhibit a reasonably good understanding of their rights (Grisso, 1980, 1981). But studies of adults with serious psychological disorders (Cooper & Zapf, 2008; Rogers, Harrison, Hazelwood, & Sewell, 2007) or with mental retardation (Clare & Gudjonsson, 1991; Everington & Fulero, 1999; Fulero & Everington, 1995; O'Connell, Garmoe, & Goldstein, 2005) have found substantial impairments in understanding of *Miranda* warnings compared to nonimpaired adult defendants.

Many studies have examined adolescents' understanding of *Miranda* warnings, and the results have been very consistent (Abramovitch, Higgins-Biss, & Biss, 1993; Abramovitch, Peterson-Badali, & Rohan, 1995: Colwell et al., 2005; Goldstein, Condie, Kalbeitzer, Osman, & Geier, 2003; Grisso, 1980, 1981; Redlich, Silverman, & Steiner, 2003; Viljoen, Klaver, & Roesch, 2005; Viljoen & Roesch, 2005; Wall & Furlong, 1985). In one comprehensive study, 55% of 430 youth of ages 10–16 misunderstood one or more of the *Miranda* warnings (for example, "That means I can't talk until they tell me to"). Across these studies, the understanding of adolescents ages 15–17 with near-average levels of verbal intelligence tends not to have been inferior to that of adults. But youth of that age with IQ scores below 85, and average youth below age 14, performed much poorer, often misunderstanding two or more of the warnings.

Some studies have shown that many defendants, especially adolescents, who seem to have an adequate factual understanding of *Miranda* warnings, do not grasp their relevance to the situation they are in (e.g., Grisso, 1980, 1981; Viljoen, Zapf, & Roesch, 2007). For example, one may factually understand that "I can have an attorney before and during questioning" yet not know what an attorney is or what role an attorney would play. Others may understand the attorney's role but disbelieve that it would apply in their own situation—as when youth cannot imagine that an adult would take their side against other adults, or when a person with paranoid tendencies believes that any attorney, even his own, would oppose him.

The ability to grasp the relevance of the warnings beyond having a mere factual understanding of what they say is sometimes referred to as having a "rational understanding" or "appreciation" of the warnings. Many states, however, require only a factual understanding of *Miranda* rights for a "knowing and intelligent" waiver (e.g., *People v. Daoud*, 2000). In those states that apply a strict factual understanding standard, youth who technically understand the warnings (e.g., "I can have an attorney to talk to" or "I can stay silent") but harbor faulty beliefs that may distort the significance of these warnings ("An attorney will tell the court whatever I say" or "You have to tell the truth in court, so eventually I'll have to talk if they want me to") are considered capable of having made a valid waiver, even if they have no recognition of the meanings of the words or a distorted view of their implications.

Even among those with adequate understanding, suspects will vary in their capacities to "think" and "decide" about waiving their rights. Whether decision-making capacities are deemed relevant for a "voluntary, knowing, and intelligent" waiver will depend on courts' interpretations of "intelligent" or "voluntary." Several studies have thus examined the decision-making process of persons faced with hypothetical *Miranda* waiver decisions.

Studies of adolescents indicate that youth under age 15 on average perform differently from older adolescents and adults. They are more likely to believe that they should waive their rights and tell what they have done, partly because they are still young enough to believe that they should never disobey authority. Studies have also shown that they are more likely to decide about waiver on the basis of the potential for immediate negative consequences—for example, whether they will be permitted to go home if they waive their rights—rather than considering the longer-range consequences associated with penalties for a delinquency adjudication (Grisso, 1981; Grisso et al., 2003). Young adolescents presented with hypothetical waiver decisions are less likely than older adolescents to engage in reasoning that involves adjustment of their decisions based on the amount of evidence against them or the seriousness of the allegations (Abramovitch, Peterson-Badali, & Rohan, 1995). These results regarding the likelihood of immature decision-making processes are consistent with research on the development of psychosocial abilities of young adolescents in everyday circumstances (Steinberg & Cauffman, 1996) and other

legal contexts (Grisso & Schwartz, 2000; Owen-Kostelnik, Reppucci, & Meyer, 2006).

Other *Miranda* decision-making studies have examined the suggestibility of persons with disabilities (Clare & Gudjonsson, 1995: Everington & Fulero, 1999; O'Connell, Garmoe, & Goldstein, 2005) and adolescents (Goldstein et al., 2003; Redlich et al., 2003; Singh & Gudjonsson, 1992). Suggestibility refers to a predisposition to accept information communicated by others and to incorporate that information into one's beliefs and memories. In general, these studies indicate that persons with mental retardation and adolescents in general are more susceptible to suggestion in the context of making hypothetical waiver decisions, and that greater suggestibility is related to poorer comprehension of the warnings. These results take on special significance in light of observational studies of police behavior when obtaining *Miranda* waiver decisions from adolescents (Feld, 2006a, 2006b) and adults (Leo, 1996b). As described elsewhere in this article, police officers often approach suspects with "friendly" suggestions regarding both the significance of the *Miranda* waiver procedure and their decision. In either case, results indicate that adults with disabilities and adolescents in general are prone to adjust their behaviors and decisions accordingly.

In a formal sense, whether one waives his or her rights voluntarily, knowingly, and intelligently does not have a direct bearing on the likelihood of false confessions (Kassin, 2005; White, 2001). The decision to waive one's rights in a police interrogation does not necessarily lead to a confession, much less a false confession. Nevertheless, research cited earlier regarding the lack of attentiveness of persons with disabilities and adolescents to long-range consequences suggests an increased risk that they would also comply with requests for a confession—whether true of false—to obtain the presumed short-term reward (e.g., release to go home). In addition, some studies have found that poor comprehension of *Miranda* warnings is itself predictive of a propensity to give false confessions (Clare & Gudjonsson, 1995; Goldstein et al., 2003). Sometimes this stems from low intelligence or a desire to comply; at other times it appears to be related to a naïve belief that one's actual innocence will eventually prevail—a belief that is not confined to adolescents or persons with disabilities (Kassin & Norwick, 2004).

Finally, many states require the presence of a parent or other interested adult when youth make decisions about their *Miranda* rights (Oberlander, Goldstein, & Goldstein, 2003). These rules are intended to offer youth assistance in thinking through the decision while recognizing that caretakers cannot themselves waive their children's rights in delinquency or criminal investigations. Studies have shown, however, that the presence of parents at *Miranda* waiver events typically does not result in any advice at all or, when it does, provides added pressure for the youth to waive rights and make a statement (Grisso & Ring, 1979). The presence of parents may be advisable, but it does not offer a remedy for the difficulties youth face in comprehending or responding to requests for a waiver of their rights.

In summary, research suggests that adults with mental disabilities, as well as adolescents, are particularly at risk when it comes to understanding the meaning of *Miranda* warnings. In addition, they often lack the capacity to weigh the consequences of rights waiver, and are more susceptible to waiving their rights as a matter of mere compliance with authority.

Overview of Confession Evidence in the Courts

American courts have long treated confession evidence with both respect and skepticism. Judicial respect for confessions emanates from the power of confession evidence and the critical role that confessions play in solving crimes. The U.S. Supreme Court has recognized that confession evidence is perhaps the most powerful evidence of guilt admissible in court (*Miranda v. Arizona*, 1966)—so powerful, in fact, that "the introduction of a confession makes the other aspects of a trial in court superfluous, and the real trial, for all practical purposes, occurs when the confession is obtained" (*Colorado v. Connelly*, 1986, p. 182 citing McCormick, 1972, p. 316).

Judicial skepticism of confession evidence stems from the historical fact that some law enforcement officers, aware that confession evidence can assure conviction, have abused their power in the interrogation room. As the U.S. Supreme Court stated in *Escobedo v. Illinois* (1964): "We have learned the lesson of history, ancient and modern, that a system of criminal law enforcement which comes to depend on the 'confession' will, in the long run, be less reliable and more subject to abuses than a system which depends on extrinsic evidence independently secured through skillful investigation" (pp. 488–489).

Judicial concern with juror over-reliance on confession evidence gave rise to a series of evolving rules designed to curb possible abuses in the interrogation room, exclude unreliable confessions from trial, and prevent wrongful convictions. These doctrines, which developed both in the common law of evidence and under the Constitution as interpreted by the U.S. Supreme Court, fell into two distinct sets of legal rules: corroboration rules and the voluntariness rules (Ayling, 1984; Leo, Drizin, Neufeld, Hal, & Vatner, 2006).

Corroboration Rules

The corroboration rule, which requires that confessions be corroborated by independent evidence, was the

American take on the English rule known as the *corpus delicti* rule. *Corpus delicti* literally means "body of the crime"—that is, the material substance upon which a crime has been committed" (Garner, 2004, p. 310). The rule was founded at common law in England in the wake of *Perry's Case*, a seventeenth-century case in which a mother and two brothers were convicted and executed based upon a confession to a murder that was later discovered to be false when the supposed murder victim turned up alive (Leo et al., 2006). America's version of *Perry's Case* is the infamous 1819 case of Stephen and Jesse Boorn, two brothers who were convicted and sentenced to death in Manchester, Vermont for the murder of their brother-in-law Russell Colvin. Fortunately for the two men, both of whom had confessed to the killing under intense pressure from authorities, their lawyers located Colvin alive before their hangings took place (Warden, 2005).

In American homicide cases, in response to *Boorn*, the rule came to mean that no individual can be convicted of a murder without proof that a death occurred, namely the existence of a "dead body." As the rule evolved in the courts over time, it was applied to all crimes and required that before a confession could be admitted to a jury, prosecutors had to prove: (1) that a death, injury, or loss had occurred and (2) that criminal agency was responsible for that death, injury, or loss (Leo et al., 2006). The rule was designed to serve three purposes: to prevent false confessions, to provide incentives to police to continue to investigate after obtaining a confession, and to safeguard against the tendency of juries to view confessions as dispositive of guilt regardless of the circumstances under which they were obtained (Ayling, 1984).

The *corpus delicti* rule does not require corroboration that the defendant committed the crime, nor does it demand any proof of the requisite mental state or any other elements of the crime. Moreover, the rule only requires corroboration of the fact that a crime occurred; it does not require that the facts contained in the confession be corroborated. Given the relative ease of establishing the *corpus delicti* in most criminal cases (e.g., producing a dead body in a homicide case and showing that death was not self-inflicted or the result of an accident), and the weight that most jurors attach to confession evidence, prosecutors can still obtain many convictions from unreliable confessions. The rule thus makes it easier in some cases for prosecutors to convict both the guilty and the innocent (Leo et al., 2006).

At the same time, in a certain class of cases, the *corpus delicti* rule may bar the admission of reliable confessions. Because the rule requires that prosecutors prove that there be death or injury resulting from a criminal act, prosecutors may have a hard time getting confessions admitted when the evidence is unclear as to whether any injury had occurred (e.g., child molestation without physical evidence) or whether it resulted from an accident or natural causes as opposed to a criminal act (e.g., child death by smothering or Sudden Infant Death Syndrome; see Taylor, 2005).

For these reasons and others, the rule has been severely criticized. In *Smith v. United States* (1954), the U.S. Supreme Court criticized the *corpus delicti* rule for "serv[ing] an extremely limited function" (p. 153). The Court noted that the rule was originally designed to protect individuals who had confessed to crimes that never occurred but that it does little to protect against the far more frequent problem wherein a suspect confesses to a crime committed by someone else. In short, the rule did "nothing to ensure that a particular defendant was the perpetrator of a crime" (*State v. Mauchley*, 2003, p. 483).

In place of the *corpus delicti* rule, the Supreme Court, in two decisions released on the same day—*Smith* and *Opper v. United States* (1954)—announced a new rule, dubbed the trustworthiness rule, which requires corroboration of the confession itself rather than the fact that a crime occurred. Under the trustworthiness rule, which was adopted by several states, the government may not introduce a confession unless it provides "substantial independent evidence which would tend to establish the trustworthiness of the confession" (*State v. Mauchley*, 2003, p. 48; citing Opper).

In theory, the trustworthiness standard is a marked improvement on the *corpus delicti* rule in its ability to prevent false confessions from entering the stream of evidence at trial. In practice, however, the rule has not worked to screen out false confessions. Because investigators sometimes suggest and incorporate crime details into a suspect's confession, whether deliberately or inadvertently, many false confessions appear highly credible to the secondhand observer. Without an electronic recording of the entire interrogation process, courts are thus left to decide a swearing contest between the suspect and the detective over the source of the details contained within the confession. Moreover, the quantum of corroboration in most jurisdictions that apply the trustworthiness doctrine is very low, allowing many unreliable confessions to go before the jury (Leo et al., 2006).

Rules Prohibiting Involuntary Confession

Until the late eighteenth century, out-of-court confessions were admissible as evidence even if they were the involuntary product of police coercion. In 1783, however, in *The King v. Warrickshall*, an English Court recognized the inherent lack of reliability of involuntary confessions and established the first exclusionary rule:

> Confessions are received in evidence, or rejected as inadmissible, under a consideration whether they are or are not intitled [sic] to credit. A free and voluntary confession is deserving of the highest credit, because it is presumed to flow from the strongest sense of guilt …but a confession forced from the mind by the flattery of hope, or by the torture of fear, comes in so questionable a shape…that no credit ought to be given it; and therefore it should be rejected (*King v. Warrickshall*, 1783, pp. 234–235).

The basis for excluding involuntary confessions in *Warrickshall* was a concern that confessions procured by torture or other forms of coercion must be prohibited because of the risk that such tactics could cause an innocent person to confess. In other words, involuntary confessions were to be prohibited because they were unreliable. Following *Warrickshall*, in the late 1800s, the U.S. Supreme Court adopted this reliability rationale for excluding involuntary confessions in a series of decisions (*Hopt v. Utah*, 1884; *Pierce v. United States*, 1896; *Sparf v. United States*, 1895; *Wilson v. United States*, 1896).

The Supreme Court adopted a second rationale for excluding involuntary confessions in 1897, in *Bram v. United States.* In *Bram*, the Court for the first time linked the voluntariness doctrine to the Fifth Amendment's provision that "no person shall be compelled in any criminal case to be a witness against himself." This privilege against self-incrimination was not rooted in a concern about the reliability of confessions. Rather, its origins were grounded in the rule of *nemo teneturseipsum prodere* ("no one is bound to inform on himself"), a rule dating back to the English ecclesiastical courts which sought to protect individual free will from state intrusion (Leo et al., 2006). The rule of *nemo tenetur*, which was adopted in the colonies and incorporated into the Fifth Amendment, applied only to self-incriminating statements in court, and had never been applied to extrajudicial confessions. By mixing two unrelated voluntariness doctrines, *Bram* rewrote history and provoked considerable confusion by courts and academics alike (Wigmore, 1970). Still, it gave birth to a new basis for excluding involuntary confession evidence—the protection of individual free will.

A third basis for excluding involuntary confessions began to emerge in 1936, in the case of *Brown v. Mississippi*, to deter unfair and oppressive police practices. In *Brown*, three black tenant farmers who had been accused of murdering a white farmer were whipped, pummeled, and tortured until they provided detailed confessions. The Court unanimously reversed the convictions of all three defendants, holding that confessions procured by physical abuse and torture were involuntary. The Court established the Fourteenth Amendment's due process clause as the constitutional test for assessing the admissibility of confessions in state cases. In addition to common law standards, trial judges would now have to apply a federal due process standard when evaluating the admissibility of confession evidence, looking to the "totality of the circumstances" to determine if the confession was 'made freely, voluntarily and without compulsion or inducement of any sort'"(*Haynes v. Washington*, 1963, quoting *Wilson v. United States*, 1896). As such, the Court proposed to consider personal characteristics of the individual suspect (e.g., age, intelligence, mental stability, and prior contact with law enforcement) as well as the conditions of detention and interrogation tactics that were used (e.g., threats, promises, and lies).

This deterrence rationale, implied in *Brown*, was made even more explicit in *Haley v. Ohio*, a case involving a 15-year-old black boy who was questioned throughout the night by teams of detectives, isolated for 3 days, and repeatedly denied access to his lawyer (*Haley v. Ohio*, 1948). While the majority held that the confession was obtained "by means which the law should not sanction" (pp. 600–601), Justice Frankfurter, in his concurrence, went a step further, stating that the confession must be held inadmissible "[t]o remove the inducement to resort to such methods this Court has repeatedly denied use of the fruits of illicit methods" (p. 607).

As these cases suggest, the Supreme Court relied on different and sometimes conflicting rationales for excluding involuntary confessions throughout the twentieth century (Kamisar, 1963; White, 1998). It was not always clear which of the three justifications the Court would rely on when evaluating the voluntariness of a confession. Nevertheless, the Court did appear to designate certain interrogation methods—including physical force, threats of harm or punishment, lengthy or incommunicado questioning, solitary confinement, denial of food or sleep, and promises of leniency—as presumptively coercive and therefore unconstitutional (White, 2001). The Court also considered the individual suspect's personal characteristics, such as age, intelligence, education, mental stability, and prior contact with law enforcement, in determining whether a confession was voluntary. The template of the due process voluntariness test thus involved a balancing of whether police interrogation pressures, interacting with a suspect's personal dispositions, were sufficient to render a confession involuntary (Schulhofer, 1981).

The "totality of the circumstances" test, while affording judges flexibility in practice, has offered little protection to suspects. Without bright lines for courts to follow, and without a complete and accurate record of what transpired during the interrogation process, the end result has been largely unfettered and unreviewable discretion by judges. In practice, when judges apply the test, "they exclude only the most egregiously obtained confessions and then only

haphazardly" (Feld, 1999, p. 118). The absence of a litmus test has also encouraged law enforcement officers to push the envelope with respect to the use of arguably coercive psychological interrogation techniques (Penney, 1998). Unlike its sweeping condemnation of *physical* abuse in *Brown v. Mississippi*, the Court's overall attitude toward *psychological* interrogation techniques has been far less condemnatory. In particular, the Court's attitudes toward the use of maximization and minimization (Kassin & McNall, 1991) and the false evidence ploy and other forms of deception (Kassin & Kiechel, 1996)—techniques that have frequently been linked to false confessions (Kassin & Gudjonsson, 2004)—has been largely permissive. A discussion of some of these cases follows.

Cases Addressing Interrogation Tactics: Maximization and Minimization

Today's interrogators seek to manipulate a suspect into thinking that it is in his or her best interest to confess. To achieve this change in perceptions of subjective utilities, they use a variety of techniques, referred to broadly as "maximization" and "minimization" (Kassin & McNall, 1991). Maximization involves a cluster of tactics designed to convey the interrogator's rock-solid belief that the suspect is guilty and that all denials will fail. Such tactics include making an accusation, overriding objections, and citing evidence, real or manufactured, to shift the suspect's mental state from confident to hopeless. Toward this end, it is particularly common for interrogators to communicate as a means of inducement, implicitly or explicitly, a threat of harsher consequences in response to the suspect's denials (Leo & Ofshe, 2001).

In contrast, minimization tactics are designed to provide the suspect with moral justification and face-saving excuses for having committed the crime in question. Using this approach, the interrogator offers sympathy and understanding; normalizes and minimizes the crime, often suggesting that he or she would have behaved similarly; and offers the suspect a choice of alternative explanations—for example, suggesting to the suspect that the murder was spontaneous, provoked, peer-pressured, or accidental rather than the work of a cold-blooded premeditated killer. As we will see later, research has shown that this tactic communicates by implication that leniency in punishment is forthcoming upon confession.

As the 1897 case of *Bram v. United States* demonstrates, minimization has been part of the arsenal of police interrogation tactics for over a century. In *Bram*, the authorities induced the defendant to confess based on the kind of unspoken promise that anchors the modern psychological interrogation: "Bram, I am satisfied that you killed the captain. But some of us here think you could not have done the crime alone. If you had an accomplice, you should say so, and not have the blame of this horrible crime on your own shoulders" (*Bram v. United States*, 1897, p. 539). This statement contained no direct threats or promises; rather, it combined elements of maximization (the interrogator's stated certainty in the suspect's guilt) and minimization (the suggestion that he will be punished less severely if he confesses and names an accomplice). Using language that condemns the latter, the Supreme Court reversed Bram's conviction, holding that a confession "must not be extracted by any sort of threats or violence, nor obtained by any direct or implied promises, however slight" (pp. 542–543).

Although a strict interpretation of *Bram* seemed to suggest a ban on minimization, courts throughout the twentieth century followed a practice of evading, contradicting, disregarding, and ultimately discarding *Bram* (Hirsch, 2005a). Briefly in the 1960s, it appeared that the Supreme Court was ready to revitalize *Bram* and to apply it broadly to the psychological interrogation techniques taught by such legendary police reformers as Chicago's Fred Inbau and John Reid. Indeed, the landmark case of *Miranda v. Arizona* (1966), described earlier, cited *Bram* and condemned the Reid technique and other tactics that "are designed to put the subject in a psychological state where his story is but an elaboration of what the police purport to know already—that he is guilty" (p. 450). This newfound concern with the impact of psychological interrogation tactics, however, was short lived. In the immediate aftermath of *Miranda*, the Supreme Court adopted a more deferential attitude toward law enforcement in its confession jurisprudence. In particular, *Arizona v. Fulminante* (1991) in dicta may have sounded the death knell for *Bram.* Responding to a party's invocation of *Bram*, the Court casually remarked that "under current precedent [Bram] does not state the standard for determining the voluntariness of a confession" (p. 286). However, White (1997) noted that "as Fulminante's holding indicates, some promises may be sufficient in and of themselves to render a confession involuntary; other promises may or may not be permissible depending upon the circumstances" (p. 150).

Cases Addressing Interrogation Tactics: Trickery and Deception

The false evidence ploy is a controversial tactic occasionally used by police. Not all interrogation trainers approve of this practice (Gohara, 2006), the use of which has been implicated in the vast majority of documented police-induced false confessions (Kassin, 2005). In several pre-*Miranda* voluntariness cases, the U.S. Supreme Court recognized that deception can induce involuntary confessions, although the Court never held that such tactics would automatically invalidate a confession. In *Leyra v. Denno* (1954), for

example, Leyra asked to see a physician because he was suffering from sinus problems and police brought in a psychiatrist who posed as a general physician. The Supreme Court held that the "subtle and suggestive" questioning by the psychiatrist amounted to a continued interrogation of the suspect without his knowledge. This deception and other circumstances of the interrogation rendered Leyra's confession involuntary. Similarly, in *Spano v. New York* (1959), the suspect considered one of the interrogating officers to be a friend. The Court held that the officer's false statements, in which he suggested that the suspect's actions might cost the officer his job, were a key factor in rendering the resulting confession involuntary. In *Miranda v. Arizona* (1966), the Supreme Court discussed the use of trickery and deception and noted that the deceptive tactics recommended in standard interrogation manuals fostered a coercive environment. Again, the Court did not specifically prohibit such tactics, choosing instead to offer suspects some relief from the coercive effect by empowering them with rights which could be used to bring interrogation to a halt. The criticism of deception may have fanned hopes that the Court would deal a more direct blow to this controversial tactic in future cases. But such hopes were quickly quashed.

Three years later, in *Frazier v. Cupp* (1969), the Supreme Court addressed interrogation trickery and issued a decision that to this day has been interpreted by police and the courts as a green light to deception. In *Frazier*, police used a standard false evidence ploy—telling Frazier that another man whom he and the victim had been seen with on the night of the crime had confessed to their involvement. The investigating detective also used minimization, suggesting to Frazier that he had started a fight with the victim because the victim made homosexual advances toward him. Despite the use of these deceptive tactics, the Court held that Frazier's confession was voluntary. This ruling established that police deception by itself is not sufficient to render a confession involuntary. Rather, according to *Frazier*, deception is but one factor among many that a court should consider. Some state courts have distinguished between mere false assertions, which are permissible, and the fabrication of reports, tapes, and other evidence—which is not. In the Florida case of *State v. Cayward* (1989), the defendant's confession was suppressed because police had typed up a phony crime laboratory report that placed Cayward's DNA on the victim. However, the court's concern was not that the manufactured evidence might prompt an innocent person to confess but that it might find its way into court as evidence. Similarly, New Jersey confessions were suppressed when produced by a fake, staged audiotape of an alleged eyewitness account (*State v. Patton*, 1993) and a fake crime lab report identifying the suspect's DNA at the crime scene (*State v. Chirokovskcic*, 2004). This is where the law remains today despite numerous cautionary notes from academics and researchers on the use of deception (Gohara, 2006; Gudjonsson, 2003; Kassin, 2005; Kassin & Gudjonsson, 2004; Skolnick & Leo, 1992; but see Grano, 1994; Slobogin, 2007).

Practices in England

Interrogations and confession evidence are regulated in England and Wales by the Police and Criminal Evidence Act of 1984 (PACE; Home Office, 1985), which became effective in January 1986. The Act is supplemented by five Codes of Practice, referred to as Codes A (on stop and search), B (entry and searches of premises), C (detention and questioning of suspects), D (on identification parades), and E (tape recording of interviews). The Codes provide guidance to police officers concerning procedures and the appropriate treatment of suspects. Code C is particularly relevant to issues surrounding "fitness to be interviewed," as it provides guidance "on practice for the detention, treatment and questioning of persons by police officers" (Home Office, 2003, p. 47).

The most important interview procedures set out in PACE and its Codes of Practice are that: Suspects who are detained at a police station must be informed of their legal rights; in any 24-h period the detainee must be allowed a continuous period of rest of at least 8 hours; detainees who are vulnerable in terms of their age or mental functioning should have access to a responsible adult (known as an 'appropriate adult'), whose function is to give advice, further communication, and ensure that the interview is conducted properly and fairly; and all interviews shall be electronically recorded.

Compared to the approach typically taken in the U.S. (e.g., using the Reid technique), investigative interview practices in England are less confrontational. Williamson (2007) discussed in detail how psychological science has influenced the training of police officers and their interviewing practice, making it fairer and more transparent. Prior to 1992, investigators in Britain received no formal training and the chief purpose of interviewing suspects was to obtain confessions. Following some high-profile miscarriages of justice, such as the "Guildford Four" and "Birmingham Six," the Association of Chief Police Officers for England and Wales (ACPO) published the first national training program for police officers interviewing both suspects and witnesses. This new approach was developed through a collaboration of police officers, psychologists, and lawyers. The mnemonic PEACE was used to describe the five distinct parts of the new interview approach ("Preparation and Planning," "Engage and Explain," "Account," "Closure," and "Evaluate"). The theory underlying this approach, particularly in cases of witnesses, victims, and cooperative suspects, can be traced

to Fisher and Geiselman's (1992) work on the "Cognitive Interview" (Milne & Bull, 1999; for research evidence, see Clarke & Milne, 2001; Williamson, 2006). Recent analyses of police–suspect interviews in England have revealed that the confrontation-based tactics of maximization and minimization are in fact seldom used (Soukara, Bull, Vrij, Turner, & Cherryman, in press; Bull & Soukara, 2009).

POLICE-INDUCED FALSE CONFESSIONS

As described earlier, the process of interrogation is designed to overcome the anticipated resistance of individual suspects who are presumed guilty and to obtain legally admissible confessions. The single-minded objective, therefore, is to increase the anxiety and despair associated with denial and reduce the anxiety associated with confession. To achieve these goals, police employ a number of tactics that involve isolating the suspect and then employing both negative and positive incentives. On the negative side, interrogators confront the suspect with accusations of guilt, assertions that are made with certainty and often bolstered by evidence, real or manufactured, and a refusal to accept alibis and denials. On the positive side, interrogators offer sympathy and moral justification, introducing "themes" that normalize and minimize the crime and lead suspects to see confession as an expedient means of escape. In this section, we describe some core principles of psychology relevant to understanding the suspect's decision making in this situation; then we describe the problem of false confessions and the situational and dispositional factors that put innocent people at risk.

Types of False Confessions

Although it is not possible to calculate a precise incidence rate, it is clear that false confessions occur in different ways and for different reasons. Drawing on the pages of legal history, and borrowing from social-psychological theories of influence, Kassin and Wrightsman (1985) proposed a taxonomy that distinguished among three types of false confession: voluntary, coerced-compliant, and coerced-internalized (see also Kassin, 1997; Wrightsman & Kassin, 1993). This classification scheme has provided a useful framework for the study of false confessions and has since been used, critiqued, extended, and refined by others (Gudjonsson, 2003; Inbau et al., 2001; McCann, 1998; Ofshe & Leo, 1997a, 1997b).

Voluntary False Confessions

Sometimes innocent people have claimed responsibility for crimes they did not commit without prompting or pressure from police. This has occurred in several high-profile cases. After Charles Lindbergh's infant son was kidnapped in 1932, 200 people volunteered confessions. When "Black Dahlia" actress Elizabeth Short was murdered and her body mutilated in 1947, more than 50 men and women confessed. In the 1980s, Henry Lee Lucas in Texas falsely confessed to hundreds of unsolved murders, making him the most prolific serial confessor in history. In 2006, John Mark Karr volunteered a confession, replete with details, to the unsolved murder of young JonBenet Ramsey. There are a host of reasons why people have volunteered false confessions—such as a pathological desire for notoriety, especially in high-profile cases reported in the news media; a conscious or unconscious need for self-punishment to expiate feelings of guilt over prior transgressions; an inability to distinguish fact from fantasy due to a breakdown in reality monitoring, a common feature of major mental illness; and a desire to protect the actual perpetrator—the most prevalent reason for false admissions (Gudjonsson et al., 2004; Sigurdsson & Gudjonsson, 1996, 1997, 2001). Radelet, Bedau, and Putnam (1992) described one case in which an innocent man confessed to a murder to impress his girlfriend. Gudjonsson (2003) described another case in which a man confessed to murder because he was angry at police for a prior arrest and wanted to mislead them in an act of revenge.

Compliant False Confessions

In contrast to voluntary false confessions, compliant false confessions are those in which suspects are induced through interrogation to confess to a crime they did not commit. In these cases, the suspect acquiesces to the demand for a confession to escape a stressful situation, avoid punishment, or gain a promised or implied reward. Demonstrating the form of influence observed in classic studies of social influence (e.g., Asch, 1956; Milgram, 1974), this type of confession is an act of mere public compliance by a suspect who knows that he or she is innocent but bows to social pressure, often coming to believe that the short-term benefits of confession relative to denial outweigh the long-term costs. Based on a review of a number of cases, Gudjonsson (2003) identified some very specific incentives for this type of compliance—such as being allowed to sleep, eat, make a phone call, go home, or, in the case of drug addicts, feed a drug habit. The desire to bring the interview to an end and avoid additional confinement may be particularly pressing for people who are young, desperate, socially dependent, or phobic of being locked up in a police station. The pages of legal history are filled with stories of compliant false confessions. In the 1989 Central Park jogger case described earlier, five

teenagers confessed after lengthy interrogations. All immediately retracted their confessions but were convicted at trial and sent to prison—only to be exonerated 13 years later (*People of the State of New York v. Kharey Wise et al.*, 2002).

Internalized False Confessions

In the third type of false confession, innocent but malleable suspects, told that there is incontrovertible evidence of their involvement, come not only to capitulate in their behavior but also to believe that they may have committed the crime in question, sometimes confabulating false memories in the process. Gudjonsson and MacKeith (1982) argued that this kind of false confession occurs when people develop such a profound distrust of their own memory that they become vulnerable to influence from external sources. Noting that the innocent confessor's belief is seldom fully internalized, Ofshe and Leo (1997a) have suggested that the term "persuaded false confession" is a more accurate description of the phenomenon. The case of 14-year-old Michael Crowe, whose sister Stephanie was stabbed to death in her bedroom, illustrates this type of persuasion. After a series of interrogation sessions, during which time police presented Crowe with compelling false physical evidence of his guilt, he concluded that he was a killer, saying: "I'm not sure how I did it. All I know is I did it." Eventually, he was convinced that he had a split personality—that "bad Michael" acted out of a jealous rage while "good Michael" blocked the incident from memory. The charges against Crowe were later dropped when a drifter in the neighborhood that night was found with Stephanie's blood on his clothing (Drizin & Colgan, 2004).

Relevant Core Principles of Psychology

Earlier we reviewed the tactics of a modern American interrogation and the ways in which the U.S. Supreme Court has treated these tactics with respect to the voluntariness and admissibility of the confessions they elicit. As noted, the goal of interrogation is to alter a suspect's decision making by increasing the anxiety associated with denial and reducing the anxiety associated with confession (for an excellent description of a suspect's decision-making process in this situation, see Ofshe & Leo, 1997b).

Long before the first empirical studies of confessions were conducted, the core processes of relevance to this situation were familiar to generations of behavioral scientists. Dating back to Thorndike's (1911) law of effect, psychologists have known that people are highly responsive to reinforcement and subject to the laws of conditioning, and that behavior is influenced more by perceptions of short-term than long-term consequences. Of distal relevance to a psychological analysis of interrogation are the thousands of operant animal studies of reinforcement schedules, punishment, appetitive, avoidance, and escape learning, as well as behavioral modification applications in clinics, schools, and workplaces. Looking through this behaviorist lens, it seems that interrogators have sometimes shaped suspects to confess to particular narrative accounts of crimes like they were rats in a Skinner box (see Herrnstein, 1970; Skinner, 1938).

More proximally relevant to an analysis of choice behavior in the interrogation room are studies of human decision making in a behavioral economics paradigm. A voluminous body of research has shown that people make choices that they think will maximize their well-being given the constraints they face, making the best of the situation they are in—what Herrnstein has called the "matching law" (Herrnstein, Rachlin, & Laibson, 1997). With respect to a suspect's response to interrogation, studies on the discounting of rewards and costs show that people tend to be impulsive in their orientation, preferring outcomes that are immediate rather than delayed, with delayed outcomes depreciating over time in their subjective value (Rachlin, 2000). In particular, animals and humans clearly prefer delayed punishment to immediate aversive stimulation (Deluty, 1978; Navarick, 1982). These impulsive tendencies are especially evident in juvenile populations and among cigarette smokers, alcoholics, and other substance users (e.g., Baker, Johnson, & Bickel, 2003; Bickel & Marsch, 2001; Bickel, Odum, & Madden, 1999; Kollins, 2003; Reynolds, Richards, Horn, & Karraker, 2004).

