



Why great doctors make great leaders

Dr Amanda Goodall



**You may have noticed that
experts have become
rather unpopular recently**



“These smug pilots have lost touch with regular passengers like us. Who thinks I should fly the plane?”



The rise in populism





Conservative MP Michael Gove, Secretary of State for Environment
Senior member of government and the Brexit team



Politicians find it harder to deal with experts



**We only listen to experts
when we have to**





**I hope today that I can leave you
with the impression that we need
our best experts to lead and
manage our organisations**



What I will present

1. The case for 'expert leadership' from different settings
2. Why doctors might make better leaders
3. Evidence from Danish doctors



How much core-business knowledge should leaders have?



■ Does it matter to the performance of Mercedes-Benz that the head of the company trained as an engineer, has a PhD and worked in the company most of his career?





■ How important is it that the Director of Nursing is a celebrated nurse who has had a successful clinical career?



Does it matter that the CEO of a hospital is a doctor as opposed to a non-medically trained manager?

Mayo Clinic **CEO, President**



Gianrico Farrugia, M.D.
Gastroenterology

Mayo Clinic contributes \$28 billion to US economy

Cleveland Clinic **CEO, President**



Tomislav Mihaljevic, M.D.
Cardiothoracic surgeon

Cleveland Clinic's revenues \$8.4 billion in 2017

Why are the most successful consulting firms (Deloitte, E&Y, KPMG, PWC) led by their best consultants?

Engelbert joined Deloitte in 1986 and has since worked her way up

Catherine Engelbert,
CEO Deloitte





THE KEY IDEA



‘Expert leaders’

Successful leaders are those who have a deep understanding of the core business of their organization



‘Expert leaders’

**Being a capable general manager
alone is not sufficient**



**Now let's take a quick run
through the evidence for
expert leadership**



Research universities



Goodall, A.H. Research Policy, 2009



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My research question was



Who should lead research universities?



Who should lead research universities?

Good managers?

Good scholars?



My key findings

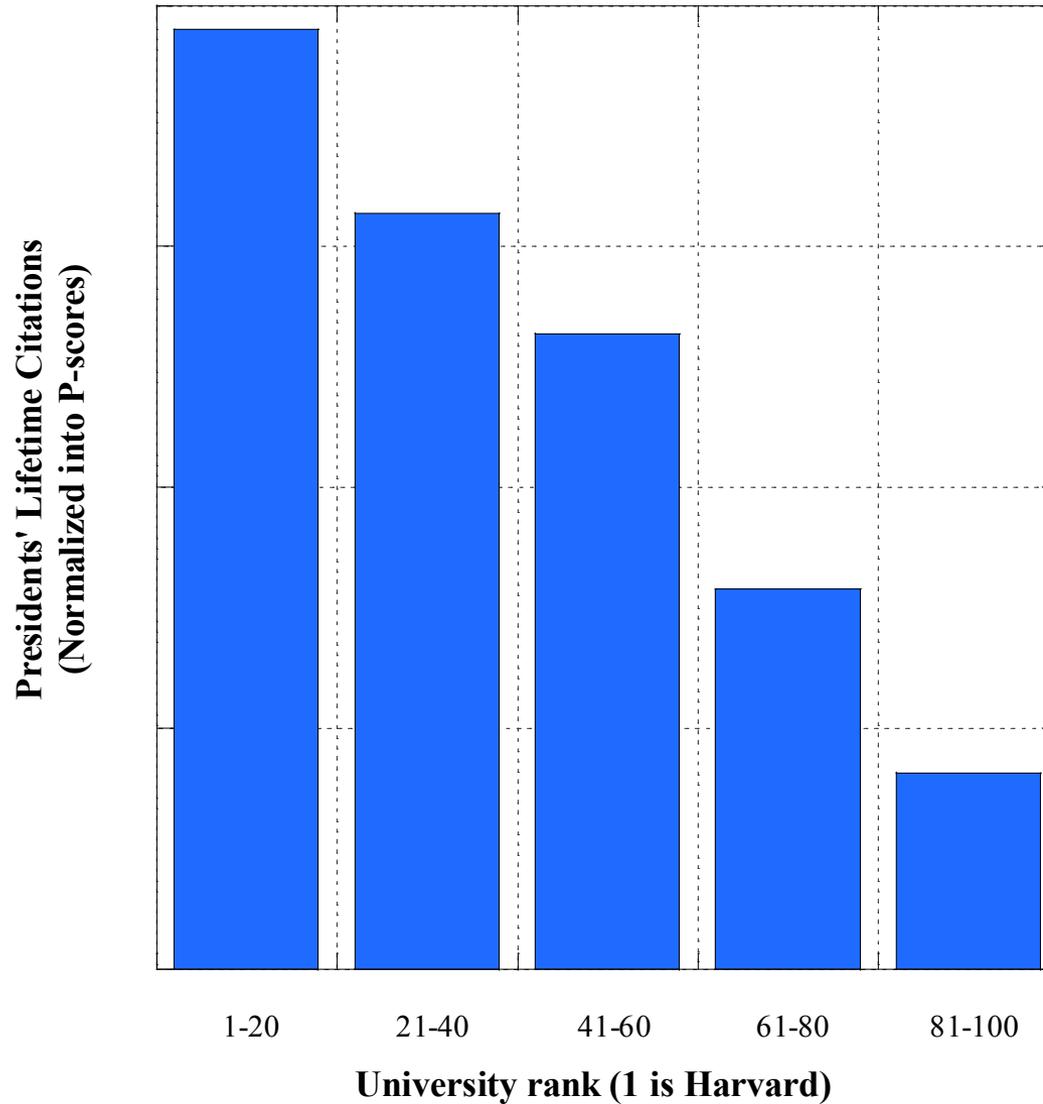
- 1. The best universities are led by top scholars**



