

# An Investigation of Asylum Officials' Beliefs about Cognitive Bias and how they Control it.

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*Psychology at the Frontiers: Asylum Interviewing and Decision Making [Psych-AID]*



In making decisions, humans are limited by time, information, and knowledge.

## Decision-Making



This helps us make quicker decisions while ignoring certain information. However, using ineffective and unreliable heuristics can lead to errors.

As such, we form habits and use mental shortcuts (heuristics).

(Gigerenzer & Todd, 2001; Todd & Gigerenzer, 2000)

These systematic errors are known as **cognitive bias** (Tversky & Kahneman, 1974).  
E.g., confirmation bias, blind spot bias, gambler's fallacy, etc.





Working under significant time pressure and heavy workloads  
(Skrifvars et al., 2024)

# Cognitive Bias in Asylum Decision-making

Using partially unsupported assumptions about human memory and fear (Selim et al., 2025; Skrifvars, Sui et al., 2024)

Focusing on an aspect of a claim by asking more closed-ended questions (Skrifvars et al., 2020; Van Veldhuizen et al., 2018)

Influence of political atmosphere (Raman et al., 2022; Spirig, 2018; Riedel & Schneider, 2017)

Little is known about the strategies officials use to mitigate against the negative effects of these biases in the asylum context. Hence, the necessity for this study.



Dror (2020) has highlighted six misconceptions held by forensic experts.

1. Cognitive bias is an ethical issue



## **Misconception about cognitive bias**

2. Those influenced by cognitive bias are bad apples,

3. Experts are immune to cognitive bias,

4. Technological protection,

5. Bias blind spots

6. The illusion of control

These factors influence the awareness and strategies employed to mitigate the negative effects of cognitive bias.



Kukucka et al. (2017) and Zapf et al. (2018) found among forensic examiners and forensic mental health professionals that:



## **Misconception amongst forensic officials**

They considered cognitive bias a cause for concern and admitted that their prior beliefs and expectations affected their decisions.

Experts were very confident about decision-making in their field (74 -96% perceived accuracy)

There was a presence of a bias blind spot and an illusion of control.

Training and experience were associated with the beliefs.

These highlight the need for training.





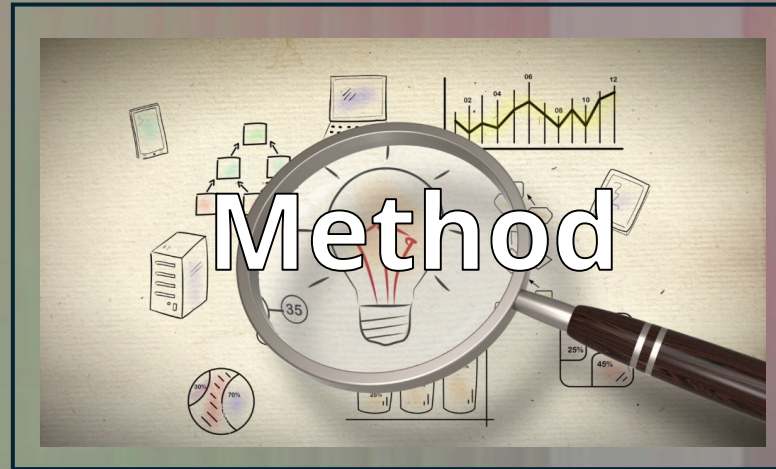
# Current study



We aim to conceptually replicate and extend the study by Kukucka et al. (2017) and Zapf et al. (2018) on the beliefs of cognitive bias of asylum decision-makers.

We aim to:

- Explore their perceived accuracy of decisions.
- Investigate their beliefs about cognitive bias.
- Examine how training and experience affect their beliefs.
- Explore their strategies for controlling cognitive bias.



### Design:

Survey questionnaire composed of closed and open-ended questions.

### Preregistered

Analyses script & data will be available on OSF

1. Bias blind-spot
2. Questions on beliefs about cognitive bias
3. Training, years of experience and Strategies for controlling cognitive bias

Officials received a definition of cognitive bias with two examples





We recruited 110 participants.



