



**ExChange**

# Social work decision making

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9.30am – 9.40am

Welcome

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9.40am – 10.50am

Decision-making (and forecasting) in social work

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10.50am – 11am

Break

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11am – 12pm

Group activity

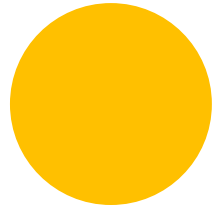
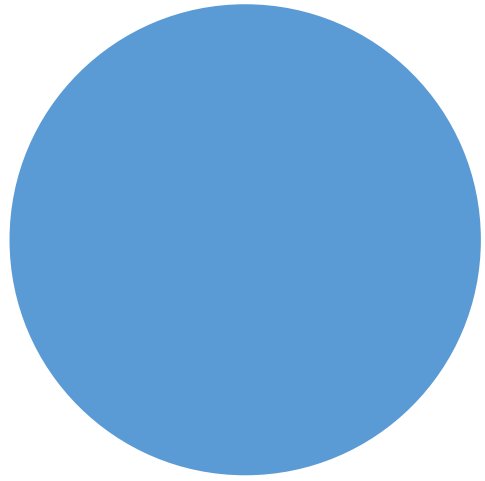
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12pm – 12.30pm

Feedback from group activity and wrap-up



Plan



# Decision-making (and forecasting) in social work



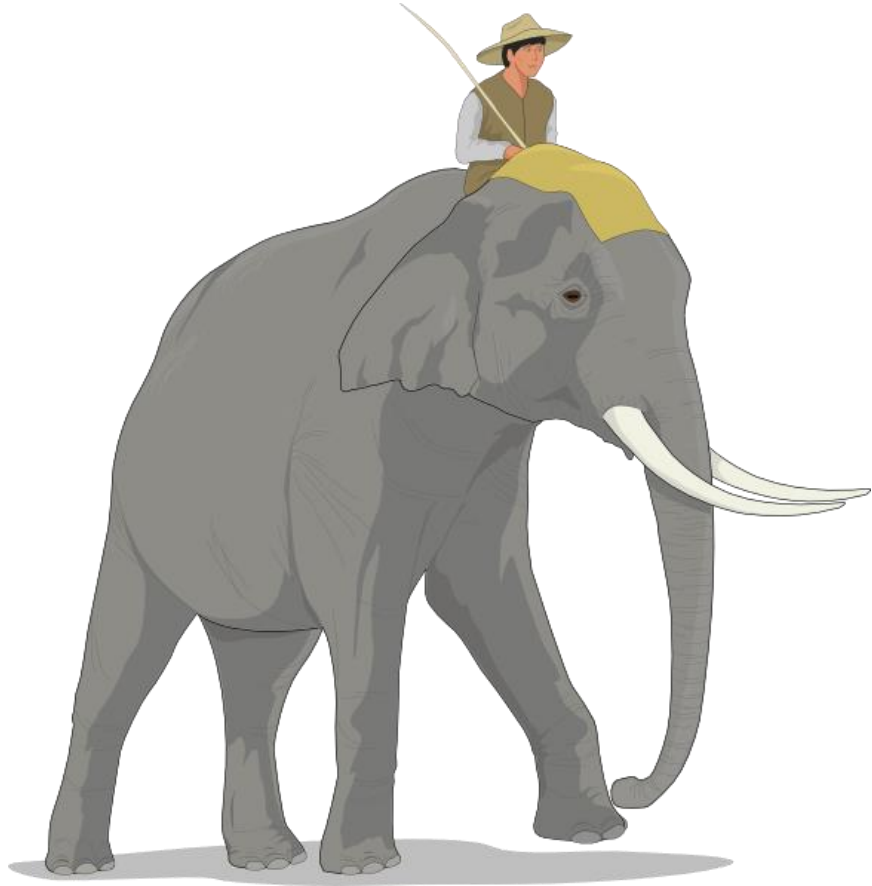
# How do social workers make decisions?



Hard thing to observe (it happens inside people's heads)



