

Implementation of Blind Reviewing in a Forensic Biology Laboratory

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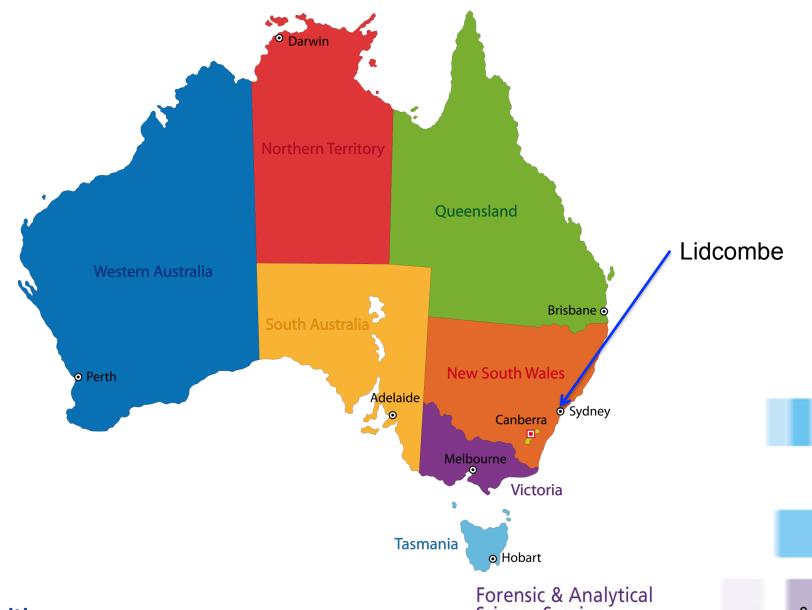
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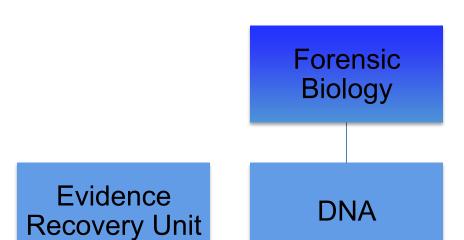












Case Management Unit

> Intelligence Reporting

Court Reporting





Photo illustration by David Sleight/ProPublica, DNA illustration by Saemilee via Getty Images



Cognitive Bias

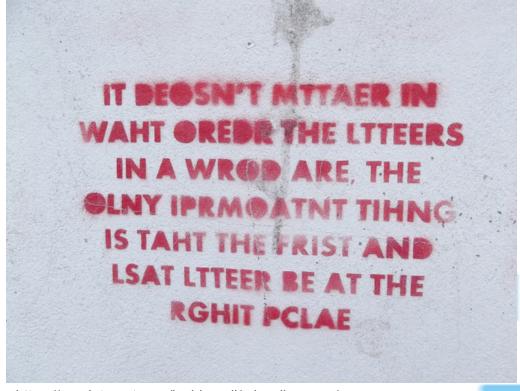
'...bias is a by-product of processing limitations – because information processing time and ability are limited, humans must use shortcuts or rules of thumb that are prone to breakdown in systematic ways'

Haselton, M. G., Nettle, D. and Andrews, P. W. (2015) The Evolution of Cognitive Bias, in The Handbook of Evolutionary Psychology (ed D. M. Buss), John Wiley & Sons, Inc.



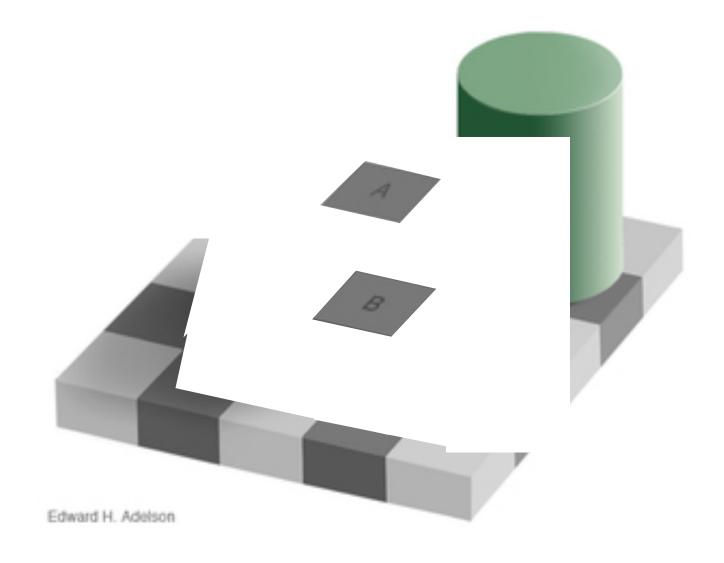
After reading the the sentence, you are now aware that the the human brain often does not inform you that the the word 'the' has been repeated twice every time.

