

## **Miniproject Outline**

### **Exceptional Performance: Skill or Luck?**

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The business press and most managers usually idolize top performers. Stories of the most successful people and firms are frequent and popular. Successful people and firms often attribute their success to skill. Media, managers, and other observers of these outliers typically share this attribution. Top performers are perceived to be the most skilful, receive exceptional rewards, and are the object of imitation.

Our recent publications in leading management and interdisciplinary journals expose an important flaw in the seemingly obvious idea that the exceptional performers are the most skilled ([Denrell & Fang, 2010](#); [Denrell, Fang, & Zhao, In print](#); [Denrell & Liu, 2012](#)). The problem is that exceptional performance often occurs in exceptional circumstances. As a result, exceptional performance is likely more due to circumstances than to skill. Top performers are often the luckiest rather than the most skilled ones: those who made the wildest prediction that happened to be true or who benefitted from rich-get-richer dynamics that boosted their initial fortune.

The primary goal of this miniproject is to examine our argument empirically using longitudinal firm performance data (most related databases are available for Warwick staff/students). The main prediction is that superior performance during a long period can indicate lower capabilities of firms and stronger rich-get richer dynamics in that industry (e.g., Microsoft in software industry). Data in sport may be an alternative source to illustrate the argument (e.g., we may learn more from the second best performers, e.g., Fernando Alonso in Formula One Season 2012, who drove an inferior car but managed to gain the second place in final ranking).

Three skills are required for students who would like to take this miniproject - the students are expected to be able to (1) perform formal/simulation modelling using software such as Matlab (necessary) or Mathematica (optional), e.g., to build a theoretical model to demonstrate the conditions under which top performers are not the most skilled; (2) perform statistical analysis on the data using software such as Stata (necessary) or R (optional), e.g., to estimate the degree of rich-get-richer dynamics in different industries; (3) write up the analysis/report with high academic standard, i.e., making the report ready for journal submission.

The expected output of this miniproject is threefold. First, academics in fields such as management, sociology, and public policy will be interested in our findings, e.g., to what extent sustained high performance indicate high capabilities. We will help the student to publish the final report in a top research journal. Second, managers, consultants and media will be interested in our findings, e.g., who should one learn from if the top performers are to be ignored. We will help the students to disseminate the findings to broader communities, such as publishing in leading newspapers and business practitioners' journals.

Third, the output can be the basis for a PhD project. One possible direction is that the students could extend the analysis to a larger scale and examine top performers in which industry/country/sport are the luckiest. An alternative direction is that the students could develop behavioural experiments to examine how to improve people's learning, e.g., helping people less likely to mistake luck for skill when evaluating performance differences.

Interested students are welcome to email us for discussions. Look forward to hearing from you!