

# Persistent overconfidence and memory

Cambridge Economics Alumni Webinar Series

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February 2022

- Collaboration with David Huffman and Collin Raymond

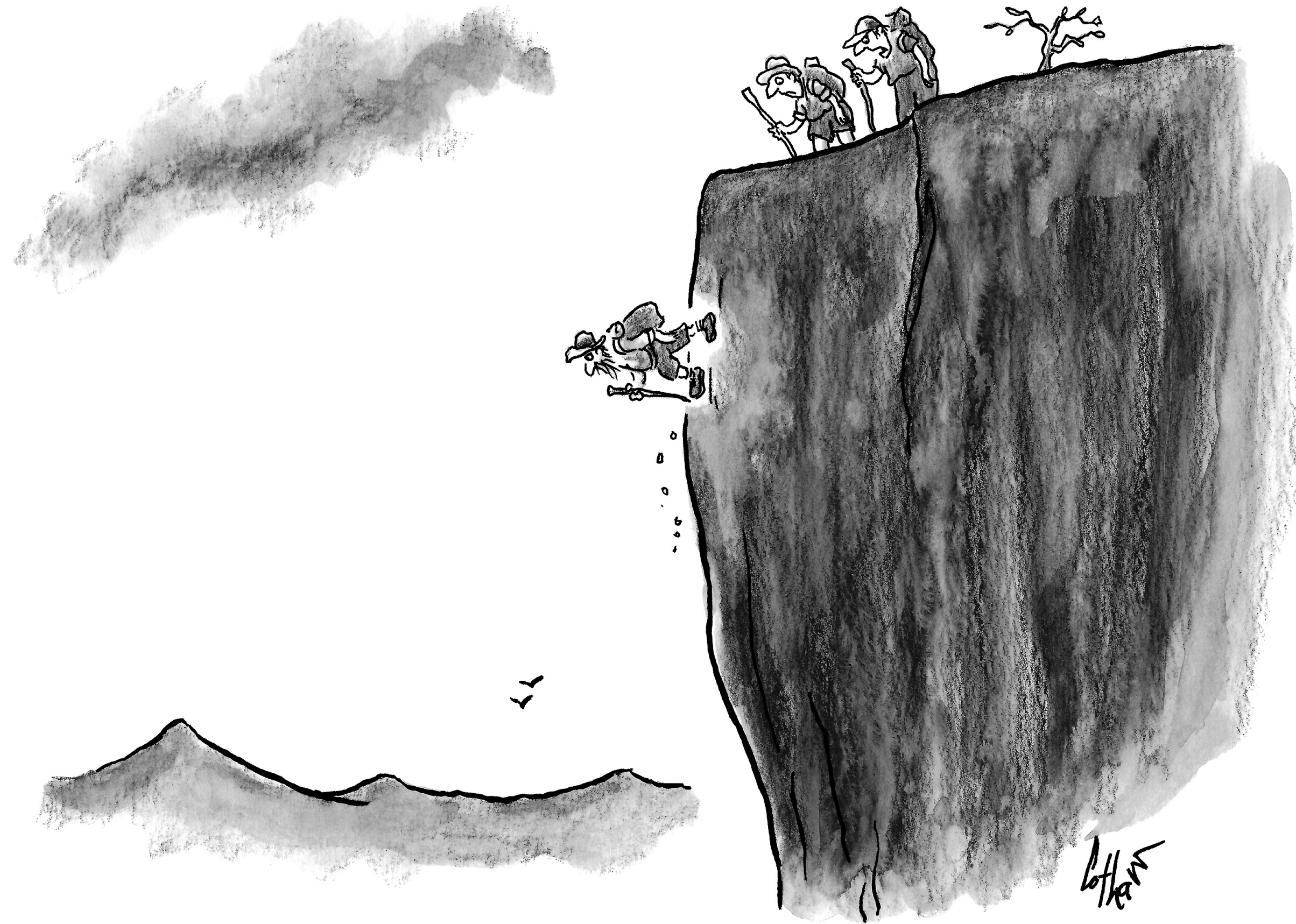


- and a large firm

- Funded by The Keynes Fund



# Overconfidence



*“Let’s not mistake his confidence for leadership.”*

# Overconfidence

**“The over-weening conceit which the greater part of men have of their own abilities, is an ancient evil remarked by the philosophers and moralists of all ages...”**

**Adam Smith, The Wealth of Nations**



# Overconfidence in the lab

- IQ tests
- Student volunteers



# Real world: Open questions

- Beyond experimental volunteers
- Things that matter
- Experience and feedback:
  - Does overconfidence persist?
  - If so, how come we don't learn?



# Real world: Open questions

- Beyond experimental volunteers
- Things that matter
- Experience and feedback:
  - Does overconfidence persist?
  - If so, how come we don't learn?



