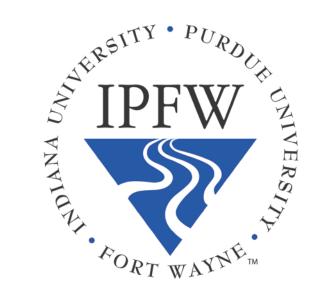


Cognitive Bias in the Courtroom: Combating the Anchoring Effect in Criminal Sentencing

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RELEVANT CASE- GO HERE FIRST!

Anthony Weiner facing criminal charges for sending sexually-explicit messages to 15-year-old girl.

http://tinyurl.com/weinercase

Anchoring – Why does it matter?

Anchoring is a psychological phenomenon wherein one's perceptions shift as a result of information presented to the perceiver. Anchoring:

- 1. Is one of the major forms of **cognitive bias** (Tversky & Kahneman, 1974)
- 2. Leads to severe & systematic errors
- 3. When involving numbers, leads to a shift towards initial values
- 4. Has **priming effect**, which evokes selective accessibility of anchor-consistent information

Example: Was Ghandi older or younger than 140? (*M*age = 67 years) Was Ghandi older or younger than 9? (*M*age = 50 years)

Relevance for Civil and Criminal Courts

Research has shown that both judges and mock jurors alike are prone to this systematic bias. Experienced **judges** are not more uniform in their sentencing than inexperienced jurors, and sentencing disparities emerge even when judges receive identical case information. Meanwhile, in **civil cases**, typically, the more you ask for in damages, the more you get.

Example: Personal injury lawsuit where physician failed to diagnose lumbar radiculopathy & now patient has permanent disability (Campbell et al., 2015).

\$250k plaintiff anchor (Mdamages = \$225,765) \$5 million plaintiff anchor (Mdamages = \$1,859,137)

Problem: If first sentencing or damages recommendation comes from the prosecutor/plaintiff, defense is at disadvantage because of anchor effect. **Research Question:** How do defense attorneys devise effective counter strategies that: 1) lower award/sentence and 2) do not alienate jurors?

METHODS

U.S. adult MTurk workers (*N* =780, *M*age = 39.32, *SD* = 13.17) read through a criminal scenario for U.S. Airman Abis, who had been convicted of burglary by a jury of peers. Task was to assign a sentence, up to a maximum of 120 months jail time (**judgment**) and indicate whose arguments (prosecution or defense) they favored (**favor**). Participants were randomly assigned to one of 13 experimental conditions that varied by:

Prosecutor's anchor:

Low vs. High anchor In low anchor condition, prosecutor recommended 24 mos. High anchor condition = 120 months.

Exact vs. Range anchor– In exact condition, prosecutor recommended 120 months. Range condition = 110-120 months.

Defense counsel's counter strategy:

Ignore– Defense argued for a minimal sentence, with no numerical anchor. **Identify**– Defense argued that prosecutor was using anchoring, which was psychological manipulation.

Counter– Defense countered with 3-6 months recommended sentence. **Identify + Counter**– Defense argued that prosecutor was using anchoring & countered with a 3-6 months recommended sentence.

How do anchors & counters affect judgments?

Table 1

	n	M (SD)	95% CI	Range
Control	55	47.13 (40.62)	[36.15, 58.11]	0-120
Low anchor— Ignore	63	36.02 (28.72)	[28.72, 43.31]	0-120
Identify	62	30.53 (27.09)	[23.65, 37.41]	0-120
Counter	63	28.33 (26.67)	[21.62, 35.05]	0-120
Identify + Counter	63	22.70 (26.91)	[15.92, 29.47]	0-120
Exact high anchor— Ignore	67	54.03 (41.79)	[43.84, 64.22]	3-120
Identify	55	53.58 (37.20)	[43.52, 63.64]	0-120
Counter	63	34.84 (36.01)	[25.77, 43.91]	0-120
Identify + Counter	57	29.93 (29.51)	[22.10, 37.76]	0-120
Range high anchor— Ignore	58	48.88 (43.32)	[37.49, 60.27]	0-120
Identify	60	48.68 (35.09)	[39.62, 57.75]	3-120
Counter	58	40.86 (32.90)	[32.21, 48.51]	2-120
Identify + Counter	56	42.39 (36.92)	[32.27, 52.51]	0-120

