

ECPS6005: COGNITION IN ACTION

FACTORS AFFECTING DECISION MAKING IN FORENSIC SETTINGS

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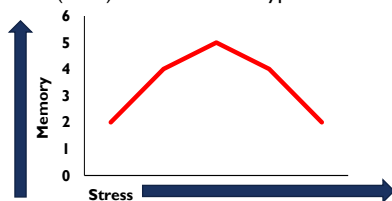
ADVOKATE

- **A:** Amount of time event is observed
- **D:** Distance of event from witness
- **V:** Visibility: clearer = better
- **O:** Obstructions between witness and event
- **K:** Known to witness: familiar = better description
- **A:** Any reason to remember event: something unusual
- **T:** Time between event & recall: longer time = worse memory
- **E:** Errors made: more inaccurate = less reliable

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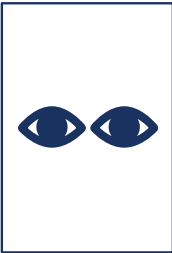
VIOLENCE AND WEAPON FOCUS

- Stress, high emotion, and violence of event = detrimental to memory and decision making.
- Easterbrook (1959): Cue-utilisation hypothesis



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VIOLENCE AND WEAPON FOCUS



- Attention directed to weapon due to threatening nature = less attention allocated to other stimuli
 - Suspects face, clothing, voice, etc.
- Weapon = central component & impacts encoding.
 - Memories form where attention allocated
 - Technique to retrieve info will not work if "other" info not encoded

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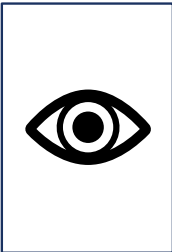
VIOLENCE AND WEAPON FOCUS



- **Evaluation:**
- Loftus (1980): presence of weapon does not lead to effect
 - Instead, high emotion/stress during encoding is to blame
- Christianson (1992): Central vs. peripheral details:
 - Central: memory for negative emotional events better than neutral
 - Peripheral: memory for negative emotional events poorer than neutral

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VIOLENCE AND WEAPON FOCUS



- Loftus et al. (1987): Attention, eye fixation, memory and decision-making are connected.
 - Ps shown man in bank holding either a cheque or weapon
 - Sig. fewer Ps could ID him when holding gun compared to cheque.
 - Eye fixation sig. longer on gun than cheque
- But - are poor ID decisions a consequence of emotional arousal from weapon focus leading to lack of encoding?

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ROLE OF UNUSUALNESS

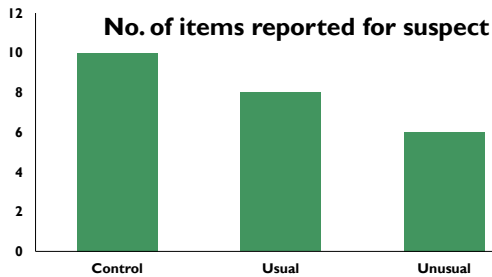
- Pickel (1998): Chicken in the hairdresser's study.
 - Manipulated threat and unusualness level:
 - Ps watch video of man entering hair salon and approach receptionist holding either:
 1. Scissors (high threat, low unusualness)
 2. Gun (high threat, high unusualness)
 3. Wallet (low threat, low unusualness)
 4. Raw chicken (low threat, high unusualness)



(or carrying nothing in control condition)

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ROLE OF UNUSUALNESS



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WEAPON FOCUS IN REAL CASES

- Not as simple as applied-lab work implies
- Tollestrup et al. (1994): archive analysis of victims/EWs to robbery:
 - Expect better memory from witness than victim – but no difference found
 - Weapon present did not decrease number/accuracy of details
 - Weapon present did decrease accuracy of suspect ID
- Christianson and Hubinette (1993): 110 victims and EWs to robbery:
 - Victims remember more than EW (accurate, detailed, and long-lasting).
- Yuille and Cutshall (1986): lab work cannot simulate threatening event
 - Lab and field work lead to formation of qualitatively different memories.