Source: xkcd.com



# We study

- Chain of food and drink stores
- Store managers
- Overconfidence about job performance
  - Central do daily life
  - Lots of experience
  - Lots of feedback





# Manager performance

- Bonus: quarterly competition
- Managers are ranked
- Ranking is public in the firm
- Feedback: nearly weekly



# Average manager

240 in total

2.5 years with the firm:

- 10 quarterly competitions
- 125 weeks of feedback



# Question 1

## Are managers realistic about performance?

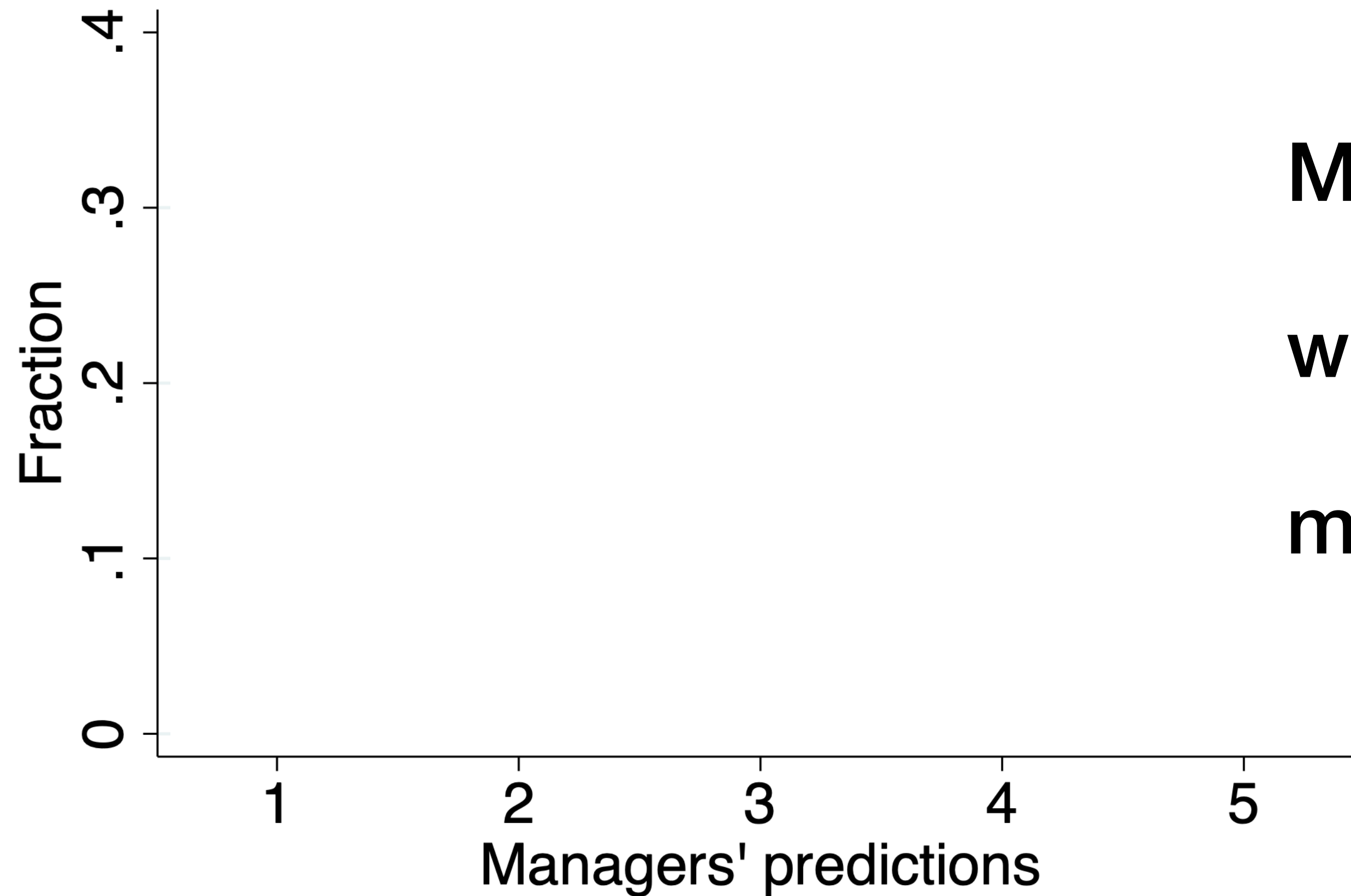
We asked managers to predict their rank

- end of the quarter (Q4 2015)
- quintile (top 20%, next 20%... )
- later, compare to actual
- paid them for getting it right
- results confidential



# Manager predictions

(5 = best quintile)



