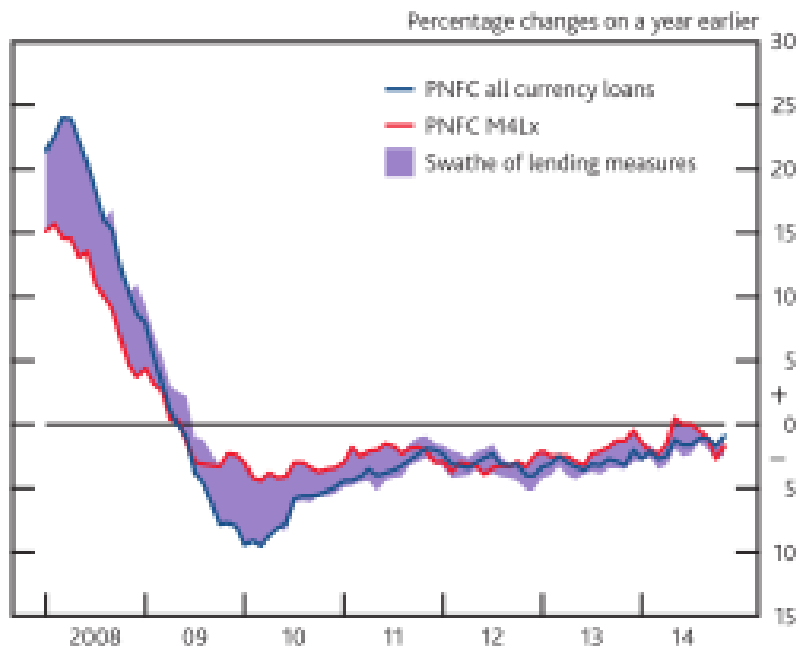


FINDING FINANCE

Can psychometric testing be used to explain,
predict and measure entrepreneurial funding
resource orchestration?

DR GEOFF PARKES, PROFESSOR MARK HART, PROFESSOR
JOHN RUDD
ASTON BUSINESS SCHOOL

BACKGROUND



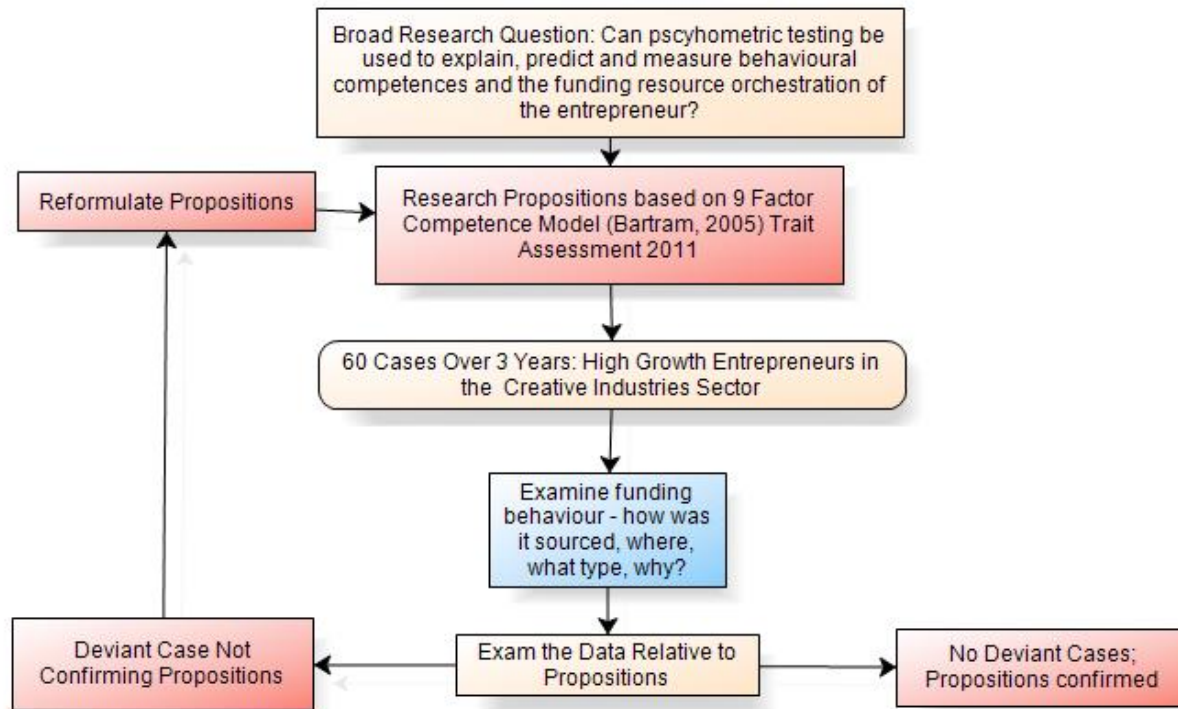
Lending to UK Businesses 2008-2015

- Collapse of Lending in the period
- Rate of Decline Reduced
- Prices unchanged
- Improvement expected in all but SME's in 2015