http://www.abrarjeh.com/2016/09/01/jim-kwik-speed-reading-crash-course/



https://au.pinterest.com/joshhazell/miscellaneous/





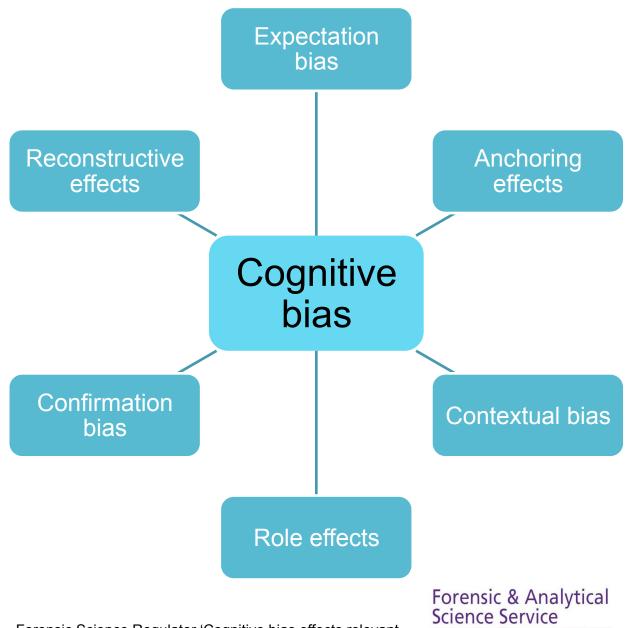






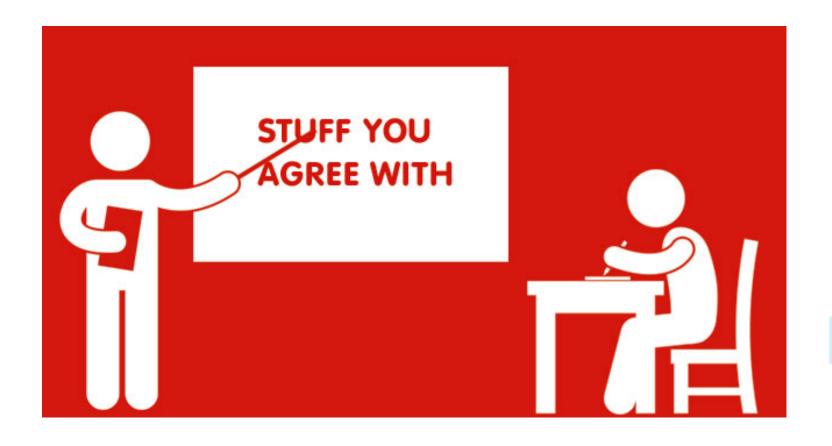








Confirmation Bias





Limiting Gender Bias

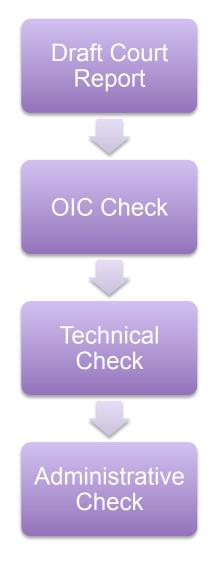
- In 1970, less than 5% of people in the top five US orchestras were female
- 'Blind' auditions became industry standard in the 1970s and 1980s
- Increased a woman's chance of getting to the next round by 50%
- Female musicians increased to around 25% in the mid-90s



http://www.astridbaumgardner.com/blog-and-resources/blog/ysm-mock-auditions/



Standard Court Report Checking

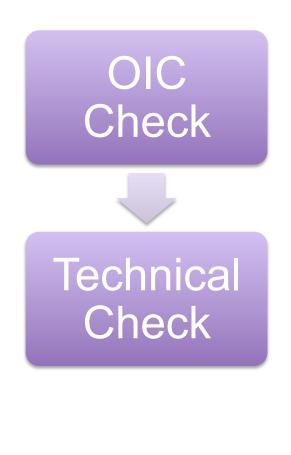




Standard Court Report Checking

 OIC checker amends the Court Report

- Technical Checker is aware of any changes made by the OIC
- Identities of both checkers are known to each other