Rooted in the observation that people are inherently social beings, a second set of core principles is that individuals are highly vulnerable to influence from change agents who seek their compliance. Of direct relevance to an analysis of interrogation are the extensive literatures on attitudes and persuasion (Petty & Cacioppo, 1986), informational and normative influences (e.g., Asch, 1956; Sherif, 1936), the use of sequential request strategies, as in the foot-in-the-door effect (Cialdini, 2001), and the gradual escalation of commands, issued by figures of authority, to effectively obtain self- and other-defeating acts of obedience (Milgram, 1974). Conceptually, Latane's (1981) social impact theory provides a predictive mathematical model that can account for the influence of police interrogators—who bring *power*, *proximity*, and *number* to bear on their exchange with suspects (for a range of social psychological perspectives on interrogation, see Bem, 1966; Davis & O'Donahue, 2004; Zimbardo, 1967).

A third set of core principles consists of the "seven sins of memory" that Schacter (2001) identified from cognitive and neuroscience research—a list that includes memory transience, misattribution effects, suggestibility, and bias.

When Kassin and Wrightsman (1985) first identified coerced-internalized or coerced-persuaded false confessions, they were puzzled. At the time, existing models of memory could not account for the phenomenon whereby innocent suspects would come to internalize responsibility for crimes they did not commit and confabulate memories about these nonevents. These cases occur when a suspect is dispositionally or situationally rendered vulnerable to manipulation and the interrogator then misrepresents the evidence, a common ploy. In light of a now extensive research literature on misinformation effects and the creation of illusory beliefs and memories (e.g., Loftus, 1997, 2005), experts can now better grasp the process by which people come to accept guilt for a crime they did not commit as well as the conditions under which this may occur (see Kassin, 2008).

Situational Risk Factors

Among the situational risk factors associated with false confessions, three will be singled out: interrogation time, the presentation of false evidence, and minimization. These factors are highlighted because of the consistency in which they appear in cases involving proven false confessions.

Physical Custody and Isolation

To ensure privacy and control, and to increase the stress associated with denial in an incommunicado setting, interrogators are trained to remove suspects from their familiar surroundings and question them in the police station—often in a special interrogation room. Consistent with guidelines articulated by Inbau et al. (2001), most interrogations are brief. Observational studies in the U.S. and Britain have consistently shown that the vast majority of interrogations last approximately from 30 minutes up to 2 hours (Baldwin, 1993; Irving, 1980; Leo, 1996b; Wald et al., 1967). In a recent self-report survey, 631 North American police investigators estimated from their experience that the mean length of a typical interrogation is 1.60 hours. Consistent with cautionary advice from Inbau et al. (2001) against exceeding 4 hours in a single session, these same respondents estimated on average that their longest interrogations lasted 4.21 hours (Kassin et al., 2007). Suggesting that time is a concern among practitioners, one former Reid technique investigator has defined interrogations that exceed 6 hours as "coercive" (Blair, 2005). In their study of 125 proven false confessions, Drizin and Leo (2004) thus found, in cases in which interrogation time was recorded, that 34% lasted 6–12 hours, that 39% lasted 12–24 hours, and that the mean was 16.3 hours.

It is not particularly surprising that false confessions tend to occur after long periods of time—which indicates a dogged persistence in the face of denial. The human needs for belonging, affiliation, and social support, especially in times of stress, are a fundamental human motive (Baumeister & Leary, 1996). People under stress seek desperately to affiliate with others for the psychological, physiological, and health benefits that social support provides (Rofe, 1984; Schachter, 1959; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Hence, prolonged isolation from significant others in this situation constitutes a form of deprivation that can heighten a suspect's distress and incentive to remove himself or herself from the situation. Depending on the number of hours and conditions of interrogation, sleep deprivation may also become a source of concern. Controlled laboratory experiments have shown that sleep deprivation, which may accompany prolonged periods of isolation, can heighten susceptibility to influence and impair decision-making abilities in complex tasks. The range of effects is varied, with studies showing that sleep deprivation markedly impairs the ability to sustain attention, flexibility of thinking, and suggestibility in response to leading questions (Blagrove, 1996; for a review, see Harrison & Horne, 2000). This research literature is not all based in the laboratory. For example, performance decrements have been observed in medical interns (e.g., Veasey, Rosen, Barzansky, Rosen, & Owens, 2002; Weinger & Ancoli-Israel, 2002)—as when sleep deprivation increased the number of errors that resident surgeons made in a virtual reality surgery simulation (Taffinder, McManus, Gul, Russell, & Darzi, 1998). Also demonstrably affected are motorists (Lyznicki, Doege, Davis, & Williams, 1998) and F-117 fighter pilots (Caldwell, Caldwell, Brown, & Smith, 2004). Combining the results in a meta-analysis, Pilcher and Huffcut (1996) thus concluded that: "overall sleep deprivation strongly impairs human functioning." The use of sleep deprivation in interrogation is hardly a novel idea. In *Psychology and Torture*, Suedfeld (1990) noted that sleep deprivation is historically one of the most potent methods used to soften up prisoners of war and extract confessions from them. Indeed, Amnesty International reports that most torture victims interviewed report having been deprived of sleep for 24 hours or more.

Presentations of False Evidence

Once suspects are isolated, interrogators, armed with a strong presumption of guilt, seek to communicate that resistance is futile. This begins the confrontation process, during which interrogators exploit the psychology of inevitability to drive suspects into a state of despair. Basic research shows that once people see an outcome as inevitable, cognitive and motivational forces conspire to

promote their acceptance, compliance with, and even approval of the outcome (Aronson, 1999). In the case of interrogation, this process also involves interrupting the suspect's denials, overcoming objections, and refuting alibis. At times, American police will overcome a suspect's denials by presenting supposedly incontrovertible evidence of his or her guilt (e.g., a fingerprint, blood or hair sample, eyewitness identification, or failed polygraph)—even if that evidence does not exist. In the U.S., it is permissible for police to outright lie to suspects about the evidence (*Frazier v. Cupp*, 1969)—a tactic that is recommended in training (Inbau et al., 2001), and occasionally used (Kassin et al., 2007; Leo, 1996b).

Yet basic psychological research warns of the risk of this manipulation. Over the years, across a range of subdisciplines, basic research has revealed that misinformation renders people vulnerable to manipulation. To cite but a few highly recognized classics in the field, experiments have shown that presentations of false information—via confederates, witnesses, counterfeit test results, bogus norms, false physiological feedback, and the like—can substantially alter subjects' visual judgments (Asch, 1956; Sherif, 1936), beliefs (Anderson, Lepper, & Ross, 1980), perceptions of other people (Tajfel, Billig, Bundy, & Flament, 1971), behaviors toward other people (Rosenthal & Jacobson, 1968), emotional states (Schachter & Singer, 1962), physical attraction (Valins, 1966), self-assessments (Crocker, Voelkl, Testa, & Major, 1991), memories for observed and experienced events (Loftus, 2005), and even certain medical outcomes, as seen in studies of the placebo effect (Brown, 1998; Price, Finniss, & Benedetti, 2008). Scientific evidence for human malleability in the face of misinformation is broad and pervasive.

The forensic literature on confessions reinforces and extends this classic point, indicating that presentations of false evidence can lead people to confess to crimes they did not commit. This literature is derived from two sources of information. First, studies of actual cases reveal that the false evidence ploy, which is not permitted in Great Britain and most other European nations, is found in numerous wrongful convictions in the U.S., including DNA exonerations, in which there were confessions in evidence (Drizin & Leo, 2004; Leo & Ofshe, 1998). That this tactic appears in proven false confession cases makes sense. In self-report studies, actual suspects state that the reason they confessed is that they perceived themselves to be trapped by the weight of evidence (Gudjonsson & Sigurdsson, 1999; Moston, Stephenson, & Williamson, 1992).

Concerns about the polygraph are illustrative in this regard. Although it is best known for its use as a lie-detector test, and has value as an investigative tool, posttest "failure" feedback is often used to pressure suspects and can prompt false confessions. This problem is so common that Lykken (1998) coined the term "fourth degree" to describe the tactic (p. 235), and the National Research Council Committee to Review the Scientific Evidence on the Polygraph (2003) warned of the risk of polygraph-induced false confessions. In a laboratory demonstration that illustrates the point, Meyer and Youngjohn (1991) elicited false confessions to the theft of an experimenter's pencil from 17% of subjects told that they had failed a polygraph test on that question.

The second source of evidence is found in laboratory experiments that have tested the causal hypothesis that false evidence leads innocent people to confess to prohibited acts they did not commit. In one study, Kassin and Kiechel (1996) accused college students typing on a keyboard of causing the computer to crash by pressing a key they were instructed to avoid. Despite their innocence and initial denials, subjects were asked to sign a confession. In some sessions but not others, a confederate said she witnessed the subject hit the forbidden key. This false evidence nearly doubled the number of students who signed a written confession, from 48 to 94%.

Follow-up studies have replicated this effect to the extent that the charge was plausible (Horselenberg et al., 2006; Klaver, Lee, & Rose, 2008), even when the confession was said to bear a financial or other consequence (Horselenberg, Merckelbach, & Josephs, 2003; Redlich & Goodman, 2003), and even among informants who are pressured to report on a confession allegedly made by another person (Swanner, Beike, & Cole, in press). The effect has been particularly evident among stress-induced males (Forrest, Wadkins, & Miller, 2002) and children and juveniles who tend to be both more compliant and suggestible than adults (Candel, Merckelbach, Loyen, & Reyskens, 2005; Redlich & Goodman, 2003). Using a completely different paradigm, Nash and Wade (2009) used digital editing software to fabricate video evidence of participants in a computerized gambling experiment "stealing" money from the "bank" during a losing round. Presented with this false evidence, all participants confessed—and most internalized the belief in their own guilt.

One needs to be cautious in generalizing from laboratory experiments. Yet numerous false confession cases have featured the use and apparent influence of the false evidence ploy. In one illustrative case, in 1989, 17-year-old Marty Tankleff was accused of murdering his parents despite the complete absence of evidence against him. Tankleff vehemently denied the charges for several hours—until his interrogator told him that his hair was found within his mother's grasp, that a "humidity test" indicated he had showered (hence, the presence of only one spot of blood on his shoulder), and that his hospitalized father had emerged from his coma to say that Marty was his assailant—all of which were untrue (the father never

regained consciousness and died shortly thereafter). Following these lies, Tankleff became disoriented and confessed. Solely on the basis of that confession, Tankleff was convicted, only to have his conviction vacated and the charges dismissed 19 years later (Firstman & Salpeter, 2008; Lambert, 2008).

Minimization: Promises Implied But Not Spoken

In addition to thrusting the suspect into a state of despair by the processes of confrontation, interrogators are trained to minimize the crime through "theme development," a process of providing moral justification or face-saving excuses, making confession seem like an expedient means of escape. Interrogators are thus trained to suggest to suspects that their actions were spontaneous, accidental, provoked, peer-pressured, drug-induced, or otherwise justifiable by external factors. In the Central Park jogger case, every boy gave a false confession that placed his cohorts at center stage and minimized his own involvement (e.g., 16-year-old Kharey Wise said he felt pressured by peers)—and each said afterward that he thought he would go home after confessing based on statements made by police.

Minimization tactics that imply leniency may well lead innocent people who feel trapped to confess. Two core areas of psychology compel this conclusion. The first concerns the principle of reinforcement. As noted earlier, generations of basic behavioral scientists, dating back to Thorndike (1911), and formalized by Skinner (1938), have found that people are highly responsive to reinforcement and the perceived consequences of their behavior. More recent studies of human decision making have added that people are particularly influenced by outcomes that are immediate rather than delayed, the latter depreciating over time in their subjective value (Rachlin, 2000). The second core principle concerns the cognitive psychology of pragmatic implication. Over the years, researchers have found that when people read text or hear speech, they tend to process information "between the lines" and recall not what was stated per se, but what was *pragmatically implied.* Hence, people who read that "The burglar goes to the house" often mistakenly recall later that the burglar actually broke into the house; those who hear that "The flimsy shelf weakened under the weight of the books" often mistakenly recall that the shelf actually broke (Chan & McDermott, 2006; Harris & Monaco, 1978; Hilton, 1995). These findings indicate that pragmatic inferences can change the meaning of a communication, leading listeners to infer something that is "neither explicitly stated nor necessarily implied" (Brewer, 1977).

Taken together, basic research showing that people are highly influenced by perceived reinforcements and that people process the pragmatic implications of a communication suggests the possibility that suspects infer leniency in treatment from minimizing remarks that depict the crime as spontaneous, accidental, pressured by others, or otherwise excusable—even in the absence of an explicit promise. To test this hypothesis, Kassin and McNall (1991) had subjects read a transcript of an interrogation of a murder suspect (the text was taken from an actual New York City interrogation). The transcripts were edited to produce three versions in which the detective made a contingent explicit promise of leniency, used the technique of minimization by blaming the victim, or did not use either technique. Subjects read one version and then estimated the sentence that they thought would be imposed on the suspect. The result: As if explicit promises had been made, minimization lowered sentencing expectations compared to conditions in which no technique was used.

More recently, researchers have found that minimization can also lead innocent people to confess. Using the computer crash paradigm described earlier, Klaver, Lee, and Rose (2008) found that minimization remarks significantly increased the false confession rate when the accusation concerning the forbidden key press was plausible. Russano, Meissner, Kassin, and Narchet (2005) devised a newer laboratory paradigm to not only assess the behavioral effects of minimization but to assess the diagnosticity of the resulting confession (a technique has "diagnosticity" to the extent that it increases the ratio of true to false confessions). In their study, subjects were paired with a confederate for a problem-solving study and instructed to work alone on some problems and jointly on others. In the *guilty* condition, the confederate sought help on a problem that was supposed to be solved alone, inducing a violation of the experimental prohibition. In the *innocent* condition, the confederate did not make this request to induce the crime. The experimenter soon "discovered" a similarity in their solutions, separated the subject and confederate, and accused the subject of cheating. The experimenter tried to get the subject to sign an admission by overtly promising leniency (a deal in which research credit would be given in exchange for a return session without penalty), making minimizing remarks ("I'm sure you didn't realize what a big deal it was"), using both tactics, or using no tactics. Overall, the confession rate was higher among guilty subjects than innocent, when leniency was promised than when it was not, and when minimization was used than when it was not. Importantly, diagnosticity—defined as the rate of true confessions to false confessions—was highest at 7.67 when no tactics were used (46% of guilty suspects confessed vs. only 6% of innocents) and minimization—just like an explicit offer of leniency—reduced diagnosticity to 4.50 by increasing not only the rate of true confessions (from 46 to 81%) but even more so the rate of false confessions (which tripled from 6 to 18%). In short,

minimization provides police with a loophole in the rules of evidence by serving as the implicit but functional equivalent to a promise of leniency (which itself renders a confession inadmissible). The net result is to put innocents at risk to make false confessions.

It is important to note that minimization and the risk it engenders is not a mere laboratory phenomenon. Analyzing more than 125 electronically recorded interrogations and transcripts, Ofshe and Leo (1997a, 1997b) found that police often use techniques that serve to communicate promises and threats through pragmatic implication. These investigators focused specifically on what they called *high-end inducements*—appeals that communicate to a suspect that he or she will receive less punishment, a lower prison sentence, or some form of prosecutorial or judicial leniency upon confession and/or a higher charge or longer prison sentence in the absence of confession. In some homicide cases, for example, interrogators suggested that if the suspect admits to the killing it would be framed as unintentional, as an accident, or as an act of justifiable self-defense—not as premeditated cold-blooded murder, the portrayal that would follow from continued denial. This is a variant of the "maximization"/"minimization" technique described by Kassin and McNall (1991), which communicates through pragmatic implication that the suspect will receive more lenient treatment if he or she confesses but harsher punishment if he or she does not.

Dispositional Risk Factors

In any discussion of dispositional risk factors for false confession, the two most commonly cited concerns are a suspect's age (i.e., juvenile status) and mental impairment (i.e., mental illness, mental retardation). These common citations are because of the staggering overrepresentation of these groups in the population of proven false confessions. For example, of the first 200 DNA exonerations in the U.S., 35% of the false confessors were 18 years or younger and/or had a developmental disability. In their sample of wrongful convictions, Gross, Jacoby, Matheson, Montgomery, and Patel (2005) found that 44% of the exonerated juveniles and 69% of exonerated persons with mental disabilities were wrongly convicted because of false confessions.

Adolescence and Immaturity

There is strong evidence that juveniles are at risk for involuntary and false confessions in the interrogation room (for reviews see Drizin & Colgan, 2004; Owens-Kostelnik, Reppucci, & Meyer, 2006; Redlich, 2007; Redlich & Drizin, 2007; Redlich, Silverman, Chen, & Steiner, 2004). Juveniles are over represented in the pool of identified false confession cases: 35% of the proven false confessors in the Drizin and Leo (2004) sample were younger than age 18, and within this sample of juveniles, 55% were aged 15 or younger. Comparatively, of all persons arrested for murder and rape, only 8 and 16%, respectively, are juveniles (Snyder, 2006). Numerous high-profile cases, such as the Central Park Jogger case (Kassin, 2002), have demonstrated the risks of combining young age, and the attributes that are associated with it (e.g., suggestibility, heightened obedience to authority, and immature decision-making abilities), and the psychologically oriented interrogation tactics described earlier. Hence, Inbau et al. (2001) concede that minors are at special risk for false confession and advise caution when interrogating a juvenile. Referring to the presentation of fictitious evidence, for example, they note: "This technique should be avoided when interrogating a youthful suspect with low social maturity" (p. 429).

The field of developmental psychology was born over a century ago in the influential writings of James Baldwin, Charles Darwin, G. Stanley Hall, and William Stern (see Parke, Ornstein, Rieser, & Zahn-Waxler, 1994). Since that time, basic research has shown that children and adolescents are cognitively and psychosocially less mature than adults—and that this immaturity manifests in impulsive decision making, decreased ability to consider long-term consequences, engagement in risky behaviors, and increased susceptibility to negative influences. Specifically, this body of research indicates that early adolescence marks the onset of puberty, heightening emotional arousability, sensation seeking, and reward orientation; that mid-adolescence is a period of increased vulnerability to risk-taking and problems in affect and behavior; and that late adolescence is a period in which the frontal lobes continue to mature, facilitating regulatory competence and executive functioning (for reviews, see Steinberg, 2005; Steinberg & Morris, 2001). Recent neurological research on brain development dovetails with findings from behavioral studies. Specifically, these studies have shown continued maturation during adolescence in the limbic system (emotion regulation) and in the prefrontal cortex (planning and self-control), with gray matter thinning and white matter increasing (Steinberg, 2007).

The developmental capabilities and limitations of adolescents are highly relevant to behavior in the interrogation room. In *Roper v. Simmons* (2005), Justice Kennedy cited three general differences between juveniles and adults in support of the Court's reasoning for abolishing the death penalty for juveniles. First, he addressed the lessened maturity and responsibility of juveniles compared to adults with specific mention to the 18-year bright-line requirements for marriage without parental consent, jury duty, and voting. Second, Justice Kennedy noted that "juveniles are

more vulnerable or susceptible to negative influences and outside pressures, including peer pressure" (p. 15). Consistent with this portrait, Drizin and Leo (2004) found in their sample of false confessions that several involved two or more juveniles (out of 38 multiple false confession cases, half involved juveniles). In recommending that police "play one [suspect] against the other," Inbau et al. (2001) note that this tactic may be especially effective on young, first-time offenders (pp. 292–293). Third, Justice Kennedy recognized that juveniles' personality or "character" is not as well developed as adults. In light of the volatility of adolescence, it is interesting that Inbau et al. (2001) also suggest "themes" for confession that exploit a juvenile's restless energy, boredom, low resistance to temptation, and lack of supervision.

Drawing on basic principles of developmental psychology, there is now a wealth of forensically oriented research indicating that juveniles—suspects, defendants, and witnesses—have age-related limitations of relevance to the legal system in comparison to adults. For example, individuals younger than 16 years generally have impairments in adjudicative competence (e.g., the ability to help in one's own defense) and comprehension of legal terms (Grisso et al., 2003; Saywitz, Nathanson, & Snyder, 1993). In a subset of studies particularly germane to interrogations, several researchers employing a range of methodologies have shown that the risk of false confession is heightened during childhood and adolescence relative to adulthood. Of particular note, as described earlier, juveniles are more likely than adults to exhibit deficits in their understanding and appreciation of the *Miranda* rights that were explicitly put into place to protect people subject to "inherently coercive" interrogations (see Grisso, 1981; Redlich et al., 2003).

In the first set of studies, laboratory-based experiments have examined juveniles' responses in mock crimes and interrogations. Using the Kassin and Kiechel (1996) computer crash paradigm, Redlich and Goodman (2003) found that juveniles aged 12- and 13-years-old, and 15- and 16-years-old, were more likely to confess than young adults (aged 18–26 years), especially when confronted with false evidence of their culpability. In fact, a majority of the younger participants, in contrast to adults, complied with the request to sign a false confession without uttering a word. In another laboratory experiment, researchers examined the effect of positive and negative reinforcement on children aged 5 through 8 years (Billings et al., 2007). Reinforcement strongly affected children's likelihood of making false statements: Of those in the reinforcement condition, 52% made false admissions of guilty knowledge and 30% made false admissions of having witnessed the crime (within a span of 3.5 minutes!). In contrast, of children in the control condition, only 36 and 10% made false guilty knowledge and admissions, respectively. These findings mirror the vast majority of studies on the interview-relevant abilities of child-victim/witnesses (e.g., Garven, Wood, & Malpass, 2000).

In a second set of studies, youths have made decisions in response to hypothetical scenarios. Goldstein et al. (2003) investigated male juvenile offenders' self-reported likelihood of providing false confessions across different interrogation situations and found that younger age significantly predicted false confessions (25% surmised that they would definitely confess despite innocence to at least one of the situations). Similarly, Grisso et al. (2003) examined juveniles' and young adults' responses to a hypothetical mock-interrogation situation—specifically, whether they would confess to police, remain silent, or deny the offense. Compared to individuals aged 16 and older, those between 11 and 15 were significantly more likely to report that they would confess.

In a third set of studies, juveniles have been asked to self-report on actual interrogation experiences. In a sample of 114 justice-involved juveniles, Viljoen, Klaver, and Roesch (2005) found that suspects who were 15-years old and younger, compared to those who were 16- and 17-years old, were significantly more likely to waive their right to counsel and to confess. Overall, only 11 (less than 10%) said they had asked for an attorney during police questioning (see also Redlich et al., 2004) and 9 (6%) said they had at some point falsely confessed. A survey of over 10,000 Icelandic students aged 16–24 years similarly revealed that of those with interrogation experiences, 7% claimed to have falsely confessed, with the rates being higher among those with more than one interrogation experience (Gudjonsson, Sigurdsson, Asgeirsdottir, & Sigfusdottir, 2006). In a massive and more recent effort, more than 23,000 juveniles from grades 8, 9, and 10 (average age of 15.5 years) were surveyed from seven countries—Iceland, Norway, Finland, Latvia, Lithuania, Russia, and Bulgaria. Overall, 11.5% (2,726) reported having been interrogated by police. Within this group, 14% reported having given a false confession (Gudjonsson, Sigurdsson, Asgeirsdottir, & Sigfusdottir, in press).

Cognitive and Intellectual Disabilities

Much of what is true of juveniles is similarly true for persons with intellectual disabilities—another group that is over-represented in false confession cases (see Gudjonsson, 2003; Gudjonsson & MacKeith, 1994). Hence, in *Atkins v. Virginia* (2002), the U.S. Supreme Court explicitly cited the possibility of false confession as a rationale underlying their decision to exclude this group categorically from capital punishment. The case of Earl Washington is illustrative of the problem. Reported to have an IQ ranging

from 57 to 69 and interrogated over the course of 2 days, Washington "confessed" to five crimes, one being the rape and murder of a woman (charges resulting from the other four confessions were dismissed because of inconsistencies). Although he could not provide even basic details (e.g., that the victim was raped or her race) and although much of his statement was inconsistent with the evidence, Washington—who was easily led by suggestive questions and deferred to authority figures—was convicted, sentenced to death, and incarcerated for 18 years before being exonerated (Hourihan, 1995).

Mental retardation represents a constellation of symptoms, disorders, and adaptive functioning. The condition is defined by an IQ score of 70 or below and a range of impairments, such as adapting to societal norms, communication, social and interpersonal skills, and self-direction (American Psychiatric Association, 1994). In training police recruits, Perske (2004) identifies from research a number of tendencies exhibited by people who are mentally retarded. Collectively suggesting a heightened susceptibility to influence, the list includes the tendencies to rely on authority figures for solutions to everyday problems; please persons in authority; seek out friends; feign competence; exhibit a short attention span; experience memory gaps; lack impulse control; and accept blame for negative outcomes.

Some researchers have provided evidence for the diminished capacity of persons with cognitive disabilities in studies pertaining to interrogation (Fulero & Everington, 2004). Across four studies of *Miranda* comprehension, findings are quite consistent in showing that persons with mental retardation have significant deficits in their understanding and appreciation of *Miranda* warnings (Cloud, Shepard, Barkoff, & Shur, 2002; Everington & Fulero, 1999; Fulero & Everington, 1995; O'Connell, Garmoe, & Goldstein, 2005). For example, O'Connell et al. (2005) found that 50% of people with mild mental retardation in their sample could not correctly paraphrase *any* of the five *Miranda* components (see also Everington & Fulero, 1999). In comparison, less than 1% of adults in the general population score similarly low (Grisso, 1996). Moreover, research on the capacity of persons with mental retardation to learn and retain the knowledge and skills necessary to be competent suspects and defendants demonstrates that a significant number cannot meet this threshold, even with education (Anderson & Hewitt, 2002).

Everington and Fulero (1999) also examined the suggestibility of persons with mental retardation. Using the Gudjonsson Suggestibility Scale (GSS; a measure of interrogative suggestibility), they found that people with mental retardation were more likely to yield to leading questions and change their answers in response to mild negative feedback (see also O'Connell et al., 2005). Gudjonsson (1991) examined GSS scores among three groups: alleged false confessors, alleged true confessors, and suspects who resisted confession during questioning. He found the alleged false confessors to have the lowest IQ scores as well as the highest suggestibility scores compared to the other two groups (Gudjonsson & Clare, 1995). Finally, Clare and Gudjonsson (1995) examined perceptions of a videotaped suspect who provides a true and false confession during an interrogation and found that 38% of perceivers with intellectual disabilities, compared to only 5% of those without intellectual disabilities, believed the suspect would be allowed to go home while awaiting trial. Additionally, only 52% believed that the suspect should obtain legal advice if innocent, compared to 90% of others.

Personality and Psychopathology

In terms of susceptibility to false confession, it is important to consider other individual factors of relevance to a person's decision to confess. Gudjonsson (2003) discusses a number of personal risk factors, including enduring personality traits (e.g., suggestibility, compliance) as well as psychopathology and personality disorders—categories within the DSM-IV Axis I and II diagnostic framework that are relevant to false confessions.

A number of large-scale studies of false confessions, carried out in Iceland, show the importance of antisocial personality traits and history of offending both among prison inmates (Sigurdsson & Gudjonsson, 2001) and community samples (Gudjonsson, Sigurdsson, Asgeirsdottir, & Sigfusdottir, 2006, 2007; Gudjonsson, Sigurdsson, Bragason, et al., 2004; Gudjonsson et al., 2004). There have also been cases in which the personality disorder was considered crucial to understanding the false confession (Gudjonsson, 2006; Gudjonsson & Grisso, 2008). One interpretation of this finding is that persons with antisocial personality disorder, or antisocial traits, are more likely to be involved in offending, more often interviewed by police, and prone to lie for short-term instrumental gain, and are less concerned about the consequences of their behavior. This increases their tendency to make false denials as well as false confessions depending on their need at the time.

Psychopathology seems to be linked to false confessions in that persons with mental illness are over-represented in these cases. Psychological disorder is often accompanied by faulty reality monitoring, distorted perception, impaired judgment, anxiety, mood disturbance, poor self-control, and feelings of guilt. Gudjonsson (2003) provided a number of examples of cases where false confessions were directly related to specific disorders. Following the release of the Birmingham Six in 1991, research conducted for the British Royal Commission on Criminal Justice found that about 7% of suspects detained at police stations had a

history of mental illness and that many more were in an abnormal mental state due to anxiety and mood disturbance (Gudjonsson, Clare, Rutter, & Pearse, 1993). Similar findings were found in a recent study among suspects at Icelandic police stations (Sigurdsson, Gudjonsson, Einarsson, & Gudjonsson, 2006). In the U.S., research has consistently shown that rates of serious mental illness in the criminal justice system are at least two to five times higher than rates in the general population (e.g., James & Glaze, 2006; Lamb & Weinberger, 1998). To further compound the problem, the majority (75–80%) of offenders with mental illness have co-occurring substance abuse or dependence disorders (Abram, Teplin, & McClelland, 2003), which is an additional risk factor for false confessions (see Sigurdsson & Gudjonsson, 2001).

There is currently little research available to show how different disorders (e.g., anxiety, depression, and schizophrenia) potentially impair the suspect's capacity to waive legal rights and navigate his or her way through a police interview (Redlich, 2004). However, there is recent evidence from two separate studies to suggest that depressed mood is linked to a susceptibility to provide false confession to police (Gudjonsson et al., 2006; Sigurdsson et al., 2006). Gudjonsson et al. (2007) also recently found that multiple exposures to unpleasant or traumatic life events were significantly associated with self-reported false confessions during interrogation. Rogers et al. (2007a) found that most mentally disordered offenders exhibited insufficient understanding of *Miranda*, particularly when the warnings required increased levels of reading comprehension. Finally, Redlich (2007) found that offenders with mental illness self-reported a 22% lifetime false confession rate—notably higher than the 12% found in samples of prison inmates without mental illness (Sigurdsson & Gudjonsson, 1996).

An important type of psychopathology in relation to false confessions is attention deficit hyperactivity disorder (ADHD), which consists of three primary symptoms: inattention, hyperactivity, and impulsivity (American Psychiatric Association, 1994). This condition is commonly found among offenders (Young, 2007). Moreover, research shows that people with ADHD cope during questioning by answering a disproportionate number of questions with "don't know" replies—which may lead police to be suspicious of their answers (Gudjonsson, Young, & Bramham, 2007). They may also exhibit high levels of compliance. Gudjonsson et al. (2008) found that the rate of self-reported false confessions was significantly higher among prisoners who were currently symptomatic for attention deficit hyperactivity disorder (ADHD) than among the other prisoners (41 and 18%, respectively). These findings highlight the potential vulnerability during questioning of people who are currently symptomatic for ADHD.

Protections for Vulnerable Suspects in England

When the police interview mentally disordered persons and juveniles in England and Wales, there are special legal provisions available to ensure that their statements to police are reliable and properly obtained—for example, in the presence of "appropriate adults." The current legal provisions are detailed in the Codes of Practice (Home Office, 2003). Even when the police adhere to all the legal provisions, a judge may consider it unsafe and unfair to allow the statement to go before the jury. Here the crucial issue may be whether or not the defendant was "mentally fit" when interviewed. The term "fitness for interview" was first introduced formally in the current Codes of Practice, which became effective in 2003.

Fitness for interview is closely linked to the concept of "legal competencies," which refers to an individual's physical, mental, and social vulnerabilities that may adversely affect his or her capacity to cope with the investigative and judicial process (Grisso, 1986). Historically, legal competence constructs relating to confession evidence have focused primarily on the functional deficits of juveniles (Drizin & Colgan, 2004), and adult defendants with mental retardation (Fulero & Everington, 2004) and mental illnesses (Melton, Petrila, Poythress, & Slobogin, 1997). Increasingly, the construct of legal competence in criminal cases is also being applied to defendants with "personality disorder" (Gudjonsson & Grisso, 2008). The introduction of "fitness to be interviewed" within the current Codes of Practice in England and Wales is a significant step toward protecting vulnerable suspect populations (Gudjonsson, 2005). Indeed, a similar framework has been introduced in New Zealand and Australia (Gall & Freckelton, 1999).

Innocence as a Risk Factor

On September 20, 2006, Jeffrey Mark Deskovic was released from a maximum-security prison in New York, where he spent 15 years for a murder he said he committed but did not. Why did he confess? "Believing in the criminal justice system and being fearful for myself, I told them what they wanted to hear," Deskovic said. Certain that DNA testing on the semen would establish his innocence, he added: "I thought it was all going to be okay in the end" (Santos, 2006, p. A1).

On the basis of anecdotal and research evidence, Kassin (2005) suggested the ironic hypothesis that *innocence* itself may put *innocents* at risk. Specifically, it appears that people who stand falsely accused tend to believe that truth and justice will prevail and that their innocence will become transparent to investigators, juries, and others. As a result, they cooperate fully with police, often failing to

realize that they are suspects not witnesses, by waiving their rights to silence and a lawyer and speaking freely to defend themselves. Thus, although mock criminals vary their disclosures according to whether the interrogator seems informed about the evidence, innocents are uniformly forthcoming—regardless of how informed the interrogator seems (Hartwig, Granhag, Strömwall, & Kronkvist, 2006; Hartwig, Granhag, Strömwall, & Vrij, 2005).

Based on observations of live and videotaped interrogations, Leo (1996b) found that four out of five suspects waive their rights and submit to questioning—and that people who have no prior record of crime are the most likely to do so. In light of known recidivism rates, this result suggested that innocent people in particular are at risk to waive their rights. Kassin and Norwick (2004) tested this hypothesis in a controlled laboratory setting in which some subjects but not others committed a mock theft of $100. Upon questioning, subjects who were innocent were more likely to sign a waiver than those who were guilty, 81 to 36%. Afterward, most innocent subjects said that they waived their rights precisely because they were innocent: "I did nothing wrong," "I had nothing to hide." The feeling of reassurance that accompanies innocence may be rooted in a generalized and perhaps motivated belief in a just world in which human beings get what they deserve and deserve what they get (Lerner, 1980). It may also stem from the "illusion of transparency," a tendency for people to overestimate the extent to which their true thoughts, emotions, and other inner states can be seen by others (Gilovich, Savitsky, & Medvec, 1998; Miller & McFarland, 1987). Whatever the mechanism, it is clear that *Miranda* warnings may not adequately protect the citizens who need it most—those accused of crimes they did not commit (Kassin, 2005).