THEORETICAL BACKGROUND AND EMPIRICAL FINDINGS: SUMMARY

- Information Asymmetry (Cummings et al 2013)
- Supply – Demand Side of Market failure (Mueller, 2012)
- Focus on the Entrepreneur (Sarasvathy, 2004;)
- Pecking Order Theory (Myers, 1984); Funding Escalator (Berger & Udell, 1998)
- Relationships (Howorth et al 2007); Managerial Choice (Changati, 1990)
- Personality and Traits (McClelland, 1961)
- *‘No relationship between personality and entrepreneurship (Gartner, 1988)*
- Reconsidered (Rauch et al 2007); Five Factor Model (Goldberg. 1990)
- Behaviour: Great Eight Model of Competences (Bartrum 2002)
- *‘a paucity of empirical research and lack of conceptual clarity on entrepreneurial behaviour (Bird and Schjoedt 2009)*

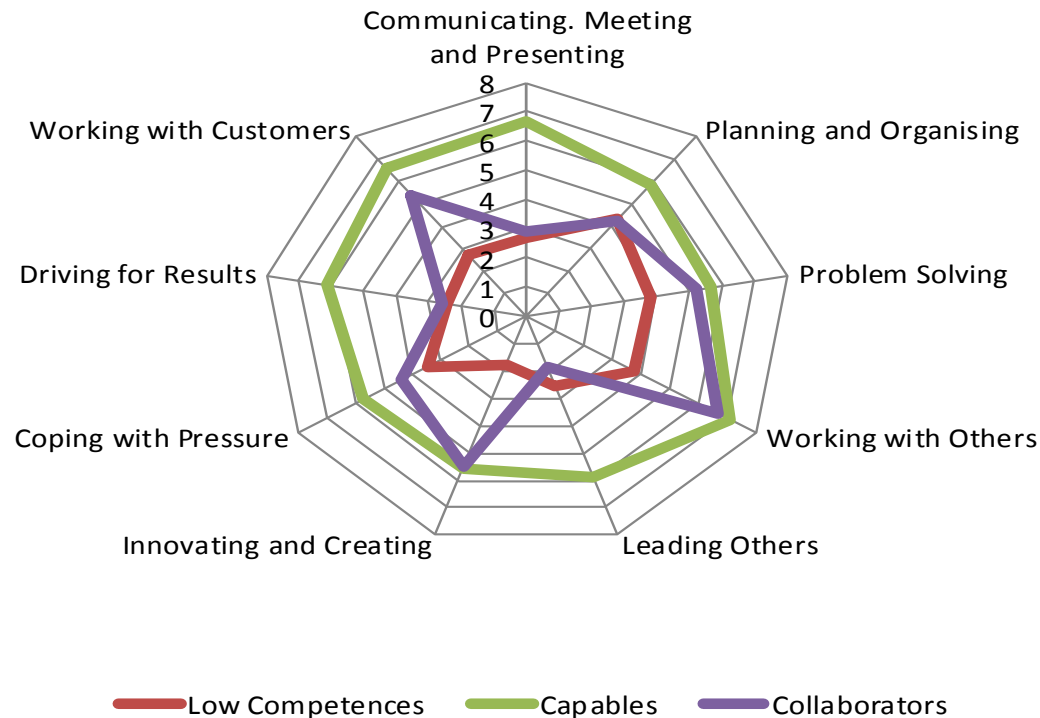
QUALITATIVE METHODOLOGY: Analytic Induction