Blind Reviewing

Blank Court Report

OIC Check

Technical Check

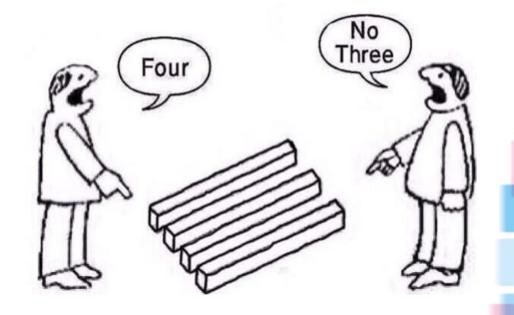
Consensus Check

Administrative Check



What if there is no consensus?

- A third opinion is requested:
 - Fair and transparent selection process
 - Blind review of the contested result
 - Discussions are recorded and the process is transparent





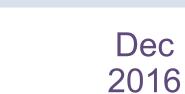
Blind Reviewing Implementation

- Staff consultation meetings
- Monitoring the process
- Amending the procedure
- Feedback surveys



2015 Pilot study Apr 2017

Cases with ≤25 items



Cases with ≤10 items

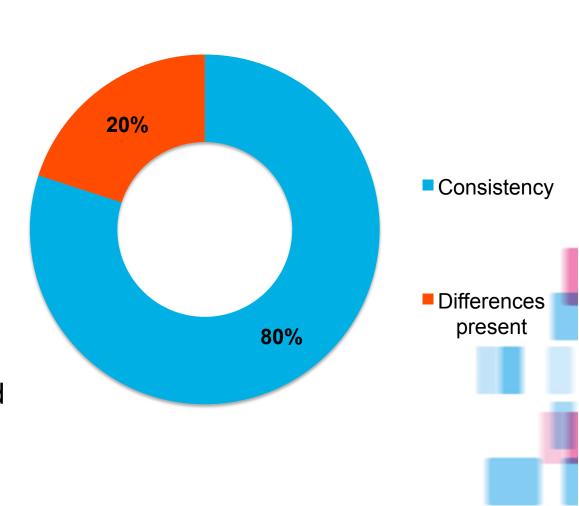
Jul 2017

All cases



Monitoring the Process

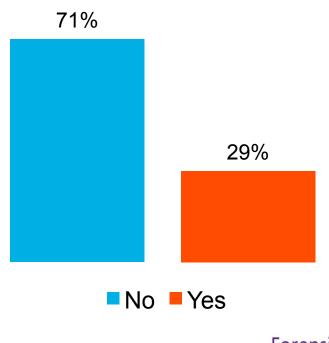
- Reviewed 50 cases
- Differences were only present in cases with complex DNA mixtures
 - The number of contributors was the main variable
- All differences were resolved at the consensus stage





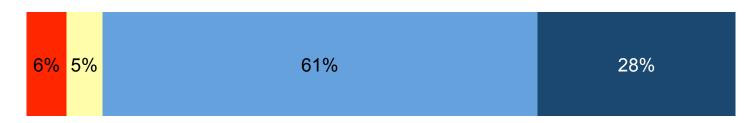
Monitoring the Process

Do you feel that the time taken to check a court report has increased (n = 7)?

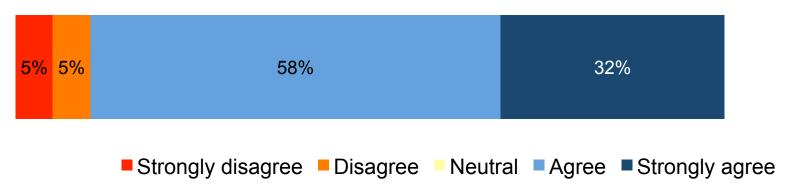




I think that the introduction of Blind Peer Reviewing has increased quality of work (n = 19):



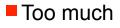
Regarding Blind Peer Reviewing, the balance between efficiency and quality is right (n = 18):

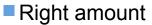




Blind Peer Review happens (n=18):









■ Should be every time



Outcomes

- Court report checking is more immune to potential biasing effects
- Greater transparency for potential court challenges
- Excellent training tool for new senior staff
- Balance between efficiency and quality achieved
- Junior staff training is affected as they are no longer drafting court reports



Future Plans

- Electronic court report checking
 - > Automated comparison and non-conformance flagging
 - > Improve efficiency for large cases
- Introduce blind reviewing to intelligence reporting
- Expand to other disciplines at FASS



Thanks

- Clint Cochrane
- Carole Field
- Sharon Neville



Questions?

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