**Model:**

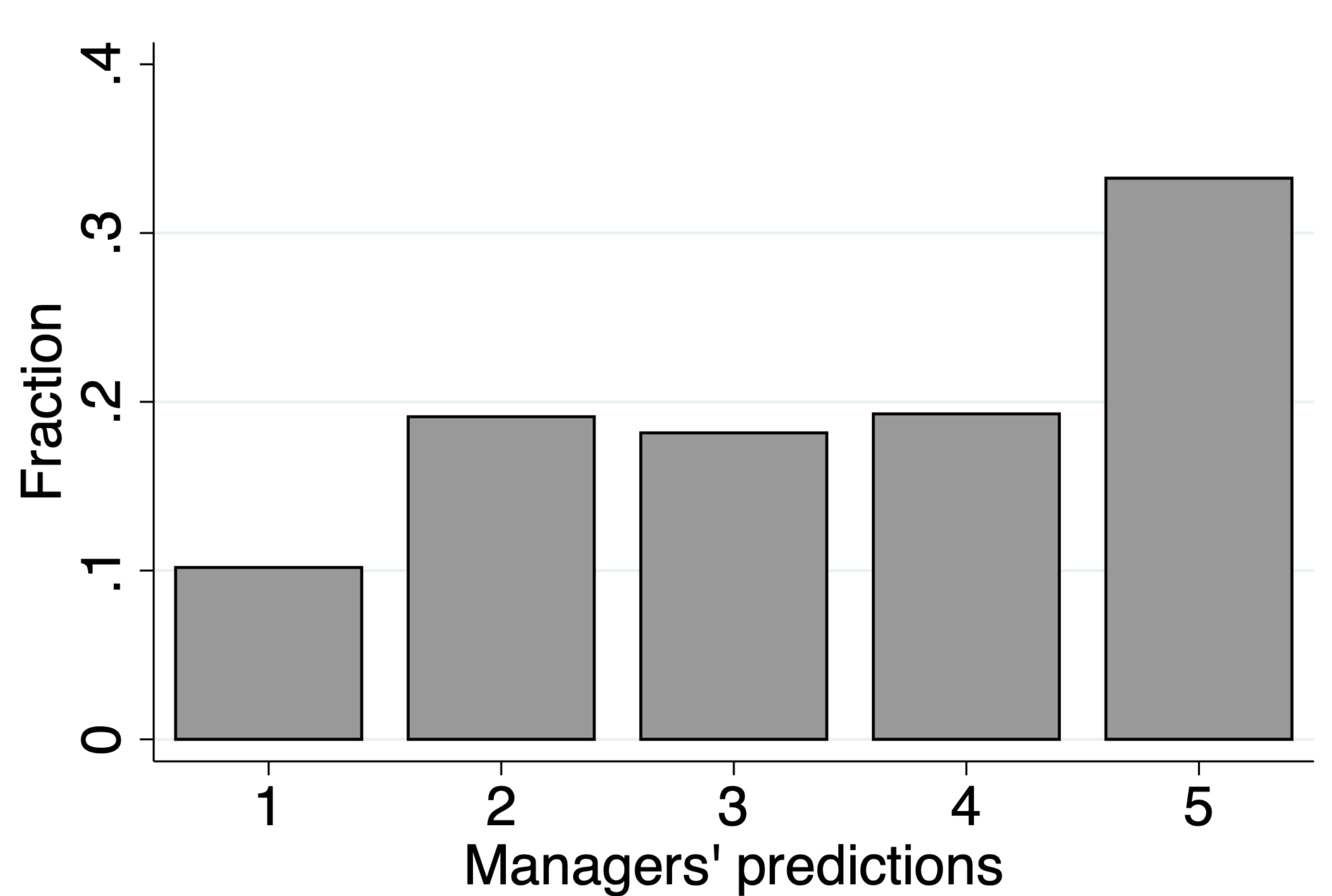
**with this much information,**

**managers should predict correctly.**



# Manager predictions

(5 = best quintile)