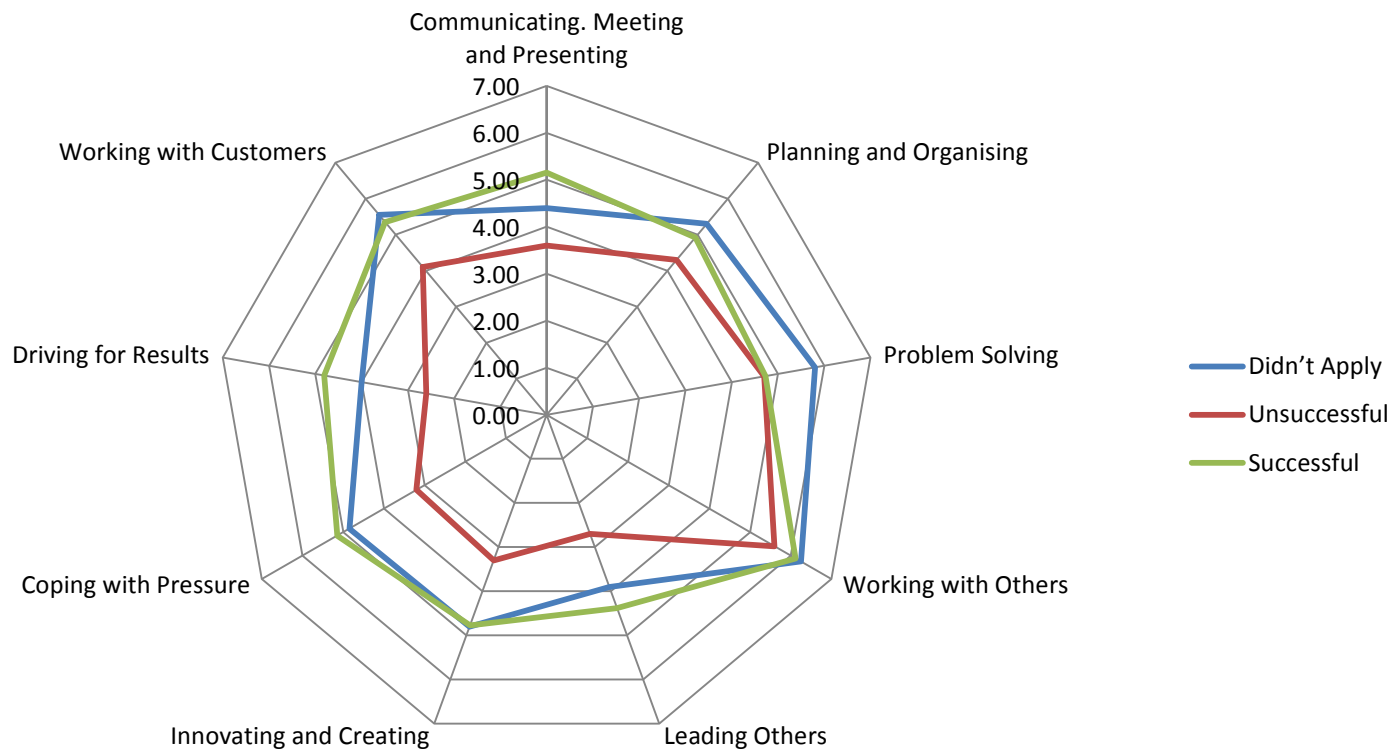
- **Behavioural Competences**
- Communicating
- Planning
- Problem Solving
- Working with Others
- Innovating
- Coping with Pressure
- Driving for Results
- Working with Customers