My key findings

- 1. The best universities are led by top scholars**
- 2. Top scholars seem to improve the later performance of their university**

A Cross-Tabulation of Presidents' Lifetime Citation P-scores by World University Rank (in quintiles)





**The findings are
statistically significant**



What evidence is there that scholar-leaders improve performance?



In part 2 of my study

- I look at the performance of a university 10 years after a leader is hired
- I use multiple-regression equations to control for other variables



Conclusion

The higher a president's lifetime citations, the more likely it was that their university improved its research performance

SOCRATES
in the
BOARDROOM



*Why Research Universities
Should Be Led by Top Scholars*

AMANDA H. GOODALL

Princeton University Press, 2009



The next step was

To go inside universities ...

Heads of Academic Departments



Do Economics Departments Improve After They Appoint a Top Scholar as Chairperson? with John M. McDowell & Larry D. Singell. 2017 in Kyklos

Do Economics Departments Improve After They Appoint a Top Scholar as Chairperson?



We look at the change in performance of 58 US economics departments over 15 years



After adding controls for Chairs' characteristics and institutional factors, we find ...



We found that departments go on to improve when they are led by Chairs whose own research is well cited



**In which other settings
have we identified the
'expert leader' finding?**



Why Do Leaders Matter? A Study of Expert Knowledge in a Superstar Setting, with Lawrence M. Kahn and Andrew J. Oswald, Journal of Economic Behavior & Organization, 2009.

