Specialized Topics in Ethical Forensic Practice, Part 3:
Bias in Forensic Evaluations

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Why This Workshop?

- In 2009 the Research Council of the National Academy of Sciences issues a scathing report calling bias a "*severe problem*" in all forensic sciences

    - ✓ <u>Example</u>: 50% of fingerprint examinations had bias introduced into the procedures

- Neal & Grisso (2013) – failure to address the problem of bias in forensic evaluation "*runs counter to our professional obligation to be accountable for our performance, to strive for the integrity of our opinions...(and) degrades our perceived credibility.*"

Straw Poll: Bias

Atticus Finch, where art thou?

Definition of Bias

- <u>Black's Law Dictionary</u>: "*A predisposition to decide a cause or an issue in a certain way.*"

- <u>West & Kenny (2011)</u>: *"Any systematic error (i.e., not random error) that determines judgment other than the truth."*

- <u>Free Online Dictionary</u>: *"A preference or an inclination, especially one that inhibits impartial judgment."*

TYPES OF BIAS

Types of Bias (Croskerry, 2003)

1. <u>Anchoring Bias</u> – tendency to form & anchor impressions about an examinee based on early or preliminary data

2. <u>Diagnostic Momentum</u> – tendency to assume the validity of a diagnosis based on its presence over time
   - ✓ Newton's Laws of Motion and Diagnosis

3. <u>Confirmatory Bias</u> – tendency to look for, perceive, interpret, create, **and/or** be more sensitive to data that confirm one's initial impression/hypothesis **- more**

Confirmatory Bias:
The Emperor's New iPhone - 2013

Sigh…

- *"Two things are infinite: the universe and human stupidity; and I'm not sure about the universe."*

  ~ Albert Einstein

Allegiance Bias

- A variation of Confirmatory or Anchoring Bias that should be of particular concern to examiners doing ex-parte evaluations

- Refers to a tendency to interpret data favorably to the side that hired one

- Murrie et al., (2013): forensic examiners who believed they were working for the prosecution tended to rate sexually violent offenders as being at higher risk of re-offending than did forensic examiners who thought that they had been hired by the defense

Types of Bias, Cont'd

4. <u>Gambler's Fallacy</u> – tendency to believe that past occurrence of an event that is independent of the present issue affects the likelihood of the present issue

5. <u>Sunk Costs</u> – tendency to become increasingly reluctant to alter or reject an opinion as a result of the time, energy, and personal investment one has in the opinion despite evidence to the contrary
   - ✓ The "***forensic evaluation moment***"

Types of Bias, Cont'd

6. <u>Framing Bias</u> - using an approach or description of the situation or issue that is too narrow, **or**, arriving at different conclusions from the same information, depending on how that information is presented

Examples of Framing Bias?

A. ObamaCare

B. Pro Choice

C. Sanity

D. 1/10 chance of succeeding

E. Victim

A. Affordable Care Act

B. Pro Life

C. Criminal Responsibility

D. 90% chance of failure

E. Survivor

Types of Bias, Cont'd

7. <u>Blind Spot Bias</u> – tendency to perceive cognitive and motivational biases much more in others than in oneself
   - ✓ This is a meta-bias since it refers to a pattern of inaccurate judgment in reasoning about cognitive biases

8. <u>False Consensus</u> - the tendency of people to overestimate the level to which other people share their beliefs, attitudes, and values

Types of Bias, Cont'd

9. <u>Vertical Line Failure</u> – repetitive tasks can lead to thinking in silos, i.e., predictable, familiar styles that emphasize economy, efficiency, and utility

10. <u>Visceral Bias</u> – tendency for affective sources, either positive or negative, to influence decision-making (e.g., irritation, pity, etc.)

   ✓ Goldyne, A. (2007). Minimizing the influence of unconscious bias in evaluations: A practical guide. *Journal of American Academy of Psychiatry and the Law*, 35:60-66

Types of Bias, Cont'd

11. <u>Hindsight Bias</u> – tendency to overestimate our ability to have predicted an outcome that could not possibly have been predicted with certainty ("*I knew it all along*")

✓ *"They obviously should not have discharged the patient who ended up killing that person."*

MOST LIKELY BIASES IN COMPETENCY AND SANITY EVALUATIONS

Anchoring Bias

COMPETENCY

- Repeat customers

- Initial impressions in the first 5 minutes about current mental condition

SANITY

- Avoiding talking to collaterals recommended by the defendant

- In a case with data on both sides of the sanity issue, you consider first data only on one side