Interviews are helpful...but problematic due to post-hoc rationalisation



# How do social workers make decisions?

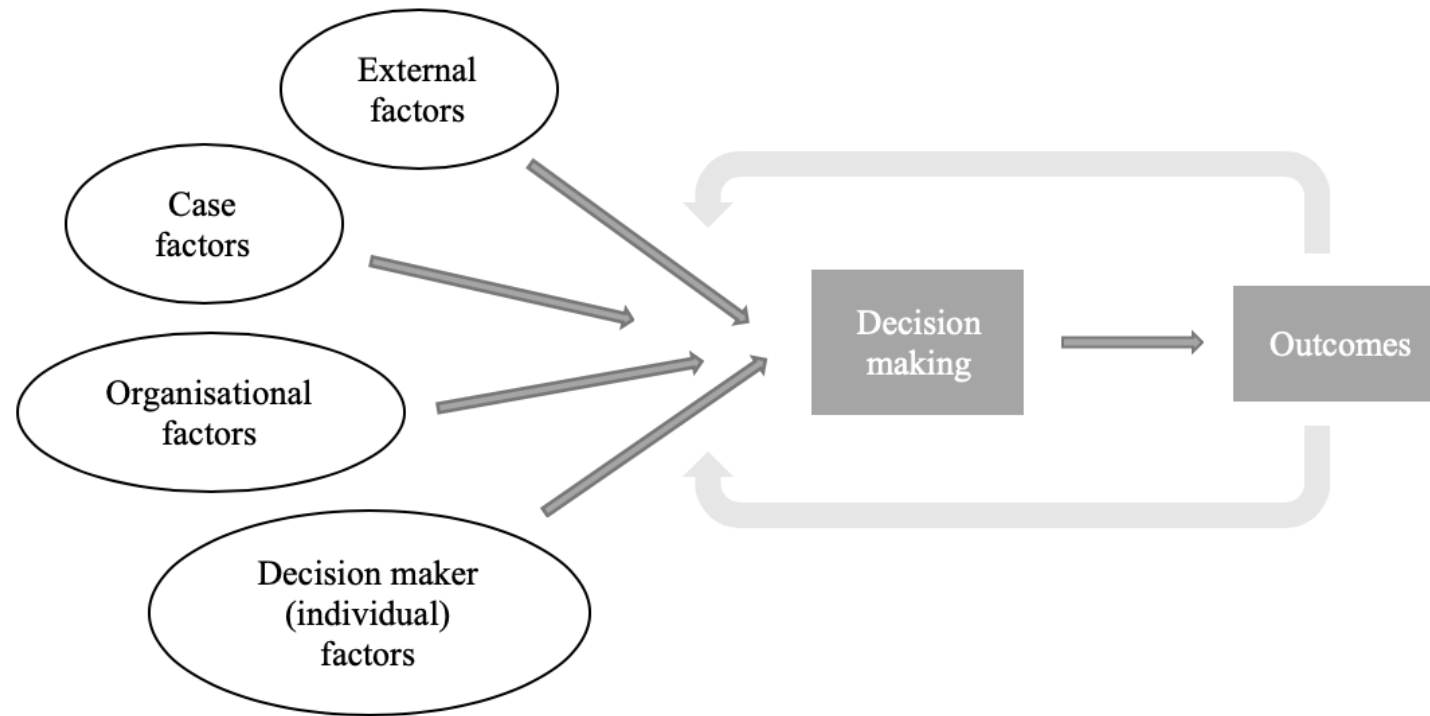
- Intuition and rationality: the elephant and the rider
- Who is in charge?



How do social workers make decisions?

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ETHICS AND VALUES



# How do social workers make decisions?

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COMPLEX ECOLOGY (BAUMANN ET AL, 2011)

# What decisions do social workers make?



Many 'big' decisions taken outside of supervision, via panels, conferences and courts



'Small' decisions taken countless times every day by social workers and supervisors



# What helps improve decision-making?



Professional expertise considered insufficient (Beddoe, 2010)



Novices learning from experts (e.g. with case vignettes)