BEHAVIOURAL COMPETENCES: 3 CLUSTERS

Sixty Cases: Behavioural Competences

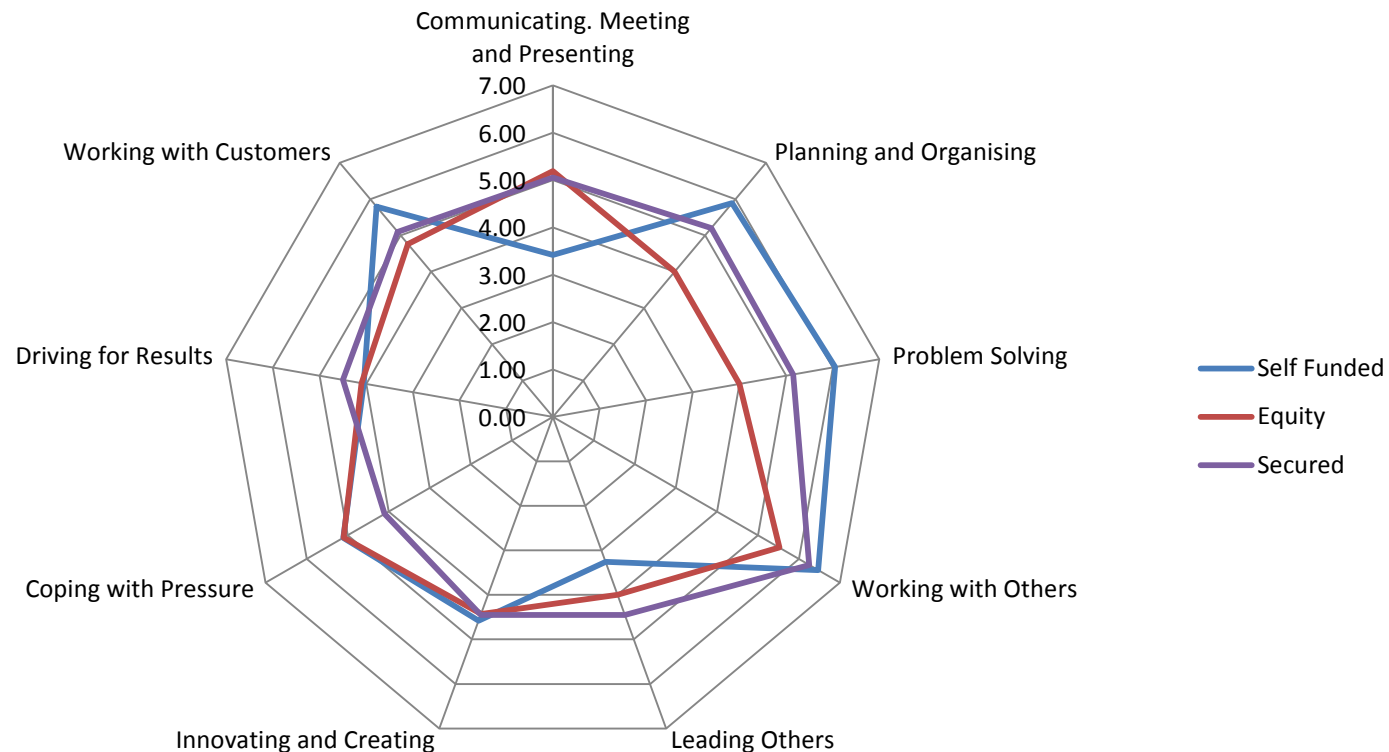


FUNDING OUTCOMES



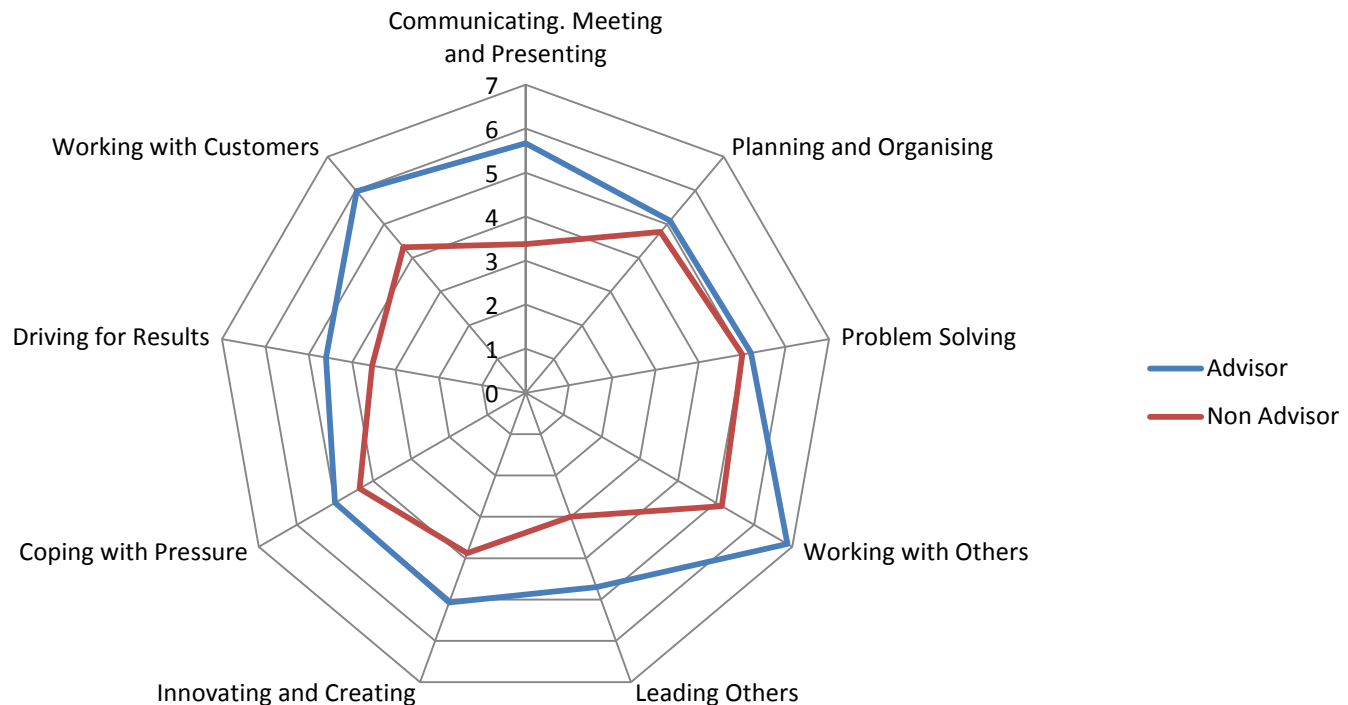
Chi-Square: $\chi^2 (1, n=172)=21.488, p<.000$; cluster membership is an indicator of funding outcomes.