These findings suggest that people have a naïve faith in the power of innocence to set them free. This phenomenology was evident in the classic case of Peter Reilly, an 18-year-old who falsely confessed to the murder of his mother. When asked years later why he did not invoke his *Miranda* rights, Reilly said, "My state of mind was that I hadn't done anything wrong and I felt that only a criminal really needed an attorney, and this was all going to come out in the wash" (Connery, 1996, p. 93). Innocence may lead innocents to forego other important safeguards as well. Consider the case of Kirk Bloodsworth, the first death row inmate to be exonerated by DNA. In 1985, based solely on eyewitness identifications, Bloodsworth was convicted for the rape and murder of a 9-year-old girl. He was exonerated by DNA 8 years later and ultimately vindicated when the true perpetrator was identified. The day of his arrest, Bloodsworth was warned that there would be cameras present and asked if he wanted to cover his head with a blanket. He refused, saying he did nothing wrong and was not going to hide—even though potential witnesses might see him on TV (Junkin, 2004).

THE CONSEQUENCES OF CONFESSION

It is inevitable that some number of innocent people will be targeted for suspicion and subjected to excessively persuasive interrogation tactics, and many of them will naively and in opposition to their own self-interest waive their rights and confess. One might argue that this unfortunate chain of events is tolerable, not tragic, to the extent that the resulting false confessions are detected by authorities at some point and corrected. Essential to this presumed safety net is the belief that police, prosecutors, judges, and juries are capable of distinguishing true and false confessions.

The process begins with the police. Numerous false confession cases reveal that once a suspect confesses, police often close their investigation, deem the case solved, and overlook exculpatory evidence or other possible leads–even if the confession is internally inconsistent, contradicted by external evidence, or the product of coercive interrogation (Drizin & Leo, 2004; Leo & Ofshe, 1998). This trust in confessions may extend to prosecutors as well, many of whom express skepticism about police-induced false confessions, stubbornly refusing to admit to such an occurrence even after DNA evidence has unequivocally established the defendant's innocence (Findley & Scott, 2006; Hirsch, 2005b; Kassin & Gudjonsson, 2004). Upon confession, prosecutors tend to charge suspects with the highest number and types of offenses, set bail higher, and are far less likely to initiate or accept a plea bargain to a reduced charge (Drizin & Leo, 2004; Leo & Ofshe, 1998; but see Redlich, in press).

Part of the problem is that confessions can taint other evidence. In one case, for example, Pennsylvania defendant Barry Laughman confessed to rape and murder, which was later contradicted by blood typing evidence. Clearly influenced by the confession, the state forensic chemist went on to concoct four "theories," none grounded in science, to explain away the mismatch. Sixteen years later, Laughman was set free (http://www.innocenceproject.org). Recent empirical studies have demonstrated the problem as well. In one study, Dror and Charlton (2006) presented five latent fingerprint experts with pairs of prints from a crime scene and suspect in an actual case in which they had previously made a match or exclusion judgment. The prints were accompanied either by no extraneous information, an instruction that the suspect had confessed (suggesting a match), or an instruction that the suspect was in custody at the time (suggesting an exclusion). The misinformation

produced a change in 17% of the original, previously correct judgments. In a second study, Hasel and Kassin (2009) staged a theft and took photographic identification decisions from a large number of eyewitnesses who were present. One week later, individual witnesses were told that the person they had identified denied guilt, or that he confessed, or that a specific other lineup member confessed. Influenced by this information, many witnesses went on to change their identification decisions, selecting the confessor with confidence, when given the opportunity to do so.

Not surprisingly, confessions are particularly potent in the courtroom. When a suspect in the U.S. retracts his or her confession, pleads not guilty, and goes to trial, a sequence of two decisions is set into motion. First, a judge determines whether the confession was voluntary and hence admissible as evidence. Then a jury, hearing the admissible confession, determines whether the defendant is guilty beyond a reasonable doubt. But can people distinguish between true and false confessions? And what effect does this evidence have within the context of a trial?

Research on the impact of confessions throughout the criminal justice system is unequivocal. Mock jury studies have shown that confessions have more impact than other potent forms of evidence (Kassin & Neumann, 1997) and that people do not fully discount confessions—even when they are judged to be coerced (Kassin & Wrightsman, 1980) and even when the confessions are presented secondhand by an informant who is motivated to lie (Neuschatz, Lawson, Swanner, Meissner, & Neuschatz, 2008). For example, Kassin and Sukel (1997) presented mock jurors with one of three versions of a murder trial transcript. In a low-pressure version, the defendant was said to have confessed to police immediately upon questioning. In a high-pressure version, participants read that the suspect was in pain and interrogated aggressively by a detective who waved his gun in a menacing manner. A control version contained no confession in evidence. Presented with the high-pressure confession, participants appeared to respond in the legally prescribed manner. They judged the statement to be involuntary and said it did not influence their decisions. Yet when it came to the all-important verdict measure, this confession significantly increased the conviction rate. This increase occurred even in a condition in which subjects were specifically admonished to disregard confessions they found to be coerced. Similar results have recently been reported in mock jury studies involving defendants who are minors (Redlich, Ghetti, & Quas, 2008; Redlich, Quas, & Ghetti, 2008).

This point concerning the power of confession evidence is bolstered by recent survey evidence indicating that although laypeople understand that certain interrogation tactics are psychologically coercive, they do not believe that these tactics elicit false confessions (Leo & Liu, 2009). Archival analyses of actual cases also reinforce this point. When proven false confessors pleaded not guilty and proceeded to trial, the jury conviction rates ranged from 73% (Leo & Ofshe, 1998) to 81% (Drizin & Leo, 2004). These figures led Drizin and Leo to describe confessions as "inherently prejudicial and highly damaging to a defendant, even if it is the product of coercive interrogation, even if it is supported by no other evidence, and even if it is ultimately proven false beyond any reasonable doubt" (p. 959).

There are at least three reasons why people cannot easily identify as false the confessions of innocent suspects. First, generalized common sense leads people to trust confessions the way they trust other behaviors that counter self-interest. Over the years, and across a wide range of contexts, social psychologists have found that social perceivers fall prey to the fundamental attribution error—that is, they tend to make dispositional attributions for a person's actions, taking behavior at face value, while neglecting the role of situational factors (Jones, 1990; Ross, 1977). Gilbert and Malone (1995) offered several explanations for this bias, the most compelling of which is that people draw quick and relatively automatic dispositional inferences from behavior and then fail to adjust or correct for the presence of situational constraints. Common sense further compels the belief that people present themselves in ways that are self-serving and that confessions must therefore be particularly diagnostic of guilt. Indeed, most people reasonably believe that they would never confess to a crime they did not commit and have only rudimentary understanding of the predispositional and situational factors that would lead someone to do so (Henkel, Coffman, & Dailey, 2008).

A second reason is that people are typically not adept at deception detection. We saw earlier that neither lay people nor professionals distinguish truths from lies at high levels of accuracy. This problem extends to judgments of true and false confessions. To demonstrate, Kassin, Meissner, and Norwick (2005) videotaped male prison inmates providing true confessions to the crimes for which they were incarcerated and concocting false confessions to crimes selected by the experimenter that they did not commit. When college students and police investigators later judged these statements from videotapes or audiotapes, the results showed that neither group was particularly adept, exhibiting accuracy rates that ranged from 42 to 64%—typically not much better than chance performance. These findings suggest people cannot readily distinguish true and false confessions and that law enforcement experience does not improve performance. This latter result is not surprising, as many of the behavioral cues that typically form part of the basis for training (e.g., gaze aversion, postural cues, and

grooming gestures) are not statistically correlated with truth-telling or deception (DePaulo et al., 2003).

On the assumption that "I'd know a false confession if I saw one," there is a third reason for concern: Police-induced false confessions often contain *content* cues presumed to be associated with truthfulness. In many documented false confessions, the statements ultimately presented in court contained not only an admission of guilt but vivid details about the crime, the scene, and the victim that became known to the innocent suspect through leading questions, photographs, visits to the crime scene, and other secondhand sources invisible to the naïve observer. To further complicate matters, many false confessors state not just what they allegedly did, and how they did it, but *why*—as they self-report on revenge, jealousy, provocation, financial desperation, peer pressure, and other prototypical motives for crime. Some of these statements even contain apologies and expressions of remorse. To the naïve spectator, such statements appear to be voluntary, textured with detail, and the product of personal experience. Uninformed, however, this spectator mistakes illusion for reality, not realizing that the taped confession is scripted by the police theory of the case, rehearsed during hours of unrecorded questioning, directed by the questioner, and ultimately enacted on paper, tape, or camera by the suspect (see Kassin, 2006).

RECOMMENDATIONS FOR REFORM

Confession is a potent form of evidence that triggers a chain of events from arrest, prosecution, and conviction, through post-conviction resistance to change in the face of exculpatory information. Recent DNA exonerations have shed light on the problem that innocent people, confident in the power of their innocence to prevail, sometimes confess to crimes they did not commit. Research has identified two sets of risks factors. The first pertains to the circumstances of interrogation, situational factors such as a lengthy custody and isolation, possibly accompanied by a deprivation of sleep and other need states; presentations of false evidence, a form of trickery that is designed to link the suspect to the crime and lead him or her to feel trapped by the evidence; and minimization tactics that lead the suspect and others to infer leniency even in the absence of an explicit promise. The second set of risk factors pertains to dispositional characteristics that render certain suspects highly vulnerable to influence and false confessions—namely, adolescence and immaturity; cognitive and intellectual impairments; and personality characteristics and mental illness.

In light of the wrongful convictions involving false confessions that have recently surfaced, as well as advances in psychological research on interviewing, interrogations, and confessions, there are renewed calls for caution regarding confessions and the reform of interrogation practices not seen since the Wickersham Commission Report (1931) and U.S. Supreme Court opinion in *Miranda* (1966). Professionals from varying perspectives may differ in their perceptions of both the problems and the proposed solutions. Hence, it is our hope that the recommendations to follow will inspire a true collaborative effort among law enforcement professionals, district attorneys, defense lawyers, judges, social scientists, and policy makers to scrutinize the systemic factors that put innocent people at risk and devise effective safeguards.

Electronic Recording of Interrogations

Without equivocation, our most essential recommendation is to lift the veil of secrecy from the interrogation process in favor of the principle of transparency. Specifically, *all custodial interviews and interrogations of felony suspects should be videotaped in their entirety and with a camera angle that focuses equally on the suspect and interrogator.* Stated as a matter of requirement, such a policy evokes strong resistance in some pockets of the law enforcement community. Yet it has also drawn advocates from a wide and diverse range of professional, ideological, and political perspectives (e.g., American Bar Association, 2004; Boetig, Vinson, & Weidel, 2006; Cassell, 1996a; Drizin & Colgan, 2001; Geller, 1994; Gudjonsson, 2003; Leo, 1996c; Slobogin, 2003; Sullivan, 2004; The Justice Project, 2007).

In England, under the Police and Criminal Evidence Act of 1984, the mandatory requirement for tape-recording police interviews was introduced to safeguard the legal rights of suspects and the integrity of the process. At first resisted by police, this requirement has positively transformed the ways in which police interviews are conducted and evaluated. Over the years, the need for taping has pressed for action within the U.S. as well. In *Convicting the Innocent*, a classic study of wrongful convictions, Edwin Borchard (1932) expressed concern that police abuses during interrogations led to involuntary and unreliable confessions. His solution, utilizing the technology of the time, was to make "[phonographic records" [of interrogations] which shall alone be introducible in court" (pp. 370–371).

Throughout the twentieth century, other advocates for recording were less concerned with preventing false confessions and more concerned with increasing the accuracy of the justice system by eliminating the swearing contests between police officers and suspects over what occurred during the interrogation (Kamisar, 1977; Weisberg, 1961). Still others saw that recording interrogations held

tremendous benefits for law enforcement by discouraging note-taking and other practices that could inhibit suspects, helping police officers obtain voluntary confessions, nabbing accomplices, and protecting officers from false allegations of abuse (Geller, 1993; O'Hara, 1956). Despite these calls for recording, by the turn of the twentieth century only two states, by virtue of state Supreme Court decisions—Alaska (*Stephan v. State*, 1985) and Minnesota (*State v. Scales*, 1994)—required law enforcement officers to electronically record suspect interrogations. The pace of reform in this area, however, is picking up and once again a concern about false confessions seems to be the impetus. In the post-DNA age, and particularly in the past 5 years, as the number of wrongful convictions based on false confessions has continued to climb, concerns about the reliability of confession evidence have led to a renewed push for recording requirements (Drizin & Reich, 2004). As a result of statutes and court rulings, seven additional jurisdictions—Illinois, Maine, New Mexico, New Jersey, Wisconsin, North Carolina, and the District of Columbia—have joined Minnesota and Alaska, in requiring recordings of custodial interrogations in some circumstances (Robertson, 2007; Sullivan, 2004). In several other states, supreme courts have stopped short of requiring recording but either have issued strongly worded opinions endorsing recording—e.g., New Hampshire (*State v. Barnett*, 2002) and Iowa (*State v. Hajtic*, 2007)—or, in the case of Massachusetts, held that where law enforcement officers have no excuse for the failure to record interrogation, defendants are entitled to a strongly worded instruction admonishing jurors to treat unrecorded confessions with caution (*Commonwealth v. DiGiambattista*, 2004).

In addition to recent developments in state courts and legislatures, there is a growing movement among law enforcement agencies around the country to record interrogations voluntarily. Over the past 70 years, the idea has been anathema to many in law enforcement—including the FBI, which prohibits electronic recording, and John Reid & Associates, which used to vigorously oppose the practice of recording interrogations (Inbau et al., 2001; but see Buckley & Jayne's [2005] recent publication, *Electronic Recording of Interrogations*; for an historical review, see Drizin & Reich, 2004). Yet there are now signs that police opposition is thawing (e.g., Boetig et al., 2006). Several years ago, a National Institute of Justice study found that one-third of large police and sheriff's departments throughout the U.S. were already videotaping at least some interrogations or confessions and that their experiences with the practice were positive (Geller, 1993). A more recent survey of more than 465 law enforcement agencies in states that do not require electronic recording of interrogations has revealed that the practice is widespread. Without any legislative or judicial compulsion, police departments in many states routinely record interviews and interrogations in major felony investigations. Without exception, they have declared strong support for the practice (Sullivan, 2004; Sullivan, Vail, & Anderson, 2008).

There are numerous advantages to a videotaping policy. To begin, the presence of a camera may deter interrogators from using the most egregious, psychologically coercive tactics—and deter frivolous defense claims of coercion where none existed. Second, a videotaped record provides trial judges (ruling on voluntariness) and juries (determining guilt) an *objective* and *accurate* record of the process by which a statement was taken—a common source of dispute that results from ordinary forgetting and self-serving distortions in memory. In a study that demonstrates the problem, Lamb, Orbach, Sternberg, Hershkowitz, and Horowitz (2000) compared interviewers' verbatim contemporaneous accounts of 20 forensic interviews with alleged child sex abuse victims with tape recordings of these same sessions. Results showed that more than half of the interviewers' utterances and one quarter of the details that the children provided did not appear in their verbatim notes. Even more troubling was that interviewers made frequent and serious source attribution errors—for example, often citing the children, not their own prompting questions, as the source of details. This latter danger was inadvertently realized by D.C. Detective James Trainum (2007) who—in an article entitled "I took a false confession – so don't tell me it doesn't happen!"—recounted a case in which a suspect who had confessed to him was later exonerated: "Years later, during a review of the videotapes, we discovered our mistake. We had fallen into a classic trap. We believed so much in our suspect's guilt that we ignored all evidence to the contrary. To demonstrate the strength of our case, we showed the suspect our evidence, and unintentionally fed her details that she was able to parrot back to us at a later time. It was a classic false confession case and without the video we would never have known" (see also Trainum, 2008). Similarly, Police Commander Neil Nelson, of St. Paul, Minnesota, said that he too once elicited a false confession, which he came to doubt by reviewing the interrogation tape: "You realize maybe you gave too much detail as you tried to encourage him and he just regurgitated it back" (Wills, 2005; quoted online by Neil Nelson & Associates; http://www.neilnelson.com/pressroom.html).

To further complicate matters of recollection, police interrogations are not prototypical social interactions but, rather, extraordinarily stressful events for those who stand accused. In a study that illustrates the risk to accurate retrieval, Morgan et al. (2004) randomly assigned trainees in a military survival school to undergo a realistic high-stress or low-stress mock interrogation. Twenty-four hours later, he found that those in the high-stress condition had

difficulty even identifying their interrogators in a lineup. In real criminal cases, questions constantly arise about whether rights were administered and waived, whether the suspect was cooperative or evasive, whether detectives physically intimidated the suspect, whether promises or threats were made or implied, and whether the details in a confession emanated from the police or suspect, are among the many issues that become resolvable (in Great Britain, as well, taping virtually eliminated the concern that police officers were attributing to suspects admissions that would later be disputed; see Roberts, 2007).

In recent years, Sullivan (2004, 2007) has tirelessly interviewed law enforcement officials from hundreds of police and sheriff's departments that have recorded custodial interrogations and found that they enthusiastically favored the practice. Among the collateral benefits they often cited were that recording permitted detectives to focus on the suspect rather than take copious notes, increased accountability, provided an instant replay of the suspect's statement that sometimes revealed incriminating comments that were initially overlooked, reduced the amount of time detectives spent in court defending their interrogation practices, and increased public trust in law enforcement. Countering the most common apprehensions, the respondents in these interview studies reported that videotaping interrogations did not prove costly or inhibit suspects from talking to police or incriminating themselves. Typical of this uniformly positive reaction, Detective Trainum (2007) notes: "When videotaping was first forced upon us by the D.C. City Council, we fought it tooth and nail. Now, in the words of a top commander, we would not do it any other way."

It is beyond the scope of this article to draft a model rule that would address such specific details as what conditions should activate a recording requirement, how the recordings should be preserved, whether exceptions to the rule should be made (e.g., if the equipment malfunctions, if the suspect refuses to make a recorded statement), and what consequences would follow from the failure to record (e.g., whether the suspect's statement would be excluded or admitted to the jury with a cautionary instruction). As a matter of policy, however, research does suggest that it is important not only that entire sessions be recorded, triggered by custodial detention, but that the camera adopt a neutral "equal focus" perspective that shows both the accused and his or her interrogators. In 20-plus years of research on illusory causation effects in attribution, Lassiter and his colleagues have taped mock interrogations from three different camera angles so that the suspect, the interrogator, or both were visible. Lay participants who saw only the suspect judged the situation as less coercive than those focused on the interrogator. By directing visual attention toward the accused, the camera can thus lead jurors to underestimate the amount of pressure actually exerted by the "hidden" detective (Lassiter & Irvine, 1986; Lassiter, Slaw, Briggs, & Scanlan, 1992). Additional studies have confirmed that people are more attuned to the situational factors that elicit confessions whenever the interrogator is on camera than when the focus is solely on the suspect (Lassiter & Geers, 2004; Lassiter, Geers, Munhall, Handley, & Beers, 2001). Under these more balanced circumstances, juries make more informed attributions of voluntariness and guilt when they see not only the final confession but the conditions under which it was elicited (Lassiter, Geers, Handley, Weiland, & Munhall, 2002). Indeed, even the perceptions of experienced trial judges are influenced by variations in camera perspective (Lassiter, Diamond, Schmidt, & Elek, 2007).

Reform of Interrogation Practices

In light of recent events, the time is ripe for police, district attorneys, defense lawyers, judges, researchers, and policymakers to evaluate current methods of interrogation. All parties would agree that the surgical objective of interrogation is to secure confessions from perpetrators but not from innocent suspects. Hence, the process of interrogation should be structured in theory and in practice to produce outcomes that are accurate, as measured by the observed ratio of true to false confessions. Yet except for physical brutality or deprivation, threats of harm or punishment, promises of leniency or immunity, and flagrant violations of a suspect's constitutional rights, there are no clear criteria by which to regulate the process. Instead, American courts historically have taken a "totality of the circumstances" approach to voluntariness and admissibility. Because *Miranda* does not adequately safeguard the innocent, we believe that the time is right to revisit the factors that comprise those circumstances.

As illustrated by the Reid technique and other similar approaches, the modern American police interrogation is, by definition, a guilt-presumptive and confrontational process—aspects of which put innocent people at risk. There are two ways to approach questions of reform. One is to completely reconceptualize this model at a macro level and propose that the process be converted from "confrontational" to "investigative." Several years ago, after a number of high-profile false confessions, the British moved in this direction, transitioning police from a classic interrogation to a process of "investigative interviewing." The Police and Criminal Evidence (PACE) Act of 1984 sought to reduce the use of psychologically manipulative tactics. In a post-PACE study, Irving and McKenzie (1989) found that the use of psychologically manipulative tactics had significantly declined—without a corresponding drop in the frequency of confessions. The post-PACE confession rate

is also somewhat higher in the UK than in the U.S. (Gudjonsson, 2003). In 1993, the Royal Commission on Criminal Justice further reformed the practice of interrogation by proposing the PEACE model described earlier ("Preparation and Planning," "Engage and Explain," "Account," "Closure," and "Evaluate"), the purpose of which is fact finding rather than confession. Observational research suggests that such investigative interviews enable police to inculpate offenders—and youthful suspects as well (Hershkowitz, Horowitz, Lamb, Orbach, & Sternberg, 2004; Lamb, Orbach, Hershkowitz, Horowitz, & Abbott, 2007)—by obtaining from them useful, evidence-generating information about the crime (for reviews, see Bull & Soukara, 2009; Williamson, 2006).

Similar techniques have been taught and employed in the U.S. as well, where Nelson (2007) reports from experience that it is highly effective. Recent laboratory research has also proved promising in this regard. In one series of experiments, interviewers more effectively exposed deceptive mock criminals when they strategically withheld incriminating evidence than when they confronted the suspects with that evidence (Hartwig et al., 2005, 2006). In an experiment using the Russano et al. (2005) cheating paradigm described earlier, Rigoni and Meissner (2008) independently varied and compared accusatorial and inquisitorial methods and found that the latter produced more diagnostic outcomes—lowering the rate of false confessions without producing a corresponding decrease in the rate of true confessions. Although more systematic research is needed, it is clear that investigative interviewing offers a potentially effective macro alternative to the classic American interrogation. Indeed, New Zealand and Norway have recently adopted the PEACE approach to investigative interviewing as a matter of national policy.

A second approach to the question of reform is to address specific risk factors inherent within a confrontational framework for interrogation. On the basis of converging evidence from actual false confession cases, basic principles of psychology, and forensic research, the existing literature suggests that certain interrogation practices alone and in combination with each other pose a risk to the innocent—whether they are dispositionally vulnerable or not. Focused in this way, but stopping short of making specific recommendations, we propose that the following considerations serve as a starting point for collaborative discussion.

Custody and Interrogation Time

As noted earlier, the human needs for belonging, affiliation, and social support, especially in times of stress, are a fundamental human motive. Prolonged isolation from significant others thus constitutes a form of deprivation that can heighten a suspect's distress and increase his or her incentive to escape the situation. Excessive time in custody may also be accompanied by fatigue and feelings of helplessness and despair as well as the deprivation of sleep, food, and other biological needs. The vast majority of interrogations last from 30 minutes up to 2 hours (Baldwin, 1993; Irving, 1980; Kassin et al., 2007; Leo, 1996b; Wald et al., 1967). Inbau et al. (2001) cautioned against surpassing 4 hours, and Blair (2005) argued that interrogations exceeding 6 hours are "legally coercive." Yet research shows that in proven false confession cases the interrogations had lasted for an average of 16.3 hours (Drizin & Leo, 2004). Following PACE in Great Britain, policy discussions should begin with a proposal for the imposition of time limits, or at least flexible guidelines, when it comes to detention and interrogation, as well as periodic breaks from questioning for rest and meals. At a minimum, police departments should consider placing internal time limits on the process that can be exceeded—initially and at regular intervals thereafter, if needed—only with authorization from a supervisor of detectives.

Presentations of False Evidence

A second problem concerns the tactic of presenting false evidence, which is often depicted as incontrovertible, and which takes the form of outright lying to suspects—for example, about an eyewitness identification that was not actually made; an alibi who did not actually implicate the suspect; fingerprints, hair, or blood that was not actually found; or polygraph tests that they did not actually fail. In *Frazier v. Cupp* (1969), the U.S. Supreme Court reviewed a case in which police falsely told the defendant that his cousin (whom he said he was with), had confessed, which immediately prompted the defendant to confess. The Court sanctioned this type of deception—seeing it as relevant to its inquiry on voluntariness but not a reason to disqualify the resulting confession. Although some state courts have distinguished between mere false assertions, which are permissible, and the fabrication of reports, tapes, and other evidence, which are not, the Supreme Court has not revisited the issue.

From a convergence of three sources, there is strong support for the proposition that outright lies can put innocents at risk to confess by leading them to feel trapped by the inevitability of evidence against them. These three sources are: (1) the aggregation of actual false confession cases, many of which involved use of the false evidence ploy; (2) one hundred-plus years of basic psychology research, which proves without equivocation that misinformation can substantially alter people's visual perceptions, beliefs, motivations, emotions, attitudes, memories, self-assessments, and even certain physiological outcomes, as seen in

studies of the placebo effect; and (3) numerous experiments, from different laboratories, demonstrating that presentations of false evidence increase the rate at which innocent research participants agree to confess to prohibited acts they did not commit. As noted earlier, scientific evidence for the malleability of people's perceptions, decisions, and behavior when confronted with misinformation is broad and pervasive. With regard to a specific variant of the problem, it is also worth noting that the National Research Council Committee to Review the Scientific Evidence on the Polygraph (2003) recently expressed concern over the risk of false confessions produced by telling suspects they had failed the polygraph (see also Lykken, 1998).

Over the years, legal scholars have debated the merits of trickery and deception in the interrogation room (e.g., Magid, 2001; Slobogin, 2007; Thomas, 2007) and some law enforcement professionals have argued that lying is sometimes a necessary evil, effective, and without risk to the innocent (Inbau et al., 2001). To this argument, two important points must be noted. First, direct observations and self-report surveys of American police suggest that the presentation of false evidence is a tactic that is occasionally used (e.g., Feld, 2006a, 2006b; Kassin et al., 2007; Leo, 1996b). Some interrogators no doubt rely on this ploy more than others do. Yet in a position paper on false confessions, the Wisconsin Criminal Justice Study Commission (2007) concluded that "Experienced interrogators appear to agree that false evidence ploys are relatively rare" (p. 6). Second, it is instructive that in Great Britain, where police have long been prohibited from deceiving suspects about the evidence, relying instead on the investigative interviewing tactics described earlier, there has been no evidence of a decline in confession rates (Clarke & Milne, 2001; Gudjonsson, 2003; Williamson, 2006).

In light of the demonstrated risks to the innocent, we believe that the false evidence ploy, which is designed to thrust suspects into a state of inevitability and despair, should be addressed. The strongest response would be an outright ban on the tactic, rendering all resulting confessions per se inadmissible—as they are if elicited by promises, threats, and physical violence (such a ban currently exists in England, Iceland, and Germany; suspects are differently protected in Spain and Italy, where defense counsel must be present for questioning). A second approach, representing a relatively weak response, would involve calling for no direct action, merely a change of attitude in light of scientific research that will lead the courts to weigh the false evidence ploy more heavily when judging voluntariness and reliability according to a "totality of the circumstances."

Representing a compromise between an outright ban and inaction, we urge police, prosecutors, and the courts, in light of past wrongful convictions and empirical research, to heighten their sensitivity to the risks that false evidence poses to the innocent suspect. One way to achieve this compromise would be to curtail some variants of the false evidence ploy but not others—or in the case of some suspects but not others. As noted earlier, some state courts have distinguished between mere false assertions and the fabrication of reports, tapes, photographs, and other evidence, the latter being impermissible. This particular distinction seems arbitrary. False evidence puts innocents at risk to the extent that a suspect is vulnerable (e.g., by virtue of his or her youth, naiveté, intellectual deficiency, or acute emotional state) and to the extent that the alleged evidence it is presented as incontrovertible, sufficient as a basis for prosecution, and impossible to overcome. By this criterion, which the courts would have to apply on a case-by-case basis, a confession produced by telling an adult suspect that his cousin had confessed, the ploy used in *Frazier v. Cupp* (1969), might well be admissible. Yet a confession produced by telling a traumatized 14-year-old boy that his hair was found in his murdered sister's grasp, that her blood was found in his bedroom, and that he failed an infallible lie detector test—the multiple lies presented to false confessor Michael Crowe—would be excluded (White, 2001).

Minimization Tactics

A third area of concern involves the use of minimization techniques (often called "themes," "scenarios," or "inducements") that can communicate promises of leniency indirectly through pragmatic implication. While American federal constitutional law has long prohibited the use of explicit promises of leniency (*Bram v. United States*, 1897; *Leyra v. Denno*, 1954; *Lynumn v. Illinois*, 1963), uses of minimization are less clear. There is some legal support for the proposition that implicit promises of leniency are also prohibited in federal constitutional law (White, 1997), although a majority of states hold that a promise of leniency is only one factor to be considered in determining whether a confession is involuntary (White, 2003).

Multiple sources support the proposition that implicit promises can put innocents at risk to confess by leading them to perceive that the only way to lessen or escape punishment is by complying with the interrogator's demand for confession, especially when minimization is used on suspects who are also led to believe that their continued denial is futile and that prosecution is inevitable. These sources are: (1) the aggregation of actual false confession cases, the vast majority of which involved the use of minimization or explicit promises of leniency (Drizin & Leo, 2004; Leo & Ofshe, 1998; Ofshe & Leo, 1997a, 1997b; White, 2001); (2) basic psychological

research indicating, first, that people are highly responsive to reinforcement and make choices designed to maximize their outcomes (Hastie & Dawes, 2001), and second that people can infer certain consequences in the absence of explicit promises and threats by pragmatic implication (Chan & McDermott, 2006; Harris & Monaco, 1978; Hilton, 1995); and (3) experiments specifically demonstrating that minimization increases the rate at which research participants infer leniency in punishment and confess, even if they are innocent (Kassin & McNall, 1991; Klaver, Lee, & Rose, 2008; Russano et al., 2005).

In light of the demonstrated risks to the innocent, we believe that techniques of minimization, as embodied in the "themes" that interrogators are trained to develop, which communicate promises of leniency via pragmatic implication, should be scrutinized. Some law enforcement professionals have argued that minimization is a necessary interrogation technique (Inbau et al., 2001). As with the false evidence ploy, there are several possible approaches to the regulation of minimization techniques—ranging from the recommendation that no action be taken to an outright ban on minimization. Between these extreme positions one might argue that some uses of minimization but not others should be limited or modified.

Minimization techniques come in essentially three forms: those that minimize the *moral* consequences of confessing, those that minimize the *psychological* consequences of confessing, and those that minimize the *legal* consequences of confessing (Inbau et al., 2001; Ofshe & Leo, 1997a, 1997b). One possible compromise between the two extreme positions noted above would be to permit moral and psychological forms of minimization, but ban legal minimization that communicates promises of leniency via pragmatic implication. With this distinction in mind, interrogators would be permitted, for example, to tell a suspect that he or she will feel better after confession (psychological minimization) or that he or she is still a good person (moral minimization), but not that the legal consequences of his actions will be minimized if he confesses (e.g., as may be implied by self-defense and other themes). More research is thus needed to distinguish among the different tactics that interrogators are trained to use (e.g., the provocation, peer pressure, and accident scenarios), and the pragmatic inferences that these tactics lead suspects to draw concerning the consequences of confession.

Protection of Vulnerable Suspect Populations

There is a strong consensus among psychologists, legal scholars, and practitioners that juveniles and individuals with cognitive impairments or psychological disorders are particularly susceptible to false confession under pressure. Yet little action has been taken to modulate the methods by which these vulnerable groups are questioned when placed into custody as crime suspects. More than 45 years ago, the 1962 President's Panel on Mental Retardation questioned whether confessions from defendants with mental retardation should ever be admissible at trial (see Appelbaum & Appelbaum, 1994). In 1991, Fred Inbau wrote that "special protections must be afforded to juveniles and to all other persons of below-average intelligence, to minimize the risk of untruthful admissions due to their vulnerability to suggestive questioning" (1991, pp. 9–10). More recently, Inbau et al. (2001) advised against use of the false evidence ploy with youthful suspects or those with diminished mental capacity: "These suspects may not have the fortitude or confidence to challenge such evidence and, depending on the nature of the crime, may become confused as to their own possible involvement" (p. 429; also see Buckley, 2006).

It is uniformly clear to all parties that vulnerable suspect populations—namely, juveniles and people who are cognitively impaired or psychologically disordered—need to be protected in the interrogation room. In operational terms, we believe that there are two possible ways to protect these vulnerable populations. The first concerns the mandatory presence of an attorney. A least with regard to juveniles, a parent, guardian, or other interested adult is required in some states to protect young suspects who face interrogation. Yet research suggests that the presence of an interested adult does not increase the rate at which juveniles assert their constitutional rights because these adults, often passive, frequently urge their youths to cooperate with police—a tendency observed both in the U.S. (Grisso & Ring, 1979; Oberlander & Goldstein, 2001) and in the UK, where the law provides for access to an "appropriate adult" (Pearse & Gudjonsson, 1996). For this reason, juveniles—at least those under the age of 16 (at present, the research evidence is less clear when it comes to older adolescents)—should be accompanied and advised by a professional advocate, preferably an attorney, trained to serve in this role (see Gudjonsson, 2003).

As a second possible means of protection, law enforcement personnel who conduct interviews and interrogations should receive special training—not only on the limits of human lie detection, false confessions, and the perils of confirmation biases—but on the added risks to individuals who are young, immature, mentally retarded, psychologically disordered, or in other ways vulnerable to manipulation. In a survey of 332 Baltimore police officers, Meyer and Reppucci (2007) found that while respondents understood in general terms that adolescents lack maturity of judgment and are more malleable than adults, they did not by implication believe that juvenile suspects were at greater risk in the interrogation room. Hence, they reported using roughly the same Reid-like techniques with juveniles

as they do with adults (e.g., confrontation, repetition, refusal to accept denials, false evidence, minimization, and use of alternative questions). Interestingly, one-third of these respondents stated that police could benefit from special training with regard to the interrogation of juvenile suspects. In light of research described earlier, as well as Inbau et al.'s (2001) cautionary notes on the interrogation of minors and their heightened risk for false confession, we agree.