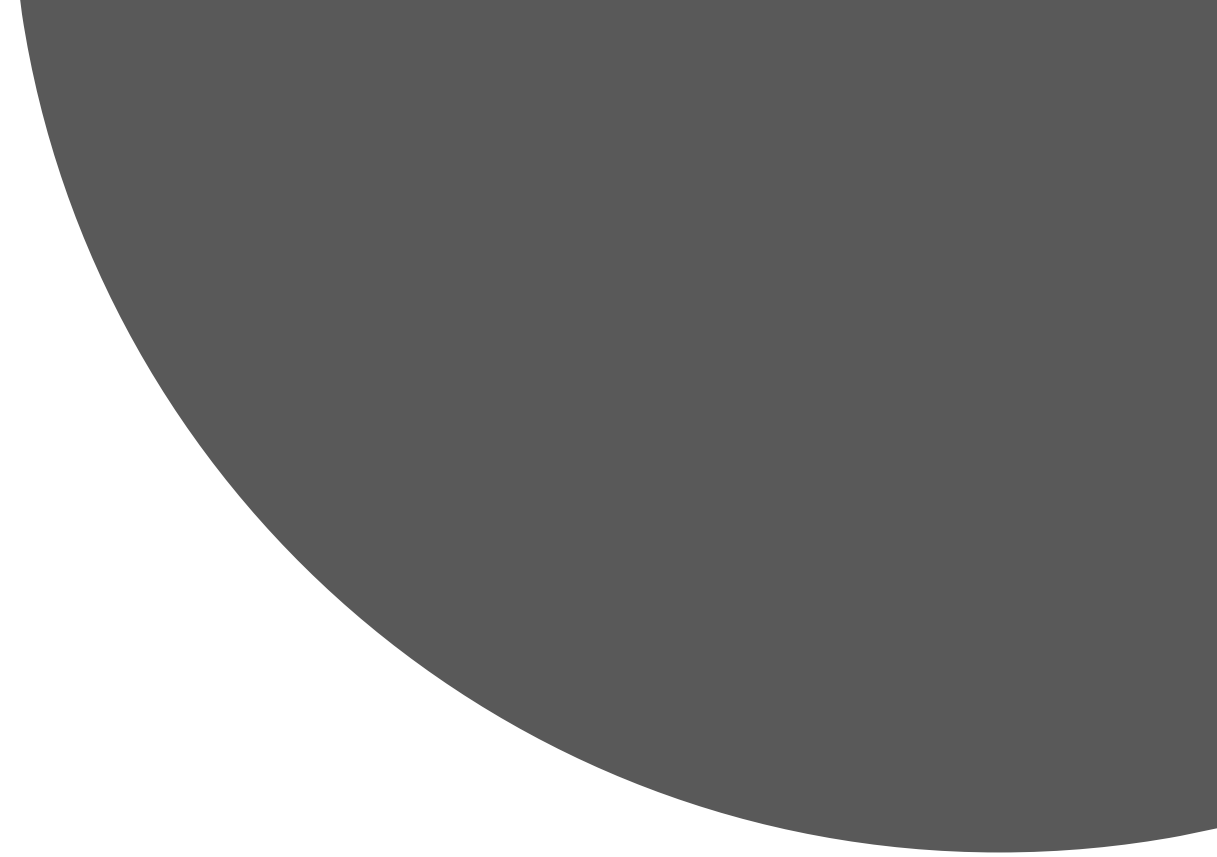
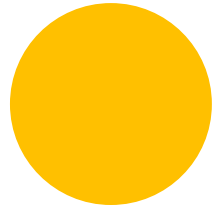
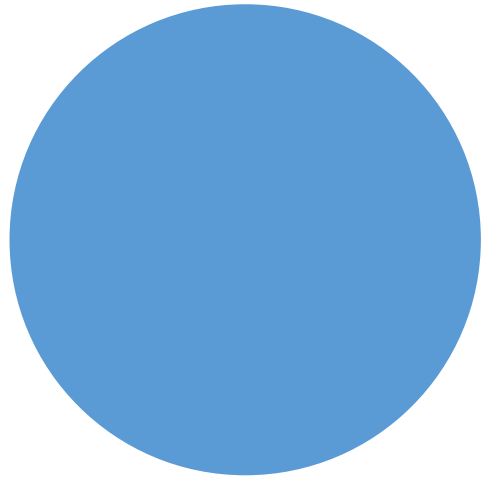
Improving supervision (e.g. group—based models)



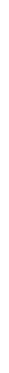
Standardised processes (e.g. forms, forms and more forms)



Machine Learning and Artificial Intelligence



Learning from the best: The  
Good Judgement Project



# Who would you trust to know the answer?

- Will North Korea test fire a new ballistic missile within the next 6-months?
  - CIA analysts with access to classified data?
  - Mid-Western retired teachers with access to Google?



# Wisdom of the crowds

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If you were stuck on a difficult question, would you:

- a) phone a friend *or*
- b) ask the audience?

Phone a friend gets the right answer 65% of the time.

Ask the audience gets the right answer 90% of the time.



# Wisdom of the crowds: common pitfalls to avoid



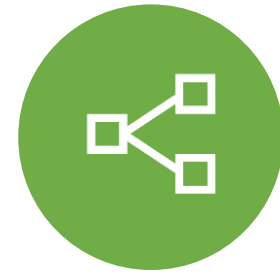
ANCHORING



POLARIZATION



GROUP THINK



SOCIAL  
DESIRABILITY

“This plan has a fair chance of success”



10% chance of succeeding?