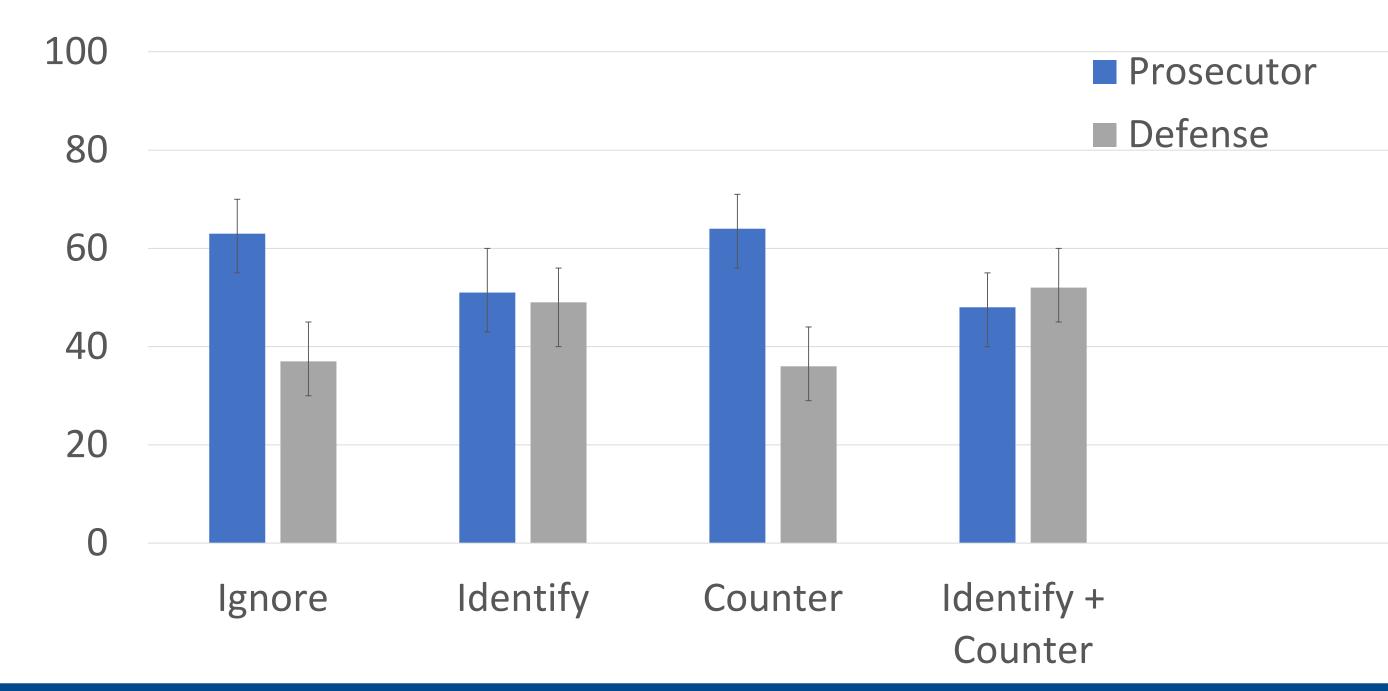
ANOVAs showed main effects for low vs. high anchor (F(1, 492) = 22.48, p < .001, $\eta^2 = .04$) and for defense strategy (F(3, 490) = 9.12, p < .001, $\eta^2 = .051$).

Post-hoc t-tests & Bonferroni post-hoc comparisons showed that:

- 1. Participants in the **high anchor condition** adjudged significantly higher sentences than those in the low anchor condition.
- 2. When defense counsel used *identify* + *counter strategy*, participants adjudged significantly lower sentences than when defense counsel simply ignored the anchor or used the identify strategy (all ps > .01).
- 3. When defense used **counter strategy**, participants adjudged significantly lower sentences than when he ignored the anchor (p = .006).
- 4. The interaction effect between low vs. high anchor and countering strategy was not significant (F(3, 490) = 1.93, p = .12, $\eta^2 = .011$). So, although the high anchor sentences were higher, the **four defense strategies had similar relative efficacies** when the prosecutor proposed a low or high anchor.

What about FAVOR? As Figure 1 shows, prosecutors were heavily favored in the ignore and counter conditions. But defense counsel gained ground in the identify conditions.

Figure 1.