71 females, 37 males, and 2 Undisclosed.  
56 Asylum officials, 54 Judges

Mean age: 41 (SD=13) years

35 Germany, 34 Sweden, 29 Finland, 12 from 5 other countries.





## Perceived Accuracy

Perceived accuracy of asylum decision in their country: 84% (SD = 12)

Does this differ from 50% perceived accuracy? Yes,  $BF_{10} = 4.7011 \times 10^{50}$  (very strong evidence)



# Bias Blind Spot

To what extent do you think your own asylum decisions are influenced by cognitive bias?  
39% (SD = 22)

To what extent do you think your colleagues' asylum decisions are influenced by cognitive bias? 44% (SD = 22)

Questions are counterbalanced

Do officials consider themselves less biased? Yes,  $BF_{10} = 1.83 \times 10^5$  (strong evidence in favour of our hypothesis)





# Results

Do officials subscribe to the misconception?

Item [On a scale from 1 (strongly disagree) to 7 (strongly agree)]	M(SD)	Ans	BF10
1. Prior beliefs and expectations affect the evaluation of credibility	5.49(1.11)	No	$2.04 \times 10^{23}$
2. Prior beliefs and expectations affect the final decision for international protection.	5.09(1.22)	No	$1.34 \times 10^{13}$
3. Asylum officials have a strong impression before interviewing.	4.40(1.52)	No	7.81
4. Having a strong impression about a case can affect the decision to grant asylum.	4.69(1.45)	No	$1.24 \times 10^4$
5. Experienced asylum official are less influenced by prior beliefs and expectation than new official.	3.49(1.54)	No	0.02

Test: Is the mean different from the midpoint (4: neither agree nor disagree)?

The direction of the Bayes Factor speaks for ( $BF_{10} > 1$ ) or against ( $BF_{10} < 1$ ) the proposed hypothesis.



# Results

Do officials subscribe to the misconception?

Item [On a scale from 1 (strongly disagree) to 7 (strongly agree)]	M(SD)	Ans	BF10
6. Asylum officials who consciously set aside their prior beliefs and expectations are less likely to be influenced by them.	5.62(1.22)	Yes	$8.10 \times 10^{22}$
7. Decisions on asylum cases can be unduly influenced by previous cases.	4.89(1.13)	No	$2.16 \times 10^9$
8. Using AI for credibility assessment ensures decisions are not unduly influenced by prior beliefs and expectations.	2.80(1.52)	No	$2.23 \times 10^{10}$
9. A computerized system that compares facts can ensure prior beliefs and expectations do not overly influence decisions.	3.69(1.53)	NAD	1.07

Test: Is the mean different from the midpoint (4: neither agree nor disagree)?

The direction of the Bayes Factor speaks for ( $BF_{10} > 1$ ) or against ( $BF_{10} < 1$ ) the proposed hypothesis.





# Effect of Training on beliefs about cognitive bias

How many officers have received training on cognitive bias

Yes = 32 %, Related concept = 16 %, No = 45 %, Don't know = 7 %

Effect of training on Beliefs about cognitive bias

- Training did not moderate the bias blind spot perception.
- Except for item 3, training did not affect the other 8 items.
- Paired-wise comparison revealed that officials who answered 'yes' ( $M = 4.9$ ) to item 3 agreed they had a strong impression about a case before interviews, compared to 'no' respondents (mean = 3.98), who were neutral. Other comparisons were not supported.



# Effect of experience on belief about cognitive bias

Mean Work Experience: 9 (SD=11) years

## Effect of experience on Beliefs about cognitive bias

- Experience was not associated with the bias blind spot perception.
- Only 2 of 9 items were associated with experience.
- As experience increased, officials were more likely to disagree with having a strong impression before interviews (item 3,  $\beta = -0.04$ ).
- As experience increased, officials were more likely to agree that experienced officials were immune to cognitive bias (item 5,  $\beta = 0.03$ ).
- These indicate experienced officials endorsed certain misconceptions.





# Strategies officials use to mitigate against the influence of cognitive bias

## More Effective

- Considering alternative explanations
- Two people assessing a case
- Asking for clarification
- Explicitly identifying facts
- Unique case assessment

## Less effective

- Conscious control
- Self-reflection
- Awareness of bias
- Relying on experience
- Group thinking

## Related to work practice

- Applying the law
- Comparing cases with country-of-origin information and other sources
- Having a positive attitude (open-minded, objective, curious, etc).