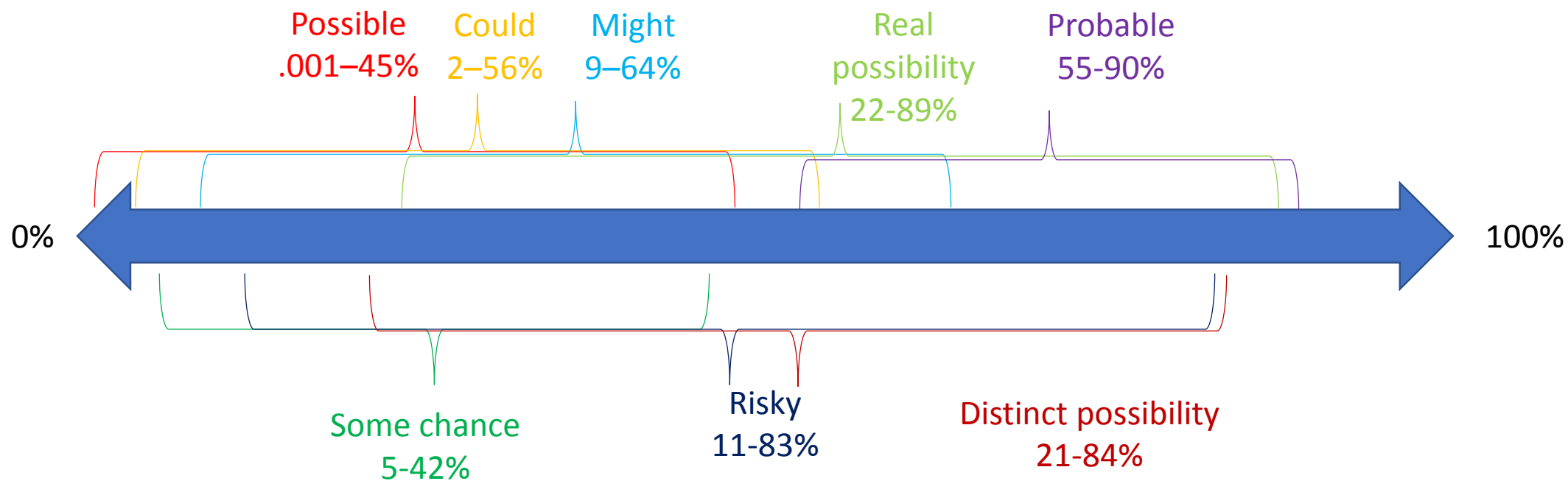
25% chance of succeeding?

50% chance of succeeding?

75% chance of succeeding?

The importance of being clear

“This plan has a fair chance of success”



# Feedback

- From mistakes – Why? Where did I go wrong? What could I do differently next time?
- From successes – Why? How close was I to getting it wrong? What could I do even better next time?







- - How can we utilize the **wisdom of the crowds** in social work decision-making?
- - How can we be **clearer** about what we mean?
- - How can we get good **feedback**?

# How is forecasting related to decision-making?



How are actions and decisions related to forecasting?



Do social workers make forecasts about the future?



The ecology of social work decision-making is complicated

# How is forecasting related to decision-making?

- “Predicting the future is an integral part of human cognition. We reach for an umbrella when we expect rain. We cross the street when the light turns green and expect cars to stop. We help others and expect reciprocity - they will help us in future situations. Without some ability to generate predictions, we could neither plan for the future nor interpret the past”
- (Mellers et al, 2015, p. 1).

# Do SWs make forecasts about the future?

“...reasonable cause to suspect that a child is suffering **or is likely to suffer**, significant harm...”

- Will a parent or child benefit from a particular service?
- Will there be further incidents of domestic violence?
- Will anyone attend a Family Group Conference?



1. "I am concerned that Amber is self-harming, this **could** impact on her health and potentially be life-threatening."
2. "Amber's health and development needs are not being met, which **could** result in her not getting the right support. Amber **could** have a poor start to her school life."
3. "If Amber's uncle was left to care for her, her needs **could** be neglected, and she **might** be at risk of harm."
4. "Amber **could** be at risk of physical, emotional and sexual abuse."

Do SWs make forecasts about the future?



Run workshops with 38 social workers and supervisors



Reviewed case-file information and answered a series of questions about what might happen next



Process-outcomes were relatively easy to forecast (better than chance)

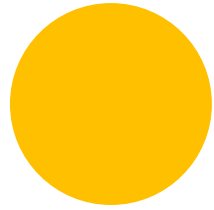
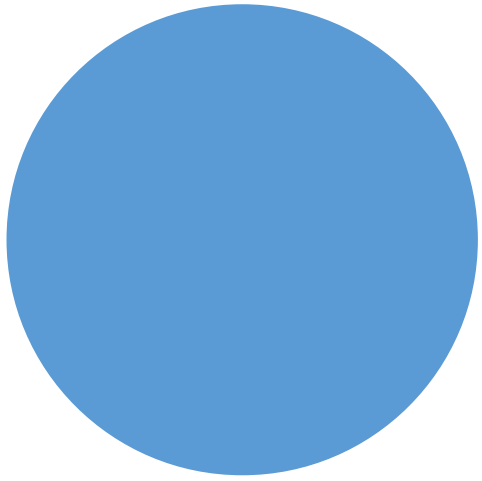


Behavioural-outcomes much harder (worse than chance)

# Forecasting and decision-making



Forecasting the future is hard  
and doing so with complete  
accuracy is impossible.