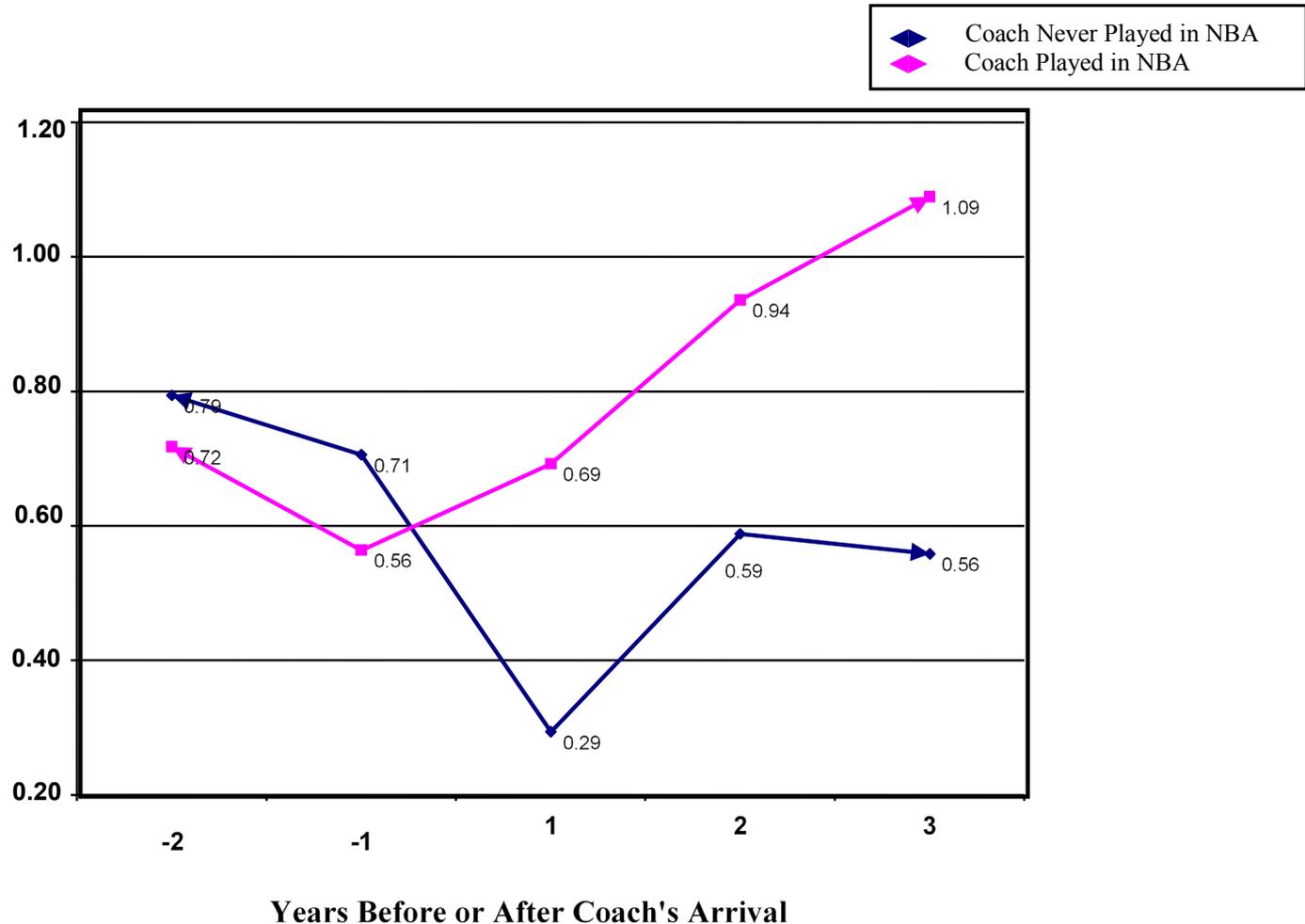
Professional basketball

- Work with with Lawrence Kahn (Cornell Univ) and Andrew Oswald (Warwick Univ)
- In longitudinal data we used information from 15,000 basketball games
- We controlled for a number of factors (team payroll, position played, etc)



- We found that star basketball players make better basketball coaches
- Basketball teams in the NBA won more games if led by coaches who were star players or had long playing careers

Team Playoff Success Before and After Arrival of New Coach (2 year moving average)



Notes to Figure: 1=average of first and second year after new coach is hired, etc. Playoff success takes on 5 values: 0=missed playoffs; 1=lost in first round; 2=lost in second round; 3=lost in third round; 4=lost in finals; 5=won championship. For negative years, values are the average of that year's playoff success and the previous one; for positive years, values are the average of that year's playoff success and the subsequent one.



Expert Leaders in a Fast-Moving Environment, with Ganna Pogrebna, Leadership Quarterly, 2015.



Formula 1 racing

In work with With Ganna Pogrebna.

We examine the performance of every team in the six decades of Formula 1 championships between 1950 and 2011



Formula 1 racing

After adjusting for a number of factors, we find that the most successful team leaders in F1 motor racing are more likely to have started their careers as drivers



Ten years driving experience was equal to a 16% higher probability that the leader's team gained a podium position (1-3)



What about Football?



The managers of the 92 clubs in the Premier League and English Football League played an average of 16 years in senior clubs



Pep Guardiola at Barcelona
Regarded as one of the best
midfielders of his generation



**Possibly the best
manager in the world**

TRANSFORMED BY PEP GUARDIOLA





Arsene Wenger



Jose Mourinho



Arsene Wenger



Jose Mourinho

ARE OUTLIERS



gw0212006 [18] (c) www.vivaalphotos.com





**We know management
practices are important for
hospital performance**

There is a strong relationship between management practice and health outcomes*

UK heart attack mortality rates relative to national mean



Van Reenen, J., Bloom, N., & Sadun, R. 2014. Does management matter in healthcare? 1–51. Working paper, Stanford University.

Van Reenen et al. (2014) examine data on good management practices.