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WEAPON FOCUS IN REAL CASES

- Christianson (1992): stress cannot be measured objectively in field – no neutral comparison.
- So, does violence impact EW memory?
 - Different outcomes from lab and field studies
 - Lab work suggests memory impairment but little ID effect
 - Field work very mixed
 - Some find detriment
 - Some find enhancement
 - Some find no difference
- Many aspects can impact EWs decisions.

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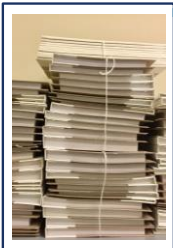
WHAT ABOUT JURY DECISIONS?



- Trial by jury of peers = cornerstone of fair legal system (Penrol & Heuer, 1998)
- But - differences in jury systems in different countries and extent juries used
- How can understanding mechanisms of cognition help us understand why juries come to certain decisions?

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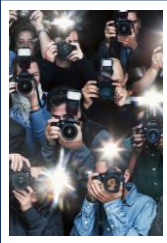
FACTORS THAT MAY INFLUENCE JURY DECISIONS



- Knowledge of prior convictions
 - White paper on Criminal Justice (2002)
 - Prior convictions are form of pre-trial info that may bias jury's decisions
 - May believe past behaviour predicts future behaviour
 - Has some basis but invokes criminal stereotype
 - Recommend prior convictions are not disclosed

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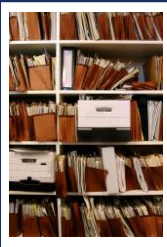
FACTORS THAT MAY INFLUENCE JURY DECISIONS



- Trial Publicity:
 - In US, media can view court cases and interview jury
 - In UK, there are more restrictions
- Media reporting (before/during) could influence jurors
- If jury exposed to trial publicity, questions about their suitability for making fair decisions are raised

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FACTORS THAT MAY INFLUENCE JURY DECISIONS



- Psychological research:
 - Mock jury and mock jury paradigm
 - Enables direct manipulation of variables
- Case studies and archival evidence
 - Post-hoc and observational
- Post-deliberation interviews
 - Not able to do this everywhere

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FACTOR THAT MAY INFLUENCE JURY DECISIONS

- Different types of pre-trial publicity:
 - Otto et al. (1994): three aspects of biasing:
 1. Different effects of several different types of pre-trial publicity
 2. Pre-trial publicity biases impacting presentation of evidence
 3. Psychological processes pre-trial publicity operate on biases
 - "Jury" exposed to pre-trial publicity (newspaper articles) about defendant's character, inadmissible statements by neighbour (weak and strong), prior police record, low status job, prior to viewing the trial.

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FACTORSTHAT MAY INFLUENCE JURY DECISIONS

- Otto et al. (1994): Results
 - Pre-trial publicity (particularly negative info) about defendant's character influenced initial judgments about guilt.
 - Bias weakened but not eliminated by trial evidence.
 - Character pre-trial publicity, and both weak and strong inadmissible statements changed initial judgments of guilt.
 - Initial judgment affects way Ps assessed trial evidence and attributions made about defendant.
 - Prior record pre-trial publicity has effects by influencing inferences about criminality of defendant and relates to post-trial judgments.

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FACTORSTHAT MAY INFLUENCE JURY DECISIONS

- Emotionally charged vs. Neutral pre-trial publicity
 - Kramer et al. (1990)
 - Pre-trial publicity shown to jury was either
 1. Past conviction for armed robbery + evidence at flat
 2. Plus, fatal hit and run of child with the car used in robbery
 - Jury then watch re-enactment of real trial and told to ignore pre-trial publicity
 - 20% increase in guilty verdict given with emotional pre-trial publicity
 - Rose to 41% when hung juries factored out