# Compare predications to actual

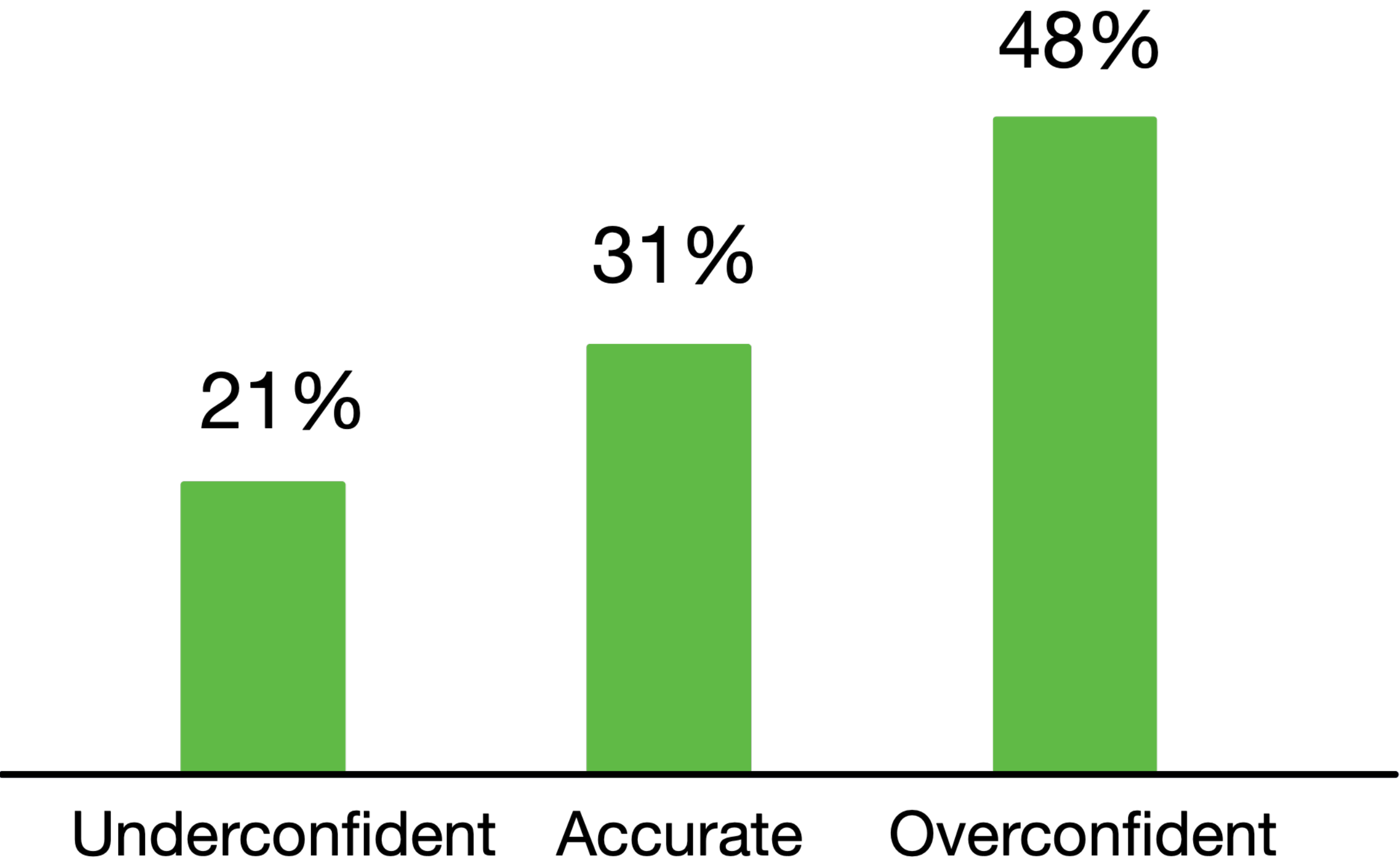
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Underconfident