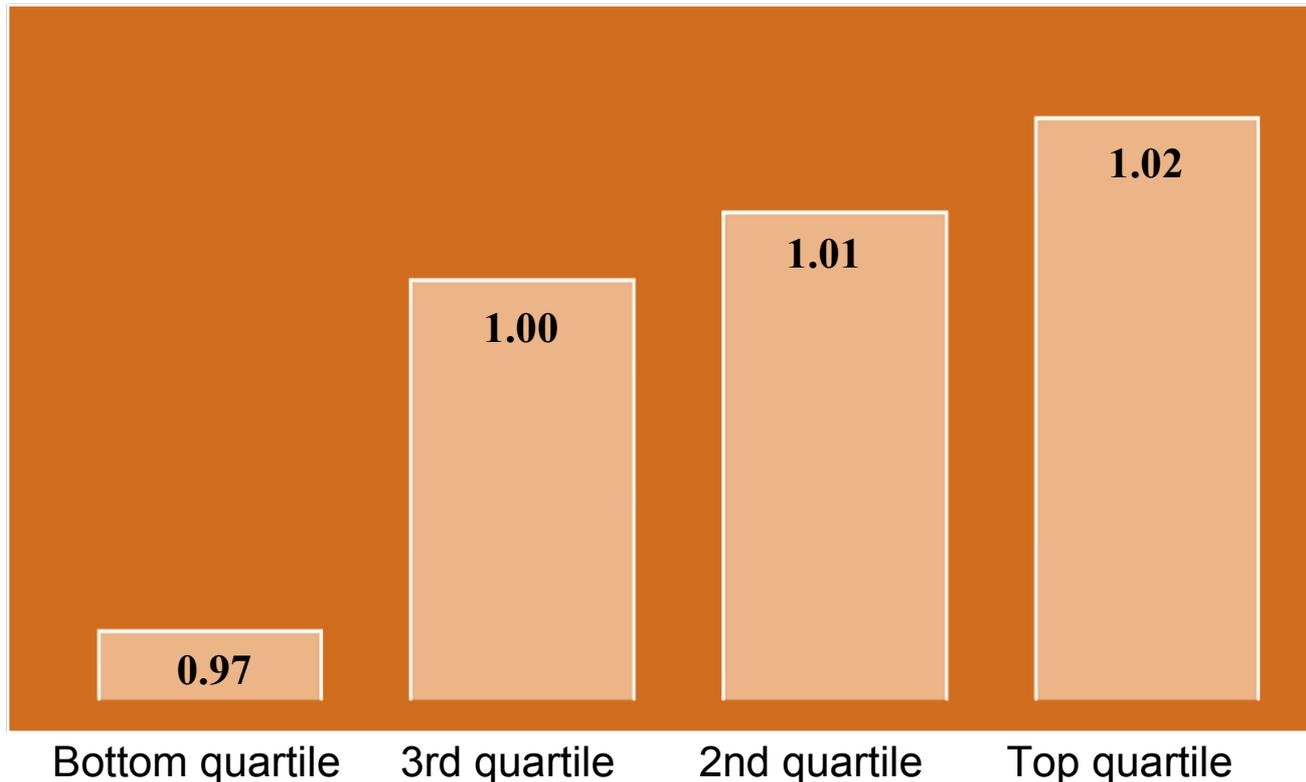
They found that it was the proportion of managers with a clinical degree that was positive and significant in almost all specifications



The separation of clinical and managerial knowledge inside hospitals was associated with worse management

Hospitals with more clinicians as managers have better management*

Management score relative to national mean (in 1,200 hospitals across 7 countries)



Proportion of senior managers with a clinical degree

*Graph reproduced from John Van Reenen, Nick Bloom, & Raffaella Sadun.



In my study I asked a simple question:

**Are hospitals ranked higher
when they are led by doctors or
professional managers?**

Goodall, A.H. Social Science and Medicine, 2011



My data

- **US Hospital ranking 'America's Best Hospitals' 2009 by *US News & World Report* (USNWR)**



My data

- **US Hospital ranking 'America's Best Hospitals' 2009 by *US News & World Report* (USNWR).**
- **CEOs in the top-100 hospitals in three specialisms: Cancer, Digestive Disorders, and Heart & Heart Surgery**



My data

- I separate the hospital CEOs – physicians or non-clinical professional managers?
- As a proxy for size of hospital, the study includes a variable for the number of beds in each of the 100 facilities