Summary and Conclusion

In 1932, Edwin Borchard published *Convicting the innocent: Sixty-five actual errors of criminal justice*, in which several false confession cases were included. Addressing the question of how these errors were uncovered, he noted how "sheer good luck" played a prominent role and lamented on "how many unfortunate victims of error have no such luck, it is impossible to say, but there are probably many." Today's generation of post-conviction exonerations well illustrate the role that sheer good luck plays (e.g., as when DNA, long ago collected, was preserved; as when the true perpetrator finds a conscience and comes forward). With increased scientific attention to the problem of false confessions, and the reforms recommended in this article, we believe it possible to reduce the serendipitous nature of these discoveries and to increase both the diagnosticity of suspects' statements and the ability of police, prosecutors, judges, and juries to make accurate decisions on the basis of these statements.

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From third-degree to third-generation interrogation strategies: putting science into the art of criminal interviewing

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NAVAL POSTGRADUATE SCHOOL

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THESIS

FROM THIRD-DEGREE TO THIRD-GENERATION INTERROGATION STRATEGIES: PUTTING SCIENCE INTO THE ART OF CRIMINAL INTERVIEWING

by

Desmond S. O'Neill

March 2017

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The interviewing strategies of the American law-enforcement system are more than seventy-five years old. Psychologically manipulative and guilt-presumptive, these methodologies replaced the brutal "third-degree" interrogation tactics of the previous century, but have recently come under scrutiny for being both ethically and operationally unsound. These findings have prompted a paradigm shift toward more ethical, effective, and scientifically validated tactics. This thesis set out to explore the advantages of integrating next-generation practices into the interview-training ethos of the Department of Homeland Security (DHS) Office of Professional Responsibility (OPR)—the internal affairs component of Immigration and Customs Enforcement. An evaluation of evidence-based interrogation practices and governmental policy analyses, along with insight from subject-matter experts, provided the data for this exploration. A series of recommendations derived from the lessons learned of the U.K. PEACE model, the practices of the Federal Law Enforcement Training Center, and research by the High-Value Detainee Interrogation Group offered insight for the optimal training of interviewing techniques and their long-term retention in the field. Assuming the recommendations for OPR are both scalable and replicable, this model should be relevant and valuable for the professional practices of other DHS agencies responsible for conducting interrogations as well as for law-enforcement agencies nationwide.

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FROM THIRD-DEGREE TO THIRD-GENERATION INTERROGATION STRATEGIES: PUTTING SCIENCE INTO THE ART OF CRIMINAL INTERVIEWING

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ABSTRACT

The interviewing strategies of the American law-enforcement system are more than seventy-five years old. Psychologically manipulative and guilt-presumptive, these methodologies replaced the brutal "third-degree" interrogation tactics of the previous century, but have recently come under scrutiny for being both ethically and operationally unsound. These findings have prompted a paradigm shift toward more ethical, effective, and scientifically validated tactics. This thesis set out to explore the advantages of integrating next-generation practices into the interview-training ethos of the Department of Homeland Security (DHS) Office of Professional Responsibility (OPR)—the internal affairs component of Immigration and Customs Enforcement. An evaluation of evidence-based interrogation practices and governmental policy analyses, along with insight from subject-matter experts, provided the data for this exploration. A series of recommendations derived from the lessons learned of the U.K. PEACE model, the practices of the Federal Law Enforcement Training Center, and research by the High-Value Detainee Interrogation Group offered insight for the optimal training of interviewing techniques and their long-term retention in the field. Assuming the recommendations for OPR are both scalable and replicable, this model should be relevant and valuable for the professional practices of other DHS agencies responsible for conducting interrogations as well as for law-enforcement agencies nationwide.

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LIST OF ACRONYMS AND ABBREVIATIONS

AFOSI	Air Force Office of Special Investigations
AILEITP	Advanced Interviewing for Law Enforcement Investigators Training Program
AILEITP-M	Advanced Interviewing for Law Enforcement Investigators Training Program-Modified
BAI	behavioral analysis interview
CI	cognitive interview
CITP	Criminal Investigator Training Program (FLETC)
CM	conversation management
CRC	curriculum review conference (FLETC)
DHS	Department of Homeland Security
FBI	Federal Bureau of Investigation
FLETC	Federal Law Enforcement Training Center
HIG	High-Value Detainee Interrogation Group
HSI	Homeland Security Investigations (DHS)
HUMINT	human intelligence
ICE	Immigration and Customs Enforcement
ISD	instructional systems design
OPR	Office of Professional Responsibility (DHS)
OPRSAT	OPR Special Agent Training
SME	subject-matter expert
SUE	strategic use of evidence
U.K.	United Kingdom

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EXECUTIVE SUMMARY

Criminal interrogations are fundamentally designed to elicit confessions.[1] Beginning with the proliferation of physically abusive and aggressive tactics in the early 20th century—arguably the first generation of American interrogation strategies—law-enforcement agents employed what they deemed the most effective means for getting suspects to confess.[2] In the early 1940s, harsh "third-degree" interrogation practices eventually gave way to less physically abusive but more psychologically manipulative techniques.[3] These tactics—later named the Reid Technique—taught investigators how to detect lies and elicit confessions using an array of psychological strategies.[4] Now more than seventy-five years old, Reid's dominance in the U.S. criminal-interrogation realm is pervasive and relies heavily on assuming guilt, assessing behavioral clues of deception, and administering psychological manipulation.[5]

Over the past decade, however, accusatorial interviewing has come under intense scrutiny in part because it is based more on anecdote and tradition than on scientific research. Critics note that Reid's architects have failed to produce empirical evidence supporting the validity of assessing behavior to determine culpability.[6] A 2006 meta-analysis study found the aptitude to correctly detect deception—regardless of expertise—averaged only 54 percent, near the equivalent of a coin flip.[7] A compounding problem

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[1] Randy Borum, "Approaching Truth: Behavioral Science Lessons on Educing Information from Human Sources," in *Intelligence Science Board Study on Educing Information Phase 1 Advisors*, 17–43 (Washington, DC: National Defense Intelligence College, 2005), 18.

[2] Richard A. Leo, "The Third Degree and the Origins of Psychological Interrogation in the United States," in *Interrogations, Confessions, and Entrapment*, eds. G. Daniel Lassiter and Jennifer J. Ratcliff, 37–84 (New York: Springer, 2004), 57.

[3] Ibid.

[4] Ibid., 57, 77.

[5] Leo, "The Third Degree," 64; Christian A. Meissner et al., "Accusatorial and Information-Gathering Interrogation Methods and Their Effects on True and False Confessions: A Meta-analytic Review," *Journal of Experimental Criminology* 10, no. 4 (2014): 461.

[6] Gisli H. Gudjonsson, *The Psychology of Interrogations and Confession: A Handbook* (Hoboken, NJ: Wiley, 2003), 21; and Leo, "The Third Degree," 67.

[7] Charles F. Bond Jr. and Bella M. DePaulo, "Accuracy of Deception Judgments," *Personality and Social Psychology Review* 10, no. 3 (2006): 214.

with relying on behavior to distinguish between truth and lies is twofold: interrogators often overestimate their ability to detect deception, which then intensifies the accusatorial nature of the interview.[8] These flawed interrogation schemes collectively increase the potential for false confessions, a systemic problem within the U.S. policing culture.[9]

The United Kingdom—having faced its own miscarriages of justice due to false confessions—has prohibited its practitioners from employing coercive interrogation methods.[10] British investigators now conduct investigative interviews grounded in building rapport, asking open-ended exploratory questions, and focusing on cognitive cues of deception.[11] A 2014 study showed investigative interviewing increased the elicitation of truthful information and decreased false confessions when compared to the accusatory approach—the favored American model.[12]

Despite the ubiquity of traditional interviewing strategies within the U.S. law-enforcement ethos, scholars and practitioners are slowly shifting toward next-generation methodologies. In 2009, the U.S. government created the High-Value Detainee Interrogation Group (HIG) in response to the highly publicized post-9/11 interrogation tactics the United States used on terrorist suspects.[13] Part of the group's mission was to

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[8] Saul M. Kassin et al., "Police Interviewing and Interrogations: A Self-report Survey of Police Practices and Beliefs," *Law and Human Behavior* 31, no 4 (2007): 389; Saul M. Kassin, Christian A. Meissner, and Rebecca J. Norwick, "'I'd Know a False Confession if I Saw One': A Comparative Study of College Students and Police Investigators," *Law and Human Behavior* 29, no 2 (2005): 222.

[9] Richard A. Leo and Richard J. Ofshe, "The Consequences of False Confessions: Deprivations of Liberty and Miscarriages of Justice in the Age of Psychological Interrogation," *The Journal of Criminal Law and Criminology* 88, no. 2 (1998): 491; Saul M. Kassin and Gisli H. Gudjonsson, "The Psychology of Confessions: A Review of the Literature and Issues," *American Psychology Association* 5, no. 2 (2004): 37.

[10] David Dixon, "Questioning Suspects: A Comparative Perspective," *Journal of Contemporary Criminal Justice* 6, no. 4 (2010): 429.

[11] Meissner et al., "Accusatorial and Information-Gathering Interrogation Methods," 461.

[12] Christopher E. Kelly and Christian A. Meissner, "Interrogation and Investigative Interviewing in the United States: Research and Practice," in *Contemporary Developments and Practices in Investigative Interviewing and Interrogation*, Volume II, eds. D. Walsh et al. (New York: Routledge, 2014).

[13] The HIG is a federally funded interagency created by the Obama Administration in 2009 that oversees the interrogations of terrorist suspects in U.S. custody and the custodial transference of terrorist suspects. In addition, the HIG is tasked with conducting research in the field of interviewing and interrogations in order to identify the most effective and ethical means to educe information from suspects. "Special Task Force on Interrogations and Transfer Policies Issues its Recommendations to the President," U.S. Department of Justice, August 24, 2009, https://www.justice.gov/opa/pr/special-task-force-interrogations-and-transfer-policies-issues-its-recommendations-president; Russano et al., "Structured Interviews of Experienced HUMINT Interrogators," *Applied Cognitive Psychology* 28 (2014): 847.

identify the best theories and practices "from the cognitive, behavior and social sciences," and from them produce the most effective and ethical means of conducting interrogations.[14] Since the group's establishment, HIG-supported researchers have published more than 100 pieces of scientific literature in the field of interviewing and interrogations, arguably making the group the authority in communication methodologies.[15] The group has also provided instruction to multiple U.S. law-enforcement and military institutions, including the, Los Angeles Police Department, Federal Law Enforcement Training Center, and Air Force Office of Special Investigations, on the use of evidence-based methods of interviewing.[16]

Not all government agencies, however, have adopted research-supported interrogation methods.[17] While some organizations are stymied by institutional challenges—such as agency assumption that the traditional interrogation tactics are sufficient—others remain unaware of the HIG's existence or the efficacy of its science-based techniques. This thesis was, in part, an attempt to defeat both problems. It was particularly interested in the strategic, ethical, and performance improvements next-generation interviewing can bring to the Department of Homeland Security (DHS) Office of Professional Responsibility (OPR)—an internal affairs component of Immigration and Customs Enforcement.

OPR comprises senior and experienced special agents promoted from within the DHS Homeland Security Investigations (HSI).[18] Unlike HSI special agents, who mostly interview suspected criminals, OPR special agents primarily interview other law enforcement officials—many of whom themselves are experienced interrogators.[19]

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[14] Kelly and Meissner, "Interrogation and Investigative Interviewing," 9.

[15] Christian A. Meissner and Melissa Russano, "Examining Validation and Field Assessment of Science-Based Methods of Interrogation," HIG Research Symposium, October 23, 2015, Washington, DC.

[16] Kelly and Meissner, "Interrogation and Investigative Interviewing," 9; Meissner and Russano, "Science-Based Methods of Interrogation."

[17] Patricia Donovan, email to author, January 30, 2017.

[18] "Office of Professional Responsibility," U.S. Immigration and Customs Enforcement (ICE), accessed March 2, 2017, https://www.ice.gov/leadership/opr#wcm-survey-target-id; "Homeland Security Investigations," ICE, accessed March 2, 2017, https://www.ice.gov/hsi.

[19] "Homeland Security Investigations," ICE; "Office of Professional Responsibility," ICE.

During the writing of this thesis, OPR agreed to partner with the HIG to conduct an effectiveness evaluation of instruction offered by HIG-backed trainers. This study design is a comparative before-and-after training analysis that measures the quality and quantity of information obtained during suspect interviews. The framework of this project has three phases. The initial phase involves OPR providing the HIG with suspect interview transcripts for review. These documents enable the group's researchers to identify the types of interview challenges OPR agents face and to develop a five-day training program specific to those needs. The second and third phases include training select OPR agents in HIG-supported interviewing methodologies and assessing the effectiveness of that training by evaluating actual interrogations conducted by participants before and after training.[20]

This thesis hypothesizes that by identifying and instituting select science-based interviewing practices, OPR special agents can enhance their investigative output. Support for this argument derives from an array of empirical research, governmental policy analyses, and insight from subject-matter experts. A series of recommendations, such as continuing educational development as well as achieving agency and practitioner buy-in, provide the framework for adhering to these enhanced interviewing methods. This thesis also discussed the concept of training skilled OPR special agents to be instructors in HIG-backed strategies for agency personnel. Such an approach is fiscally constructive and alleviates the reliance on third-party vendors for teaching interviewing strategies to OPR agents. Furthermore, assuming the principles are both scalable and replicable, this model can theoretically be broadened to encompass the standard practices of other DHS agencies responsible for conducting interrogations as well as law-enforcement entities nationwide.

[20] HIG research is approved both by the university Institutional Review Board and the FBI Institutional Review Board, and complies with U.S. federal policies for the protections of human subjects research.

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DISCLAIMER

This work reflects the author's opinions alone and not those of the Department of Homeland Security, Immigration and Customs Enforcement, or Office of Professional Responsibility.

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I. INTRODUCTION

The record button on the video recorder was switched on as the special agent from the U.S. Department of Homeland Security (DHS) took his seat inside the interview room of the Clarksville, Tennessee, Police Department.[1] Trained as a polygraph examiner by the U.S. Department of Defense, the agent was considered both a lie-detection specialist and an expert in interrogation strategies. Sitting across from him was Freddrick Bates, a 31-year-old high school dropout.[2]

A month previously, Bates had been accused of performing oral sex on his 17-year-old stepdaughter, a crime punishable with up to fifteen years in prison.[3] Although there was no evidence against him in the case, Bates met with Clarksville police detectives to answer their questions. During his interview, Bates vehemently denied the allegations and, wanting to further prove his innocence, agreed to take a polygraph exam at a later date.

Bates spent his morning attached to a polygraph instrument, answering the same questions, but this time in the sole presence of the trained special agent. As the video continued to record, Bates sat in silence, waiting to hear the results of his polygraph test. The agent purposefully rolled forward in his chair. "Alright Freddrick," the agent began, "I looked over everything, and there's absolutely no doubt at all … that you did engage in oral sex with her before she was 18."[4] With a confused look on his face, Bates replied, "There's no doubt that I did?"

Over the next hour, the video captured Bates's interrogation as the agent used an array of psychological strategies designed to persuade him to confess. First, the agent shifted blame onto Bates's victim, implying she came onto him while minimizing the

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[1] State of Tennessee v Kevin Yepez, 19th Jud. Cir. (2015), Exhibit 12 [video].

[2] The agent's qualifications as a lie-detection specialist and expert interrogator are based on this author's professional experience as a U.S. Department of Homeland Security special agent/polygraph examiner who attended the same U.S. Department of Defense polygraph training school.

[3] "Tennessee Rape and Sexual Assault Laws," FindLaw, accessed December 17, 2016, http://statelaws.findlaw.com/tennessee-law/tennessee-rape-and-sexual-assault-laws.html.

[4] State of Tennessee v Kevin Yepez, 19th Jud. Cir. (2015), Exhibit 12 [video].

seriousness of the offense, suggesting the act was consensual.[5] Next, the agent challenged Bates's character by questioning if he was a "dirt bag" who preyed on girls and should therefore go to prison.[6] Although Bates repeatedly denied any wrongdoing, the agent rebuffed his claims, calling Bates a liar and refusing to give him a chance to plead his case.[7] Several times throughout the interrogation, the agent sat intimately close to Bates, touching his knee as a way to maintain his attention.[8] In the end, with seemingly no way to convince the agent otherwise, Bates finally broke. He admitted to performing oral sex on the juvenile and spent the next hour and a half putting his confession on paper. [9]

Ten months later, Bates agreed to face his interrogator again. This time, however, it was in front of Tennessee Circuit Court Judge John H. Gasaway III, who presided over the motion to suppress Bates's confession from trial.[10] According to Bates's attorney, Charles S. Bloodworth, the interrogation of his client was conducted in a manner that overbore Bates's ability to act freely in his own self-interest.[11] Shortly after reviewing the videotaped confession, Judge Gasaway granted the motion to suppress. In his decision, he wrote, "It is enough to say that the nature of the conduct exhibited by the interrogator exceeded the limits of coercion permitted. His actions and words can fairly be described as browbeating the defendant into submission."[12]

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[5] Ibid.

[6] Ibid.

[7] Ibid.

[8] Ibid.

[9] Ibid.

[10] State of Tennessee v. Freddrick Lydrell Bates, 19th Jud. Dist. (2012), "Order Suppressing Evidence."

[11] State of Tennessee v. Freddrick Lydrell Bates, 19th Jud. Dist. (2012), "Motion to Suppress Statements of the Defendant."

[12] State of Tennessee v. Freddrick Lydrell Bates, 19th Jud. Dist. (2012), "Order Suppressing Evidence."

A. PROBLEM STATEMENT

Truthful information—given voluntarily and without duress—is arguably the most valuable piece of evidence educed from any law-enforcement interview setting. In the criminal arena, admissions of guilt are ostensibly the product of strategically designed interviews orchestrated by highly experienced interrogators.[13] The opening narrative, however, brings to light the dark side of the current interviewing paradigm and provides the backdrop for the argument of this thesis.

Bates's interrogation took place in 2012; its recent occurrence suggests that practitioners continue to use interviewing tactics invented in the 1940s: methods developed on preconceived assumptions and post hoc analysis.[14] Bates's interrogator was an experienced federal agent and polygraph examiner—presumably among the best trained in the nation. Why, then, was Bates's confession deemed coerced? The answer lies in the systemic use of unscientific and overbearing methodologies. When qualified interrogators elicit false confessions using government-backed strategies deemed highly effective, the framework upon which the entire tradecraft is founded must be questioned.

Because criminal interrogations are fundamentally designed to elicit confessions, U.S. law-enforcement personnel rely heavily on "accusatorial" interviewing methods that comprise:

- Establishing control
- Using psychological manipulation
- Asking closed-ended and confirmatory questions
- Focusing on obtaining a confession

[13] For the purpose of this thesis, the words *interrogator*, *interviewer*, *investigator*, and *practitioner* are used synonymously and interchangeably, defined as: any individual whose professional responsibility involves interviewing suspects, witnesses, victims, or human sources for the purpose of gathering information.

[14] Leo, "The Third Degree," 67.

- Assessing behavioral clues of deception[15]

Over the past decade, however, these accusatorial approaches have come under scrutiny, in part because they are based more on anecdote and tradition than on empirical research. A 2006 report for the Office of the Director of National Intelligence found that a majority of U.S. law-enforcement training academies teach interviewing techniques that lack scientific validity.[16] The magnitude of this finding is significant because these strategies have been the framework of U.S. criminal interrogations for nearly seventy-five years, a problem further discussed in Chapter II.[17]

Compounding the issue is the institutional perception of the practitioners themselves. Although consensus exists over the need for interrogators to be highly proficient, carefully trained, and well educated, most U.S. policing agencies choose convenience over capability. According to Neuman and Salinas-Serrano, interviews are assigned to "whichever team of agents [or individual] happens to be investigating the case, regardless of experience or expertise," rather than to those considered most competent.[18] Moreover, many of the investigators who conduct interrogations have received little, if any, specialized interview training beyond basic academy instruction.[19] In short, because law-enforcement agencies categorize interrogation aptitude as a *generalized ability*—an everyday skill required for the job—rather than a *tradecraft specialty*, presumably anyone with a badge and gun is considered a competent interrogator.[20]

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[15] Randy Borum, "Approaching Truth: Behavioral Science Lessons on Educing Information from Human Sources," in *Intelligence Science Board Study on Educing Information Phase 1 Advisors*, 17–43 (Washington, DC: National Defense Intelligence College, 2005), 18; Christian A. Meissner et al., "Accusatorial and Information-Gathering Interrogation Methods and Their Effects on True and False Confessions: A Meta-analytic Review," *Journal of Experimental Criminology* 10, no. 4 (2014): 461; Allison D. Redlich, Christopher E. Kelly, and Jeaneé C. Miller, "The Who, What, and Why of Human Intelligence Gathering: Self-reported Measures of Interrogation Methods," *Applied Cognitive Psychology* 28, no. 6 (2014): 817.

[16] Ariel Neuman and Daniel Salinas-Serrano, "Custodial Interrogations: What We Know, What We Do, and What We Can Learn from Law Enforcement Experiences," in *Educing Information: Interrogation: Science and Art*, 141–233 (Washington, DC: National Defense Intelligence College, 2006), 229.

[17] Leo, "The Third Degree," 64.

[18] Neuman and Salinas-Serrano, "Custodial Interrogations," 227.

[19] Ibid., 227–228.

[20] Ibid., 228.

Practitioners themselves are equally aware of these tradecraft deficiencies. In a 2014 study of some of the nation's most highly regarded U.S. interrogation experts, more than half (53.7 percent) felt their formal interviewing courses failed to prepare them for the field while an additional 19.5 percent were undecided as to the real-world transference of their training, a problem they attributed to classroom instruction that was insufficient, irrelevant, or archaic.[21] Beyond these organizational and academic shortcomings are the moral implications of interviewing practices that elicit confessions "too powerfully."[22] Nonprofit legal organizations such as the Innocence Project have exposed not just the unethical and inhumane side of modern U.S. police interrogation tactics but also their inaccuracy: nearly one quarter of erroneous convictions come from false confessions.[23]

The prevalence of these injustices is as much an international phenomenon as it is an American tragedy. The United Kingdom (U.K.)—having faced its own miscarriages of justice due to false confessions—has prohibited its practitioners from employing coercive interrogation methods.[24] British investigators now conduct *investigative interviews* founded on the following:

- Establishing rapport
- Using direct, positive confrontation
- Asking open-ended exploratory questions
- Eliciting information as a primarily goal
- Focusing on cognitive cues to deception[25]

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[21] Russano et al., "Structured Interviews of Experienced HUMINT Interrogators," *Applied Cognitive Psychology* 28 (2014): 850.

[22] Alan Hirsch, "Going to the Source: The New Reid Method and False Confessions," *Ohio State Journal of Criminal Law* 11 (2013): 805.

[23] "False Confessions or Admissions," Innocence Project, accessed February 4, 2017, http://www.innocenceproject.org/causes/false-confessions-admissions/.

[24] David Dixon, "Questioning Suspects: A Comparative Perspective," *Journal of Contemporary Criminal Justice* 6, no. 4 (2010): 429.

[25] Meissner et al., "Accusatorial and Information-Gathering Interrogation Methods," 461.

In a 2014 study, Kelly and Meissner found distinct differences between the accusatorial and information-gathering interviewing styles. They focused on five major studies to identify the most-used interrogation practices and how those practices affected outcomes. In sum, their research showed investigative interviewing to be more successful in eliciting truthful information, while decreasing the potential for false confessions when compared to the accusatory approach—the favored American model.[26]

Despite their ubiquity across the U.S. policing culture, accusatorial interviewing methods are slowly but increasingly being recognized by researchers, trainers, and practitioners as flawed and obsolete.[27] In 2009, the U.S. government created the High-Value Detainee Interrogation Group (HIG) in response to the highly publicized post-9/11 interrogation tactics the United States used on terrorist suspects.[28] Part of the group's mission was to identify the best theories and practices "from the cognitive, behavior and social sciences," and from them produce the most effective and ethical means of conducting interrogations.[29] The establishment of this program in 2009 has resulted in the publication of more than 100 pieces of scientific literature, arguably making the HIG the authority on interrogation strategies.[30] Since its inception, the group has shared its evidence-based interviewing practices with several law-enforcement and military institutions. DHS's Federal Law Enforcement Training Center (FLETC), metropolitan police departments in Dallas, Philadelphia, and Los Angeles, as well as the Air Force Office of Special Investigations (AFOSI) have begun instituting HIG-approved protocols

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[26] Christopher E. Kelly and Christian A. Meissner, "Interrogation and Investigative Interviewing in the United States: Research and Practice," in *Contemporary Developments and Practices in Investigative Interviewing and Interrogation*, Volume II, eds. D. Walsh et al. (New York: Routledge, 2014), 8.

[27] Dixon, "Questioning Suspects," 437; Meissner et al., "Accusatorial and Information-Gathering Interrogation," 479.

[28] The HIG is a federally funded interagency created by the Obama Administration in 2009 that oversees the interrogations of terrorist suspects in U.S. custody and the custodial transference of terrorist suspects. In addition, the HIG is tasked with conducting research in the field of interviewing and interrogations in order to identify the most effective and ethical means to educe information from suspects. "Special Task Force on Interrogations and Transfer Policies Issues its Recommendations to the President," U.S. Department of Justice, August 24, 2009, https://www.justice.gov/opa/pr/special-task-force-interrogations-and-transfer-policies-issues-its-recommendations-president; Russano et al., "Structured Interviews of Experienced HUMINT Interrogators," *Applied Cognitive Psychology* 28 (2014): 847.

[29] Kelly and Meissner, "Interrogation and Investigative Interviewing," 9.

[30] Christian A. Meissner and Melissa Russano, "Examining Validation and Field Assessment of Science-Based Methods of Interrogation," HIG Research Symposium, October 23, 2015, Washington, DC.

in their training curricula.[31] These next-generation approaches include techniques such as the *cognitive interview*, *investigative interviewing*, and the *strategic use of evidence*—all scientifically validated and ethically sound (discussed in more detail in Chapter IV).

Although FLETC began teaching HIG interviewing practices to its basic students in 2013, not all agency personnel within DHS have adopted HIG-backed methods.[32] While some organizations are stymied by institutional challenges—such as agency assumption that the traditional interrogation tactics are sufficient—others simply remain unaware of HIG's existence or the efficacy of its techniques. This thesis is, in part, an attempt to defeat both problems. It is particularly interested in strategic, ethical, and performance improvements—essentially a shift to this new generation of approaches—for the DHS Office of Professional Responsibility (OPR).

OPR—an internal affairs component of DHS Immigration and Customs Enforcement (ICE)—comprises senior and experienced special agents promoted from within Homeland Security Investigations (HSI), the investigative arm of DHS.[33] Unlike HSI special agents, who mostly interview suspected criminals, OPR special agents primarily interview other law enforcement officials.[34] As such, OPR personnel must be proficient in the most effective interviewing strategies available to interact with their audience—most of whom are themselves experienced interrogators.[35] Equally important is the need for not only OPR agents but all law-enforcement agents to adhere to

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[31] FLETC is the primary DHS training academy for U.S. criminal investigators. "Four FLETC Training Programs Earn Accreditation Status," Federal Law Enforcement Training Center (FLETC), November 11, 2016, https://www.fletc.gov/press-release/2016/11/04/four-fletc-training-programs-earn-accreditation-status; Kelly and Meissner, "Interrogation and Investigative Interviewing," 9; Robert Kolker, "A Severed Head, Two Cops, and the Radical Future of Interrogation," *Wired*, May 24, 2016, https://www.wired.com/2016/05/how-to-interrogate-suspects/; Kelly McEvers, "In New Age of Interrogations, Police Focus on Building Rapport," NPR, May 23, 2016, http://www.npr.org/2016/05/23/479207853/in-new-age-of-interrogations-police-focus-on-building-rapport; Meissner and Russano, "Examining Validation."

[32] Patricia Donovan, email to author, January 30, 2017.

[33] "Office of Professional Responsibility," U.S. Immigration and Customs Enforcement, (ICE), accessed March 2, 2017, https://www.ice.gov/leadership/opr#wcm-survey-target-id; "Homeland Security Investigations," ICE, accessed March 2, 2017, https://www.ice.gov/hsi.

[34] "Homeland Security Investigations," ICE.

[35] "Office of Professional Responsibility," ICE.

interviewing tactics that are grounded in science and ethics; a failure to do so carries both legal and financial repercussions, as discussed in Chapter III.

B. RESEARCH QUESTIONS

In response to these systemic interviewing challenges, this thesis asks the following: How can the OPR training program integrate "third-generation" interviewing methodologies to improve the effectiveness of its special agents' investigations?

Ancillary questions directing this research include:

- What are the benefits and limitations of adopting these next-generation methodologies?
- How can the policies that support the HIG and FLETC training protocols be integrated into the OPR interview training framework?
- How can OPR special agents remain proficient in these new interviewing techniques after training?
- How can these improvements be replicated by law-enforcement components beyond OPR?

C. RESEARCH DESIGN

To answer the research questions, this thesis begins by analyzing and discussing the "traditional" interviewing approaches employed by most U.S. law-enforcement agencies—including OPR. Those methods are then compared to newer, "third-generation" interviewing stratagems, such as the cognitive interview (CI), the U.K.'s PEACE model of interviewing, and the strategic use of evidence (SUE), empirically supported by scientific research.[36] Components of the Scharff Technique, a human intelligence (HUMINT) collection strategy, are also analyzed for their relevance within the criminal interrogation arena. The creation of the HIG and FLETC's adoption of HIG-supported interviewing strategies, including the challenges of their development and lessons learned, are also discussed. This thesis concludes with a set of policy

[36] PEACE is an acronym for Planning and preparation, Engage and explain, Account clarification and challenge, Closure, and Evaluation. Andrea Shawyer, Becky Milne, and Ray Bull, "Investigative Interviewing in the UK," in *International Developments in Investigative Interviewing*, eds. Tom Williamson, Becky Milne, and Stephen P. Savage, 24–38 (London: Willan, 2009), 27.

recommendations for the adoption of third-generation interviewing practices at OPR and, by extension, law enforcement nationwide. Specifically, it proposes restructuring the OPR Special Agent Training (OPRSAT) interview and interrogation training curriculum to accord with the best practices of the HIG and FLETC, and discusses how a training modification could significantly enhance both the OPR program and law enforcement as a whole. This thesis contributes to the literature and the tradecraft of law-enforcement interrogation by highlighting the strengths and limitations of the status quo. Its purpose is to synthesize the organizational, strategic, and operational metrics involved in transitioning OPR away from its reliance on accusatorial interview strategies and toward next-generation methodologies.

During the writing of this thesis, OPR headquarters agreed to collaborate with the HIG to conduct an effectiveness analysis of instruction offered by HIG trainers. The design of the collective project is a pre- and post-training comparative analysis that measures the quality and quantity of information obtained during suspect interviews. The framework of this project has three phases. The initial phase—ongoing as of this writing—involves OPR providing the HIG with suspect interview transcripts for evaluation. These documents enable the group's researchers to identify the types of interview challenges OPR agents face and to develop a five-day training program specific to those needs. The second and third phases—scheduled to begin after the completion of this thesis—include training OPR agents in HIG-supported interviewing methodologies and assessing the effectiveness of the training by analyzing the participants' actual interrogations both before and after training.

Although the implementation of this joint project satisfies certain elements within this thesis—gaining OPR headquarters' approval and identifying a funding source—its long-term benefit has yet to be determined. The question remains if this beta group of OPR agents will revert to its original interrogation tactics. This thesis hypothesizes that by identifying and instituting certain post-training practices, such as continual educational development, this training modality can succeed. The concept of "train the trainer"—training select OPR special agents to be instructors in HIG-backed strategies for agency personnel—is also discussed here. Such an approach is not only fiscally

responsible, it also alleviates the reliance on third-party vendors to teach OPR agents interviewing strategies. Furthermore, assuming the principles are both scalable and replicable, this model can theoretically be broadened to encompass the standard practices of other DHS agencies responsible for conducting interrogations as well as law-enforcement entities nationwide.

D. CHAPTER OVERVIEW

Chapter II describes the status quo, in particular the framework of the predominant U.S. interviewing model—the Reid Technique. The literature review is integrated directly into Chapters II and III; the latter analyzes the flaws and limitations of the status quo and lays the foundation for a paradigm shift to third-generation methodologies. Chapter IV evaluates the best evidence-based approaches toward more effective and ethical interviewing. Chapter V, the final chapter, explores the framework of the U.S. national policies that currently govern the HIG and FLETC's involvement in third-generation interviewing strategies. This chapter also focuses on the applicability of this research and offers several recommendations for the successful broader adoption of this model.

II. THE REID TECHNIQUE: SECOND-GENERATION INTERROGATION METHODOLOGIES

The evolution of criminal interviewing is as much about the future as it is about the past. According to Richard Leo, by studying its history, "we gain a deeper understanding of the roots, context and contradictions of contemporary police interrogations."[37] Beginning with the proliferation of physically abusive and aggressive tactics used against suspects in the early 20th century—arguably the "first generation" of American interrogation strategies—law-enforcement agents employed what they deemed the most effective means for getting confessions. In that first generation, suspects were routinely beaten with "fists or … some implement especially the rubber hose, that inflicts pain but is not likely to leave permanent visible scars."[38] These harsh interrogation practices (colloquially referred to as the "third degree") eventually gave way to less physically abusive but more psychologically manipulative techniques, which began to appear in the 1940s.[39] Now more than seventy-five years old, these "second-generation" interviewing methodologies are the status quo for most U.S. law-enforcement interrogators.[40]

A central tenet of second-generation approaches is the suspect's presumed culpability.[41] Meissner et al. identify this approach as an "accusatorial method … that is confrontational and guilt-presumptive."[42] Forensic psychologist Karl Roberts identifies this American style of interviewing as "persuasive," in which suspects are encouraged—

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[37] Richard A. Leo, "The Third Degree and the Origins of Psychological Interrogation in the United States," in *Interrogations, Confessions, and Entrapment*, eds. G. Daniel Lassiter and Jennifer J. Ratcliff, 37–84 (New York: Springer, 2004), 41.

[38] National Commission on Law Observance and Enforcement, *Report on Lawlessness in Law Enforcement*, Volume 11 (Washington, DC: United States Government Printing Office, 1931), 153.

[39] Leo, "The Third Degree," 57.

[40] Ibid.