# Discussion

- Officials recognized that cognitive bias affected their decisions and that AI-based credibility assessment cannot fully eliminate this influence.
- However, they believed they were less biased than their colleagues and could consciously control their biases— reflecting two common misconceptions.
- Many officials reported no training on cognitive bias.
- Trained officials were more aware of how their impression influenced their decisions than untrained officials.
- As experience increased, officials were more likely to endorse certain misconceptions.
- These findings highlight a strong need for training on cognitive bias and strategies to manage it among asylum officials.





# References

- Dror, I. E. (2020). Cognitive and Human Factors in Expert Decision Making: Six Fallacies and the Eight Sources of Bias. *Analytical Chemistry*, 92(12), 7998–8004. <https://doi.org/10.1021/acs.analchem.0c00704>
- Gigerenzer, G., & Todd, P. M. (2001). *Simple heuristics that make us smart* (1. issued as an Oxford Univ. Press paperback). Oxford University Press.
- Kukucka, J., Kassin, S. M., Zapf, P. A., & Dror, I. E. (2017). Cognitive bias and blindness: A global survey of forensic science examiners. *Journal of Applied Research in Memory and Cognition*, 6(4), 452–459. <https://doi.org/10.1016/j.jarmac.2017.09.001>
- Raman, V., Vera, C., & Manna, C. (2022). Bias, Consistency, and Partisanship in U.S. Asylum Cases: A Machine Learning Analysis of Extraneous Factors in Immigration Court Decisions. *Equity and Access in Algorithms, Mechanisms, and Optimization*, 1–14. <https://doi.org/10.1145/3551624.3555288>
- Riedel, L., & Schneider, G. (2017). Dezentraler Asylvollzug diskriminiert: Anerkennungsquoten von Flüchtlingen im bundesdeutschen Vergleich, 2010-2015. *Politische Vierteljahresschrift*, 58(1), 23–50. <https://doi.org/10.5771/0032-3470-2017-1-23>
- Selim, H., Lindblad, P., Vanto, J., Skrifvars, J., Alvesalo-Kuusi, A., Korkman, J., Pirjatanniemi, E., & Antfolk, J. (2025). (In)credibly queer? Assessments of asylum claims based on sexual orientation. *Legal and Criminological Psychology*, 30(1), 159–182. <https://doi.org/10.1111/lcrp.12278>
- Skrifvars, J., Ilmoni, A., Siegrids, L., Galán, M., Stevens, L. M., Hedayat Selim, Korkman, J., & Antfolk, J. (2024). Experiences of Asylum Interviews by Asylum Officials, Interpreters and Asylum Seekers in Finland. <https://doi.org/10.13140/RG.2.2.26499.72485>
- Skrifvars, J., Korkman, J., Sui, V., Van Veldhuizen, T., & Antfolk, J. (2020). An analysis of question style and type in official Finnish asylum interview transcripts. *Journal of Investigative Psychology and Offender Profiling*, 17(3), 333–348. <https://doi.org/10.1002/jip.1557>
- Skrifvars, J., Sui, V., Antfolk, J., Van Veldhuizen, T., & Korkman, J. (2024). Psychological assumptions underlying credibility assessments in Finnish asylum determinations. *Nordic Psychology*, 76(1), 55–77. <https://doi.org/10.1080/19012276.2022.2145986>
- Todd, P. M., & Gigerenzer, G. (2000). Précis of simple heuristics that make us smart. *Behavioral and Brain Sciences*, 23(5), 727–741.
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases: Biases in judgments reveal some heuristics of thinking under uncertainty. *Science*, 185(4157), 1124–1131. <https://doi.org/10.1126/science.185.4157.1124>
- Van Veldhuizen, T. S., Maas, R. P. A. E., Horselenberg, R., & Van Koppen, P. J. (2018). Establishing Origin: Analysing the Questions Asked in Asylum Interviews. *Psychiatry, Psychology and Law*, 25(2), 283–302. <https://doi.org/10.1080/13218719.2017.1376607>
- Zapf, P. A., Kukucka, J., Kassin, S. M., & Dror, I. E. (2018). Cognitive bias in forensic mental health assessment: Evaluator beliefs about its nature and scope. *Psychology, Public Policy, and Law*, 24(1), 1–10. <https://doi.org/10.1037/law0000153>

**Thank you for your attention!**

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**Questions?**



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