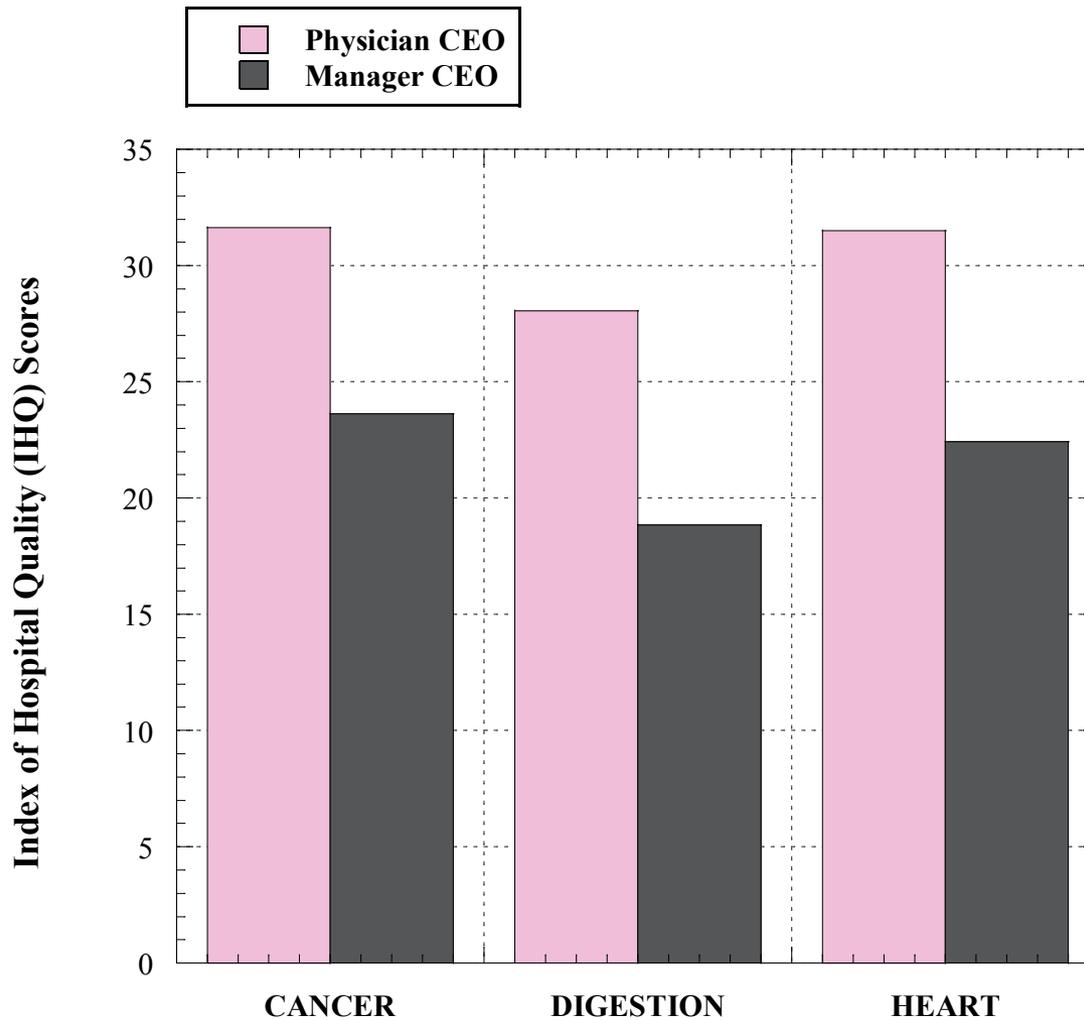
My results



My results

- **There is a positive cross-sectional association between hospital performance and physician-leadership ($P < 0.001$)**
- **This remains significant after controlling for potential confounders: hospital size and university affiliation**

Mean Index of Hospital Quality (IHQ) Score of Hospitals Led by Physician CEOs and Manager CEOs in Three Specialty Fields





The size of the effect

Hospital quality scores are approximately 25% higher in physician-run hospitals



A recent study builds substantially on my early paper

**Tasi, M. C., Keswani, A., & Bozic, K. J.
(2017) Does physician leadership affect
hospital quality, operational efficiency,
and financial performance? Health Care
Management Review**

Tasi et. al. (2017) examine whether hospital systems led by physicians are associated with **better quality ratings, financial performance, and operating efficiency** compared with those led by non-physician managers



Tasi et. al. (2017) found

- 1. Hospitals systems (n=115) that were physician-led had higher quality ratings across 12 medical specialties**
- 2. They also had more inpatient days per hospital bed than did non-physician-led hospitals**



Tasi et. al. (2017) found

- 3. There were no differences in the total revenue or profit margins between the groups**

The analysis included 34 physician-led hospitals and 81 non physician-led hospitals