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FACTORSTHAT MAY INFLUENCE JURY DECISIONS

- But - meta-analysis by Steblay et al. (1999) suggests moderator variables influence pre-trial publicity-guilty verdict relationship:
 - Use of surveys
 - Use of mock jury
 - Use of public or students
 - Real cases vs. fictitious cases
 - Type of crime – drugs, sexual abuse, murder, disorder, injury
 - Delay between exposure to publicity and making decision
 - Source of publicity – TV, internet, newspaper
 - Type of publicity – vague/specific
 - Content - low status job, confession, prior-record

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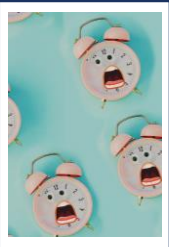
FACTORS THAT MAY INFLUENCE JURY DECISIONS

- Does pre-trial publicity influence jury decision?
 - Small but significant effect
 - More pronounced for violent crimes
- In UK, safety measures implemented - stopping media from reporting on cases at certain points and not allowing the interviewing of jurors.



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FACTORS THAT MAY INFLUENCE JUDICIAL DECISIONS



1. Being tired

- Cho and Barnes (2016): US sentencing decisions on "sleepy Monday" (day after daylight saving time)
- Custodial sentences ~5% longer than given on previous Monday and subsequent Monday, and on all other days of the year!
- No other reason found for disparity.
- Effect apparent despite 1-hour average sleep lost.
- Suggests if judge is tired, sentence will be tougher.

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FACTORS THAT MAY INFLUENCE JUDICIAL DECISIONS



2. Being hungry

- Danziger et al. (2011): parole board decisions by Israeli judges.
- 1,000+ decisions by 8 Israeli judges in 50 days over 10 months.
- Judges worked 3 sessions a day, with morning snack & lunch break.
- As judges became hungry/thirsty, decisions more severe.
 - Start of each session, 65% chance of winning parole.
 - Declined to almost zero by end of session, then returned after break.
- Pattern applied to every judge.
- Not explained by other factors (e.g., severity of crime), length of time in custody or ethnicity

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FACTORS THAT MAY INFLUENCE JUDICIAL DECISIONS

2. Being hungry

- From Danziger et al.

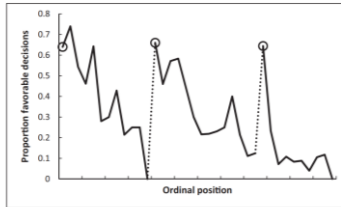
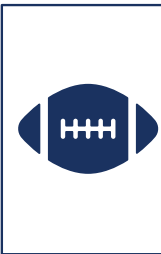


Fig. 1. Proportion of rulings in favor of the prisoners by ordinal position. Circled points indicate the first decision in each of the three decision sessions; tick marks on x axis denote every third case; dotted line denotes food break. Because unequal session lengths resulted in a low number of cases for some of the later ordinal positions, the graph is based on the first 95% of the data from each session.

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FACTORS THAT MAY INFLUENCE JUDICIAL DECISIONS

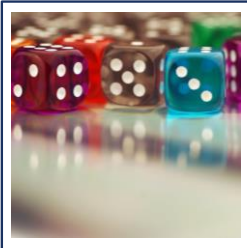


3. Unexpected sports team result:

- Eren and Mocan (2016): judicial decisions in Louisiana affected by unexpected loss by local college American football team.
- After unexpected loss, sentencing by juvenile court judges from 1996-2012 was 7% higher than average.
- Doubled if judge had graduated from that college.
- Wins had no effect on sentencing.
- Nor did expected losses.
- Unexpected disappointment carried into courtroom, influencing sentencing decisions.

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FACTORS THAT MAY INFLUENCE JUDICIAL DECISIONS



3. Anchoring:

- Kahneman (2011): German judges with average >15 years experience read description of woman caught shoplifting
- After rolling pair of loaded dice (every roll either 3 or 9), asked if they would sentence to prison term greater or less (months) than number showing on dice.
- Also, specify exact prison sentence they would give.
- Those who rolled 9 said they would sentence to 8 months; those who rolled 3 said they would sentence to 5 months
- Anchoring effect = 50%.

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