Confirmation Bias

COMPETENCY

- You notice that a defendant is neatly dressed, on time for the evaluation, and obviously skilled with her smart phone yet has a SMI diagnosis

SANITY

- Forming an opinion about MSO or wrongfulness before the full range of data is gathered or considered

Allegiance Bias

COMPETENCY

- You find yourself thinking about future referrals from a private attorney whose client presents with 65% data that indicate she is competent, 35% that suggest otherwise

SANITY

- Lawyer: *"Here's what I think is going on…"*

- *"Oh oh – I've got nothing so far for the person who hired me…"*

- Skewed data on decisions rendered in previous cases

Sunk Costs Bias

COMPETENCY

- *"There were no obvious behavioral indicators of malingering, so I did not give a SIRS. I just scored the ECST-R and the ATP is bad. Do I really have to go all the way back out to that county jail to give a SIRS?"*

SANITY

- *"I just went through that box of records and 7 DVDs and <u>now</u> I learn that there is one subtle, encapsulated aspect of the defendant's thinking that is delusional."*

Framing Bias

COMPETENCY

- The public defender told me that this Somali male just "didn't seem to get it" when talking about possible legal outcomes

SANITY

- I always read the police report first

- Noticing affect-laden or dramatic adjectives and adverbs in victim accounts

Visceral Bias

COMPETENCY

- Downplaying symptoms of mental illness while emphasizing traits of a personality disorder when describing current mental condition

SANITY

- *"This defendant would have met criteria for the volitional prong so I will extend the benefit of the doubt."*

- *"The alleged offense is reprehensible and this defendant is just a cold-blooded sociopath."*

REMEDIES FOR BIAS

There is no cure...

Knowing is <u>Not</u> Enough

- The inability to recognize that we have allowed bias to influence our judgments is the primary reason why we tend to accept our intuitive thinking at face value
  - ✓Explains why "*forewarned is forearmed*" is ineffective in overcoming biases

- Research demonstrates that <u>simple passive awareness</u> of the source of cognitive bias is <u>insufficient</u> by itself to prevent a person from being trapped by biases (Ariely 2008; Cialdini 2001)

What is Enough: The Golden Thread

- Croskerry et al. (2013): debiasing techniques share a common feature that involves a deliberate process of decoupling automatic intuitive processing and moving to analytical processing so that **unexamined intuitive judgments can be submitted to verification**

- Core idea: Actively think about your thinking

- Goal: Diminishing the intensity or frequency of biases in decision making, not the elimination of bias

DEBIASING: MODELS AND STRATEGIES

Change Readiness Model for Bias
(Croskerry et al., 2013)

- <u>Transtheoretical Change Readiness Model</u>: cognitive debiasing rarely comes about through a single event but instead through a succession of stages:

  1. **Precontemplation**: lack of awareness of bias

  2. **Contemplation**: considering adopting debiasing strategies

  3. **Preparation**: deciding to use debiasing strategies

  4. **Action**: initiating strategies to debias

  5. **Maintenance**: maintaining the debiasing strategies

Why You Should <u>Not</u> Care About Debiasing

1. Could lead to a naive or **unexamined relativism** in which all perspectives are valued equally

- ✓ **Response**: the goal of debiasing techniques should be to help us grasp, consider, and evaluate alternative points of view, <u>not</u> necessarily to accept them as equally valid

Why You Should <u>Not</u> Care About Debiasing

2. ***"I'm not biased, but all my colleagues are."***

   ✓ <u>Naive Realism</u>: we see the world as it is, and if others disagree, they do so because of bias (also called *"bias blind spot"* or the *"not me fallacy"*) (Felson, 2002)

3. There are **no real world consequences** for biased decisions

   ✓ *"Doctor, what steps did you take to reduce or eliminate bias in your evaluation?"*

Why You Should <u>Not</u> Care About Debiasing

4. The **research is lacking**: we have made far more progress in cataloguing cognitive biases (Krueger & Funder, 2004, list 42 such biases) than in finding ways to correct or prevent them

    ✓ **Response**: Graber et al. (2012): identified 141 articles about debiasing, 42 reporting tested interventions to reduce the likelihood of cognitive errors, 100 containing empirically-supported suggestions

Why is it so Difficult to Recognize and Deal with Bias?