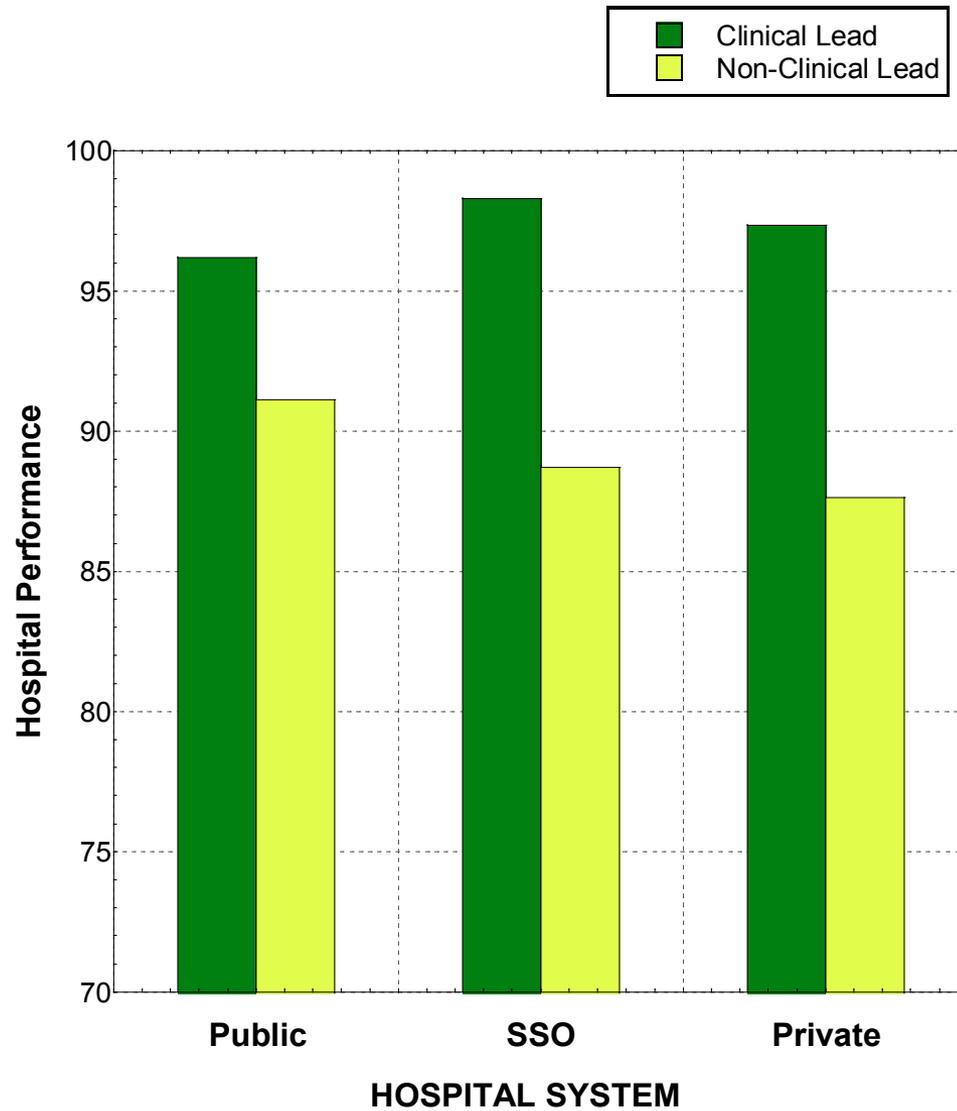


**In new work with two Iranian co-authors
Edris Kakemam & Mobin Sokhanvar**

- **Data include senior managers in 72 general hospitals in Tehran in 2015 & 2016**
- **Hospitals include public, private & NGOs (Social Security Organization)**
- **Hospital senior executives were divided into two groups: clinical and non-clinical managers**



Mean Performance Score of Hospitals led by Clinical Leaders and Non-Clinical Leaders



**Harvard
Business
Review**

Why The Best Hospitals Are Managed by Doctors

James K. Stoller, Amanda Goodall & Agnes Bäker

HBR (digital article) December 27, 2016





OTHER FINDINGS



Cass Business School
CITY UNIVERSITY LONDON

Clinicians on the board: what difference does it make?

Veronesi, Kirkpatrick & Vallascas in Social Science & Medicine 2013





Clinicians on the board

- Their paper uses UK data.
- It has information on the board membership of 57 English hospital trusts.
- Doctors represent on average 14% of board members while nurses and the other allied professions account for 12%.





Veronesi, Kirkpatrick & Vallascas find ...

That hospital trusts perform better when they have a larger proportion of clinicians on the board

The effect was largest for doctors compared with number nurses and other professionals





These findings don't mean that EVERY doctor or basketball player or lawyer is going to be a good leader

But on average this pattern is found and is reliably statistically significant after controlling for many factors



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Naturally ...

Being a doctor (or scientist, lawyer or engineer) is not a proxy for having management experience or leadership skills

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Leadership and management training is critical and it is now widely recognized as being important

At Cass we have developed a leadership Masters program exclusively for doctors

Our part-time degree is the only one currently in the UK targeting doctors



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Executive Education

Executive Masters in Medical Leadership

This two-year part-time degree has been designed exclusively by Cass researchers to train doctors in leadership and management.



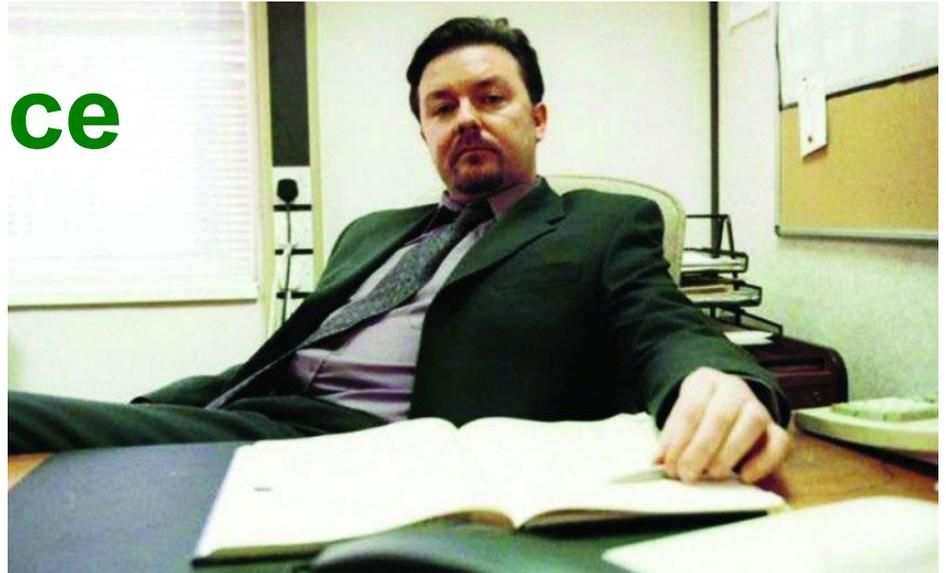
Is this 'expert leader' finding only relevant in settings with doctors, scientists and other professionals?