[41] Jacqueline R. Evans et al., "Criminal versus HUMINT Interrogations: The Importance of Psychological Science to Improving Interrogative Practice," *The Journal of Psychiatry & Law* 38 (2010): 219; Redlich, Kelly, and Miller, "The Who, What, and Why," 817.

[42] Meissner et al., "Accusatorial and Information-Gathering Interrogation Methods," 462.

through various modes of psychological influence—to confess.[43] The methodology most recognized for this style of interviewing is the Reid Technique.[44]

A. THE ORIGINS OF THE REID TECHNIQUE

One of the first to introduce second-generation methods of interviewing into the American policing culture was Fred Inbau.[45] Inbau, a Chicago-based lawyer who had previously served as director for the Chicago Police Department's Scientific Crime Detection Lab, was a staunch critic of third-degree strategies.[46] In his police-interrogation manual, *Lie Detection and Criminal Interrogation*, published in 1942, Inbau laid the foundation for using new "scientific" methodologies to extract confessions.[47] These tactics—later named the Reid Technique by Inbau's colleague John E. Reid—were designed to teach investigators how to detect lies and elicit confessions using an array of psychological strategies, discussed further in Chapter III.[48] According to Leo, because manuals such as Inbau's provided law-enforcement officials with better solutions for extracting information, the Reid Technique has been partially credited for the decline of coercive third-degree interrogations.[49] The Reid Technique has gone through several revisions and, as of 2011, was in its fifth edition.[50]

Reid's dominance in the criminal-interrogation realm is pervasive. According to the John E. Reid & Associates website, since the organization launched its first "Reid Technique of Interviewing and Interrogation" training seminar in 1974, more than

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[43] Karl Roberts, "Police Interviewing of Criminal Suspects: A Historical Perspective," *Internet Journal of Criminology* (2012): 4.

[44] Russano et al., "Structured Interviews of Experienced HUMINT Interrogators," 850; Michel St-Yves and Nadine Deslauries-Varin, "The Psychology of Suspect's Decision-Making during Interrogation," in *Handbook of Psychology of Investigative Interviewing: Current Developments and Future Direction*, eds. Ray Bull, Tim Valentine, and Tom Williamson (Hoboken, NJ: Wiley, 2009), 7.

[45] Leo, "The Third Degree," 57.

[46] Ibid., 63.

[47] Fred E. Inbau et al., *Criminal Interrogation and Confessions*, fourth edition (Burlington, MA: Jones and Bartlett, 2001), ix; Leo, "The Third Degree," 63.

[48] Leo, "The Third Degree," 57, 77.

[49] Leo, "The Third Degree," 59.

[50] Leo, "The Third Degree," 63; Hirsch, "Going to the Source," 804.

500,000 law-enforcement and security professionals worldwide have been trained, with approximately 20,000 new attendees each year.[51] In a 2013 *New Yorker* article, author Douglas Starr named the Reid Technique the global leader in interrogation training, with a client list that reads like a "who's who" of the interrogation world, including the Federal Bureau of Investigation (FBI), the Central Intelligence Agency, the U.S. Secret Service, the U.S. military, and a host of police agencies and private security firms.[52] Starr notes the technique is so influential that Reid's methods form the framework for modern-day criminal interrogations.[53]

The extent of Reid's dominance in the American interrogation ethos has been extensively documented in scientific literature as well. Russano et al. identify the Reid Technique as one of the most common interviewing and interrogation courses taught to U.S. military and law-enforcement professionals, an assessment confirmed by the work of forensic psychologist Michel St-Yves and criminologist Nadine Deslauriers-Varin.[54] Berkley law professor Charles D. Weisselberg calls John E. Reid & Associates "the largest national provider in interrogation training."[55] Leo notes that "during the last 60 years, [Reid's] *Criminal Interrogations and Confessions* has become the definitive police training manual in the United States, if not the Western world," a fact which, according to professors Christopher Kelly and Christian Meissner, has had such a profound impact it essentially solidified U.S. adherence to the accusatorial style of interviewing.[56]

Reid's definitions of *interviewing* and *interrogations* play a key role in its methodology:

> An interview is a non-accusatory conversation in which, through question and answers, the police interviewer tries to develop investigative and

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[51] "Success with Reid," John E. Reid & Associates, accessed March 2, 2017, http://www.reid.com/success_reid/r_success.html; Inbau et al., *Criminal Interrogation and Confessions*, ix.

[52] Douglas Starr, "The Interview," *New Yorker*, December 9, 2013, http://www.newyorker.com/magazine/2013/12/09/the-interview-7.

[53] Ibid.

[54] Russano et al., "Structured Interviews of Experienced HUMINT Interrogators," 850; St-Yves and Deslauriers-Varin, "The Psychology of Suspect's Decision-Making," 7.

[55] Charles D. Weisselberg, "Mourning Miranda," *California Law Review* 96, no. 6 (2008): 1530.

[56] Leo, "The Third Degree," 63; Kelly and Meissner, "Interrogation and Investigative Interviewing."

> behavioral information that will test the veracity of statements made by a suspect, victim, or witness. Interrogation, in contrast, is an accusatory procedure designed to elicit from the subject an acknowledgement that he or she did not tell the truth during an initial statement, whether that person is a suspect who originally denied involvement in the issue under investigation, or a victim who fabricated the nature of the alleged offense.[57]

The context of this narrative is central to the accusatorial-interrogation model. Practitioners are instructed to use behavioral reaction-evoking questions to establish the culpability of the interviewee. If the interviewee responds in ways deemed deceptive, the harshness of the inquiry increases in an effort to extract previously undisclosed information. From Reid's own definitions emerge both the technique's success and its limitations, the latter of which is explored in Chapter III.

B. THE REID TECHNIQUE'S FRAMEWORK

The premise of the Reid Technique is a psychological exchange layered in deception. Although Reid disavows any strategy that would educe false confessions, it endorses "psychological tactics and techniques that may involve trickery and deceit."[58] Reid defends this duplicity as being "not only helpful but frequently indispensable in order to secure incriminating information from the guilty or to obtain investigative leads from otherwise uncooperative witnesses or informants."[59] The technique is divided into two stages—the information-gathering stage and the accusatorial-interrogation stage.[60] The first stage comprises the behavioral analysis interview (BAI).[61] Composed of approximately fifteen provocative questions, the BAI is strategically designed to induce verbal and non-verbal responses from the interviewee.[62] These questions revolve around the subject's knowledge, assumptions, and attitudes about the crime, e.g.,

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57 "Interviewing and Interrogation," John E. Reid & Associates, 2001, http://www.reid.com/pdfs/iandipreview.pdf.

58 Inbau et al., *Criminal Interrogation and Confessions*, xii.

59 Ibid.

60 Saul M. Kassin, Sara C. Appleby, and Jennifer T. Perillo, "Interviewing Suspects: Practice, Science, and Future Direction," *Legal and Criminal Psychology* 15 (2010): 40; Leo, "Third Degree," 63–64.

61 Kassin, Appleby, and Perillo, "Interviewing Suspects," 40.

62 Inbau et al., *Criminal Interrogation and Confessions*, 64–65.

- Do you know who shot that man?
- Why do you think someone would shoot that man?
- What do you think should happen to someone who shot that man?

During the BAI, Reid recommends that interrogators focus on the three channels of communication—*verbal*, *paralinguistic*, and *nonverbal*—which it argues are universal.[63] According to Reid, these channels can either work conterminously to produce a consistent message, or discordantly, sending mixed signals.[64] The verbal channel consists of the words themselves and the order in which they are spoken; the paralinguistic channel involves indicators such as voice inflection and pitch, pauses, answer delays, and stutters.[65] The nonverbal channel comprises physical movements—or lack thereof—of the subject's body as well as his or her face and eyes during questioning.[66] Reid claims, for example, that a prolonged static posture, an inappropriately timed hand gesture, or a subject's unwillingness to make eye contact with the interviewer are all indicators of deception.[67]

By studying these channels simultaneously, Reid suggests, interrogators can infer the degree of a subject's truthfulness.[68] Yet, Reid notes, "Although behavior symptoms can be helpful in differentiating truth from deception, they are not to be considered determinative of the issue."[69] This position seems to contradict the importance Reid puts on the utility of the BAI in cases otherwise devoid of evidence.[70]

Subsequent to completing the BAI, interrogators synthesize the subject's multi-channel responses and, in concert with any other evidence, decide on one of three actions: eliminate the subject from suspicion, delay questioning the subject further until additional

63 Ibid., 125.

64 Ibid.

65 Ibid.

66 Ibid.

67 Ibid.,144–150.

68 Ibid., 126.

69 Ibid.,155.

70 Ibid., xi.

evidence can be collected, or interrogate the subject.[71] Assuming the practitioner witnessed behavioral cues indicative of deceit (as prescribed by Reid), he or she is advised to transition to the second stage of the interview—the interrogation—with a high degree of confidence as to the suspect's guilt.[72]

C. REID'S INTERROGATION STEPS

Reid's interrogation stage comprises nine psychological steps, as shown in Figure 1. Each step is designed to increase the suspect's anxiety, minimize his or her perceived responsibility associated with the crime, and tacitly suggest that a confession is the fastest and best way to end the interrogation.[73]

[71] Ibid., 190–191.

[72] Ibid.

[73] Hirsch, "Going to the Source," 805.

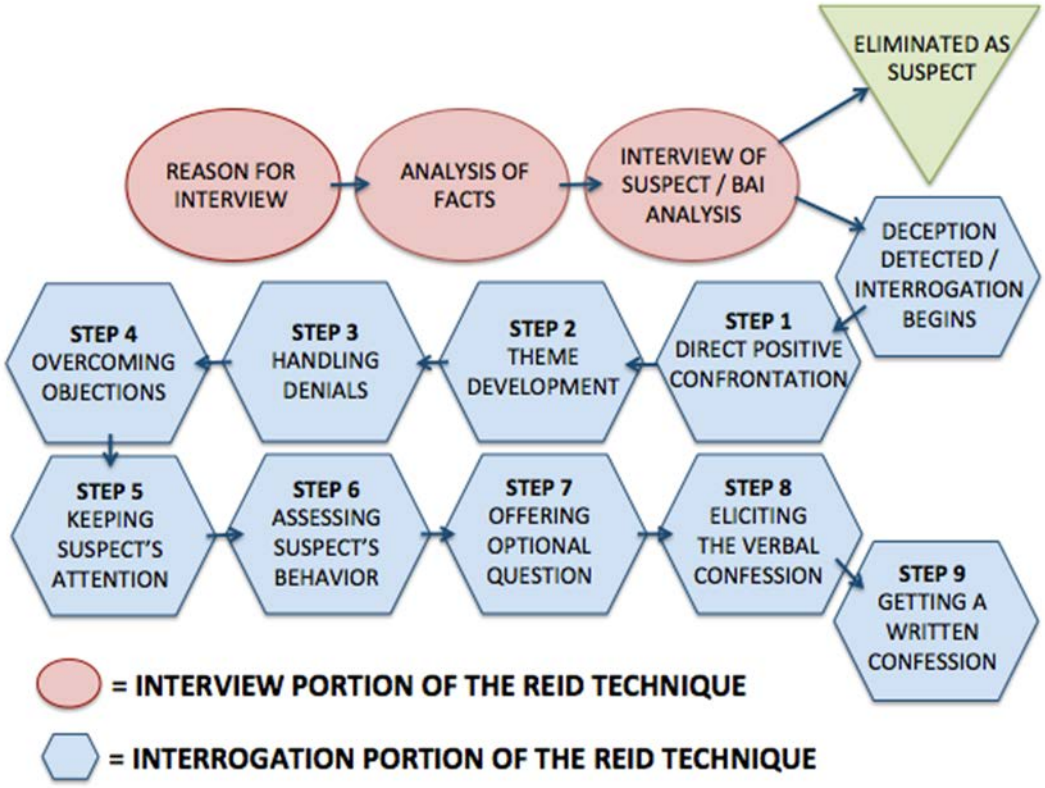

Figure 1. Reid's Nine Steps of Interrogation[74]

The first of the nine steps is a direct positive confrontation of the suspect's guilt.[75] In this step, the interrogator advises the suspect that his or her culpability has been proven beyond a reasonable doubt, so denials are futile. Reid recommends delivering this conclusion with absolute conviction so as to convince the suspect of the interrogator's certainty.[76] Next, the interrogator is instructed to pause and assess the suspect's verbal and non-verbal responses to the direct positive confrontation. These responses provide clues for how best to proceed. For example, the suspect crossing his or her arms indicates defiance, while a collapsed posture is a sign of a broken spirit.[77] The second step, theme development, presents the suspect with a moral excuse for committing the crime. In this

[74] Source: Inbau et al., *Criminal Interrogation and Confessions*, 215.

[75] Ibid., 218.

[76] Ibid.

[77] Ibid., 222.

step, Reid recommends projecting blame onto something or someone else—often the victim.[78] Reid also advises telling a story, called "a theme," that parallels the suspect's own plight. Themes in step 2 help rationalize the suspect's behavior, while step 3 focuses on rejecting the suspect's repetitive denials by reiterating elements of step 2.[79]

As the interrogation continues, the ensuing steps are designed to mirror the suspect's internal struggle between continuing to resist the practitioner's efforts and confessing.[80] Step 4 deals with managing secondary excuses, such as those involving economic, spiritual, and ethical justifications. In this step, suspects often give reasons as to why they are either unwilling or unable to commit whatever crime they are being accused of, such as, "I have enough money, why would I need to steal any?"[81] Step 5 encourages the investigator to keep the suspect's attention by feigning sympathy, manipulating the proxemics between the interrogator and the suspect, and maintaining eye contact.[82] Step 6 calls for assessing the suspect's behavior for clues of defeat, such as tears, the inability to look at the investigator, or a "broken" posture (e.g., shoulders slouched, head in hands).[83]

Once the suspect appears to be on the verge of confessing, the final three stages are centered on eliciting a vocalized confirmation of guilt, then convincing the suspect to transfer his or her verbal admissions onto paper. Step 7 involves offering the suspect an optional question. This question comprises two alternatives, one much more favorable than the other. For example, "Was this the first time you did this, or has it happened many times before?"[84] Regardless of which option the suspect chooses, both are an admission of guilt. Once the suspect admits culpability, step 8 focuses on encouraging the

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[78] Ibid., 213.

[79] Ibid.., 239–240, 213.

[80] Ibid., 212.

[81] Ibid., 213.

[82] Proxemics is the use of space between humans to affect behavior. "Proxemics—Noting Your Distance," CReducation, accessed March 2, 2017, http://www.creducation.org/resources/nonverbal_communication/proxemics.html; Inbau et al., *Criminal Interrogation and Confessions*, 214.

[83] Inbau et al., *Criminal Interrogation and Confessions*, 214.

[84] Ibid.

suspect to describe the event in enough detail to establish legal accountability; step 9 constitutes getting the suspect to transfer his or her verbal confession into a written statement.[85] Reid contends, "None of the steps is apt to make an innocent person confess and … all the steps are legally as well as morally justified."[86] Reid also notes the order of the steps is not definitive; rather, based on a constant evaluation of the suspect's verbal and nonverbal behavior, they are fluid and should match the suspect's psychological state at any given time.[87]

D. SCHOLARLY SUPPORT FOR THE REID TECHNIQUE

Proponents of Reid maintain that the ethicality and effectiveness of its interrogation strategies have been both legally confirmed through the U.S. court system and individually validated via countless user testimonials, as featured under the "General Comments" section of its website.[88] Researcher Frank Horvath along with John E. Reid & Associates' Director Brian C. Jayne and President Joseph P. Buckley defend the validity of the BAI. In their study, "Differentiation of Truth and Deceptive Criminal Suspects in Behavior Analysis Interviews," four BAI-trained evaluators watched sixty videotaped interviews, in which half (thirty) of the subjects were truthful and the other half (thirty) were deceptive. According to the authors, the culpability of the subjects had previously been independently verified. During the interviews, the evaluators were asked to determine interviewee honesty based on verbal and nonverbal responses to the interrogator's BAI questions. After factoring out inconclusive decisions—15.8 percent—evaluators were reportedly able to identify truthful subjects an average of 91 percent and deceptive subjects approximately 80 percent of the time.[89]

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[85] Ibid.

[86] Ibid., 212.

[87] Ibid., 216.

[88] "What Do the Courts Say about the Reid Technique?" John E. Reid & Associates, accessed March 2, 2017, http://www.reid.com/pdfs/wtcs.pdf; "General Comments," John E. Reid & Associates, accessed March 2, 2017, http://www.reid.com/success_reid/r_comments.html.

[89] Frank Horvath, B. Jayne, and J. Buckley, "Differentiation of Truthful and Deceptive Criminal Suspects in Behavior Analysis Interviews," *Journal of Forensic Sciences* 39, no. 3 (1994): 793–807, doi: 10.1520/JFS13657J.

Other scholarly work has confirmed and replicated the findings of Horvath, Jayne, and Buckley. In their article, "Detection of Deception: An Analysis of the Behavioral Analysis Interview Technique," researchers John P. Blair and William P. McCamey conducted a study using fifty-two participants of which twenty-seven—the experimental group—were taught the BAI technique.[90] All participants then watched ten interrogation videos—a subset of the same videos used in the Horvath et al. study. Subsequent to BAI training, the experimental group correctly identified more subjects as deceptive than did the control group.[91] The experimental group's level of confidence in determining which subjects they believed to be deceptive also increased after training.[92] Blair and McCamey note the effectiveness of the BAI in distinguishing between truth and deception.[93] However, due to what the authors infer as a research design flaw, "the pretesting process may have affected the ability to correctly classify subjects on the post-test," they conclude their results should not be generalized beyond the scope of their study.[94]

E. CONCLUSION

Over the past sixty years, the Reid Technique has been touted as the world leader in interrogation strategies.[95] Despite this, a significant amount of research has questioned if the accusatorial interview is still the best approach for gathering truthful information.[96] Scholars and practitioners alike have repeatedly and increasingly rejected the current system, embracing, instead, practices steeped in science and grounded in ethics.[97]

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[90] John P. Blair and William P. McCamey, "Detection of Deception: An Analysis of the Behavioral Analysis Interview Technique," *Illinois Law Enforcement Executive Forum* 2, (2002): 165.

[91] Ibid., 168.

[92] Ibid., 167.

[93] Ibid., 168.

[94] Ibid.

[95] Leo, "The Third Degree," 77.

[96] Christopher E. Kelly et al., "A Taxonomy of Interrogation Methods," *Psychology, Public Policy, and Law* 19, no. 2 (2013): 165.

[97] Kelly and Meissner, "Interrogation and Investigative Interviewing," 8–9; Gisli H. Gudjonsson and John Pearse, "Suspect Interviews and False Confessions," *Current Directions in Psychological Science* 20, no. 1 (2011): 36.

Chapter III explores how Reid's methodology has come under intense scrutiny for its lack of scientific support and its role in the prevalence of false confessions.

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III. PROBLEMS WITH ACCUSATORIAL (SECOND-GENERATION) INTERROGATIONS

Much of what has traditionally been deemed effective in eliciting confessions relies, in fact, on nothing more than anecdotal evidence.[98] In 2006, the Intelligence Science Board presented a Phase 1 report in which it assessed various strategies used to extract information in the criminal and intelligence arenas.[99] In chapter six of that report, Neuman and Salinas-Serrano reviewed the available literature about the methods by which law-enforcement agencies conduct interrogations.[100] From this, they found that most criminal interview training includes elements of or is similar to the Reid Technique.[101] Neuman and Salinas-Serrano also looked at the interview training programs of two federal law-enforcement agencies—the FBI and FLETC—as well as the Boston Police Department's homicide division. The researchers highlighted several significant shortcomings related to the interrogation methodologies promoted and practiced within the United States:

> Currently, those law enforcement agencies and departments that teach interrogation techniques train their officers and agents in tactics that have not been proven successful through any empirical studies. Neither the FBI nor FLETC had ever studied the efficacy of its techniques in garnering confessions or incriminating statements. Generally the agencies use variations of the Reid Technique, or subcontract the training to the Reid School or its spin off, Wicklander-Zulawski. Given the dearth of empirical evidence to support the agencies' training and techniques, it seems that reliance on them is based mostly on the reputation of the Reid approach on anecdotal evidence of its utility. Another explanation might be the institutional inertia characteristic of most large government agencies such as the FBI and other federal law enforcement agencies.[102]

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[98] Robert A. Fein, Paul Lehner, and Bryan Vossekuil, *Educing Information-Interrogation: Science and Art, Foundations for the Future* (Washington, DC: Center for Strategic Intelligence Research, 2006), xx, 5.

[99] Ibid.

[100] Neuman and Salinas-Serrano, "Custodial Interrogations," 142.

[101] Ibid.

[102] Ibid., 229.

Russano et al. further underscore the magnitude of this training failure. In their 2014 study, they interviewed forty-two senior U.S. interrogators from across the federal government as well as several state and local agencies. All participants confirmed receiving some type of formal interrogation training: the Reid Technique was the course most often attended (50.0 percent), followed by the Basic Interrogator Training Course at the U.S. Army's Fort Huachuca (42.9 percent), and the FBI Training Academy (31.0 percent). Approximately 17 percent confirmed they had received BAI training, the same percentage that received interview training at FLETC. Despite the abundance of formal training, more than half (53.7 percent) of these practitioners claimed they felt inadequately prepared to conduct real-world interrogations.[103]

Accompanying these training weaknesses is the questionable utility of the techniques themselves. Redlich et al. surveyed seventy-seven experienced U.S. interrogators regarding the methods they considered most effective for eliciting information. The researchers used six elicitation domains: *rapport and relationship building*, *context manipulation*, *emotion provocation*, *confrontation/competition*, *collaboration*, and *presentation of evidence*. They then evaluated those domains across four interview settings or contexts: *intelligence gathering*, *confession/prosecution*, *tactical interrogation*, and *strategic interrogation*.[104]

Redlich et al. found that r*apport and relationship building* was unanimously reported as the most useful for gathering information, while harsher strategies such as *confrontational/competition* were deemed the least effective, as noted in Table 1. These latter tactics, which contain elements of the Reid Technique (such as "identifying contradictions, confronting suspects, and interrupting denials"), ranked last, or least effective, in every interview category.[105]

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[103] Russano et al., "Structured Interviews of Experienced HUMINT Interrogators," 850.

[104] Redlich, Kelly, and Miller, "The Who, What, and Why," 824.

[105] Ibid.

Table 1. Effectiveness of Elicitation Domain per Interview Setting[106]

Elicitation Domain	Interview setting			
	Intelligence gathering	Confession/ prosecution	Tactical interrogations	Strategic interrogations
Rapport and relationship building	4.64	4.45	4.06	4.48
Context Manipulation	3.88	3.94	3.89	3.83
Emotion provocation	4.03	4.09	3.97	4.02
Confrontation/competition	3.25	3.49	3.47	3.24
Collaboration	4.03	3.85	3.81	3.94
Presentation of evidence	3.87	4.15	3.90	3.90

1= very ineffective; 5 = very effective

A. ASSESSMENT OF THE BAI: OTHELLO'S ERROR

A growing body of research points to the futility of attempting to ascertain guilt through verbal and nonverbal indicators, as touted in behavioral assessment strategies—such as the BAI—promoted by John E. Reid & Associates, FLETC, and the FBI.[107] In a 2006 article, psychologists Aldert Vrij, Samantha Mann, and Ronald P. Fisher conducted the first empirical study on the BAI.[108] Their experiment tested the veracity of Reid's claim that, during questioning, liars would be less cooperative in aiding investigators and display more signs of nervousness than the innocent.[109] Vrij, Mann, and Fisher's research found evidence for the exact opposite: liars were in fact more cooperative with investigators, while demonstrating fewer signs of apprehension.[110] In a later article, Vrij, Granhag, and Porter wrote, "Cues to deception are unreliable and faint [because they] …

[106] Source: Redlich, Kelly, and Miller, "The Who, What, and Why," 824.

[107] Charles F. Bond Jr. and Bella M. DePaulo, "Accuracy of Deception Judgments," *Personality and Social Psychology Review* 10, no. 3 (2006): 230; Neuman and Salinas-Serrano, "Custodial Interrogations," 184.

[108] Aldert Vrij, Samantha Mann, and Ronald P. Fisher, "An Empirical Test of the Behaviour Analysis Interview," *Law and human behavior* 30, no. 3 (2006): 329.

[109] Ibid., 342.

[110] Ibid.

can be displayed by both liars and truth tellers."[111] Like the findings of previous scholars, Vrij, Granhag, and Porter conclude that improper training is the reason interrogators focus on unreliable cues of deception.[112]

Masip et al. also underscore the inaccuracy of the BAI, arguing "the behavioural indictors of deception espoused by Inbau et al. do not coincide with the scientific evidence accumulated over several decades of empirical research."[113] They note further that the BAI is nothing more than a set of common-sense strategies for ferreting out deception, or routine social judgments that have been commercialized by Reid.[114] These same authors also counter the studies supporting the efficacy of the BAI. In their 2011 article, Masip et al. called the research conducted by Horvath, Jayne, and Buckley, as well as Blair and McCamey, "fraught with serious methodological problems" due to their small sample size, potential interviewer biases, and the inability to independently verify the suspects' guilt or innocence.[115]

Fundamental BAI shortcomings stem from its emphasis on verbal and nonverbal indicators to determine culpability. According to psychologists Charles F. Bond, Jr., and Bella M. DePaulo, the ability to correctly detect deception is near the equivalent of a coin flip.[116] Bond and DePaulo conducted a meta-analysis of 206 documents published between 1941 and 2005.[117] From this data, they assessed 6,661 statements from which 23,483 deception judgments were made. Of these decisions, 2,842 (12 percent) claimed to be by experts in distinguishing truth from lies.[118] Bond and DePaulo's work showed

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[111] Aldert Vrij, Pär Anders Granhag, and Stephen Porter, "Pitfalls and Opportunities in Nonverbal and Verbal Lie Detection," *Psychological Science in the Public Interest* 11, no. 3 (2010): 94.

[112] Ibid., 89.

[113] Jaume Masip et al., "Is the Behavior Analysis Interview Just Common Sense?" *Applied Cognitive Psychology* 25, no. 4 (2011): 595.

[114] Ibid., 601.

[115] Masip et al., "Behavior Analysis Interview," 595–596.

[116] Bond and DePaulo, "Accuracy of Deception Judgments," 214.

[117] Ibid., 219.

[118] Ibid.

that, universally, the accuracy of truth-versus-lie discrimination averages only 54 percent.[119]

Saul M. Kassin, Christian A. Meissner, and Rebecca J. Norwick report the same "slightly exceeding chance" success rate among evaluators. In a study comparing the accuracy of college students and law-enforcement officials in assessing deception, they conclude, "Across participants, conditions, and items, the overall accuracy rate was 53.9 percent—a level of performance that is both unimpressive and nonsignificant relative to chance performance."[120] Even proponents of the BAI recognize its weak theoretical application: Horvath, Blair, and Buckley write, "The Inbau et al. (2001) manual was intended to be a training tool, written by practitioners for practitioners. As such there was little concern with or need to consider the [BAI's] underlying 'theory' and the associated assumptions."[121] Horvath, Blair, and Buckley further acknowledge the earlier research supporting the BAI's utility was limited in scope; the investigators in the study were employees of John E. Reid & Associates—not law-enforcement officials—and the interviewees were not suspects in police custody, but employees from area businesses who had been suspected of committing various crimes, such as theft.[122] In short, the authors concede the BAI has never been empirically tested in a law-enforcement setting.[123]

B. A FALSE SENSE OF CONFIDENCE

A compounding problem with relying on the BAI to assess guilt is its effect on the practitioner's confidence level. Kassin et al. note that interrogators often overestimate their aptitude for distinguishing between truth and lies despite averaging only a 54-

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[119] Ibid., 214.

[120] Saul M. Kassin, Christian A. Meissner, and Rebecca J. Norwick, "'I'd Know a False Confession if I Saw One': A Comparative Study of College Students and Police Investigators," *Law and Human Behavior* 29, no 2 (2005): 216.

[121] Frank Horvath, J. P. Blair, and Joseph P. Buckley, "The Behavioural Analysis Interview: Clarifying the Practice, Theory and Understanding of its Use and Effectiveness," *International Journal of Police Science & Management* 10, no. 1 (2008): 115.

[122] Ibid., 103.

[123] Ibid.

percent accuracy rating. In their survey of 631 police investigators on interviewing methods as well as self-perception on evaluating deception, 77 percent believed their judgments were correct, an accuracy error further supported in a 2005 study by researchers Kassin, Meissner, and Norwick.[124]

The unsound reliance on behavioral cues to spot deception has been shown to increase the accusatorial nature of the interview as well. According to Saul M. Kassin, Christine C. Goldstein, and Kenneth Savatsky, once guilt is assumed, interrogators mentally enter a feedback loop of confirmation biases in which they observe, analyze, and decode information in a way that merely validates their beliefs.[125] This "self-fulfilling prophecy" leads to a cyclical response in which interrogator biases influence personal behavior, which in turn affects the suspect's behavior, causing subsequent assessments and further reactions from the interrogator, an argument further supported by Shawyer, Milne, and Bull (see Figure 2).[126]

[124] Saul M. Kassin et al., "Police Interviewing and Interrogations: A Self-Report Survey of Police Practices and Beliefs," *Law and Human Behavior* 31, no 4 (2007): 389; Kassin et al., "I'd Know a False Confession if I saw One," 222.

[125] Kassin et al., "I'd Know a False Confession if I Saw One," 216.

[126] Saul M. Kassin, Christine C. Goldstein, and Kenneth Savitsky, "Behavioral Confirmation in the Interrogation Room: On the Dangers of Presuming Guilt," *Law and Human Behavior* 27, no. 2 (2003): 187; John M. Darley and Russell H. Fazio, "Expectancy Confirmation Processes Arising in the Social Interaction Sequence," *American Psychologist* 35, no. 10 (1980): 867; Shawyer, Milne, and Bull, "Investigative Interviewing."

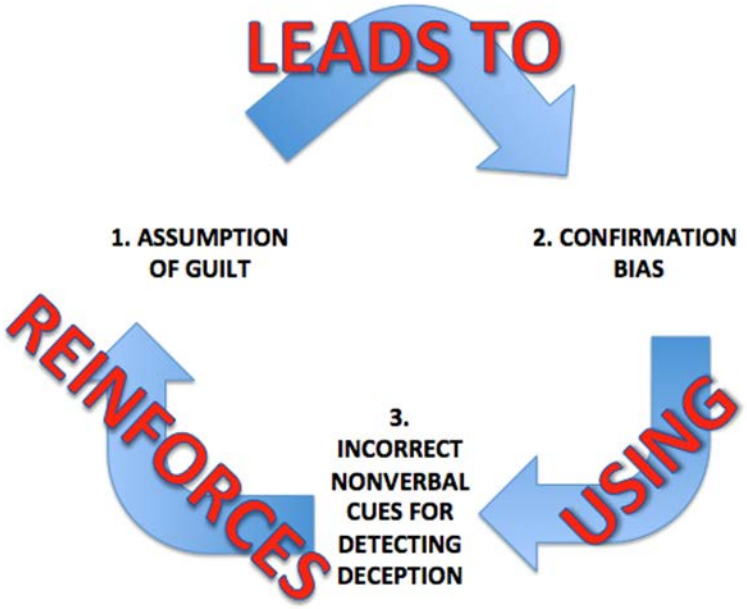

Figure 2. Influence of Investigator's Biases on Behavior[127]

Critics of this presumptive interviewing framework note that Reid's architects have failed to produce empirical evidence supporting the BAI's utility.[128] Instead, they have chosen to rely heavily on an "accumulation of unsystematic, *post hoc* observations to verify their own preconceptions."[129] Reid's unwillingness to publicize any research supporting the technique's behavioral assessment cues has prompted some scholars to caution against its use. Associate professors J.P. Blair and Brandon Kooi write,

> Many law enforcement agencies throughout the world currently use the Reid Technique to help guide their investigations. Yet, the nonverbal model of deception taught by Reid has not been sufficiently validated. If the model is incorrect, this could lead to investigators making erroneous decisions regarding the guilt or innocence of suspects. This in turn could cause an investigation to focus incorrectly upon an innocent suspect or

[127] Source: Shawyer, Milne, and Bull, "Investigative Interviewing," 28.

[128] Gisli H. Gudjonsson, *The Psychology of Interrogations and Confession: A Handbook* (Hoboken, NJ: Wiley, 2003), 21; Leo, "The Third Degree," 67.

[129] Leo, "The Third Degree," 67.

> ignore a guilty suspect, either of which could ultimately result in the conviction of an innocent person.[130]

Blair and Kooi's concern regarding false confessions is echoed by a wealth of other researchers.[131] Kassin and Gudjonsson identify Reid's BAI as a flawed pre-interrogation scheme that sets off a cascade of decisions made by the interrogator, increasing the potential for false confessions.[132] Even further, Narchet et al. found that when interviewers relied on inaccurate pre-interrogation assumptions of guilt, they were more likely to employ aggressive interrogation strategies to elicit confessions.[133] These pressure-filled tactics, such as minimizing the severity of the offense and introducing fabricated evidence, were found to influence false confessions by the innocent while having no greater confessional effect on the guilty.[134] In a 2005 study, Russano et al. note that using minimization tactics, which they acknowledged as "a common and legal interrogation technique [that] provided an effective means of obtaining true confessions," also caused a three-fold increase in false confessions when compared to interrogations not employing this strategy, as seen in Table 2.[135] Although the research showed the use of the minimization technique increased the rate of true confessions from 46 percent to 81 percent, the diagnostic value concurrently reduced by almost 40 percent, thus undermining the value of the tactics.[136]

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[130] John P. Blair and Brandon Kooi, "The Gap between Training and Research in the Detection of Deception," *International Journal of Police Science & Management* 6, no. 2 (2004): 82.

[131] Michel St-Yves and Christian A. Meissner, "Interviewing Suspects," in *Investigative Interviewing: The Essentials 2014*, ed. Michel St-Yves, 145–189 (Toronto: Carswell, 2014), 145.

[132] Saul M. Kassin and Gisli H. Gudjonsson, "The Psychology of Confessions: A Review of the Literature and Issues," *American Psychology Association* 5, no. 2 (2004): 37.

[133] Narchet, Meissner, and Russano, "Investigator Bias," 462.

[134] Ibid.