# How to improve forecasting





# Screening and cultivating talent

- Open-mindedness
- Seniority
- Numeracy
- Grit and determination
- Cognitive reflection
- Conscientiousness

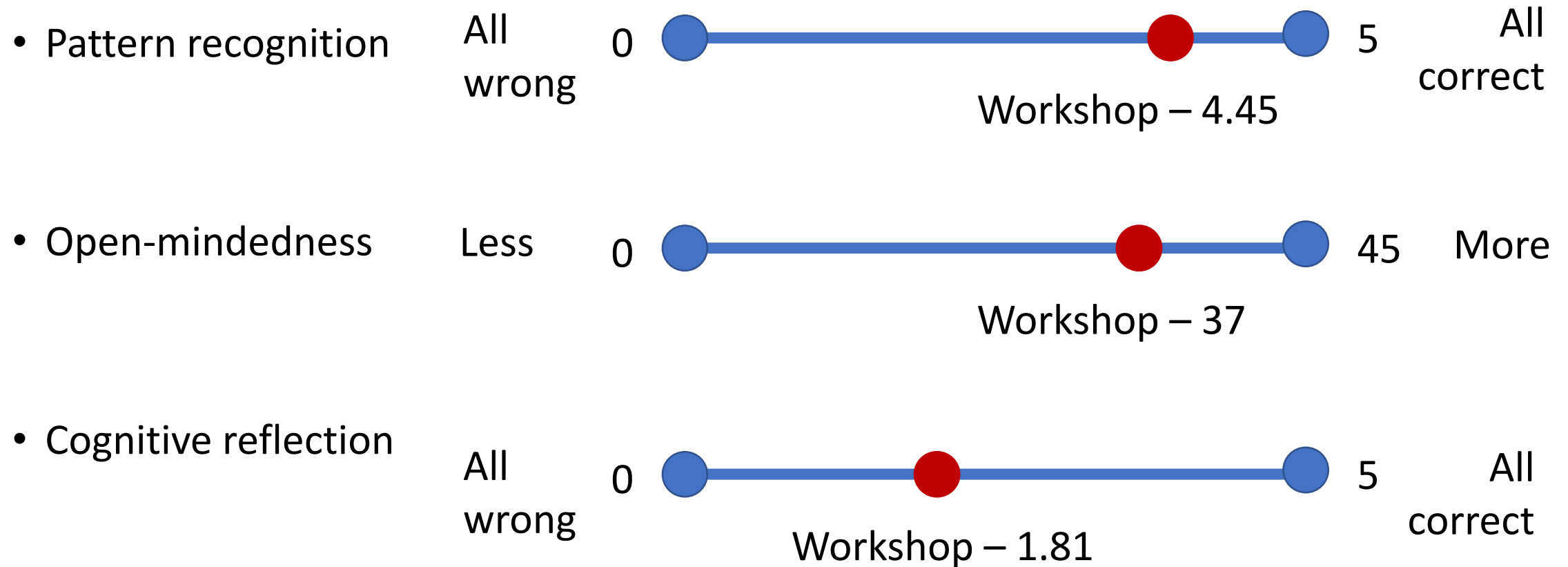
- Knowledge base
- Aversion to ambiguity
- Open to new experiences
- Pattern recognition
- Creative information seeker

# Screening and cultivating talent

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- Knowledge base
- Aversion to ambiguity
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# Screening and cultivating talent





# Asking the right questions

- 1. Is the question clear and unambiguous?
- 2. Is the time-frame well-specified?
- 3. Is the question worth answering?

What about  
these  
examples?

1. Will the UK and the EU have a good future relationship?
2. Will the UK make a deal with Europe in the near future?
  -
3. Will the UK leave the EU on or before 31<sup>st</sup> October 2019?

# Four steps to improve forecasting: the Delphi Method

Take the outside view first

Confidence calibration

Fermi-ising

Compare and update



## Taking the outside view

- What's the base rate? How often does this kind of thing happen?

How likely are the happy couple to get divorced?

What sort of event is this?

How many marriages end in divorce?

How many same-sex marriages end in divorce?

Is divorce getting more or less common, staying the same or

does it not matter?