Accurate

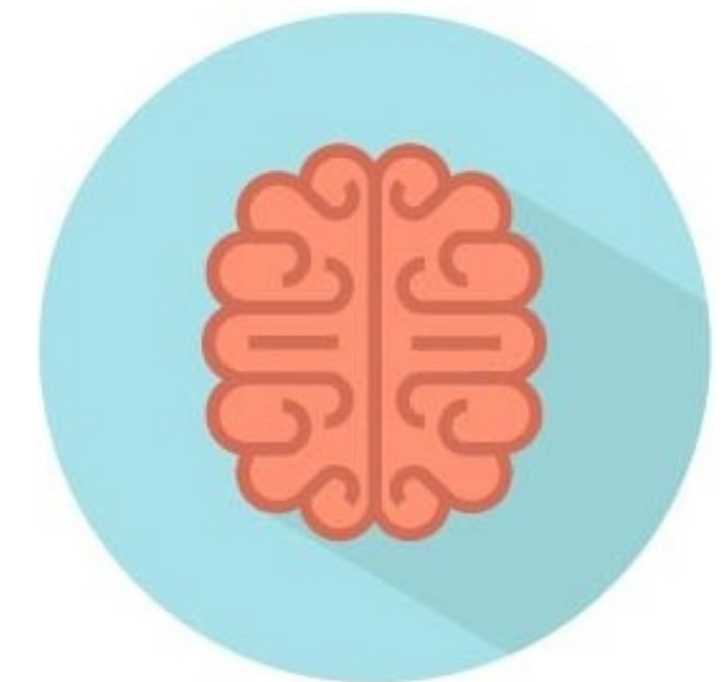
Overconfident

# Compare predications to actual



# Question 2

**What mechanism allows overconfidence bias to persist in the face of facts?**





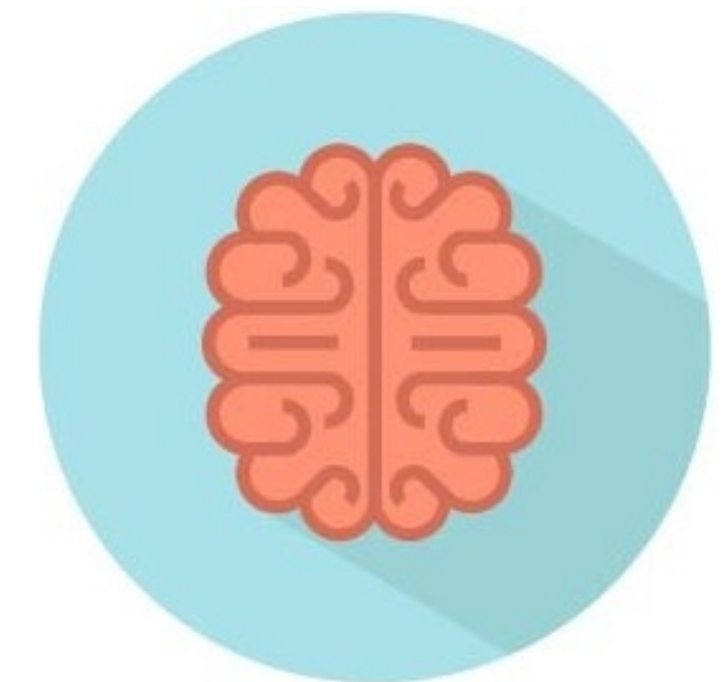
# Question 2

**What mechanism allows overconfidence bias to persist in the face of facts?**

Possible answer:

Selective memory (a.k.a Reality denial)

(Benabou 2015, Epley and Gilovich 2016, Benabou and Tirole 2016)