[135] Melissa Russano et al., "Investigating True and False Confessions within a Novel Experimental Paradigm," *Psychological Science* 16, no. 6 (2005): 484.

[136] Ibid.

Table 2. Rates of True and False Confessions and Diagnosticity Related to Interrogation Tactics[137]

Conditions	True Confessions	False Confessions	Diagnosticity
No tactic	46%	6%	7.67
Minimization	81%	18%	4.50

C. FALSE CONFESSIONS

The prevalence of false confessions has been described as a systemic problem within the realm of police interrogations.[138] Leo and Ofshe reviewed sixty cases in which suspects had initially confessed, but the confessions were later proven, or suspected, to be false.[139] All the cases lacked physical evidence proving the suspects' guilt but contained compelling evidence supporting their innocence.[140] Based on the strength of the evidence, each confession was categorized as either *proven false*, *high probability of being false*, or *probably false*.[141] Of the sixty cases reviewed, more than half (thirty-four) were identified as *proven false*.[142] Leo and Ofshe argue the common thread linking these injustices is poor police practice that originates from faulty training and instruction, and reliance on interviewing manuals such as Reid's *Criminal Interrogation and Confessions*.[143]

Skeptics of false confession findings, however, point to several shortcomings within that literature. Levine et al. note that because studies like Russano et al.'s in 2005

137 Adapted from Russano et al., "Investigating True and False Confessions," 484.

138 Richard A. Leo and Richard J. Ofshe, "The Consequences of False Confessions: Deprivations of Liberty and Miscarriages of Justice in the Age of Psychological Interrogation," *The Journal of Criminal Law and Criminology* 88, no. 2 (1998): 491.

139 Ibid., 435.

140 Ibid., 436.

141 Ibid.

142 Ibid., 492.

143 Ibid.

were designed to educe *false confessions*, their success in achieving these outcomes was likely due to the interrogator's intent, something Levine et al. called the "experimenter demand effect."[144] Inbau et al.—the authors of the Reid manual's 4th edition—argue that scholars such as Leo and Ofshe fail to validate their claim that police psychological persuasion tactics are the catalyst for educing false confessions.[145] The authors further note that although suspects do falsely confess, *how often* or *why* they do has never been empirically verified.[146]

As research in the study of false confessions has continued, its prevalence within the interrogation room has been repeatedly confirmed. In a 2014 study, Williams College law professor Alan Hirsch notes that newer research has, in fact, supported the previous findings of Leo and Ofshe, and shown the number of false confessions has likely been underestimated, as discussed subsequently in the Innocence Project.[147] Hirsch also surmises that Reid's dogmatic defense of its techniques is financially motivated. "Whatever else the Reid Technique may be, it has to be understood as a commercial product … which has been sold in the form both of manuals and training courses. Given these commercial realities, it is little wonder that those associated with John. E. Reid & Associates fiercely defend their brand and counter-attack against its critics."[148]

D. MISUSING PSEUDO-SCIENTIFIC INTERROGATION METHODS

Notwithstanding this ongoing debate, the fact remains that multiple miscarriages of justice—many of which were built on the framework of Reid—over the past several decades have been brought to light within the United States.[149] Some of these failures were discovered through analyses of recorded police interrogations, while others have

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[144] Timothy Roland Levine et al., "Expertise in Deception Detection Involves Actively Prompting Diagnostic Information Rather than Passive Behavioral Observation," *Human Communication Research* 40, no. 4 (2014): 457.

[145] Inbau et al., *Criminal Interrogation and Confessions,* 443.

[146] Ibid.

[147] Hirsch, "Going to the Source," 813.

[148] Dixon, "Questioning Suspects," 428.

[149] "False Confessions or Admissions," Innocence Project.

been attributed to DNA exoneration efforts heavily lobbied by organizations such as the Innocence Project.[150]

1. The Innocence Project

Since 1992, the Innocence Project—founded by lawyers Peter Neufeld and Barry Scheck—has been the cornerstone for "exonerating wrongfully convicted individuals through DNA testing."[151] According to this non-profit organization, of the 347 cases in which it worked to free the innocent as of 2016, 29 percent of those unjust convictions were due to false confessions.[152] The Innocence Project website reduces the contributing factors surrounding these miscarriages of justice to improper police practices:

> Sometimes law enforcement use harsh interrogation tactics with uncooperative suspects. But some police officers, convinced of a suspect's guilt, occasionally use tactics so persuasive that an innocent person feels compelled to confess. For instance, it is perfectly legal for law enforcement to employ deception or trickery in the interrogation room. Some suspects are untruthfully told that there is already evidence pointing to their guilt, such as a forensic test that links the suspect to the crime. Some suspects have confessed to avoid physical harm or discomfort. Others are told they will be convicted with or without a confession and that their sentence will be more lenient if they confess. Some are told a confession is the only way to avoid the death penalty. These tactics can be persuasive in eliciting a false confession.[153]

Scholarly work has linked certain aspects of these injustices to the accusatorial interviewing approach seen with the Reid Technique.[154] Reid proponents as well Innocence Project supporters argue, however, it is often the improper application of certain techniques, rather than the techniques themselves, that have led to false

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[150] "False Confessions or Admissions," Innocence Project; State of Tennessee v. Freddrick Lydrell Bates, 19th Jud. Dist. (2012), "Order Suppressing Evidence."

[151] "About," Innocence Project, accessed March 2, 2017, http://www.innocenceproject.org/about/.

[152] "DNA Exonerations in the United States," Innocence Project, accessed March 2, 2017, http://www.innocenceproject.org/dna-exonerations-in-the-united-states/.

[153] "False Confessions or Admissions," Innocence Project.

[154] Christian A. Meissner, Christopher E. Kelly, and Skye A. Woestehoff, "Improving the Effectiveness of Suspect Interrogations," *Annual Review of Law and Social Science* 11 (2015): 213.

confessions.[155] Law professor Brandon L. Garret notes that between 1989 and 2014, sixty-six individuals initially convicted and incarcerated on false confessions were exonerated through DNA evidence (see Table 3).[156] Of those, more than one-third were juveniles, and another third suffered from mental defects.[157] In addition, 94 percent of false confessions were contaminated with publicly withheld evidence and 92 percent of the interrogations lasted for more than three hours.[158]

Table 3. Number of False Confessions Resulting from Improper Interrogation Techniques[159]

	Contaminated with Inside Information	**Interrogations of More than 3 Hours**	**Guilty pleas**
40 False Confessions (1989–2009)	38	36	10
26 False Confessions (2009–2014)	24	25	8
Total N (% of 66 cases)	**62 (94%)**	**61 (92%)**	**18 (27%)**

Although Reid disapproves of using interrogation tactics that reveal non-disclosed evidence to suspects or introduce false evidence during the questioning of juveniles or the mentally ill, it rejects the assertion that lengthy interrogations yield false confessions.[160] To support its claim, Reid's website highlights several court rulings that found the length of the interrogation was not the sole factor in determining the voluntariness of a confession.[161] The question arises then, of whether miscarriages of justice have resulted

155 Inbau et al., *Criminal Interrogation*, 428–429; Brandon L. Garrett, "Contaminated Confessions Revisited," *Virginia Law Review* 101 (2015): 408.

156 Garrett, "Contaminated Confessions," 403.

157 Ibid., 400.

158 Ibid., 404.

159 Source: Garrett, "Contaminated Confessions," 404.

160 Inbau et al., *Criminal Interrogation and Confessions*, 369, 429.

161 "The Length of Interrogation—How Many Hours Are Too Many?" John E. Reid & Associates, accessed March 2, 2017, http://reid.com/reid_topics/length.html.

from the *proper application* of accusatorial interrogation methods like the Reid Technique—including a reliance on behavioral cues—or from the *misuse* of said strategies. In either case, what remains is a singular argument that American interviewers need better training, and in interviewing methods deemed scientifically sound. A prime example of this systemic failure involves two state court cases and one U.S. federal interrogator.

2. State of Tennessee v. Freddrick Lydrell Bates

As described in Chapter I, in *State of Tennessee v. Freddrick Lydrell Bates,* a U.S. federal law enforcement special agent—trained as a polygraph examiner by the U.S. Department of Defense—conducted a polygraph exam on Freddrick Bates. A month prior, Bates had been accused of performing oral sex on his underage stepdaughter. Subsequent to failing the polygraph exam, Bates was interrogated for approximately an hour before confessing to the lewd act. He also provided the agent with a written statement. The video-recorded interrogation of Bates—the only portion of the polygraph exam that was electronically captured—was later entered into evidence as part of a separate court proceeding. Its submission made the recording a public record and, therefore, available for review. During this author's analysis of the video, the agent was observed using eight of Reid's nine interrogation steps (described in Chapter II).[162] The following are mere examples of the agent's tactics and strategies, but provide enough detail to support the claim that his methods were Reid-based.

(1) Step 1: Employing Direct Positive Confrontation

Upon initially confronting Bates about the results of his polygraph exam, the agent stated, "I looked over everything and there's absolutely no doubt, no doubt at all that … you did [it]."[163]

[162] State of Tennessee v Kevin Yepez, 19th Jud. Cir. (2015), Exhibit 12 [video].

[163] Ibid., 2:35.

(2) Step 2: Developing Themes

After delivering the direct positive confrontation, the agent transitioned immediately to blaming the victim for Bates's actions—a projection tactic he revisited throughout the interrogation: "I know how girls are"; "They act on their hormones and that's exactly what happened here"; "She came onto you"; "Girls want attention."[164] The examiner also used a "third-person theme" to help rationalize Bates's alleged immoral behavior. "Let me tell you this story real quick … same type of situation … there's a buddy of mine, alright, named Paul … Paul's a good dude …"[165] The examiner went on to claim that "Paul" was unjustly accused of molesting an underage female and ultimately failed his polygraph trying to prove his innocence. The moral of the story was that after "Paul" failed his exam, he chose to tell his examiner the truth, thus enabling "Paul" to clear his name, an allegory mirroring Bates's current dilemma.

(3) Step 3: Handling Repetitive Denials

In response to Bates's repeated claims of innocence, the agent rejected his denials, stating, "I hear what you're saying. You already told me that, but that's not the truth. I know that's not the truth"; "No, no, no, no, don't sit here and tell me that's the truth, because that's not the truth"; "I know it happened, you're not going to convince me otherwise."[166] At one point during the interrogation, Bates is heard saying, "Listen, listen to me," to which the interrogator responded, "No, no, I will not. I'm not going to listen to that."[167] The interrogator then created space between Bates and himself by rolling back his chair. This "proxemics manipulation" further helped dismiss Bates's denials.

(4) Step 4: Secondary Excuses

During the course of the interrogation, Bates never made excuses as to why he was innocent, he just repeatedly denied the allegations. As such, the interrogator never used a step 4 tactic.

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[164] Ibid., 4:16, 4:26, 4:43; 27:22.

[165] Ibid., 9:05.

[166] Ibid., 5:21, 15:11, 26:08.

[167] Ibid., 28:39.

(5) Step 5: Keeping the Suspect's Attention

Throughout the approximately hour-long interrogation, the agent employed multiple step 5 techniques, including sitting extremely close to Bates and occasionally touching Bates's knee to keep his attention. The agent also made several remarks to give the illusion he was an advocate for Bates: "My job at this point right now is to prove that you're not a dirt bag"; "You have to explain to me so I can explain to everybody else"; "I'm trying to be a spokesperson for you"; "I know that you did not intend to cross that line with her"; "The only two people that are going to fight for you are me and you right now."[168]

(6) Step 6: Assessing the Suspect's Behavior

Approximately thirty minutes into the interrogation video, Bates displayed a broken posture—head in his hand—which signaled to the interrogator a sign of defeat (see Figure 3).

Figure 3. Bates Displaying a Sign of Defeat as Noted in Reid's Step 6

[168] Ibid., 3:20, 28:23, 29:19, 32:20, 47:12.

(7) Step 7: Offering an Optional Question

The agent also deployed an "optional question" during the interrogation: "Did it happen because you're a dirt bag and you're a scumbag or did it happen because she came onto you?"[169]

(8) Step 8: Verbal Accountability

As his denials failed to convince the interrogator of his innocence, Bates began making minor admissions, which the agent capitalized on: "So let's talk, now that the truth is coming out"; "First of all, I want to shake your hand, alright, because you're being a man of integrity right now"; "Give me the details, give me the truth of what happened when that line got crossed"; "Again, you've got to give me the details here because this is the stuff that's going to be used against her"; "How many other times did that happen?"; "Is there anything else other than that?"[170]

(9) Step 9: Eliciting a Written Confession

After confessing, the agent gave Bates a pen and paper and instructed him to write down everything he had confessed to: "Alright, this is what we are going to do, everything that you've told me we're gonna put it on paper. Alright, that way it shows your commitment to telling the truth, a commitment that you're cooperating, that you're wanting to get this cleaned up, that you want to prove that this is what the truth is."[171] Despite what appeared to be his apparent reluctance to do so—Bates was seen in the video sitting motionless, staring at the paper—he eventually wrote out a confession detailing his crime.[172]

Subsequent to finishing the written statement, Bates exits the interview room, thus ending his interrogation. As a result of his confession, Bates was arrested and later indicted by a grand jury on thirteen counts ranging from rape to a lesser offense of

[169] Ibid., 16:05.

[170] Ibid., 33:35, 33:43, 33:55, 48:19, 52:02, 1:00:50.

[171] Ibid., 1:06:31.

[172] Ibid., 1:19:10.

attempted assault (offensive/provocative touching).[173] While in jail awaiting trial, Bates's attorney filed a motion to suppress his confession, claiming it was coerced.[174] The case was eventually put before Tennessee Circuit Court Judge John H. Gasaway, III. During the hearing, Judge Gasaway reviewed the interrogation video and ruled to suppress the evidence. In his findings, Judge Gasaway wrote:

> The court has viewed the videotape of the interrogation of the defendant by [the special agent]. It is enough to say that the nature of the conduct exhibited by the interrogator exceeded the limits of coercion permitted. His actions and words can fairly be described as browbeating the defendant into submission. It is manifest that the confessional admissions of the defendant were not free, willing, and voluntary result of knowing and intelligent waiver of his constitution right.[175]

Bates ultimately pled guilty to a lesser charge and received time served for the time he spent in jail awaiting his day in court.[176]

3. State of Tennessee v. Kevin Yepez

Two years later, the same U.S. federal special agent was involved in another motion-to-suppress hearing—*State of Tennessee v. Kevin Yepez*, in which the court transcripts were available for review. Unlike *Tennessee v Bates*, the agent appeared before the court to answer questions about his training and experience and the interrogation methodologies he used to get Yepez to confess to molesting a child. During direct examination, the agent stated he had been a U.S. federal special agent since 2006 and a federal polygraph examiner since 2010.[177] During his time as an examiner, the agent claimed to have conducted between 375 and 400 polygraph exams, of which he estimated half were evaluated as *truthful*.[178] When asked, the agent stated his goal of

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[173] Charles S. Bloodworth, email to author, December 9, 2016.

[174] State of Tennessee v. Freddrick Lydrell Bates, 19th Jud. Dist. (2012), "Motion to Suppress Statements of the Defendant."

[175] State of Tennessee v. Freddrick Lydrell Bates, 19th Jud. Dist. (2012), "Order Suppressing Evidence."

[176] Charles S. Bloodworth, email to author, December 9, 2016.

[177] State of Tennessee v Kevin Yepez, 19th Jud. Cir. (2015), "Motion to Suppress."

[178] Ibid.

conducting a polygraph examination was to obtain the facts surrounding the case and not specifically a confession.

The state's attorney asked the agent to expand on the questioning methods he used while interrogating Yepez. In response, the agent referred to Reid's "optional question" and "feigning sympathy" tactics—steps 8 and 5—although not by name. According to the agent, "I elude [sic] to the fact that listen, people either make mistakes or people are—are bad people, monsters. And I would have told him at that point, say, listen, I don't think you're a monster; I think this is probably a mistake that had happened, but I just need to know what your side of the story is."[179]

Unlike Bates's interrogation, Yepez's was not recorded. When asked about this discrepancy, the agent stated it was his agency's policy *not* to record criminal polygraph examinations. However, during Bates's polygraph exam the agent incorrectly assumed the policy did not apply if the exam was for an entity other than his own agency (i.e., the Clarksville, Tennessee, Police Department), which was why he recorded Bates's interrogation. The agent stated that upon learning (after Bates) that his agency's *no record* policy applied to all polygraph tests, he no longer recorded any of his exams.[180]

During cross-examination, the defense attorney asked the agent if he knew how to avoid psychological coercion during an interrogation, to which the agent answered, "No."[181] The defense attorney also asked the agent if he had "done any studies or read any material about false statements … or false confession," to which the agent again responded, "No, no sir."[182] When asked, the agent stated he had attended a Reid Technique course—his only training on interrogation tactics—however, he could not recall any of its specific training methods.[183]

[179] State of Tennessee v Kevin Yepez, 19th Jud. Cir. (2015), "Motion to Suppress."

[180] Ibid.

[181] Ibid.

[182] Ibid.

[183] Ibid.

During further cross-examination, the defense attorney asked the agent, "Have you been trained that [the Reid] methodology is guilt presumptive?" The agent responded, "I was trained that there's something that's not been told, yes."[184] The defense attorney also pressed the agent as to the length of the interrogation. When asked why the agent gave the suspect two and a half hours to confess, the agent responded that he would have given Yepez three weeks to confess, if needed.[185] The defense attorney again asked the agent if he was aware of any studies related to innocent individuals giving false confessions, to which the agent responded, "I haven't read anything about those, no sir."[186]

At his conclusion of the cross-examination, the defense attorney entered into evidence the granted motion to suppress in *State of Tennessee v Bates*. This submission was based on the agent stating the interrogation methods he used to question Yepez were the same as those he used on Bates.[187] In the Yepez case, however, the motion to suppress was denied, which suggests the strength the videotape had in exposing the coercive nature of the Reid Technique.

Although Yepez's confession was not thrown out, the cross-examination alone indicates the scrutiny law-enforcement officials may begin to face regarding their interrogation techniques. In addition, these recent cases reaffirm that federal agencies continue to train their agents in accusatorial interrogation techniques while failing to school them in research related to false confessions. Irrespective of the interviewing methods advocated, policing agencies must take responsibility for educating their practitioners on the legal and ethical risks associated with those practices.[188]

To sum up this concern, Shepard and Griffiths note that, "It remains to be seen if interrogation—in North America and in other countries where practitioners have long

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[184] Ibid.

[185] Ibid.

[186] Ibid.

[187] Ibid.

[188] Michel St-Yves, "Police Interrogation in Canada: From the Quest for Confession to the Search for the Truth," In *International Developments in Investigative Interviewing*, eds. Tom Williamson, Becky Milne, and Stephen P. Savage, 92–110 (London: Willan, 2009), 101.

used and argued the merits of these oppressive, non-investigative practices to secure the 'truth'—will survive the transparency of recording, even more so as the efficacy of these techniques is being called increasingly into question through empirical research."[189] Police agencies continuing to train their personnel in poor interviewing strategies may lead to losses beyond confessions, justice, or truth. Such failures may have a significant financial impact as well, as in the case of Juan Rivera.

4. Juan Rivera

In 1992, Waukegan, Illinois, police detectives questioned 19-year-old Juan Rivera about the rape and murder of 11-year-old Holly Staker. After being interrogated over a four-day period and polygraphed twice by a John E. Reid & Associates polygraph examiner, Rivera confessed. In 1993, Rivera was sentenced to life in prison based solely on his confession and despite evidence of his innocence. For nearly two decades Rivera remained incarcerated until DNA evidence exonerated him in December 2011.[190] During a review of the Lake County, Illinois, Circuit Court of Appeals reversal, presiding Judge Honorable Christopher C. Starck wrote:

> Given the circumstances surrounding the interrogation of defendant, we are left with the impression that the details of defendant's confession were procured "piecemeal" and not as a result of a candid acknowledgement of guilt. Over the course of four days, there were no fewer than 10 law enforcement personnel discussing the crime with defendant or interrogating him. It was the State's burden to establish that defendant was not plied with factual information of the crime to which he finally confessed.[191]

In March of 2015, Juan Riviera was awarded a $20 million settlement for the harsh interrogation tactics that elicited his false confession.[192] Although the city of Waukegan,

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[189] Eric Shepard and Andrew Griffiths, *Investigative Interviewing: The Conversation Management Approach*, second edition (Oxford: Oxford Press, 2013): 12.

[190] Dan Hinkel and Steve Mills, "Man Freed after 20 Years in Prison for Waukegan Murder Gets $20 Million," *Chicago Tribute*, October 22, 2016, http://www.chicagotribune.com/suburbs/lake-county-news-sun/crime/ct-rivera-lawsuit-settlement-met-20150320-story.html; Douglas Starr, "Juan Rivera and the Dangers of Coercive Interrogation," *New Yorker*, May 22, 2015, http://www.newyorker.com/news/news-desk/juan-rivera-and-the-dangers-of-coercive-interrogation.

[191] People v. Rivera, IL App. (2d) 091060 (2011).

[192] Hinkel and Mills, "Man Freed after 20 Years in Prison"; Starr, "Juan Rivera."

Illinois, bore the brunt of this financial responsibility, John E. Reid & Associates was ordered to pay $2 million for its participation in this miscarriage of justice.[193] Another example that has brought national attention to the prevalence of improper interrogation tactics is the case of Brendan Dassey.

5. Brendan Dassey

In the 2015 Netflix documentary series "Making a Murderer," Brendan Dassey is portrayed as a naive 16-year-old who confessed in 2006 to helping his uncle Steven Avery rape, kill, and dismember 25-year-old Teresa Halbach.[194] On August 12, 2016, U.S. Magistrate Judge William E. Duffin—U.S. District Court for the Eastern District of Wisconsin—overturned Dassey's conviction on the grounds that it was coerced. According to Judge Duffin, the investigator's "repeated false promises, when considered in conjunction with all other relevant factors, most especially Dassey's age, intellectual deficits, and the absence of a supportive adult, rendered Dassey's confession involuntary under the Fifth and Fourteenth Amendments."[195]

During Dassey's post-conviction litigation, he was co-represented by Northwestern Pritzker Law Professors Steven Drizin and Lara Nirider.[196] As a result of Drizin's unrelated legal work earlier in his career—championing mandatory videotaping of all juvenile interrogations in Wisconsin—Dassey's electronically recorded interrogation was one of the state's first.[197] It was also what Drizin and his team used to

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[193] Ibid.

[194] Daniel Victor, "Prosecutors Appeal Overturned Conviction of 'Making a Murderer' Subject Brendan Dassey," *New York Times*, September 9, 2016, http://www.nytimes.com/2016/09/10/us/brendan-dassey-of-making-a-murderer-has-his-release-delayed.html?_r=0.

[195] Brendan Dassey v. Michael A. Dittmann, Case No. 14-CV-1310 (E.D. Wis.) (2016).

[196] "CWCY Client Brendan Dassey's Conviction Overturned by Federal Judge," Northwestern Pritzker School of Law, August 12, 2016, http://www.law.northwestern.edu/about/news/newsdisplay.cfm?ID=822.

[197] Kayla Hawkins, "Who Is Steven Drizin? Brendan Dassey's Lawyer Has a Passion for Justice," Bustle, February 10, 2016, https://www.bustle.com/articles/136610-who-is-steven-drizin-brendan-dasseys-lawyer-has-a-passion-for-justice.

argue that Dassey's confession was coerced, much of which they attributed to interrogators using Reid-based tactics.[198]

E. CONCLUSION

These four cases—*State of Tennessee v. Freddrick Lydrell Bates*, *State of Tennessee v. Kevin Yepez*, Juan Rivera, and Brendan Dassey—illustrate a singular point: the interrogation framework within the United States is systemically dysfunctional. These cases represent only a fraction of the injustices that result from poor training, a reliance on unscientific interviewing techniques, and an unwillingness to advance beyond a nearly eighty-year-old methodology. As a result, innocent men have died in prison, guilty men have walked free, and police agencies have paid millions in restitution.[199] Despite the existence of more effective and ethical means to interrogate, these methods have yet to be nationally accepted. Although the American criminal justice system has never been flawless, it has matured in step with social norms of humane treatment and civility. As such, along with the evolution of our consensus positions and knowledge in the scientific, moral, and legal realms, comes the need for the tradecraft to modernize. In Chapter IV, this thesis explores the next generation, not of coercive interrogation tactics, but of objective interviewing strategies—practices that have withstood the rigors of empirical science and practical suitability.

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[198] "Brendan Dassey: A True Story of a False Confession," Northwestern Pritzker School of Law, May 9, 2016, https://www.youtube.com/watch?v=Z7jDf5wWdDQ.

[199] Saul A. Kassin et al., "Police-Induced Confessions: Risk Factors and Recommendations," *Law and Human Behavior* 34, no. 1 (2010): 23; Hinkel and Mills, "Man Freed after 20 Years in Prison"; Starr, "Juan Rivera."

IV. THIRD-GENERATION INTERVIEWING METHODOLOGIES

Continuous evaluation of interviewing strategies through the personal accounts of interrogators and prisoners of war, and in the literature of interrogation manuals, agency policies, and government-sponsored research, has yielded a handful of scientifically validated and ethically sound strategies.[200] The first of these is the cognitive interview.

A. THE COGNITIVE INTERVIEW

Developed by psychologists R. Edward Geiselman and Ronald P. Fisher in 1985, the cognitive interview (CI) is used most effectively and principally with cooperating subjects (i.e., forthcoming witnesses and victims). It is grounded in a triad of psychological components: "memory and cognition, social dynamics, and communication."[201] Geiselman and Fisher define the CI as "a systematic approach to interviewing witnesses with the goal of increasing the amount of relevant information obtained without compromising the rate of accuracy."[202] The original version of the CI centered on investigators using four general memory-recall strategies:

- *Reinstate the context*: Recounting the event in explicit details, e.g., the condition of the room, the weather outside, and the people in the area.
- *Report everything*: Encouraging the interviewee to not hold back any information, even if he or she considers it unimportant.
- *Recall the event in a different order*: Describing the interview in a sequence other than chronologically, such as starting from the middle.

[200] Edward Geiselman and Ronald P. Fisher, "Interviewing Witnesses and Victims," in *Investigative Interviewing: Handbook of Best Practices*, ed. Michel St.-Yves, 1–21 (Ontario, Canada: Thomson Reuters, 2014), 2; Maria Hartwig, Christian A. Meissner, and Matthew D. Semel, "Human Intelligence Interviewing and Interrogation: Assessing the Challenges of Developing an Ethical, Evidence-Based Approach," in *Investigative Interviewing*, ed. Ray Bull, 209–228 (New York: Springer, 2014), 212–215.

[201] Geiselman and Fisher, "Interviewing Witnesses and Victims," 2.

[202] Ibid.

- *Change perspective*: Recalling the event from another person's viewpoint.[203]

Although the CI was found to be more effective than the standard police interview—asking open-ended questions followed by specific questions regarding the event—the technique has gone through several revisions to further its effectiveness in memory retrieval.[204]

In its current version, the CI is structurally organized into five phases.[205] The first phase is the *introduction*. This is when the interviewer establishes rapport with the interviewee and encourages him or her to do most of the talking in order to elicit maximum information.[206] *Open-ended narration* is the second phase of the interviewing sequence. This phase involves the interviewee mentally recreating the event using all five senses and then recalling what he or she remembers.[207] The third phase is the *follow-up question* phase, in which the interviewer listens to the specifics surrounding the interviewee's recollection. In this step, the interviewer also asks the interviewee to recall the event in a different chronological order, which helps further elicit information.[208] The interviewer then asks questions to prompt further details. The fourth phase, *review*, consists of the interviewer assessing the information gleaned thus far. This phase also clarifies areas of uncertainty or inconsistency and allows the interviewee to add information, if needed.[209] In the final phase, *close*, the interviewer thanks the interviewee for cooperating and encourages him or her to contact the interviewer again if additional memories surrounding the event emerge.[210] Geiselman and Fisher claim the CI approach

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[203] R. Edward Geiselman et al., "Eyewitness Memory Enhancement in the Police Interview: Cognitive Retrieval Mnemonics versus Hypnosis," *Journal of Applied Psychology* 70, no. 2 (1985): 404; R. Edward Geiselman et al., "Enhancement of Eyewitness Memory with the Cognitive Interview," *The American Journal of Psychology* 99, no. 3 (1986): 390.

[204] Günter Köhnken et al., "The Cognitive Interview: A Meta-analysis," *Psychology, Crime and Law* 5, no. 1–2 (1999): 5.

[205] Geiselman and Fisher, "Interviewing Witnesses and Victims," 3.

[206] Ibid.

[207] Ibid., 5.

[208] Ibid., 7.

[209] Ibid., 8.

[210] Ibid., 3–8.

has been evaluated in more than 100 laboratory experiments and two field studies, in which it has outperformed the typical police-style interview by 25 to 50 percent.[211]

Since the technique's development, two meta-analyses have shown its efficacy in enhancing accurate memory recall from witnesses and victims. In 1999, scholars Günter Köhnken et al. looked at forty-two studies related to the CI, in which they found the technique outperformed the standard interview in eliciting correct information by 41 percent, an effect the researchers noted as "remarkably stable and consistent."[212] Köhnken et al. did find a few studies within their analysis that failed to support their overall conclusion. They note, however, these outliers were likely attributed to either asking the interviewees to recall the event in written form—as opposed to a verbal recitation—or using very young children (age six) as interviewees.[213]

In 2010, researchers Amina Memon, Christian A. Meissner, and Joanne Fraser performed a meta-analytic study on the CI. Their data, which spanned more than twenty-five years, point to a "rather substantial increase in correct recall with the CI as compared with a structured interview," an interview technique similar to the CI but less exhaustive in terms of prompting memory recall.[214] A drawback, however, was difficulty in getting practitioners to incorporate the CI into their everyday routine.[215] Memon et al. attributed this struggle to the amount of time and effort needed to employ the interviewing strategy effectively: "Not only does the CI take longer to administer, but involves instructing witnesses in the use of several sophisticated techniques."[216] Further criticism focused on methodologies used to verify the CI's success.[217] Specifically, earlier studies occurred in laboratory environments where participants watched videos of the events as opposed to

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[211] Ibid., 8.

[212] Köhnken et al., "The Cognitive Interview," 20.

[213] Ibid.

[214] Amina Memon, Christian A. Meissner, and Joanne Fraser, "The Cognitive Interview: A Meta-analytic Review and Study Space Analysis of the Past 25 Years," *Psychology, Public Policy, and Law* 16, no. 4 (2010): 2, 26.

[215] Ibid., 35.

[216] Ibid.

[217] Jillian R. Rivard et al., "Testing the Cognitive Interview with Professional Interviewers: Enhancing Recall of Specific Details of Recurring Events," *Applied Cognitive Psychology* 28, no. 6 (2014): 917.

experiencing them personally.[218] These studies also relied on students being both interviewers—as opposed to experienced criminal interrogators—and witnesses, which may not have represented the average "witness" in terms of intelligence and memory recall.[219] The previous studies also conducted the interviews shortly after participants observed the events, which lessened the need for long-term memory recall.[220]

In a 2014 study, Rivard et al. tested the validity of these criticisms by recruiting eight experienced criminal interrogators who taught interviewing strategies at FLETC.[221] Twenty-five other FLETC trainers—who had teaching backgrounds in either law-enforcement or security courses—were used as witnesses.[222] Prior to experiment onset, the interviewers received two full days of CI instruction. Over the following month, the recruited interviewees participated in several meetings that preceded planned training exercises in surveillances, search warrants, or undercover operations. None of the interviewees knew the questions ahead of time and each interview occurred between three and forty-three days after a witnessed event. Once the interviews commenced, each interviewer conducted between two and four interviews in which they equally employed the CI technique and the five-step interviewing method taught at FLETC. This latter technique is the cornerstone of FLETC's interview and interrogation training, which centers on building rapport, avoiding leading questions or interrupting the interviewee, allowing long pauses, and employing follow-up questions.[223]

During the interviews, interviewees were asked to recall specific details, such as clothing descriptions of meeting attendees, as they related to a particular event. Each piece of information was then separated into five categories: people, settings actions, objects, and temporal, as shown in Table 4.

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[218] Ibid.

[219] Ibid.

[220] Ibid., 918.

[221] Ibid.

[222] Ibid.

[223] Patricia Donovan, email to author, January 13, 2017.

Table 4. Detail Retrieval Comparison between Cognitive Interview and FLETC Five-Step Interview Method[224]

	COGNITIVE INTERVIEW	FLETC FIVE-STEP INTERVIEW
CATEGORY	Average Number of Details	Average Number of Details
People	105.33	51.25
Setting	45.08	33.13
Actions	124.58	57.75
Objects	40.92	22.00
Temporal	3.00	1.95
Total	318.91	166.08

Rivard et al. found the CI elicited nearly 80 percent more information than the five-step interview.[225] The single disadvantage of the CI compared to the FLETC technique was time: the CI required approximately twelve more minutes on average to complete, a drawback previously discussed by Memon et al.[226] Despite this disadvantage, the CI was so effective that in 2013 FLETC began incorporating elements of its methodologies into the center's basic interviewing curriculum.[227]

B. INVESTIGATIVE INTERVIEWING: THE U.K.'S PEACE MODEL

The U.K.'s criminal interviewing philosophy and practices were characterized by the same flaws that plague the American policing system today—insufficient and inadequate interview training, the reliance on guilt-presumptive interviewing approaches, the use of manipulation techniques to glean confessions, and the lack of a unified policy

[224] Adapted from Rivard et al., "Testing the Cognitive Interview," 921.

[225] Ibid., 923.

[226] Ibid., 924; Amina Memon et al., "The Cognitive Interview," 35.