Why is it so Difficult to Recognize and Deal with Bias? (Larrick, 2004)

1. Nobody wants to be told that they have been "*doing it wrong*" for all these years

2. Nobody wants to relinquish control over a decision process for which they are responsible

3. We tend to be overconfident about the extent to which our decisions are free of bias

4. Debiasing techniques can be unfamiliar and require more work

5. Debiasing benefits can be uncertain, delayed, or small

STRATEGIES FOR DEBIASING

Debiasing Strategies

1. <u>Training</u> - people reason more accurately about frequencies than about probabilities: translate probabilistic reasoning tasks into frequency formats

   ✓ e.g., *"People with these risk factors have a 33% chance of violence"* **versus** *"3 of 10 people with these risk factors…"* (Graber et al.,2012)

2. Institute <u>organizational pathways</u> to address lack of reasonable certainty

Debiasing Strategies

3. Cognitive Forcing Strategies

   a. Identify situations in which errors are most likely (e.g., looming deadline on complex or high profile case) and institute review

   b. Standing rules - for certain diagnoses or opinions, institute review (e.g., DID)

   c. Checklists to ensure full range of data are considered

(Croskerry et al., 2013)

Cognitive Forcing

Debiasing Strategies

4. Pre-emptive self-criticism

    a. Prepare to <u>justify your decisions</u> to others

    b. Identify potential weaknesses in data collection or interpretation (e.g., data you should have obtained)

    c. Anticipate the flaws in your own arguments

    (Larrick, 2004)

Debiasing Strategies

5. <u>Consider the opposite</u> – directs attention to contrary evidence that would not otherwise be considered

    a. effective because it **directly counteracts the basic problem** of an overly narrow sample of evidence by expanding the sample and making it more representative

    (Larrick, 2004)

Consider the Opposite:
A Matter of Perspective

Group Decision Making

Advantages

1. Groups serve as an error-checking system during interaction

2. Synergies can emerge when people with complementary views interact

3. Groups increase the effective sample size of experience used to make a decision

4. Can encourage consideration of multiple possibilities

Disadvantages

1. People in groups often intentionally withhold or misrepresent their private judgments to avoid the social costs of rejection

2. Participants in groups are susceptible to anchoring on the judgments of others

3. Paul Meehl, Ph.D. (1973) – *Why I do not Attend Case Conferences*

Debiasing Strategies

6. Learn and practice principles of <u>critical thinking</u>

   a. Question assumptions

   b. What evidence would disconfirm my hypothesis?

   c. Assume the perspective of an outside observer inquiring about and critiquing your decision-making process

   d. Consider alternative explanations

   e. Seek out second opinions from people who often see things differently

   f. Employ a designated Devil's Advocate

SUPERVISION AND CONSULTATION

Supervision/Consultation Questions

1. **Is there any evidence for current bias that would be consistent with past bias?**

2. **Has the examiner fallen in love with the opinion?**

   a. **<u>affect heuristic</u>:**
   - ✓ when evaluating something we <u>like</u>, we tend to minimize its weaknesses and costs and exaggerate its strengths

   - ✓ when assessing something we <u>dislike</u>, we do the opposite

Supervision/Consultation Questions

3. **Was there evidence that was not consistent with the opinion?**

   a. Was that evidence adequately considered?

   b. If yes, how was that evidence explained?

4. **Could the assessment of the case be overly influenced by <u>salient analogies</u>?**

   a. an analogy to an especially memorable case that has unduly influenced an examiner's judgment *("This case is just like…")*

Supervision/Consultation Questions

5. **Have credible alternative hypotheses been considered?**

   a. *"What alternatives did you consider?"*

   b. *"At what stage were they discarded?"*

   c. *"To what extent did you actively look for and/or consider data that would disconfirm your main hypothesis?"*

Supervision/Consultation Questions

6. **What assumptions have been made about the data considered?**

   a. Reliability of collateral sources

   b. Psychological testing (e.g., framing effects and scoring the SIRS)

7. **Is the evidence for a <u>Halo Effect</u>?**

   a. May be in play when we see a narrative as simpler and more coherent than the evidence suggests

   b. Is the inference about simplicity warranted by the full range of evidence?

REMEDIES FOR SPECIFIC BIASES

"If passion drives you, let reason hold the reins."

 ~ **Benjamin Franklin**

So I've Got a Bias – Now What?