# Confidence calibration



- How brilliant I think I am

My actual brilliance



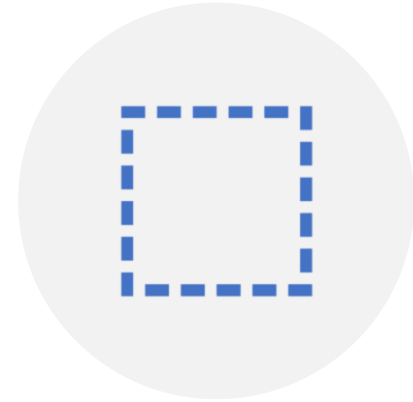
# Confidence calibration



WHAT ASSUMPTIONS AM I  
MAKING?



HOW CONFIDENT *DO I FEEL*  
ABOUT THESE ASSUMPTIONS?



HOW CONFIDENT *SHOULD I*  
*FEEL?*

# How confident are you...?



Five social work general knowledge questions



For each one, answer 'true' or 'false' (your best guess) *and* indicate how confident you feel



Write down your answers (two per question)

# Question 1

- 6,407 children were in care in Wales on 31st March 2018.
- **True or false?**
- **How confident are you? 50%, 60%, 70%, 80%, 90% or 100%**

## Question 2

- There was a 10% increase in children in care in Wales between 31st March 2017 and 31st March 2018.
- **True or false?**
- **How confident are you? 50%, 60%, 70%, 80%, 90% or 100%**

## Question 3

- The UK parliament passed its first act in relation to the prevention of cruelty to children in 1889.
- **True or false?**
- **How confident are you? 50%, 60%, 70%, 80%, 90% or 100%**

## Question 4

408 children were adopted from care in Wales in 2017-18.

- **True or false?**
- **How confident are you? 50%, 60%, 70%, 80%, 90% or 100%**

## Question 5

- Wales has the worst level of child poverty in the UK (compared with England, Scotland and Northern Ireland)
- **True or false?**
- **How confident are you? 50%, 60%, 70%, 80%, 90% or 100%**

1

- Add up your confidence scores and divide by 5 (= average confidence level)

2

- Add up how many questions you got right and multiply by 20 (= percentage correct)

Answers

- 1. True 2. False 3. True 4. False 5. True

# Scoring



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Is your confidence level greater than your score?

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Is your score greater than your confidence level?

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Are your score and confidence levels roughly equal?

How well calibrated are you?

# Fermi-ising

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*"There are known  
knowns; there are  
things we know that  
we know.*

*There are known  
unknowns; that is to  
say there are things  
that, we now know we  
don't know.*

*But there are also  
unknown unknowns –  
there are things we do  
not know we don't  
know."*



When making forecasts, we have to make a series of assumptions

By being explicit about these assumptions, we can identify where we go wrong.

Fermi

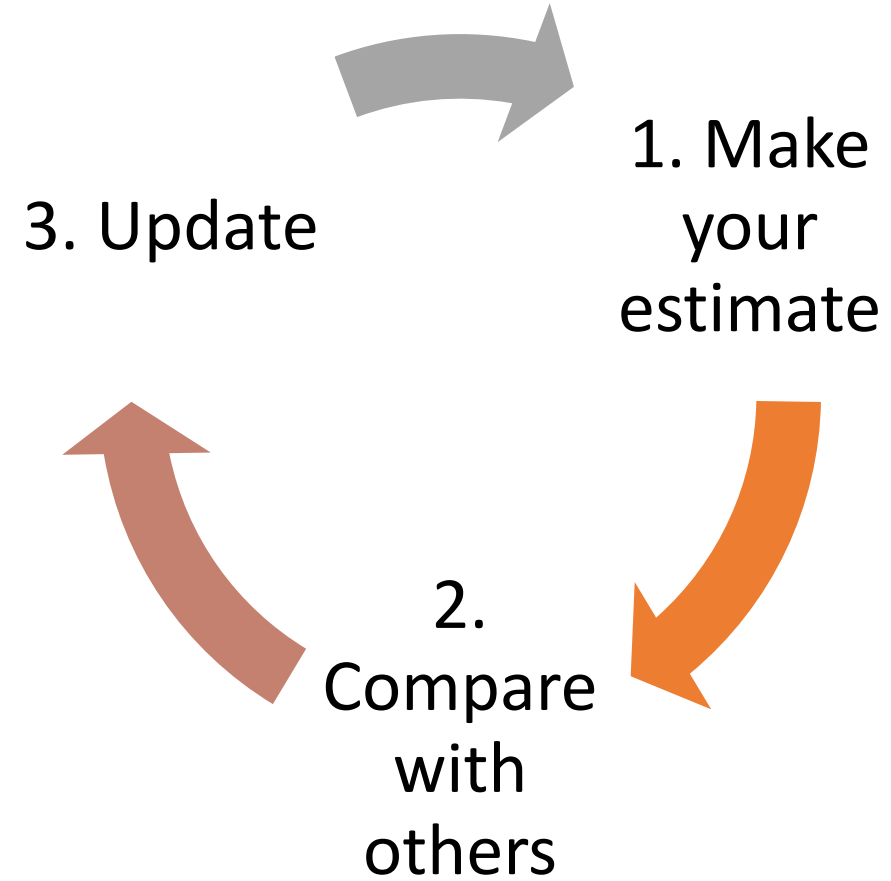
How many  
referral and  
assessment  
social workers  
are there in  
Birmingham?