[227] Rivard et al., "Testing the Cognitive Interview," 924.

mandating the recording of every suspect interview.[228] As a result, the U.K. suffered a litany of public embarrassments from a number of wrongful convictions.[229] These judicial miscarriages led to a national paradigm shift toward a more ethical interviewing strategy called *investigative interviewing*.[230]

In 1984, the U.K. Home Office instituted the Police and Criminal Evidence (PACE) Act, intended to safeguard against suspect abuse and which mandated the audio recording of all criminal interviews.[231] A re-evaluation of the policy's impact nearly a decade later, however, revealed that little, if anything, had changed. Psychologists Stephen Moston and Terry Engelberg found that practitioners lacked the skills necessary to properly manage difficult interviews and focused more on educing confessions rather than seeking objective information.[232] John Baldwin's research produced similar conclusions that a majority of practitioners within the U.K. were professionally incompetent and disorganized, and seemed inept at asking questions in a structured fashion.[233]

1. Creation of the PEACE Model of Interviewing

In response to these shortcomings, a working group within the U.K. evaluated the region's police interviewing practices.[234] This assessment resulted in the creation of a national training model that focused on seven key philosophies rooted in the tenets of "fairness, openness, and accountability"[235]:

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[228] Dixon, "Questioning Suspects," 431; Andy Griffiths and Becky Milne, "Will it All End in Tiers? Police Interviews with Suspects in Britain," in *Investigative Interviewing: Rights, Research, Regulation*, ed. Tom Williamson, 167–189 (London: Willan 2006): 167.

[229] Ibid.

[230] Ibid.

[231] Shawyer, Milne, and Bull, "Investigative Interviewing," v.

[232] Stephen Moston and Terry Engelberg, "Police Questioning Techniques in Tape Recorded Interviews with Criminal Suspects," *Policing and Society: An International Journal* 3, no. 3 (1993): 236.

[233] John Baldwin, "Police Interviewing Techniques: Establishing Truth or Proof?" *British Journal of Criminology* 33, no. 3 (1993): 339.

[234] Ray Bull and Becky Milne, "Attempts to Improve the Police Interviewing of Suspects," in *Interrogations, Confessions, and Entrapment*, ed. G. Daniel Lassiter (New York: Springer, 2004): 185.

[235] Griffiths and Milne, "Will it All End in Tiers," 170; Shawyer, Milne, and Bull, "Investigative Interviewing," 26.

1. The role of police is to obtain accurate information from suspects.
2. Interviews should be approached with an open mind.
3. Information obtained from the suspect must be compared with what the interviewer already knows.
4. The interviewing officer(s) must act fairly.
5. Vulnerable suspects must be treated with particular consideration.
6. The interviewer need not accept the first answer given.
7. Even when suspects exercise the right to silence, the interviewer still has the right to ask questions in order to try to establish the truth.[236]

On these principles, U.K. officials developed an ethical interviewing framework known as the PEACE model—an acronym for planning and preparation, engage and explain, account clarification and challenge, closure, and evaluation, as shown in Figure 4.[237]

[236] Timothy E. Curtis, "Investigative Interviewing In England Part I: Models for Interviewing Witnesses and Suspects," United Nations Asia and Far East Institute, accessed March 2, 2017, http://www.unafei.or.jp/english/pages/RMS/No92_04VE_Curtis1.pdf.

[237] Shawyer, Milne, and Bull, "Investigative Interviewing," 26.

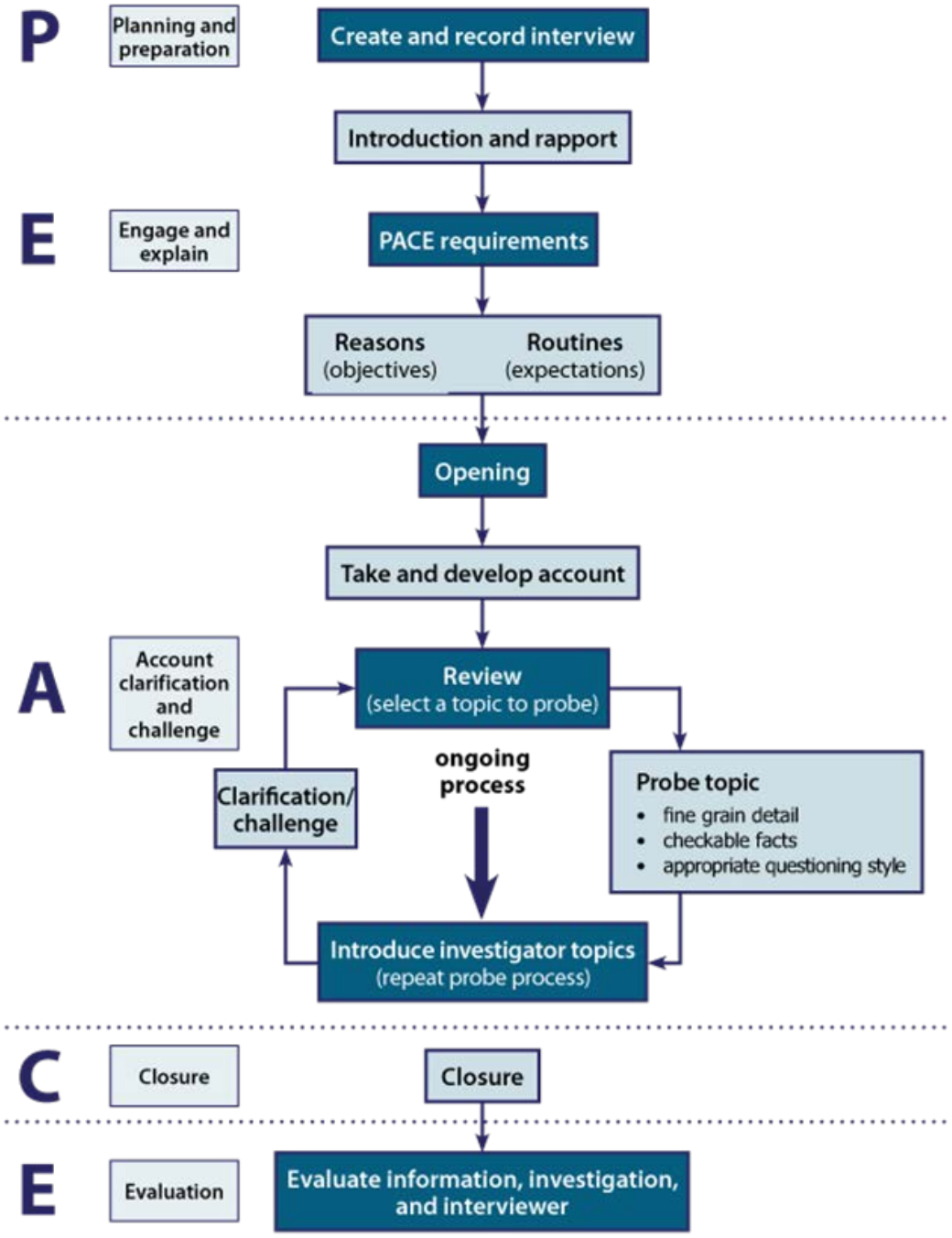

Figure 4. The U.K.'s PEACE Model of Interviewing[238]

[238] Source: "Investigative Interviewing," College of Policing, last modified January 11, 2016, https://www.app.college.police.uk/app-content/investigations/investigative-interviewing/.

The PEACE model is separated into five phases that provide the roadmap for practitioners to follow during the course of the interview. The first phase of the model—*planning and preparation*—precedes the interview.[239] This stage requires the interviewer to gather and become familiar with the pertinent information or evidence related to both the subject and the facts of the case.[240] This data collection ensures the interviewer is prepared for the interview well in advance.[241] The three subsequent phases—*engage and explain*, *account clarification and challenges*, and *closure*—take place during the interview and provide the interviewer a logical sequence of steps toward a successful conclusion.[242] During each of these steps, the subject is encouraged to provide as much detail as possible without interruption prior to the interviewer presenting any evidence to the contrary.[243] Because the interviewee's level of cooperation plays a significant role in the amount of information provided, it is also during these middle stages that the interviewer deploys one of two interviewing techniques.[244]

The first option is the aforementioned cognitive interview (CI) and the second is the *conversation management* (CM) technique.[245] This latter approach is best used with uncooperative interviewees, such as suspects or hostile witnesses, and contains three phases: the *greeting* phase, the *explanation* phase, and the *closure* phase.[246] The greeting phase focuses on establishing rapport while the explanation phase requires the interviewer to set the boundaries of the interview and explain its purpose and objectives.[247] During the second phase, the interviewer also verbalizes the need for the

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239 Shawyer, Milne, and Bull, "Investigative Interviewing," 27.

240 Ibid.

241 Ibid.

242 Ibid.

243 Ibid.

244 Ibid.

245 Ibid.

246 Ibid.; Ulf Holmberg, "Investigative Interviewing as a Therapeutic Jurisprudential Approach," in *International Developments in Investigative Interviewing*, eds. Tom Williamson, Becky Milne, and Stephen P. Savage (London: Willan, 2009): 156.

247 Holmberg, "Investigative Interviewing," 156.

interviewee to actively participate in the conversation, defined as *mutual activity*.[248] In the closure phase of the CM, the interviewer purposely ends the meeting in a positive light in the hopes the subject will agree to a future interview if the need arises.[249] After implementing either the CI or CM, the interviewer enters into the last phase of the PEACE model—the *evaluation*. In this step the interviewer assesses the outcome of the interview as well as the methodologies used.[250]

2. Evaluation of PEACE

In 2001, scholars Clarke and Milne evaluated the decade-old PEACE model, and found it deficient. In particular, they discovered no real difference—aside from the length of the interview—between the efficacy of the practitioners' interviewing skills before and after PEACE training.[251] These shortcomings were further exacerbated during victim and witness interviews, in which interviewers routinely reverted back to traditional question-and-answer exchanges instead of conducting the CI.[252]

Further research found the model's blanket approach to criminal interviewing lacked the versatility to accommodate sophisticated methods required for more serious crimes.[253] Andrew Griffiths, one of the key contributors to advancing interview policies within the U.K., notes, "PEACE fulfilled an important role in limiting oppressive interviews but there was still a need to develop further effective interview techniques."[254] These findings led to the development of a five-tier approach to interviewing, a paradigm shift reflective of changes in research, national policy, and institutional evolutions.[255]

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[248] Ibid.

[249] Ibid.

[250] Shawyer, Milne and Bull, "Investigative Interviewing," 27.

[251] Colin Clarke and Rebecca Milne, *National Evaluation of the PEACE Investigative Interviewing Course* (Report No. PRAS/149) (London: Home Office, 2001), i.

[252] Ibid., ii.

[253] Griffiths and Milne, "Will it All End in tiers," 171.

[254] Ibid.

[255] Michel St-Yves et al., "Training in Investigative Interviewing: Observations and Challenges," in *Investigative Interviewing—The Essentials*, 245–282 (Toronto, Canada: Carswell, 2014), 248.

The training modules within each of the five tiers—ranging from one to three weeks in length—were designed to correspond to the interviewers' professional experiences and skill levels, and the degree to which they would be involved in conducting investigations relevant to their positions (see Figure 5).[256]

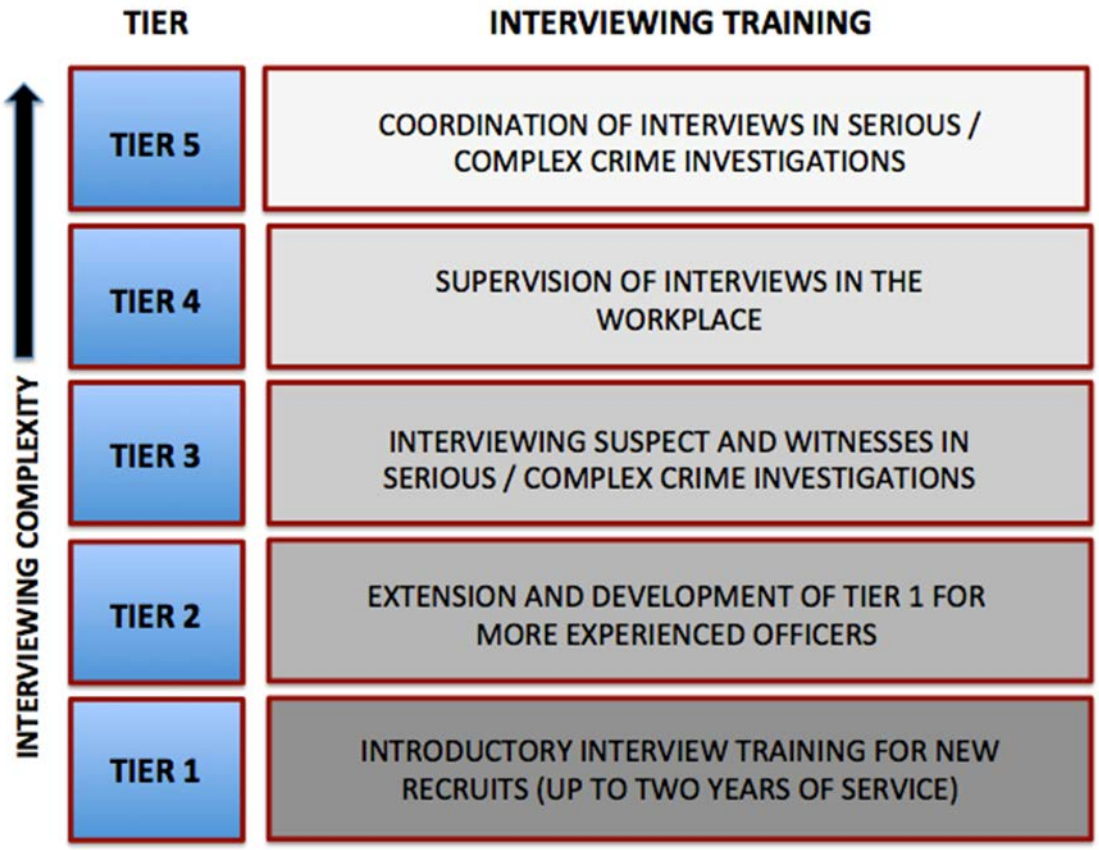

Figure 5. Five Tiers of the U.K.'s Interview Training[257]

Tier 1 teaches the rudimentary concepts of interviewing to new law-enforcement personnel, and Tier 2 is a training extension of first-tier fundamentals for more experienced officers.[258] Tier 3, which is three weeks long, is an advanced course for

[256] Shawyer, Milne, and Bull, "Investigative Interviewing," 34.

[257] Source: Shawyer, Milne, and Bull, "Investigative Interviewing," 34.

[258] Griffiths and Milne, "Will it All End in Tiers," 167.

agents involved in more serious investigations. Because its focus is on complex suspect, witness, and victim interviews, this tier incorporates strategies steeped in theoretical learning, legal training, and practical exercises requiring peer feedback.[259] Unique to this stage is the requirement that investigators pass an initial assessment prior to being accepted into Tier 3 training. This pass/fail test safeguards against incompetency in the interview room and ensures only the most qualified interviewers are conducting the most difficult interviews.[260] Tier 4 involves supervising the interviews for quality assurance and Tier 5—the highest tier—consists of coordinating the interviews for the most serious cases.[261]

3. Outcomes of the PEACE Model

Although the PEACE model was not the panacea the U.K. Home Office had initially envisioned, several studies have verified its effectiveness subsequent to Clarke and Milne's 2001 recommendations. In a 2006 study, Milne and Griffiths note that while the original PEACE training did reduce coercive interrogations, it failed to enhance the interviewer's ability to gather more relevant information.[262] With the creation of the five-tier model, however, the researchers found marked improvements in the types of questions interviewers used to probe for information and a decreased use of inappropriate questions—though these enhancements appeared to be predicated on continual refresher training to maintain a proficient interview skill level.[263]

In a 2010 study, researchers Walsh and Bull also found implementing the PEACE model greatly enhanced the quality of the overall interview.[264] In particular, they note that when practitioners effectively utilized the *planning* and *preparation* as well as the *account clarification and challenges* segments of PEACE, they performed better than

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[259] Ibid., 173.

[260] Ibid.

[261] Ibid., 168; Shawyer, Milne, and Bull, "Investigative Interviewing," 34.

[262] Griffiths and Milne, "Will it all End in Tiers," 187.

[263] Ibid.

[264] Dave Walsh and Ray Bull, "What Really Is Effective in Interviews with Suspects? A Study Comparing Interviewing Skills against Interviewing Outcomes," *Legal and Criminological Psychology* 15, no. 2 (2010): 318.

interviewers who were less successful at implementing these phases.[265] Walsh and Bull did find, however, that interviewers still lacked the ability to overcome the heightened challenge when faced with subjects unwilling to confess.[266]

4. Additional Research Supporting the Investigative Interview

Meissner et al. conducted a comparative review of the *accusatorial interview*, predominantly used in the United States, and the U.K.'s aforementioned *information-gathering* approach.[267] This review—which consisted of seventeen studies—was separated into two meta-analyses; five of the studies were field studies and the remaining twelve were experimental studies. Each study consisted of an identifiable interviewing/interrogation strategy, such as accusatorial or information gathering (see Table 5), as well as information on the confession outcome linked to that strategy.

Table 5. Distinctions between Information-Gathering and Accusatorial Interviewing Methods[268]

METHODS OF INTERVIEWING

INFORMATION-GATHERING	versus	ACCUSATORIAL
Establishes rapport		Establishes control
Uses direct, positive confrontation		Uses psychological manipulation
Employs open-ended exploratory questions		Employs closed-ended confirmatory questions
Primary goal is elicitation of information		Primary goal is confession
Focuses on cognitive cue to deception		Focuses on anxiety cue to deception

[265] Ibid.

[266] Ibid., 320.

[267] Tom Williamson, Becky Milne, and Stephen P. Savage, *International Developments in Investigative Interviewing* (New York: Routledge, 2012), xxii; Meissner et al., "Accusatorial and Information-Gathering Interrogation Methods," 461.

[268] Adapted from Meissner et al., "Accusatorial and Information-Gathering Interrogation Methods," 479.

Their results indicated that while the application of both methods increased the likelihood of obtaining true confessions—as opposed to a direct question-and-answer exchange—the accusatorial approach increased the likelihood of obtaining false confessions as well. The information-gathering approach, however, was found to decrease the potential for false confessions.[269]

Despite the documented utility of the PEACE model, critics of investigative interviewing have questioned its degree of effectiveness along with its cultural and organizational limitations—compared to the Reid Technique—within the United States. According to law professor David Dixon, "In the enthusiasm to promote an alternative to the Reid Technique, the impact of investigative interviewing is sometimes exaggerated."[270] Gudjonsson and Pearse see Reid's dominance within the American interviewing community as an impediment toward national acceptance: "No doubt, such a reform will be strongly resisted by American police authorities. The Reid Technique has a long history, and its prescriptive nature and *apparent* effectiveness undoubtedly makes it attractive."[271] According to Leo, one of the prime differences between U.S. and U.K. policing cultures is the latter's collaboration with researchers to explore, develop, and train its practitioners in more effective interview strategies.[272] As noted in much of the literature, this mutual researcher/practitioner relationship, however, is nearly nonexistent in the American policing system, resulting in a dearth of evidence as to what occurs within the confines of the interrogation room.[273] According to Gudjonsson, this void has led to "police officers … making the same interviewing mistakes as they have

[269] Ibid.

[270] Dixon, "Questioning Suspects," 430.

[271] Gudjonsson and Pearse, "Suspect Interviews and False Confessions," 36.

[272] Richard A Leo, "Inside the Interrogation Room," *The Journal of Criminal Law and Criminology* 6, no. 2 (1996): 267.

[273] Gisli H. Gudjonsson, "Psychological Vulnerabilities during Police Interviews. Why Are They Important?" *Legal and Criminological Psychology* 15, no. 2 (2010): 163.

traditionally done in the past," an argument further supported by Meissner, Hartwig, and Russano.[274]

The literature underscores that the primary obstacle with establishing such a relationship is mistrust. According to Meissner et al., "It is not unusual for law enforcement to express a reluctance to cooperate on research projects, and their lack of trust with the scientific community represents a serious obstacle for progress on these issues."[275] Nonetheless, they argue, in order to succeed in changing the current American interrogation methodology, researchers must remain persistent in their efforts to engage the policing community.[276] To date, the implementation of the PEACE model has enhanced the U.K.'s commitment to its citizenry by striving to "treat everyone fairly; be open and honest; work in partnership; and change to improve."[277] This philosophy, in turn, has improved human rights standards, thus further promoting the professionalism of the U.K. policing system as a whole.[278]

In conjunction with efforts to establish better interviewing strategies, researchers have continued to explore techniques for improving lie-detection accuracy beyond 54 percent, as noted previously by Bell and DePaulo.[279] One such technique that has shown promising results involves the use of evidence to judge deception.

C. STRATEGIC USE OF EVIDENCE

The timing of evidence introduced into a criminal interrogation has been shown to have an effect on educing confessions. In a 1996 study, Leo analyzed the "routine American police interrogation practices" in which he found 90 percent of investigators

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[274] Ibid.; Christian A. Meissner, Maria Hartwig, and Melissa B. Russano, "The Need for a Positive Psychological Approach and Collaborative Effort for Improving Practice in the Interrogation Room," *Law and Human Behavior* 34, no. 1 (2010): 44.

[275] Meissner, Hartwig, and Russano, "Positive Psychological Approach," 44.

[276] Ibid.

[277] "MPS Publication Scheme: Introduction to the Scheme," Metropolitan Police, accessed March 2, 2017, http://www.met.police.uk/foi/introduction.htm.

[278] Shawyer, Milne, and Bull, "Investigative Interviewing," 34–35.

[279] Bond and DePaulo, "Accuracy of Deception Judgments," 214.

opted to introduce evidence during the early stages of an interrogation.[280] This immediate evidentiary disclosure was then used to encourage the suspects to confess.[281] Psychologists Maria Hartwig et al. argue, however, that by strategically delaying the introduction of evidence in an interrogation, practitioners may be able to draw out more clues of deception from guilty suspects because they know neither the strength nor the breadth of the evidence against them.[282] In a 2005 study, Hartwig et al. found that when evidence against the suspect was disclosed late in the interrogation, observers were able to detect deception rates at 61.7 percent accuracy, versus 42.9 percent accuracy when evidence was disclosed early in the interview.[283] In a follow-on study, Hartwig et al. observed that when trained interviewers employed the strategic disclosure of evidence—withholding evidence while asking specific questions related to it—guilty suspects were not only less forthcoming with information when compared to truthful subjects, but also more likely to make statements that contradicted the evidence against them.[284] As such, by using this strategy, trained interviewers were able to identify deception 85 percent of the time, compared to 56 percent by untrained interviewers.

In a 2016 study, Luke et al. recruited fifty-nine participants from FLETC to test the validity of using evidence to increase deception detection accuracy. Thirty-one of the sample participants were then trained in the strategic use of evidence (SUE) technique, defined as "a framework for planning and executing suspect interviews with the aim of facilitating judgments of truth and deception."[285] Subsequent to training, all participants conducted mock suspect interviews in which physical evidence was a key part of the investigations. The study found interviewers trained in SUE were 22 percent more

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[280] Leo, "Inside the Interrogation Room," 279.

[281] Ibid.

[282] Maria Hartwig et al., "Detecting Deception via Strategic Disclosure of Evidence," *Law and Human Behavior* 29, no. 4 (2005): 471.

[283] Ibid., 469.

[284] Maria Hartwig et al., "Strategic Use of Evidence during Police Interviews: When Training to Detect Deception Works," *Law and Human Behavior* 30, no. 5 (2006): 605.

[285] Timothy Luke et al., "Training in the Strategic Use of Evidence Technique: Improving Deception Detection Accuracy of American Law Enforcement Officers," *Journal of Police and Criminal Psychology* 31, no. 4 (2016): 1.

accurate at detecting deception than those who were untrained (65 percent versus 43 percent).[286] The researchers note, however, that due to their small sample size, further studies of SUE's efficacy are needed to better support their results.[287]

Compared to Bell and DePaulo's meta-analysis study that found the accuracy rating for detecting deception—regardless of expertise—averaged 54 percent, the findings related to the strategic use of evidence are significant. Improving interviewing strategies is not confined to research solely within the criminal-interviewing milieu. There are also transferrable strategies in the realm of human intelligence gathering from which law-enforcement practitioners might equally draw.

D. ADOPTION OF HUMAN INTELLIGENCE COMMUNICATION STRATEGIES: THE SCHARFF TECHNIQUE

Human intelligence (HUMINT) is the standard term used to refer to the gathering of direct information from humans.[288] Although differences among HUMINT collection interviews and criminal interviews exist—the goal of the interrogation representing the primary difference—there are areas in which the techniques significantly overlap as well.[289] In a 2010 study, Evans et al. identified several of these shared traits: a need to properly identify the individual to be interviewed, the need to compile evidence against the subject while establishing rapport, the need for the interviewer to seek reliable answers to specific questions, and the need for the interviewer to decide the individual's immediate future, such as further questioning, releasing, or holding the subject for as long as legally possible.[290]

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[286] Ibid.

[287] Ibid., 7.

[288] Russano et al., "Structured Interviews of Experienced HUMINT Interrogators," 847.

[289] "The goals of a HUMINT interrogation is to obtain reliable information from a source about the past, present, or future which can be used to improve national security and/or further national interests. In contrast, the purpose of a criminal interrogation is generally to acquire evidence, which can be presented at trial to obtain the conviction of the guilty party." Evans et al., "Criminal versus HUMINT Interrogations," 217.

[290] Evans et al., "Criminal versus HUMINT Interrogations," 228.

The Scharff Technique represents one HUMINT strategy that arguably has the most components adaptable to the law-enforcement arena. The utility of Scharff comes from its ability to elicit more information than the *direct approach* method—asking a series of direct questions as outlined in the U.S. Army Field Manual—the government-wide standard for gathering HUMINT.[291] Although the direct approach is considered primarily a HUMINT tactic, Redlich, Kelly, and Miller found approximately 45 percent of civilian interrogators use it as well.[292] Because this percentage suggests the technique is employed as a questioning strategy during criminal interviews, its applicability in the criminal interrogation room is discussed in this section.[293]

The Scharff Technique is named and modeled after German Luftwaffe Interrogator Hans Joachim Scharff, known for his ability to elicit sensitive information from over 500 captured Allied fighter pilots using non-adversarial psychological manipulation.[294] Scharff's approach involved adopting the perspective of his prisoners, which enabled him to visualize their world. He then used that vantage point to identify their counter-interrogation tactics and circumvent them. Scharff used five interrelated tactics to accomplish this feat: adopt a friendly approach, do not press for information, present the illusion of "knowing it all," confirm/disconfirm elicited information, and ignore new information.[295]

Because of Scharff's success, psychology professor Pär Anders Granhag theorized his techniques could be applied to closely scrutinized modern-day interrogation

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[291] Jacqueline R. Evans et al., "An Empirical Evaluation of Intelligence-Gathering Interrogation Techniques from the United States Army Field Manual," *Applied Cognitive Psychology* 28, no. 6 (2014): 868.

[292] Allison D. Redlich, Christopher Kelly, and Jeaneé Miller, "Systematic Survey of the Interview and Intelligence Community," American Psychology-Law Society Conference, San Juan, Puerto Rico (2012), 3.

[293] Ibid.

[294] Pär A. Granhag, Sebastian C. Montecinos, and Simon Oleszkiewicz, "Eliciting Intelligence from Sources: The First Scientific Test of the Scharff Technique," *Legal and Criminological Psychology* 20, no. 1 (2015): 99.

[295] Ibid., 101.

techniques and with uncooperative interviewees.[296] In a 2015 study, May and Granhag predicted that if an interviewer used two of the tactics mentioned previously—*illusion of knowing it all* and *confirmation/disconfirmation*—the Scharff Technique would be more successful at eliciting information than the direct approach method.[297] To test their theory, May and Granhag separated ninety-three participants into three groups: *Scharff open-ended questions/confirmation group*, in which the interviewer gave the illusion of knowing it all, asked one open-ended question followed by a confirmation tactic and then asked another open-ended question; *Scharff confirmation/open-ended questions group*, in which the interviewer alluded to knowing it all, used a confirmation tactic and thereafter asked two open-ended questions; and *direct approach group*, in which the interviewer asked "an open-ended question followed by three specific questions, which were repeated if the source failed to answer, and finished the interview with yet another open-ended question."[298] The comparison among these techniques is shown in Table 6.

Table 6. Elements of the Scharff Technique and Direct Approach Interviewing Strategies[299]

METHODS OF INTERVIEWING		
Scharff OpenQ/Conf	**Scharff Conf/Open Q**	**Direct Approach**
Illusion of knowing-it-all	Illusion of knowing-it-all	Open-ended question
Open-ended question	Confirmation tactic	Specific questions
Confirmation tactic	First open-ended question	Open-ended question
Open-ended question	Second open-ended question	

[296] Lennart May and Pär Anders Granhag, "Techniques for Eliciting Human Intelligence: Examining Possible Order Effect of the Scharff Tactics," *Psychiatry, Psychology, and Law* 23, no. 2 (2015): 1, doi: 10.1080/13218719.2015.1054410.

[297] Ibid., 1.

[298] Ibid., 4.

[299] Adapted from ibid.

Prior to the start of the interview, each participant received twenty-four pieces of information specific to an event and was asked to strike a balance between revealing too much information and not enough to the interviewer during questioning. The participants were also advised not to add any fabricated information. The interviewers—all trained in interviewing strategies—were provided half (twelve) of the total pieces of information, unbeknownst to the students. Subsequent to the interviews, each student completed a questionnaire related to how well they understood the interviewer's objective, how motivated they were to not reveal any information, and out of the twenty-four pieces of information possessed, how many they assumed the interviewer already knew. Both methods of the Scharff Technique—open-ended questions/confirmation and confirmation/open-ended questions—outperformed the direct approach, increasing the amount of new information disclosed and minimizing the amount of information the students assumed they revealed.[300]

Although the study compared the effectiveness of two intelligence-gathering methodologies—Scharff Technique and the direct approach—the findings point to elements that can be applied to criminal interviews as well. These include techniques such as Scharff's non-coercive means of collecting information or introducing fictitious evidence.[301] Scharff's perspective-taking tactic has proven utility within the criminal-interviewing room as well. According to Granhag and Hartwig, by adopting the mindset of the suspect—specifically, his or her strategies for countering interview questions—interrogators can learn to become better prepared for more effective interrogations.[302]

[300] Ibid., 11.

[301] Granhag, Montecinos, and Oleszkiewicz, "Eliciting Intelligence from Sources," 15.

[302] Pär Anders Granhag and Maria Hartwig, "A New Theoretical Perspective on Deception Detection: On the Psychology of Instrumental Mind-Reading," *Psychology, Crime & Law* 14, no. 3 (2008): 198.

E. CONCLUSION

Despite the ad hoc successes of the Reid Technique, science has identified an array of interviewing approaches that are more ethical and more effective than these second-generation approaches: strategies such as the CI, the investigative interview, SUE, and elements of the Scharff Technique.[303] Although the American policing system has yet to systemically embrace next-generation methodologies, researchers have slowly begun collaborating with practitioners to identify the most applicable "interrogative methods that carry the support of both scientific and law enforcement communities."[304] This shared effort between scientists and investigators was the U.K.'s impetus to reform its interviewing model in the 1980s; it has similarly begun to yield improvement in several U.S. law-enforcement training curricula as well.[305] This improvement is the focus of Chapter V.

[303] Geiselman and Fisher, "Interviewing Witnesses and Victims," 8; Meissner et al., "Accusatorial and Information-Gathering Interrogation Methods," 479; Luke et al., "Training in the Strategic Use of Evidence," 1; May and Granhag, "Techniques for Eliciting Human Intelligence," 11.

[304] Gudjonsson and Pearse, "Suspect Interviews and False Confessions," 36; Meissner, Hartwig, and Russano, "The Need for a Positive Psychological Approach," 44.

[305] Gudjonsson and Pearse, "Suspect Interviews and False Confessions," 36; Patricia Donovan, email to author, January 13, 2017.

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V. POLICY ANALYSES, RECOMMENDATIONS, AND CONCLUSIONS

Synthesizing the material presented in previous chapters, this final chapter lays the foundation for incorporating third-generation methodologies into the OPR training program. Two policy analyses—of the HIG and the FLETC interviewing curriculum—provide the necessary framework and offer strategic steps toward effective implementation. Finally, the chapter outlines approaches for long-term adherence as well as recommendations for broadening practices into a larger law-enforcement arena.

A. THE HIGH-VALUE DETAINEE INTERROGATION GROUP (HIG)

In response to the highly publicized post-9/11 interrogation tactics the United States used on terrorist suspects, President Barrack Obama signed Executive Order 13419, *Ensuring Lawful Interrogations*, which called for humane treatment of detainees in U.S. custody.[306] The executive order also called for the creation of a Special Task Force on Interrogations and Transfer Policies, which proposed adopting several policies to strengthen U.S. national security.[307] One such recommendation was to establish a federal interagency group comprising interrogation experts from throughout the U.S. law-enforcement and intelligence communities. From this proposal came the creation of the HIG.

The HIG is tasked with multiple responsibilities. The first is to oversee deployment of interrogators, analysts, linguists, and support personnel to locations where high-value U.S. targets are detained. These mobile teams are designed to conduct comprehensive interrogations to educe information that both thwarts future terrorist attacks and protects U.S. national-security interests. The HIG is also responsible for instituting and managing a research program aimed at identifying the best theories and

306 "Executive Order 13491—Ensuring Lawful Interrogations," The White House, January 22, 2009, https://www.whitehouse.gov/the_press_office/EnsuringLawfulInterrogations.

