Persistent overconfidence and memory

Cambridge Economics Alumni Webinar Series

Dr Julia Shvets
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- Collaboration with David Huffman and Collin Raymond
- and a large firm
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Overconfidence

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

Source: The New Yorker; Artist: Frank Cotham
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

Source: University of Pittsburg Experimental Laboratory
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

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- Experience and feedback:
  - Does overconfidence persist?
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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

| Underconfident | Accurate | Overconfident |
Compare predictions to actual

- Underconfident: 21%
- Accurate: 31%
- Overconfident: 48%
Question 2

What mechanism allows overconfidence bias to persist in the face of facts?
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Possible answer:

Selective memory (a.k.a Reality denial)

(Benabou 2015, Epley and Gilovich 2016, Benabou and Tirole 2016)
We asked managers to *recall* their rank in the previous quarter.
“Hub. In my memory he was a lot bigger.”

Source: The New Yorker
Results: Recall

![Graph showing recall vs. actual rank.](image)
Selective memory

![Graph showing recalled rank vs. actual rank (1 is best).]

- Manager (jittered)
- Recalled = actual line
- Mean recall by rank decile

![Illustration showing Yesterday and Today with good news messages.]

- Yesterday
- Today

Good news
Good news
Good news
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

ts591@cam.ac.uk
Julia Shvets