1. No one strategy will work for everyone

2. No one strategy will work in every situation

3. Develop multiple approaches

4. Practice, practice, practice

5. Need for multiple inoculations - some things have to be learned again and again…

6. Need for extra caution in high stakes cases and/or as deadlines approach - consultation

7. Microsoft Office 2018

8. One possible way to recognize our own biases

Objectivity in the Eye of the Beholder?

- <u>Introspection Illusion</u>: we may acknowledge that we have been guilty of bias in the past, but that we are innocent of such bias in current assessments

    ✓ **Report from Atticus Finch…**

- <u>False consensus effect</u> (Ross, Greene, & House, 1977) is the tendency to overestimate the extent to which others share our views

    ✓ This bias can lead to false confidence that our views and those of our in-group are correct

Remedies for Specific Biases

1. Anchoring Bias
   - ✓ Consider review of data in multiple orders

   - ✓ Review the case with several different colleagues using multiple anchors (different starting points)

2. Diagnostic Momentum
   - ✓ Exercise skepticism the further a past diagnosis is from the current examination

   - ✓ Make independent efforts to examine the basis for diagnostic criteria – ***Show Me!***

Remedies for Specific Biases

3. Confirmatory Bias

- ✓ Identify data that are inconsistent with your initial hypothesis

- ✓ Identify data you would expect to see if your initial hypothesis were <u>true</u> and see what is missing

- ✓ Identify data you would expect to see if your initial hypothesis were <u>false</u> – is such data present?

- ✓ Consider an alternative that allows for a different perspective

Remedies for Specific Biases

4. <u>Gambler's Fallacy</u>

   ✓ In light of unusual sequences, remind yourself of the presumed independence of the points in that sequence

   ▪ <u>Example</u>: You are not "*due*" for a conclusion of incompetency in the next evaluation simply because you have had 10 in a row opining competent

Remedies for Specific Biases

5. <u>Sunk Costs</u>
   - ✓ Devil's Advocate about what has been verified, consideration of other hypotheses, or how data could be otherwise interpreted

6. <u>Framing Bias</u>
   - ✓ Try to identify then falsify your frame
   - ✓ Talk to someone with whom you often disagree, and ask *"How do you see it?"* or *"What am I overlooking?"*

Remedies for Specific Biases

7. <u>Bias Blind Spot</u>
   - ✓ Ask **not if** you are biased, but **how** you are biased

   - ✓ Identify types of situations or cases in which you may have previously been biased

8. <u>False Consensus Effect</u>
   - ✓ Seek consultation from those that often disagree with you

   - ✓ Designated Naysayer

Remedies for Specific Biases

9. <u>Vertical Line Failure</u>

   ✓ *"What else might this be?"*

   ✓ Consider extent to which rigid evaluation procedures may be obscuring key data

   ✓ *"A foolish consistency…"*

Vertical Line Failure: USS Montana

Remedies for Specific Biases

10. <u>Visceral Bias</u>

   ✓ Acknowledge any strong emotional reaction to the defendant

   ✓ Seek consultation/supervision when you note a strong emotional reaction

   ✓ Proactive detection and management of visceral bias (Goldyne, 2007)

Remedies for Specific Biases
Louie et al. (2007)

11. <u>Hindsight Bias</u>

- ✓ Use sound decision-making rules

- ✓ Seek trustworthy advisors (Prince: *"A real friend and mentor is not on your payroll."*)

- ✓ Don't dwell on data that elicits strong emotion

- ✓ Since this bias obscures the prospective <u>uncertainty</u> of the outcome and exaggerate its <u>foreseeability</u>, get a second opinion where the outcome of a scenario is not made known

FINAL THOUGHTS

Managing Bias in Forensic Evaluation
Shuman & Zervopoulos (2010)

1. Use your expertise, background knowledge, and examination data to generate plausible alternative explanations that explain the data in light of the legal question being asked

2. <u>Actively</u> challenge each plausible alternative explanation

   ✓ generate reasons why your conclusions may be wrong and why another possibility may be correct

Reducing Bias in Forensic Practice

Neal and Grisso (2014)

1. Changing practice about errors and bias requires not just knowledge but motivation and practice
2. Anchor with base rates and critically evaluate the strength of case-specific information
3. Consider the opposite
4. Structured approaches increase reliability (an imperfect but useful substitute for improving validity)
5. Identify 4 to 6 variables that are key to the question
6. Forensic due process: two sides each working from common data base
   ✓ My application of this recommendation

"The Scotty Who Knew Too Much"

~ James Thurber (1939)

QUESTIONS?

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