- *Without looking up the answers, can we make a decent estimate?*
- 1. How many people live in Birmingham?
- 2. How many of them are children?
- 3. What is the referral rate per 10,000?
- 4. How many children are referred per year?
- 5. What proportion of referrals lead to an assessment?
- 6. How many assessments per year?
- 7. How many assessments can one social worker complete per year?
- Answer =

# How many referral and assessment social workers are there in Birmingham?

- *Without looking up the answers, can we make a decent estimate?*
- 1. How many people live in Birmingham? **1.086 million**
- 2. How many of them are children? **288,000 (26.5%)**
- 3. What is the referral rate per 10,000? **604**
- 4. How many children are referred per year? **17,395**
- 5. What proportion of referrals lead to an assessment? **84%**
- 6. How many assessments per year? **14,611**
- 7. How many assessments can one social worker complete per year? **150**
- Answer = **97**

# Compare and update



# Checklist

01

1. Start with the outside view – what sort of event is this and how often does it happen?

02

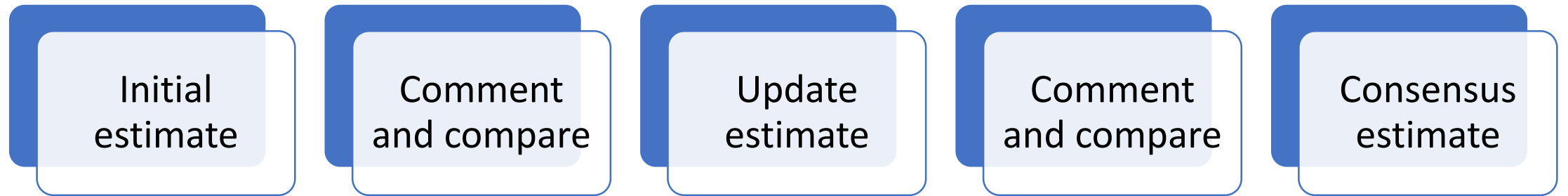
2. Confidence calibration – am I under or over confident?