Is this 'expert leader' finding only relevant in settings with doctors, scientists and other professionals?

No

Boss Competence and Worker Well-Being



**Boss Competence and Worker Well-Being,
Industrial and Labor Relations Review, (2016)
with Ben Artz and Andrew Oswald**



In a random sample of 35,000 UK and US employees matched to their firms, we found that the single strongest predictor of job satisfaction is boss competence or expert leadership



The research identified three critical influences on job satisfaction

- 1. When employees were managed by a supervisor who could perform the employee's job**
- 2. If the line-manager worked his or her way up the company or started it**





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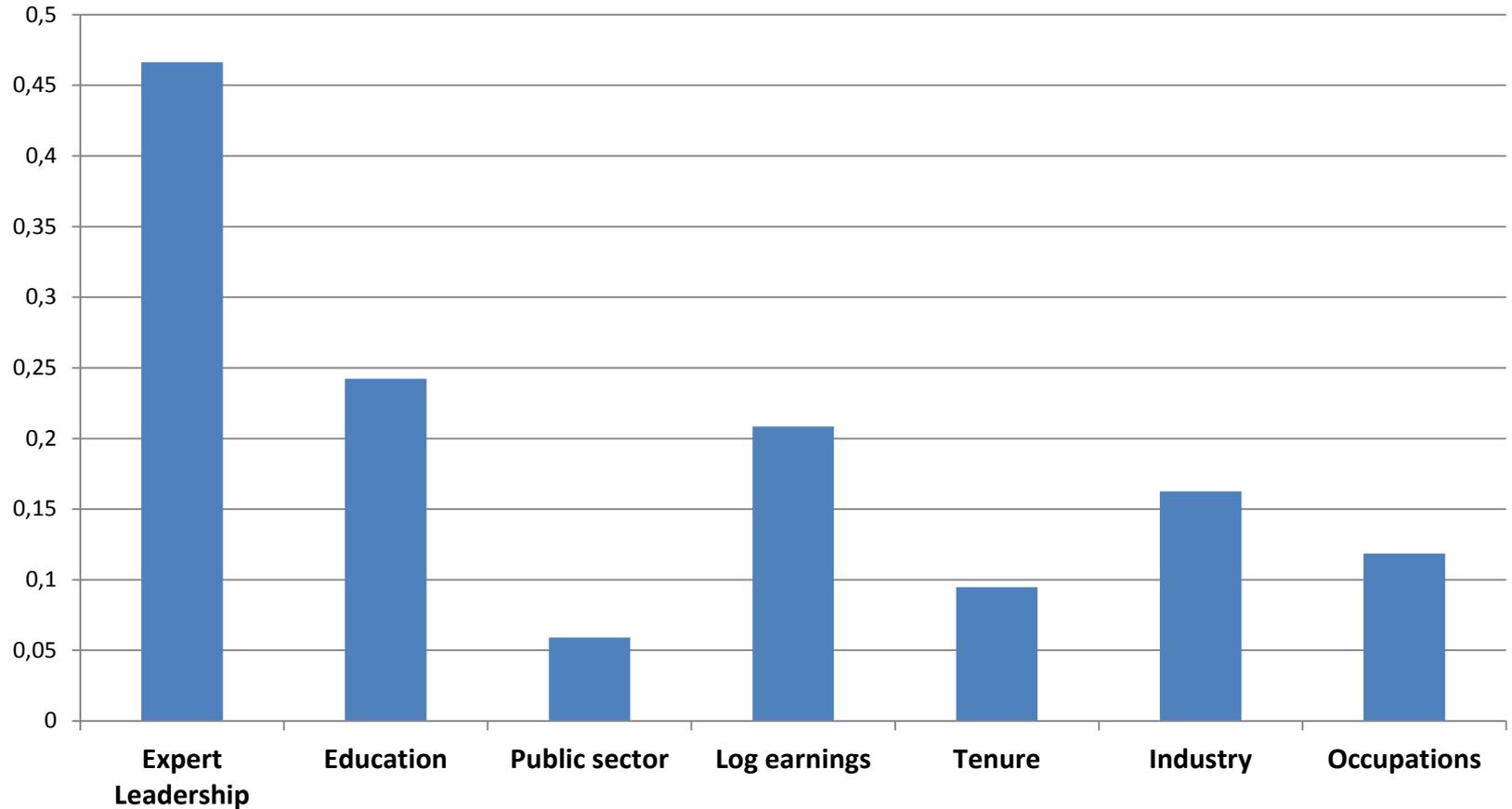
1. When employees were managed by a supervisor **who could perform the employee's job**
2. If the line-manager **worked his or her way up the company or started it**



3. A supervisor's level of technical competence, as judged by his or her employees

All three of these are predictive of substantially greater levels of happiness among employees

Longitudinal effects on job satisfaction



Note: values are computed by differencing the effects at the 10th percentile from the 90th percentile of each variable. The public sector value is the difference in effect between the public sector and private sector, the tenure value corresponds to differencing the 90th percentile from the 10th percentile, and the education value is the difference in effect between a college degree and a high school dropout.

