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

“I think people in this country have had enough of experts.”
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
Successful leaders are those who have a deep understanding of the core business of their organization.
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
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-leading improves 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?
Professional basketball

- Work 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.
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.
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
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
Arsene Wenger  

Jose Mourinho  

ARE OUTLIERS
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 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)

![Bar chart showing the proportion of senior managers with a clinical degree by quartile.](chart.png)

- Bottom quartile: 0.97
- 3rd quartile: 1.00
- 2nd quartile: 1.01
- Top quartile: 1.02

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
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.
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

- Cancer
- Digestion
- Heart
Hospital quality scores are approximately 25% higher in physician-run hospitals.
A recent study builds substantially on my early paper

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

![Graph showing mean performance scores for hospitals led by clinical and non-clinical leaders.](chart.jpg)
Why The Best Hospitals Are Managed by Doctors

James K. Stoller, Amanda Goodall & Agnes Bäker

HBR (digital article) December 27, 2016
OTHER FINDINGS
Clinicians on the board: what difference does it make?

Veronesi, Kirkpatrick & Vallasca 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 & Vallaschas 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
Naturally …

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

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


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

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)
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
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 and feel safe from bullying.
My work is available at www.amandagoodall.com