307 "Special Task Force on Interrogations and Transfer Policies Issues its Recommendations to the President," U.S. Department of Justice, August 24, 2009, https://www.justice.gov/opa/pr/special-task-force-interrogations-and-transfer-policies-issues-its-recommendations-president.

practices "from the cognitive, behavior and social sciences" that represent the most effective and ethical means of conducting interrogations.[308]

Since its establishment in 2009, HIG researchers have published more than 100 pieces of scientific literature in the field of interviewing and interrogations; topics of interest in this literature are shown in Figure 6.[309]

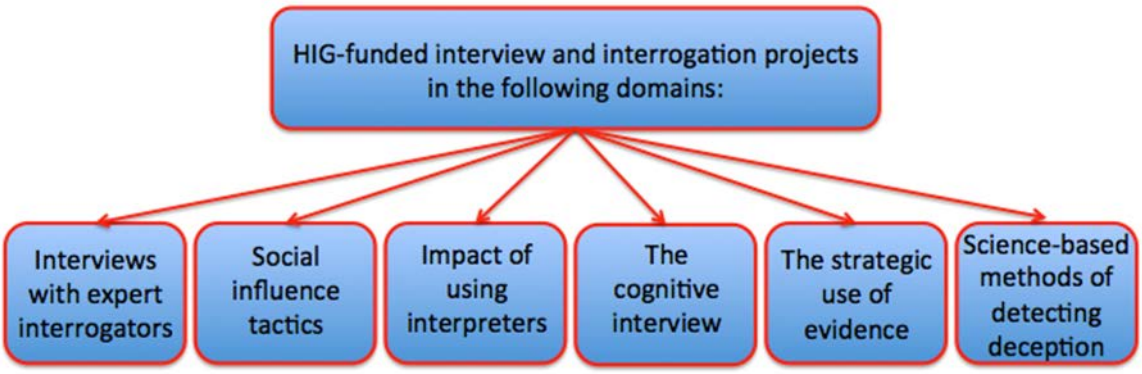

Figure 6. Domains of HIG-Funded Interviewing and Interrogation Research Projects[310]

The group has also provided instruction to multiple U.S. agencies and departments on the use of science-based methods of interviewing, including AFOSI, the Los Angeles Police Department, and FLETC.[311]

In line with the HIG's collaborative efforts with other agencies, this thesis initiated a concurrent joint research project between the HIG and OPR to enhance OPR's interview-training program. The joint project's methodology uses a before-and-after training analysis of the information obtained during suspect interviews, most of which comprise federal employees accused of criminal and administrative violations. The first

308 Kelly and Meissner, "Interrogation and Investigative Interviewing," 9.

309 Meissner and Russano, "Science-Based Methods of Interrogation."

310 Source: "High-Value Detainee Interrogation Group," Federal Bureau of Investigation, accessed March 2, 2017, https://www.fbi.gov/about/leadership-and-structure/national-security-branch/high-value-detainee-interrogation-group.

311 Kelly and Meissner, "Interrogation and Investigative Interviewing," 9; Meissner and Russano, "Science-Based Methods of Interrogation."

phase of this collaboration—which is ongoing—involves OPR providing HIG program staff with suspects' redacted interview transcripts. These records offer examples of the interviewing methods used by OPR special agents as well as the types of investigations they conduct.

The second phase of this research effort will consist of training a select group of OPR investigators in science-based interviewing methodologies. All newly hired OPR special agents are required to attend a multi-week training program—OPR Special Agent Training (OPRSAT)—located at FLETC. The program is designed to train OPR agents in a variety of skills specific to their new role within DHS, including report writing, administrative responsibilities, and internal investigative practices. Within the investigative segment is a block of instruction dedicated to interviewing strategies. Traditionally, this instruction comprised a full day of lecture from employees of John E. Reid & Associates or Wicklander-Zulawski & Associates, an interview and interrogation training business licensed to teach the Reid Technique. However, based on the HIG–OPR joint project, the traditional one-day training block has been replaced with a weeklong interviewing program taught by HIG-sponsored instructors. This five-day course, beginning in May 2017, will teach OPR students the ideologies and essentials of HIG-supported interviewing strategies and then how to apply those strategies to scenario-based exercises. The final phase of this collaboration involves OPR sending the HIG redacted transcripts from suspect interviews conducted both before and after training. The exact interviewing methodologies taught during OPRSAT have yet to be decided.

The HIG's joint project with OPR mirrors an earlier collaboration with AFOSI.[312] Beginning in 2014, a team of HIG-based researchers and practitioners trained 123 AFOSI special agents in HIG-supported research over the course of twelve months, which consisted of four weeklong classes.[313] In an effort to properly assess training effectiveness, AFOSI provided the HIG with recorded interrogations that occurred both prior to and after training. HIG coders assessed these transcripts for an array of data

[312] Meissner and Russano, "Science-Based methods of Interrogation."

[313] Ibid.

points specific to the instructed techniques and compared them to the accusatorial methods traditionally used by the military investigators.

In this particular study, HIG researchers focused on students learning an array of techniques strategically designed to influence cooperation, elicit information from stored memory, present evidence, and assess credibility.[314] At the conclusion of the study, Meissner and Russano noted that newly trained practitioners increased their use of science-based interviewing techniques such as the cognitive interview and motivational interviewing.[315] The practitioners, however, did not substitute these newly acquired strategies for their preexisting accusatorial practices.[316] Meissner and Russano surmise that the HIG-based techniques were likely viewed as additional tools in the toolbox from which the practitioners could pull.[317]

Meissner and Russano's findings suggest a similar outcome—agents continue using accusatorial interviewing tactics despite being newly trained in science-based methods—may occur subsequent to the HIG training of OPR agents in May 2017. Although ostensibly these results may seem discouraging, they in fact support the main point of this thesis. Just as the U.K.'s adherence to the PEACE model was scheduled to take five years, the restructuring of OPR's interviewing methods should also be considered a developmental process.[318] Full commitment to this new approach will arguably take generations of OPR training courses. Nevertheless, in order to become the agency's prescribed model, it must begin at some point. Furthermore, the foundation of the theoretical argument was to enhance OPR special agents' investigations using third-generation interviewing methodologies, an outcome achieved in the AFOSI project.

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[314] Ibid.

[315] Ibid.

[316] Ibid.

[317] Ibid.

[318] Griffiths and Milne, "Will it All End in Tiers," 171.

B. THE FEDERAL LAW ENFORCEMENT TRAINING CENTER (FLETC)

FLETC is the largest law-enforcement training facility in the United States.[319] Through partnering with more than ninety policing organizations, the center graduates approximately 70,000 local, state, and international criminal investigators on an annual basis.[320] From this immense responsibility comes the need for FLETC to adhere to training ideologies that are theoretical, efficient, and realistically sound. An analysis of its methods is arguably scalable toward smaller training programs such as OPRSAT.

1. FLETC's Criminal Interview Training Program

In April 2005, researchers Ariel Neuman and Daniel Salinas-Serrano reviewed the FLETC interview-training curriculum as part of their report for the 2006 Intelligence Science Board, as referenced in Chapter II. During an onsite evaluation of the program, Neuman and Salinas-Serrano noted that a majority of interview training is embedded in the center's Criminal Investigator Training Program (CITP).[321] Within this portion of the curriculum, students receive approximately ten hours of interviewing and interrogations training.[322] This block of instruction centers on teaching agents and officers fundamental communication skills and standard behavioral responses. FLETC stresses the importance of pre-interview planning, proper question construction, and adherence to its five-step methodology, as discussed in Chapter IV.[323] The curriculum integrates classroom discussions with labs and practical exercises involving role-playing.[324] Because FLETC understands the diversity of its stakeholders' jurisdictional authority to enforce laws, students are introduced to diverse interviewing and interrogation methodologies in an effort to add flexibility to their cache of tactics.[325]

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319 "Four FLETC Training Programs Earn Accreditation Status," FLETC.

320 Ibid.

321 Neuman and Salinas-Serrano, "Custodial Interrogations," 210.

322 Ibid., 209.

323 Ibid.

324 Ibid., 210.

325 Ibid.

Despite the wealth of interviewing approaches, Neuman and Salinas-Serrano found that FLETC's methodology closely resembled Reid's—though not intentionally.[326] This finding reflects the "institutional inertia" argument highlighted previously, namely that organizations simply adhere to popular protocols without independently verifying their utility.[327] FLETC also teaches its students to introduce detailed evidence into the interview room as a way of educing confessions in those situations where the interviewee is more sophisticated than the average street criminal.[328]

The framework of FLETC's communication schema is built upon the center's five-step interview/interrogation technique.[329] Reflective of the Reid Technique, this approach begins with an introduction of all those present in the interview room along with the purpose of the interview. The second step emphasizes the need to establish and maintain rapport throughout the process. The third step—the focal point of the interview—involves several components of Reid, such as presenting the elements of the case, asking general and specific questions, using pauses strategically, introducing themes, cutting off denials, and offering an optional question. During this step, students are also instructed to observe the subject's nonverbal behavior while remaining conscious of their own.[330] The introduction of evidence also occurs in this step in an effort to overwhelm the suspects with guilt. The fourth step summarizes the interview and acknowledges the subject's cooperation while the fifth step closes the interview with an exchange of contact information.[331] Unlike Reid, FLETC's five-step methodology discourages students from using deception-filled interrogation monologues to avoid losing credibility in the eyes of suspects, who may be equally adept at identifying cues of lying.[332]

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[326] Ibid.

[327] Ibid., 229.

[328] Ibid., 210.

[329] Ibid.

[330] Ibid., 211.

[331] Ibid., 210.

[332] Ibid., 212.

Neuman and Salinas-Serrano note that due to the diversity of student personalities, experiences, and education, FLETC instructors teach at the "least common denominator" level, a training pace designed for the most basic learners.[333] As such, unless students received additional training through their agency, they graduate from FLETC with only the most basic interviewing skills. When agents request further training, Neuman and Salinas-Serrano state that FLETC primarily outsources to John E. Reid & Associates or Wicklander-Zulawski & Associates.[334]

Neuman and Salinas-Serrano find FLETC lacks any systematic means to empirically measure the efficacy of its CITP training in the field.[335] In an effort to close this gap, students and agencies receive after-training surveys, as do those students who returned to FLETC for advanced training. This latter assessment is considered a flawed measure for determining value since only a small portion of graduates return to FLETC for further interview training. Those who do return are arguably highly dedicated individuals invested in the communication tradecraft, and thus more likely to have retained prior training ideologies.[336]

According to FLETC's website, the center adheres to a best-practice curriculum, which it draws from a wealth of domestic and international stakeholders within the law-enforcement and academic communities.[337] The center further promotes its efforts to comply with accreditation standards by collaborating with its federal partners and policing professionals, investing in continual training research, and employing subject-matter experts (SMEs) in an array of law enforcement–related topics.[338] FLETC's commitment to developing its training program underscores the argument that interviewing methodologies can and do evolve. As such, training curricula must be constantly evaluated and amended accordingly.

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[333] Ibid.

[334] Ibid., 213.

[335] Ibid.

[336] Ibid., 214.

[337] "Welcome to FLETC.Gov," accessed March 2, 2017, https://www.fletc.gov/welcome-fletcgov.

[338] Ibid.

Within FLETC's online training catalog, two interviewing programs are offered:

- Advanced Interviewing for Law Enforcement Investigators Training Program (AILEITP)
- Advanced Interviewing for Law Enforcement Investigators Training Program-Modified (AILEITP-M)[339]

Both programs are built on the framework of eliciting information from suspects, witnesses, and victims.[340] The primary distinction between the AILEITP and the AILEITP-M is the number of training days: five versus three, respectively.[341] In addition, the longer program (AILEITP) provides its attendees with one-to-one instructor time as well as hands-on training and lab-based exercises. These students are also taught the cognitive interview, while the AILEITP-M teaches "the advantages of effective verbal and non-verbal communication as well as ways to detect deception through verbal and non-verbal observation of others," the latter of which contradicts the aforementioned findings by Bond and DePaulo.[342] Acceptance into either training program requires active service in a federal, state, local, tribal, or international law-enforcement capacity that involves investigations, arrests, prevention, detection, or detention.[343]

2. Insight from FLETC Senior Instructor Patricia Donovan

During the author's attendance at the 2016 HIG symposium, FLETC's Behavioral Sciences Division Senior Instructor Patricia Donovan spoke about the FLETC's efforts to teach science-based interviewing techniques. During a panel discussion, Donovan noted FLETC's interviewing curriculum was currently under review as part of the curriculum review conference (CRC), an evaluation process that determines what interviewing

339 "Advanced Interviewing for Law Enforcement Investigators," FLETC, accessed March 2, 2017, https://www.fletc.gov/training-program/advanced-interviewing-law-enforcement-investigators; "Advanced Interviewing for Law Enforcement Investigators Modified," FLETC, accessed March 2, 2017, https://www.fletc.gov/training-program/advanced-interviewing-law-enforcement-investigators-modified.

340 Ibid.

341 Ibid.

342 Ibid.; Bond and DePaulo, "Accuracy of Deception Judgments," 214.

343 "Advanced Interviewing For Law Enforcement Investigators," FLETC; "Advanced Interviewing For Law Enforcement Investigators Modified," FLETC.

modalities to include or delete from the following year's training courses.[344] According to Donovan, over the past several years FLETC has shifted toward educating its students in evidence-based methodologies, a majority of which stem from HIG research. She conceded that not all federal agency officials were supportive of the curriculum change; several government institutions continue to adhere to the traditional modes of accusatorial interviewing. But she reiterated FLETC's continued commitment to adopt better interviewing practices to align with scientific studies. Donovan also expressed the importance of FLETC remaining instep with shifting political and societal changes toward the policing culture to meet the expectations of its stakeholders, identified as FLETC's partner organizations as well as the center's instructors and students.[345]

In subsequent email correspondence, Donovan expanded on the importance of stakeholder acceptance: when FLETC first implemented the CI into its 2013 training curriculum, it did so gradually.[346] This incremental approach accomplished two objectives: it ensured instructors and students properly adapted to the new method and allowed the center's stakeholders to anticipate how the new strategy would affect the FLETC five-step interviewing model.[347] According to Donovan, at the same time the CI was introduced, FLETC stopped teaching that non-verbal behavior was an indicator of deception due to its lack of scientific validity.[348] FLETC's decision to incorporate the CI into its curriculum while discontinuing teaching behavioral cues to deception was based on its continued collaboration with the HIG. By March 2017, all Reid-like techniques will have been removed from FLETC's interviewing instruction block and replaced with evidence-based methodologies.[349] The progressive nature of the center's interview

344 Patricia Donovan, panel discussion, High-Value Detainee Interrogation Group Symposium, October 20, 2016.

345 Ibid.

346 Patricia Donovan, email to author, January 13, 2017.

347 Ibid.

348 Ibid.

349 Ibid.

training program stems from its CRC—a vital component of FLETC's instructional systems design (ISD) model.[350] According to Donovan,

> The CRC is a process by which training programs are examined, modified and approved, often culminating in a formal meeting in which decisions are made by consensus of stakeholders. This gathering is a critical step in identifying training needs, performance objectives, course content, instructional strategies, evaluation methods, development, plans, risk mitigation and resource requirements (money, time, personnel, equipment, etc.). Participants/Stakeholders may determine the scope of training, sequencing of instruction, and the acceptable standards. They will have an opportunity to present training recommendations, hear SMEs' findings and input, and provide feedback on training proposals.[351]

Beyond achieving agency buy-in, Donovan claims that success of all new training approaches requires student buy-in as well.[352] Due to a predominant reliance on traditional interviewing tactics, students may be less apt to try new techniques.[353] In an effort to overcome related obstacles, Donovan suggests having relevant literature available for dissemination to agency management and practitioners, providing illustrations or models of the new techniques, and referring to other agencies or departments that have effectively used such practices—social proof—similar to the HIG's work with the AFOSI and contingencies within the Los Angeles Police Department.[354]

Donovan's explanation has significant value in understanding the system FLETC uses to evaluate and develop its interview-training program. Currently, OPR neither adheres to an ISD model nor confers with a CRC prior to making changes to its OPRSAT curriculum. This does not suggest agency failure, but arguably an unnecessary protocol for an organization—of only 200 field agents—that holds a two-week OPRSAT academy

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[350] Instructional Systems Design is "a step-by-step system for the evaluation of students' needs, the design and development of training materials and the evaluation of the effectiveness of the training intervention." Kevin Kruse, "Introduction to Instructional Design and the ADDIE Model," accessed March 2, 2017, 1, http://docshare01.docshare.tips/files/12024/120247130.pdf.

[351] Patricia Donovan, email to author, January 13, 2017.

[352] Ibid.

[353] Ibid.

[354] Meissner and Russano, "Science-Based Methods of Interrogation"; Kolker, "A Severed Head"; Patricia Donovan, email to author, January 13, 2017.

at most three times a year. However, as this thesis pushes to introduce next-generation interviewing strategies into OPRSAT, the ISD's framework may prove useful in evaluating future training modalities. Donovan's insight provides the much-needed framework for how OPR can successfully introduce evidence-based interviewing practices into its program.

C. FINDINGS AND RECOMMENDATIONS

As highlighted throughout the previous chapters, better interviewing methodologies are slowly integrating into the American policing system, thanks to organizations such as the HIG and FLETC. Solving the main theoretical question—how to adopt third-generation interviewing methodologies into OPRSAT—was not, however, an isolated problem. To fully accomplish the overall goal of this thesis—the long-term and predominate adherence to these practices—several ancillary questions required attention as well, the first of which involves the limits of training.

1. Limitations

A core limitation within any training environment is the retention of new information. Although enhanced interviewing techniques are attainable, researchers Powell, Fisher, and Wright note law-enforcement officials often "do not use these skills reliably in the real-world criminal investigations."[355] Compounding this dilemma is failing to understand that, without proper supplemental training in investigative interviewing, practitioners are more likely to revert back to traditional methodologies.[356]

In order to minimize these challenges and maximize the long-term success of the program, training must consist of the following key elements: 1) adhering to structured interviewing practices, 2) learning and applying strategies over a period of time, 3) providing supervision and feedback from SMEs, 4) creating and relying on self-motivated trainees, and 5) having practitioners who value and believe in the validity and

[355] Powell, Fisher, and Wright, "Investigative Interviewing," 37.

[356] Michel St-Yves et al., "Training in Investigative Interviewing: Observations and Challenges," 258.

necessity of what they are learning.[357] In addition, research by Memon and Higham shows that the complexity of effective training is dependent on its quality, instructor experience, and the students' willingness to learn.[358]

According to Helen Post, executive director of the Utah Parent Center, adult students "learn best when they perceive there is a connection between the training and their goals."[359] In this example, the training–goal relationship would be OPR agents equating HIG-based interview training with enhanced investigative outcomes. In addition, Post notes learning generally is more effective when it contains a practical or applied element.[360] These principles form part of the PEACE model's foundation, which incorporates the theory of experimental learning—a teaching methodology that melds lecture with practical application in an effort to improve retention.[361]

According to theorists Alice Y. Kolb and David A. Kolb, experimental learning theory is "a process of constructing knowledge that involves a creative tension among the four learning modes that is responsive to contextual demands."[362] Kolb and Kolb define these learning modes as concrete experience, abstract conceptualization, reflective observation, and active experimentation, as shown in Figure 7.[363]

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[357] Powell, Fisher, and Wright, "Investigative Interviewing," 37.

[358] Memon and Higham, "A Review of the Cognitive Interview," 191.

[359] Helen Post, "Teaching Adults: What Every Trainer Needs to Know about Adult Learning Styles," Pacer Center, accessed March 2, 2017, http://www.fastfamilysupport.org/fasttraining/Other/teachingadults-whattrainersneedtoknow.pdf.

[360] Ibid.

[361] Andy Griffiths, "An Examination into the Efficacy of Police Advanced Investigative Interview Training," (PhD diss., University of Portsmouth, 2008), 33.

[362] Alice Y. Kolb and David A. Kolb, *Experiential Learning Theory: A Dynamic, Holistic Approach to Management Learning* (WP-01-02) (Cleveland, OH: Case Western Reserve University, 2008), 44.

[363] Ibid.

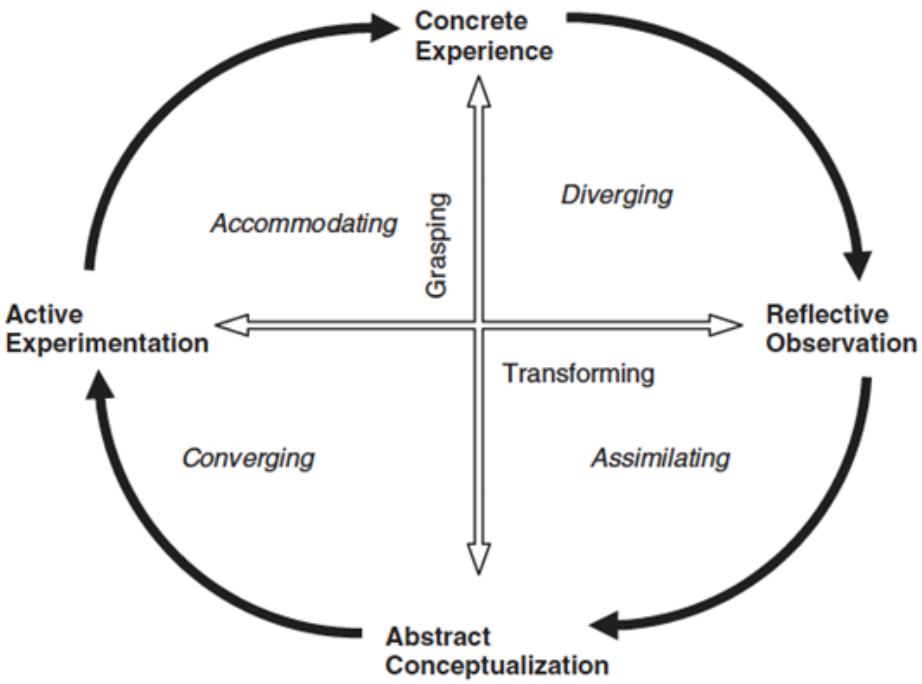

Figure 7. Kolb and Kolb's Interactive Learning Modes[364]

As students collectively synthesize each new experience through initial thought and subsequent action, learning becomes more effective, thus perpetuating the continuation of the cycle with each new experience.[365]

2. Importance of Continual Training

Although the HIG has agreed to undertake the role of training OPR agents during a five-day course, the group's responsibility stops there. Subsequent to a weeklong block of HIG instruction, research highlights the importance of continual training. According to St-Yves et al., ongoing investigative interview training must become an integral part of an investigator's career in order for the investigator to remain proficient.[366] The authors further note this continuous training can occur via "refresher courses, … annual training,

[364] Source: Kolb and Kolb, *Experiential Learning Theory*, 44.

[365] Ibid.

[366] St-Yves et al., "Training in Investigative Interviewing," 265.

… international seminars and conferences, … as well as on-line sources."[367] Both Donovan and Griffiths support the argument put forth by St-Yves et al. as to the importance of agents attending refresher courses to maintain competency.[368] In fact, two of the difficulties that have continued to compromise PEACE-model efficacy include transferring training to real-world scenarios and maintaining quality after training. In his doctoral thesis, Griffiths finds that investigators who attend Tier 3 interview training show a "positive transfer of skills" during subsequent real-life interviews.[369] He identifies, however, a significant decline of skills subsequent to training, which underscores the need for practitioners to routinely attend supplemental courses.[370] According to Griffiths,

> Advanced interviewing represents a major financial investment for the police service, but one worth making ... The failure to provide formal refresher training is akin to buying an expensive car and then not servicing it. Sooner or later there will be a crash and someone will get hurt.[371]

As such, Griffiths argues that continual training, either through official coursework or informal coaching, is necessary to minimize an eventual lapse in this perishable communication skill.[372]

3. Trainers of Third-Generation Interviewing Strategies

In addition to providing OPR agents refresher training, OPR management should consider the financial benefit of identifying competent in-house instructors to train future OPR cohorts in science-based interviewing practices. This argument parallels the identification, training, and utilization of OPR special agents to collaterally serve as OPR firearms instructors. The advantage of having agency-based weapons trainers is three-fold: it enables all OPR agents to remain firearms qualified on a quarterly basis;

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[367] Ibid., 265–266.

[368] Patricia Donovan, email to author, January 13, 2017; Griffiths, "Police Advanced Investigative Interview Training," 141.

[369] Griffiths, "Police Advanced Investigative Interview Training," 135.

[370] Ibid., 141.

[371] Ibid.

[372] Ibid., 264.

supplemental training is readily available for agents needing additional instruction; and there is no third-party training cost to the agency. Since 2005, OPRSAT has primarily relied on commercial trainers such as John E. Reid & Associates and Wicklander-Zulawski & Associates to train newly hired OPR agents. Aside from problems with these accusatorial interviewing strategies, OPR has spent approximately $104,500 over the past decade on these teaching modalities, arguably an unsustainable expense for an unproven commodity (see Table 7).

Table 7. Cost of Outsourcing Interview Training for OPRSAT Students[373]

Year	Course Taught	Number of classes	Hours of Training	Total Cost
2005	Reid	1	8	$3,000
2006	Reid/WZ	3	26	$9,000
2007	WZ	2	20	$9,000
2008	WZ	2	21	$11,000
2009	WZ	3	30	$16,500
2010	WZ	2	20	$11,000
2011	WZ	2	24	$12,000
2012	WZ	1	11	$6,000
2013	WZ	1	11	$6,000
2014	WZ	1	11	$6,000
2015	WZ	2	16	$10,000
2016	WZ	1	8	$5,000
			Total	$104,500

WZ = Wicklander-Zulawski

Relying on outsourced training also puts the quality of instruction at the mercy of happenstance or convenience. Third-party trainers are generally either experienced law-enforcement or security officials whose teaching methodologies are based solely on their individual experiences or on academics that lack any field knowledge.[374] Unless the

[373] Statistical data provided to the author by OPRSAT Program Manager Kimberly Willson.

[374] St-Yves et al., "Training in Investigative Interviewing," 266.

training comes from HIG-taught instructors, who are arguably few and far between, neither option is effective.

Griffiths supports the concept of training a small cadre of qualified personnel who become primarily responsible for training the rest of the organization.[375] To effectively manage this task, Griffiths recommends trainers understand the theories and ideologies associated with the methodologies they are teaching. Within the U.K., trainers are advised to stay in contact with researchers, remain updated in current research, study live interviews, and routinely check their own knowledge against each other's in order to collectively develop as SMEs.[376] Agents are also assigned to specialized groups managed by equally skilled supervisors who are responsible for overseeing the competency of all trainers.[377] Griffiths further notes the importance of individual credibility when it comes to teaching. Specifically, he remarks that students are more likely to adhere to training from those teachers they view as proficient and active practitioners. According to Griffiths, it is not enough to be a skilled interrogator who happens to teach interviewing; to be perceived as an expert, instructors must also be well versed in the art and science of academic teaching. St-Yves et al. further support the value of instructor characteristics, noting, "Ideally, trainers should be selected on the basis of their motivation, professional skill, understanding of theory in human learning, and interpersonal skill."[378]

Not all experts, however, agree fully with Griffiths' point of view. Vrij et al. identified the shortcomings of experienced practitioners teaching interviewing methodologies to other investigators. In their 2015 study, a retired police detective—as opposed to a scientist—instructed seasoned police detectives on the use of the CI. [379] Although Vrij et al. found the students increased their use of open-ended questions as a result of training, the questions were not specifically tied to the CI technique. The

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[375] Andy Griffiths, video interview with author, November 17, 2016.

[376] Ibid.

[377] Ibid.

[378] St-Yves et al., "Training in Investigative Interviewing," 267.

[379] Aldert Vrij et al., "Train the Trainers: A First Step towards a Science-Based Cognitive Lie Detection Training Workshop Delivered by a Practitioner," *Journal of Investigative Psychology and Offender Profiling* 13, no. 2 (2015): 110–130.

researchers attribute this shortcoming to the CI course being only one day in length. Better results might have come from an extended training course lasting several days. According to Vrij et al., when it comes to maximizing the full potential of the technique, there is value in instituting the training over several days, which should be followed by occasional refresher courses, an argument highlighted previously in this chapter.[380]

4. Supervisory Adherence

Another area of discussion OPR management should consider for the long-term effectiveness of third-generation interviewing strategies is supervisory buy-in and follow-through. As noted in the PEACE model, one recommendation for enhancing the model's efficacy is having supervisors properly trained and willing to engage in interviewing oversight—observing their agents' interviews to ensure adherence to acceptable interviewing protocols.[381] According to Stockdale, "Senior management must accept responsibility for ensuring that learning becomes incorporated into standard work practices, by encouraging, supporting and monitoring the use of new behaviors in the workplace."[382] The enhancement of OPR's interview training program is predicated on more than merely teaching one methodology over another. In addition to selecting the most appropriate science-based techniques for the program, a sequence of steps must equally be followed to ensure the newly taught strategies become embedded within the agents' toolbox, as shown in Figure 8.

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[380] Ibid.

[381] Clarke and Milne, *National Evaluation of PEACE*, 119.

[382] Janet E. Stockdale, *Management and Supervision of Police Interviews*, No. 5 (London: Home Office Police Research Group, 1993), 37.

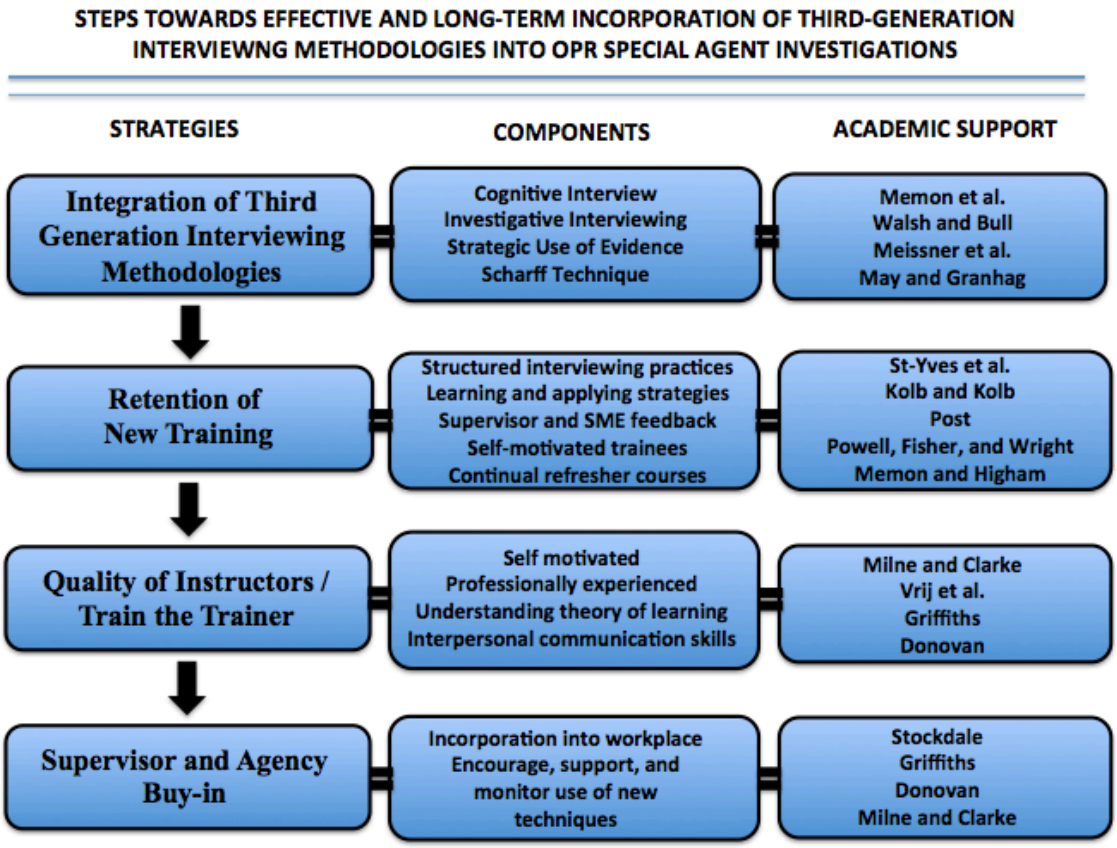

Figure 8. Elements for Long-Term Adaptability of Third-Generation Interviewing Methodologies[383]

[383] Adapted from Memon, Meissner, and Fraser, "The Cognitive Interview," 366; Walsh and Bull, "What Really Is Effective," 318; Meissner et al., "Accusatorial and Information-Gathering Interrogation Methods," 479; May and Granhag, "Techniques for Eliciting Human Intelligence," 1; St-Yves et al., Training in Investigative Interviewing," 265–266; Kolb and Kolb, *Experiential Learning Theory*, 44; Post, "Teaching Adults"; Powell, Fisher, and Wright, "Investigative Interviewing," 23; Memon and Higham, "A Review of the Cognitive Interview," 191; Clarke and Milne, *National Evaluation of PEACE*, 116; Vrij et al., "Train the Trainers; Andy Griffiths, video interview with author, November 17, 2016; Stockdale, *Management and Supervision of Police Interviews*, 37; Patricia Donovan, email to author, January 13, 2017.

D. APPLICABILITY

The incorporation of third-generation interviewing methodologies is not unique only to the professional enhancement of OPR, but to all law-enforcement organizations whose personnel conduct criminal interviews. As noted by several scholars mentioned throughout this thesis, the advancement of the criminal-interrogation methodologies is predicated on its transparency. Only when researchers are able to peer inside the interrogation room are they capable of providing useful feedback that increases the credibility of the institution as a whole. This transparency, however, is founded on trust and adherence to a working relationship between the law-enforcement community and researchers, much like those who worked collectively to revamp the U.K.'s interviewing model. Future research should focus on feedback from policing organizations, including OPR, the promotion of anecdotes related to interviewing successes using HIG-supported strategies, and broader agency buy-in. Collectively, these elements may add to the foundation currently being built by the HIG and FLETC's interview training program.

E. CONCLUSION

The argument of this thesis has focused on a singular issue: the need to enhance the interviewing capabilities of law-enforcement agents, beginning with OPR. The foundation of this argument originates from the agency's decade-long use of accusatorial interviewing approaches, taught by instructors from John E. Reid & Associates and Wicklander-Zulawski & Associates. Criminal interviewing, however, is not a mere cog in the machine of investigations; oftentimes it is the focal point. Although interviewing is a form of basic human verbal communication, not every investigator is an expert or even proficient. In fact, much like highly trained specialists are called upon to collect forensic evidence such as fingerprints, so too should those skilled in the art and science of interviewing strategies be utilized to educe information inside the interview room. Understanding that not all agencies have the personnel or the finances to rely solely on expert interviewers, agencies should at least invest in training their personnel in techniques found to be the most principled.

The predominant interviewing framework within the United States is wrought with deficiencies, both morally and operationally. In light of these shortcomings, organizations such as the HIG and FLETC have laid the foundation for the next generation of interviewing methodologies, practices backed by science. These approaches have yet to be adopted nationally by the law-enforcement community; this lack of implementation is not based on poor performance but rather on poor marketing—agencies are simply unaware or unconvinced there is a better way. Nevertheless, as noted by Neuman and Salinas-Serrano, agencies remain influenced by institutional inertia in continuing to adhere to practices developed nearly eighty years ago. As the cultural and political climate continue to change toward the professionalism of policing, the law-enforcement community will need to respond by incorporating better methods for communicating with the public. The arguments made within this thesis provide that framework, beginning with OPR.

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