Artz, Goodall & Oswald, 2016. Fixed-effects estimates; US data.

If Your Boss Could Do Your Job, You're More Likely to Be Happy at Work

Benjamin Artz , Amanda Goodall & Andrew J. Oswald

HBR (digital article) December 29, 2016





**We believe
employee job
satisfaction
explains a lot
our expert
leader finding**

Healthcare workers' well-being is linked to patient outcomes



DOCTOR I'M TIRED ALL THE TIME

**Job satisfaction and
worker well-being are
important to individual
and organisational
productivity**

Organizational Climate and Company Productivity: The Role of Employee Affect and Employee Level M. Patterson, P. Warr, M. West, JOURNAL OF OCCUPATIONAL AND ORGANIZATIONAL PSYCHOLOGY, 2004

Does the Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices A. Edmans, JOURNAL OF FINANCIAL ECONOMICS, 2011

The Link Between Job Satisfaction and Firm Value, with Implications for Corporate Social Responsibility A. Edmans, ACADEMY OF MANAGEMENT PERSPECTIVES, 2012

Leadership Behaviour of Nurse Managers in Relation to Job Satisfaction and Work Climate S.F. Sellgren, G. Ekvall, G. Tomson. JOURNAL OF NURSING MANAGEMENT, 2008

Happiness and Productivity A. J. Oswald, E. Proto, D. Sgroi, JOURNAL OF LABOR ECONOMICS, 2015

The Job Satisfaction-Productivity Nexus: A Study Using Matched Survey and Register Data. P. Bockerman, P. Ilmakannus. INDUSTRIAL AND LABOR RELATIONS REVIEW, 2012



**University of
Zurich^{UZH}**

**In research with Agnes Bäker
we looked further into the effect
of bosses (line managers) in
different settings**

- 
- We surveyed 600 faculty reporting on their department Chair in UK and Swedish research universities



In medicine

- 350 doctors reporting on their immediate manager (also a doctor) in **3 Zurich hospitals**
- 270 doctors in **South Australia** reporting on their immediate manager (also a doctor)
- 285 doctors in training from **Wessex Deanery** reporting on their immediate manager (also a doctor)



4 countries, 4 data sets, 1 story

In these four studies, if respondents reported that they had an immediate manager (a line manager) who is an 'expert leader'



Academics reporting that their department Chair is a highly-rated researcher

Doctors reporting that their immediate manager is a highly-rated clinician



**These academics and doctors
were also more likely to report
high job satisfaction and low
intentions to quit**

The competence of your boss will determine your job satisfaction!





Companies now understand the value of happy workers





**Companies now understand
the value of happy workers**



BEST PLACES *to work* 2017 **Employees' Choice**

The Sunday Times Best 100 Companies



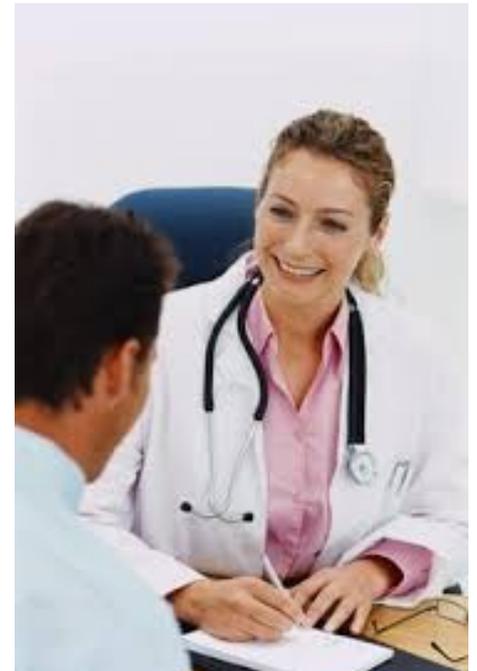
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Theory of Expert Leadership (TEL)

So how do expert leaders influence the **job satisfaction** and **quit intentions** of employees?



**Our evidence suggests
it happens through the
people practices of the
line manager and the
work environment that
expert leaders create**



Managers who are expert leaders are more likely to ...

(From Survey evidence)



Give better feedback



Are more consultative



Understand the work



**Managers are rated as
a 'good leader'**



Morale is rated as 'excellent'

**The Zurich
doctors also
reported that**



**They have trust
in the hospital's
management**



**Feel safe from
bullying**



My work is available at
www.amandagoodall.com