FUNDING TYPE



Chi square: $\chi^2 (1, n=172)=4.495, p<.343$: cluster membership and funding type was not significant

USING ADVISORS





FACTOR AND LOGIT REGRESSION

If an entrepreneur was to increase the **Driving** score by one unit, the likelihood of Not Applying, as opposed to Trying and Being Successful, would decrease (by a factor of 0.613).

If an entrepreneur was to increase the **Social** score by one unit, the likelihood of Not Applying, as opposed to Trying and Being Successful, would decrease (by a factor of 0.670).

If an entrepreneur was to increase the **Driving** score by one unit, the likelihood of Trying and Being Unsuccessful, as opposed to Trying and Being Successful, would decrease (by a factor of 0.370).

If an entrepreneur was to increase the **Social** score by one unit, the likelihood of Trying and Being Unsuccessful, as opposed to Trying and Being Successful, would decrease (by a factor of 0.380).

YEAR 2 RESULTS

| | Capables | Collaborators | Low Competencers | Total Nodes |
|------------------------------------|-------------|---------------|------------------|-------------|
| Working with Others | 24% | 13% | 3% | 17% |
| Communicating, Meeting, Presenting | 12% | 20% | 8% | 14% |
| Innovating and Creating | 11% | 18% | 4% | 12% |
| Problem Solving | 13% | 10% | 6% | 11% |
| Driving for Results | 8% | 5% | 0% | 6% |
| Planning and Organising | 5% | 5% | 1% | 4% |
| Working with Customers | 4% | 6% | 2% | 4% |
| Coping with Pressure | 1% | 0% | 0% | 0% |
| Leading Others | 0% | 1% | 0% | 0% |
| Behavioural Difficulty | 23% | 22% | 75% | 31% |
| Total Code | 100% | 100% | 100% | 100% |

YEAR 2 BEHAVIOUR








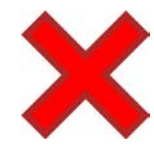

*“...but have now changed the business model (**Developing a New Business Model**) and are seeking significant funding from a sovereign wealth fund... which is a VC... haven’t taken it yet... will eclipse the original platform*

*“Always know we need some more... Another round this year or early next year... question always is from where? Always want to get the best rate... grants are the nicest way... Effectively free money except for the time you have to put into the application process... matched. (**Match Funded**). But you can do in time... so you can book time against it.”*

*“So I had to think on my feet as to how do we get ahead of the game... and so we realised if we create a framework (**Identifying Growth and Opportunity**) we can gear and be more bespoke... so we now have first mover advantage”*

*“Yes evolved the model (**Developing a New Business Model**) - now more on licensing and other IP opportunities and client work has also helped... can’t move as quickly as we could just felt it made more sense... getting more out of focus on business.”*

CONCLUSIONS

- P1 - Working with Others:** Being able to Work with Others provides opportunities to access finance (and also self finance). 
- P2 - Communicating, Meeting and Presenting:** Being a good communicator can facilitate access to finance. 
- P3 - Innovating and Creating:** Innovating and creative skills open up more opportunities for access to finance (in particular new forms of finance). 
- P4 - Problem Solving:** An entrepreneur who can problem solve is better able to access finance (and is better able to self fund and not require external finance). 
- P5 - Planning and Organising:** Planning and organising are key to successful access to finance for 
- P6 - Driving for Results:** An entrepreneur who is driven can access more finance opportunities 
- P7 - Working with Customers:** Working with customers increases opportunities to access finance. 
- P8 - Leading Others:** Competency in leadership increases access to finance. 
- P9 - Coping with Pressure:** Entrepreneurs who are better able to cope with pressure increase access to finance. 

ANY QUESTIONS?