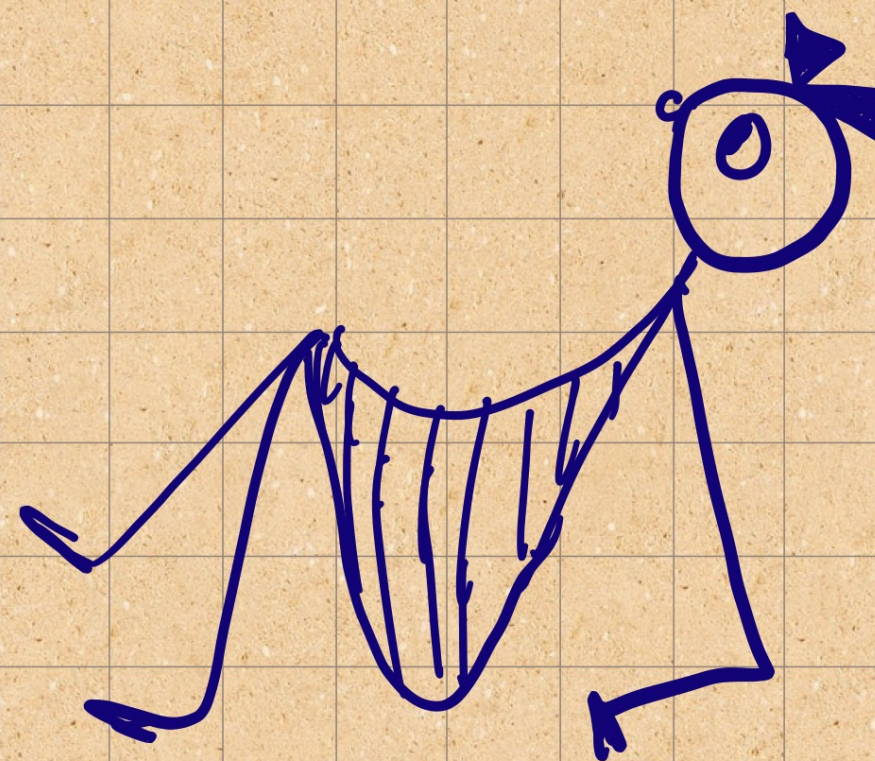




Yesterday



Today

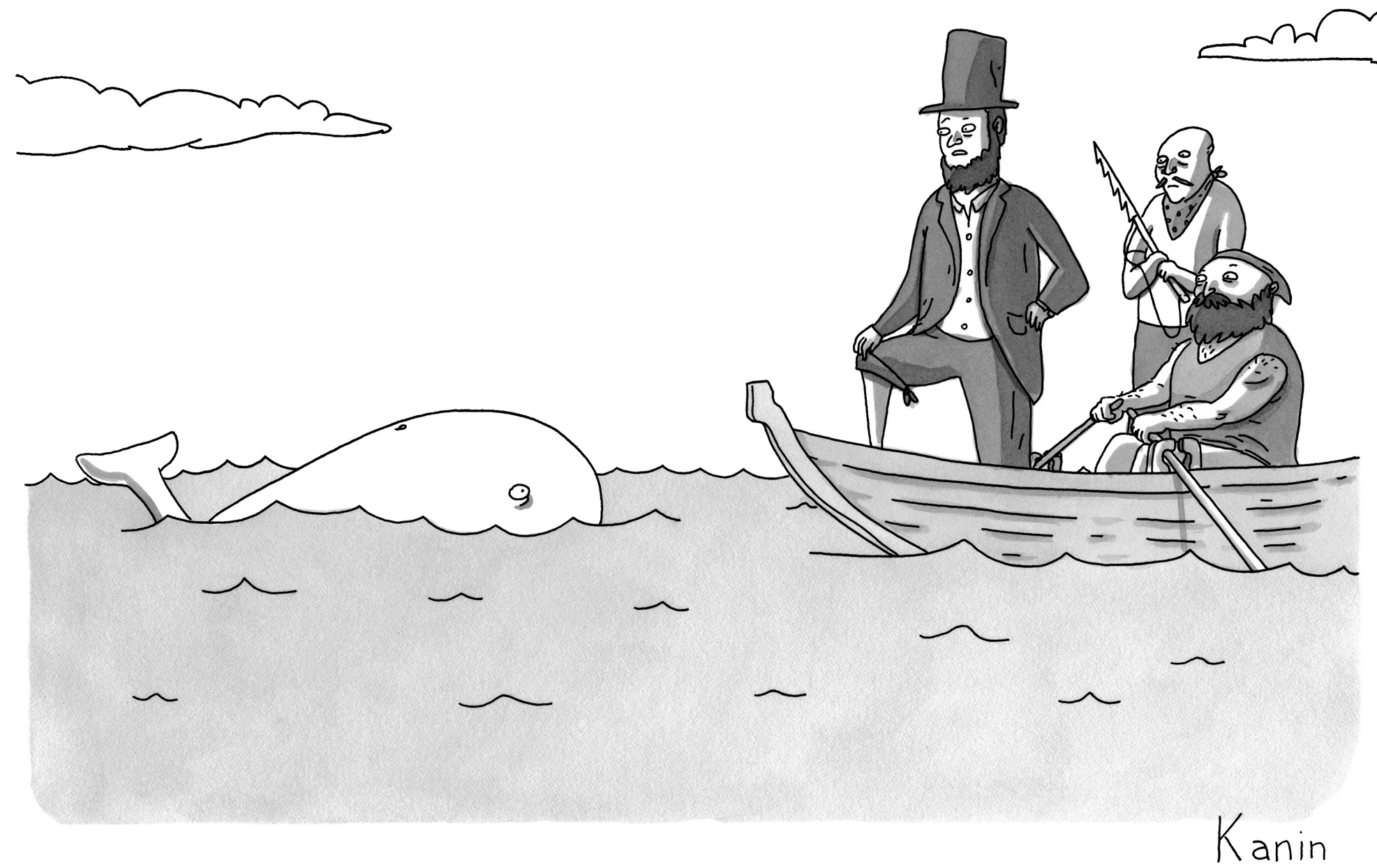




**We asked managers  
to *recall* their rank  
in the previous quarter**



# Results: Recall

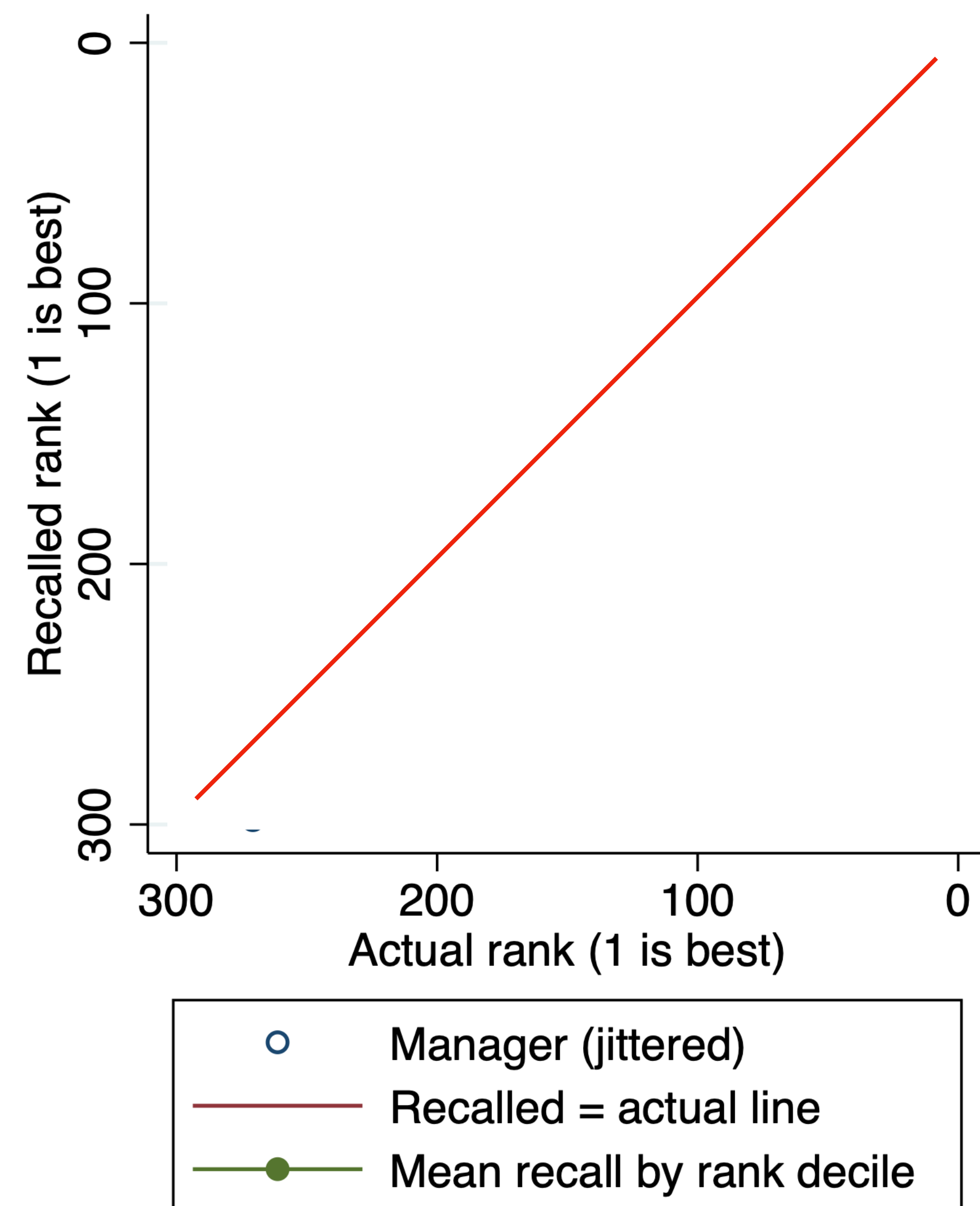


*“Hub. In my memory he was a lot bigger.”*

*Source: The New Yorker*

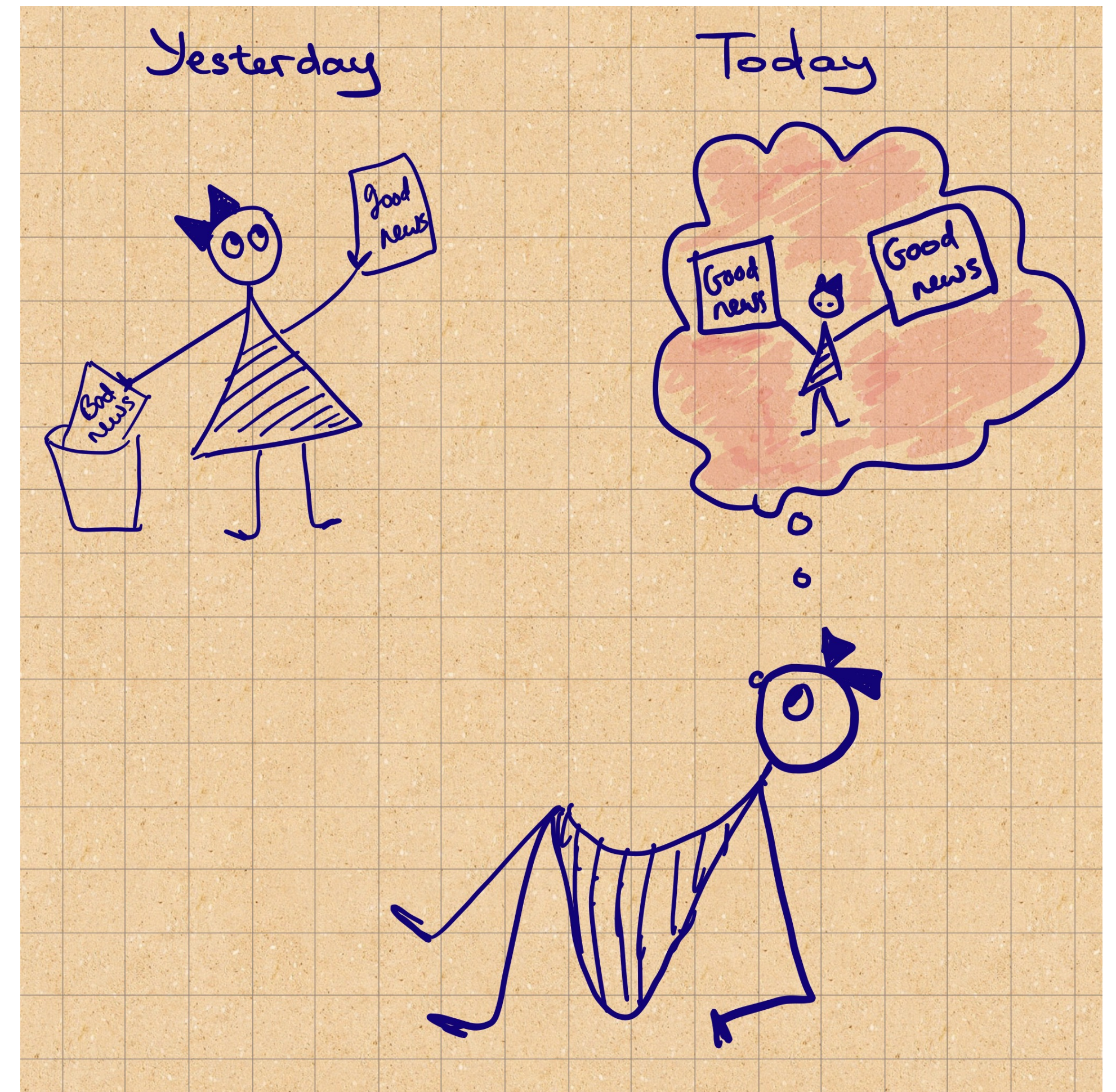
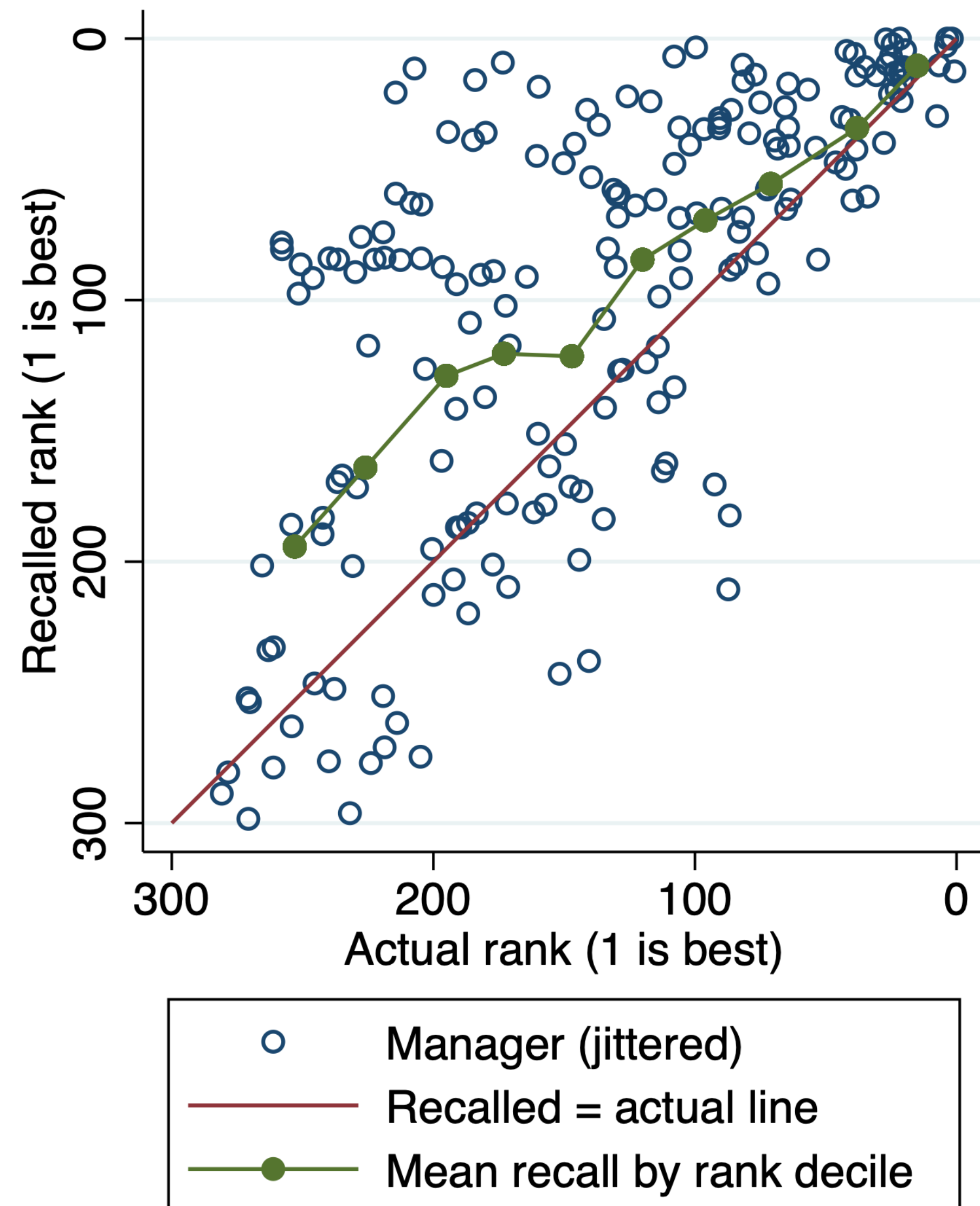


# Results: Recall





# Selective memory





# Our results so far

As a group, managers are:

1. Overconfident
2. Have selective, flattering memories

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The final step:

- 1 and 2 are linked at individual level





# Summary

1. One of first pieces of systematic evidence for overconfidence in the workplace
2. Overconfidence persists despite information
3. Selective memory helps maintain overconfidence

# Implications

- Feedback role
- Rank matters  
(Raymond & Shvets, 2020)
- ‘Benefit’ of overconfidence



*Source: The New Yorker*

# More implications

- Economists should continue to take psychology seriously
- Collaboration between firms and academics can bring big insights

# Thank you

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