03

3. Fermi-ising – use estimates where necessary and be explicit about them

04

4. Compare and update – explain your reasoning to others, listen to diverse views



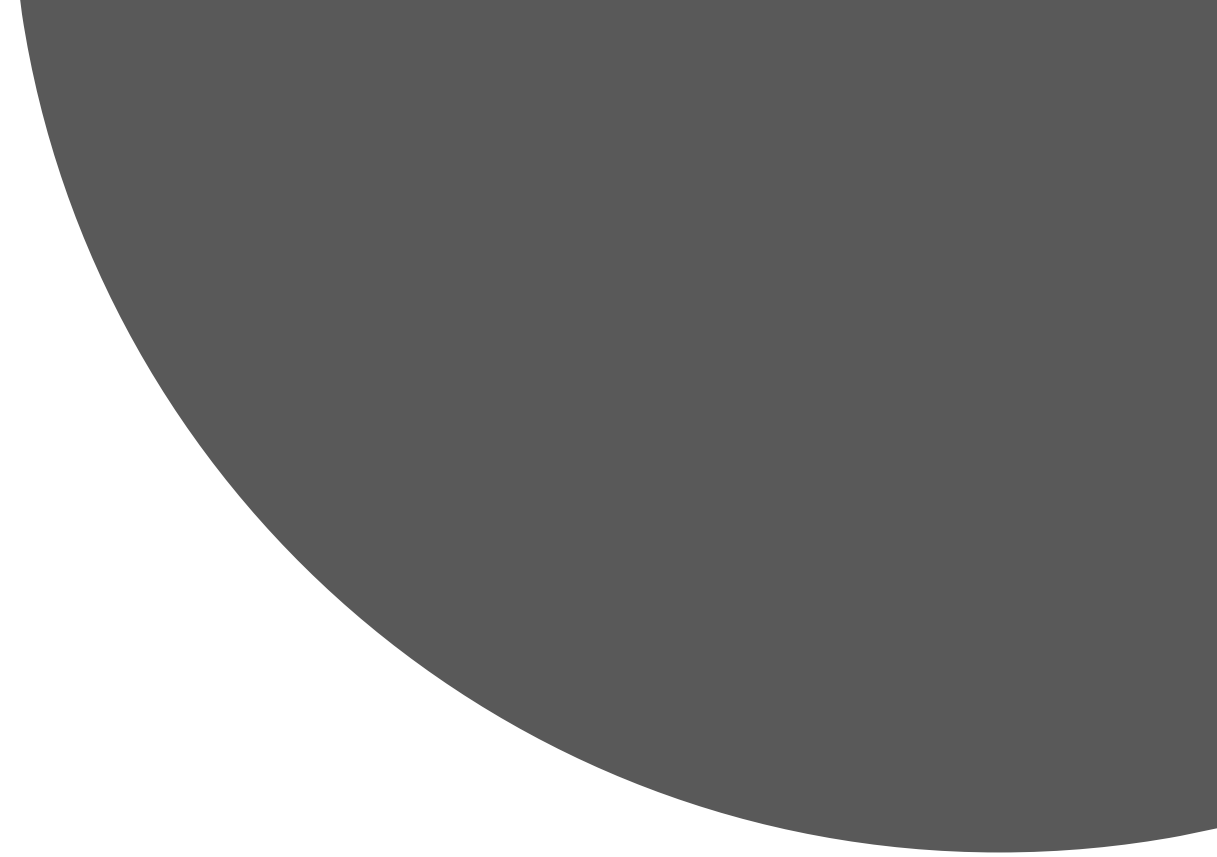
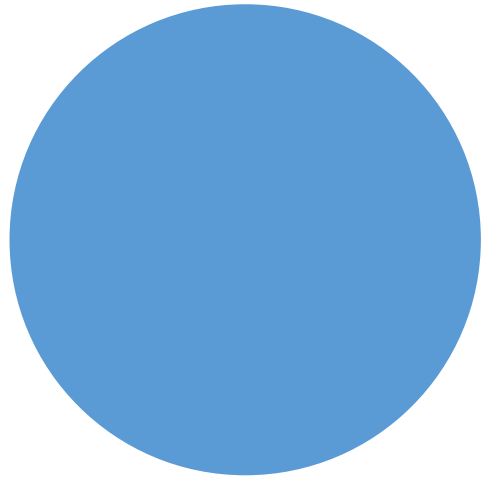
Putting it all together: the Delphi method





Break

Start again at 11am



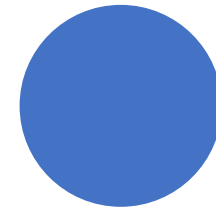
# Making social work forecasts



- In small groups (5 people maximum)
- 1. Read the case study
- 2. Consider the questions
- 3. Follow the Delphi method (and remember the checklist)
- 4. Find an agreed group answer for each question

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# Practicing the Delphi method



# Reminder

Checklist:

- Have I taken the 'outside view'?
- What assumptions am I making?
- How confident should I feel?
- Compare with others and update

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Initial estimate

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Comment and compare

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Update estimate

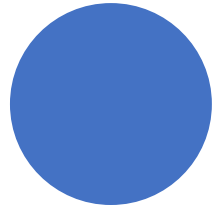
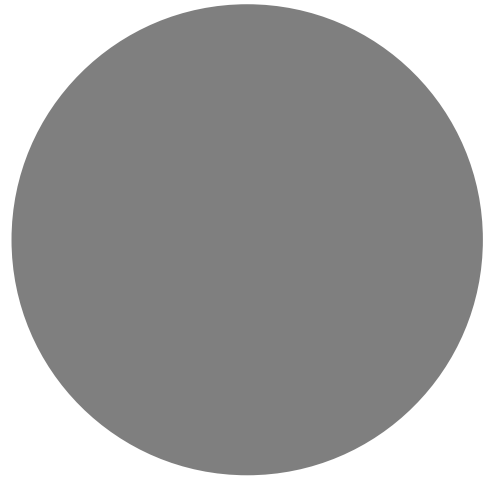
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Comment and compare

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Consensus estimate

<b>Definitely will not happen</b>	<b>Highly unlikely but not impossible</b>	<b>Very unlikely</b>	<b>Unlikely</b>	<b>Probably won't happen</b>	<b>May or may not happen</b>	<b>Could happen</b>	<b>Quite likely</b>	<b>Very likely</b>	<b>Highly likely but not definite</b>	<b>Definitely will happen</b>
0	10	20	30	40	50	60	70	80	90	100



Discussion

Questions and comments



# What happened to Debbie?

- Will Debbie's school attendance improve in the next 3 months? **Yes**
- Will Debbie's mother Rachel engage with alcohol support services in the next 3 months? **No**
- Will Debbie remain subject to a child protection plan for the next 6 months? **Yes**
- Will Debbie come into care at any point / for any duration of time during the next 6 months? **No**