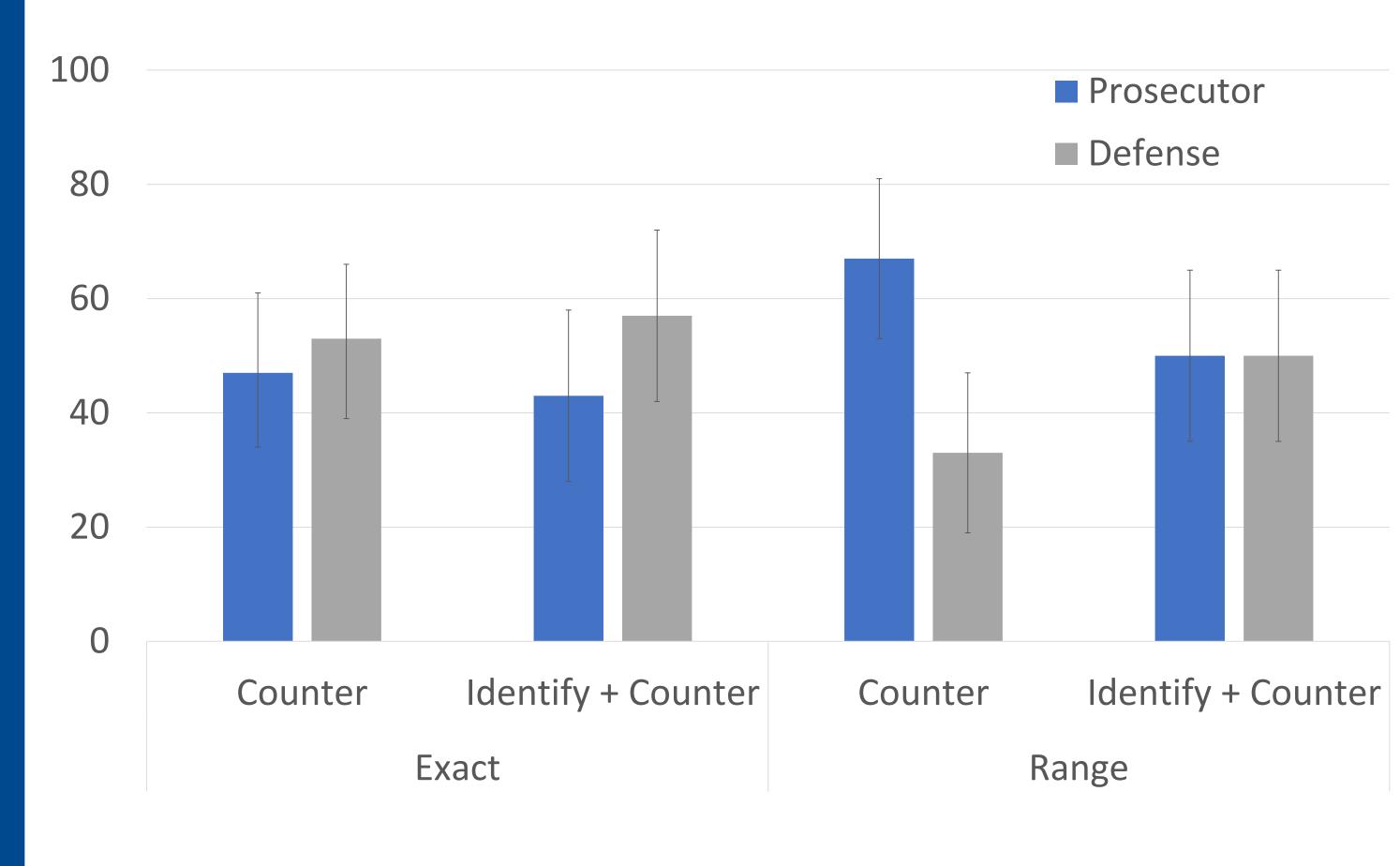


Does exact vs. range anchor make a difference in judgment?

There was no main effect for exact vs. range anchor $(F(1, 473) = 0.383, p = .536, \eta^2 = .001)$, and there also was no significant interaction effect for exact vs. range anchor x defense strategy $(F(3, 471) = 1.589, p = .191, \eta^2 = .010)$. Thus, the **sentences were not significantly different** when the prosecutor suggested an exact sentence versus a range, and the defense strategies were similarly effective in both conditions.

What about FAVOR? As Figure 2 shows, participants were 20% less likely to favor defense counsel when he countered the range offer (110-120 months) than when he countered the exact offer (120 months). However, when defense counsel used the identify + counter strategy to counter the prosecutor's suggested sentence, these significant differences disappeared ($\chi 2(1, n = 88) = 0.411, p = .521$). With the identify + counter strategy, participants were only 7% less likely to favor defense counsel when he countered the range offer than when he countered the exact offer. In other words, participants were more critical of defense counter offers when prosecutors appeared flexible in their sentencing recommendations.

Figure 2.



IMPLICATIONS FOR THE COURTROOM

Prosecutors/Plaintiffs

- 1. Generally, ask for more, and you'll get more (in sentence and damages), especially with inexperienced juries.
- 2. If you **suggest a range** (tandem anchors), the sentence or judgment may be slightly lower; however, you will likely retain favor, regardless of the defense counter strategy.

Defense counsel

- 1. Ignoring a counter is the worst possible strategy.
- 2. Counter with a low anchor, preferably a range.
- 3. Use a **counter + identify strategy** to get the lowest sentence or judgment and win favor.

FUTURE DIRECTIONS

We are currently replicating the study with a civil trial scenario to ascertain whether similar results emerge in a civil context. This will help us to generalize our findings to both criminal and civil courts.

*The views expressed herein are his own and do not necessarily represent the views of the US Air Force or Department of Defense