PERFORMANCE MANAGEMENT IN UK HIGHER EDUCATION INSTITUTIONS:
THE NEED FOR A HYBRID APPROACH

Full academic report

Dr Monica Franco-Santos
Cranfield School of Management, Cranfield University

Dr Pilar Rivera
University of Zaragoza

Professor Mike Bourne
Cranfield School of Management, Cranfield University
Acknowledgments
The authors deeply thank the more than 1,000 staff working in UK higher education institutions we surveyed during this research, in addition to a further 110 we engaged in detailed interviews. A special thank you goes to the six very generous institutions that contributed significantly to this research.

We are indebted to Professor Jurgen Enders (professor of public policy, University of Twente), Professor David Guest (professor of human resource management, King’s College London), Professor David Otley (professor of accounting, Lancaster University and RAE 2008 panel chair), Dr Francesco Chiaravalloti (senior lecturer and expert in performance management in the arts, University of Groningen), Professor Jane Broadbent (professor of accounting, University of Roehampton), Professor Robert Scapens (professor of accounting, University of Manchester), Professor Henk J ter Bogt (professor of accounting, University of Groningen), Professor Jordi Molas Gallart (professor CSIC and Universidad Politecnica de Valencia), Sir Professor Andrew Likierman (dean of London Business School), Professor Roger Brown (former vice-chancellor of Southampton Solent and former CEO of the Higher Education Quality Council), Professor Craig Mahoney (CEO of the Higher Education Academy), Professor Ron Barnett (professor of higher education, Institute of Education), Professor Frank Horwitz (director of Cranfield School of Management), Professor Edward Peck (pro-vice-chancellor and head of the College of Social Sciences, University of Birmingham), Jo Horsburgh (human resources director, Warwick University), Michael Macneil (national head of higher education, University and College Union), Matthew Knight (human resources director of Leeds University and chair of UK Universities human resources association), and Professor Geoff White (head of research, University and Colleges Employers Association) who provided the invaluable insights that formed the basis of the research.

We are very grateful to the substantial and committed collaboration of our steering committee members: Professor John Brennan (emeritus professor of higher education research, Open University), Dr Pietro Micheli (associate professor of organizational performance, Warwick Business School), Goran Roos, Dr Michael Kennerley (strategy and performance manager, University of Leeds) and Professor Andy Neely (professor of Complex Services, Cambridge University). Special thanks go to our colleagues Dr Dina Gray (visiting research fellow, Cranfield School of Management) and Dr Colin Pilbeam (principal research fellow, Cranfield School of Management) for their contributions during our case study research.

This research would have not been possible without the funding and continuous support of the Leadership Foundation for Higher Education. Thank you Professor Robin Middlehurst, Eleni Stamou and Helen Goreham for your contributions, help and encouragement along the way.
# Contents

1 Foreword 6
2 Abstract 7
3 Introduction 9
   3.1 Research and rationale 9
   3.2 Research objectives 9
   3.3 Key concepts and their definitions 9
   3.4 Research approach and design 10
   3.5 Key assumptions about UK HEIs 10
   3.6 Structure of the report 10
4 Phase I: Literature review 12
   4.1 The meaning of performance and performance management 12
   4.2 The origins of performance management in UK HEIs 13
   4.3 Performance management research 14
   4.4 Performance management consequences 17
   4.5 Organisational theories underpinning performance management 19
   4.6 Insights from literature review 20
5 Phase II. Qualitative research 24
   5.1 Objectives of the qualitative research 24
   5.2 Data collection 24
   5.3 Data analysis 24
   5.4 Findings from the qualitative research 26
   5.5 Insights from the qualitative research 36
6 Phase III: Quantitative research 39
   6.1 Objectives of the quantitative research 39
   6.2 Conceptual model 39
   6.3 Data collection 40
   6.4 Data analysis 42
   6.5 Findings of the qualitative research 42
   6.6 Insights from the qualitative research 45
7 Summary of overall findings and conclusions 47
   7.1 The meaning of performance and performance management 47
   7.2 Different performance management approaches used by UK HEIs 48
   7.3 Performance management approaches and wellbeing 52
   7.4 Advantages and disadvantages of performance management approaches 52
   7.5 Limitations and further directions 54
   7.6 Key insights for practice and policy making 55
   7.7 Concluding remarks 56
References 57
Appendix A. Case study interview questions 64
Appendix B. Survey variables and their measures 65
Appendix C. Survey data - factor and reliability analyses results 66
Appendix D. Archival variables and their measures 67
Appendix E. Universities included in this research 68
Appendix F. Correlation matrix - institutional data (Model 1) 70
Foreword

Within higher education, and particularly universities, the understanding of performance management at organisation, team and individual level remains a sustained challenge. For the human resources professional the challenge partly lies in that the “text book” answers to performance management in our sector do not lead to the required behaviour in individuals, and the required behaviour does not in turn lead to the expected performance. At institution and group level the challenge is that our culture often develops “bottom up” and not “top down” and is a product of the need to contribute to the “creation of knowledge”.

Our challenge is one of understanding that the concept of individual goals combining to form team and ultimately organisational objectives is only in part true within higher education. Institutions may aspire to ensure increased overlap between individual performance and organisational goals, but the reality is that this becomes more difficult in environments where complex, often conflicting goals, are being driven through complex governance structures with a multitude of measures. This study by Cranfield School of Management begins to make real inroads in understanding the concept of the agency-based and stewardship-based models of performance management and how the latter, more “enabling” approach begins to provide an understanding of performance management approaches in such structures.

The findings and subsequent insights will be of key interest to leaders and managers in institutions, policy makers and human resources and finance professionals, who might often be supporting development of balanced scorecards to achieve organisational performance. Its use of concepts and theory together with the qualitative research is a significant addition to the knowledge we have on the levers which could maximise performance within our own institutions.

Inderjit Seehra
Human Resources Director, University of Cambridge
Leadership Foundation Board Member
Abstract

This research investigates current practice and trends in the institutional performance management of UK Higher Education Institutions (HEIs).

We adopt a holistic view of institutional performance management – we understand it as a package or a system of the formal and informal mechanisms an institution uses to facilitate the delivery of its mission. Individual performance development reviews or appraisals are just one small component of an institutional performance management system.

Background

- Traditionally, HEIs have seen themselves as stewards of knowledge and education, focusing on long-term scholarly goals comprising the development of knowledge and the greater good for society at large.
- This view of HEIs is changing, as they are currently becoming more short-term and results/outputs driven due to the increased pressures to perform (e.g., international competition, reduced financial resources, research assessment frameworks, rankings).
- HEIs are intensifying their use of performance management mechanisms at all levels to facilitate the delivery of their goals.
- Nevertheless, we know little about the type of performance management mechanisms used in UK HEIs and the influence these mechanisms have on the wellbeing of staff and the performance of HEIs as a whole. This research was designed to address these gaps in our knowledge.

Research methods

- We used case studies to look at the performance management mechanisms in six universities. Three Russell Group and three post-1992 universities were involved and the research focused on both academic and administrative staff. This included interviewing 110 key informants from across institutions, from vice chancellors to front line staff in central services and in four schools/faculties (Education, Math, Business & Management, and Art).
- We also surveyed staff working in 162 UK HEIs through an online survey obtaining over 1000 usable responses. The results from the survey were combined with other publicly available data, from the National Student Satisfaction survey, the last Research Assessment Exercise, the Higher Education Statistics Agency (HESA), and the Universities and College Union’s (UCU) academic staff wellbeing survey.

Findings

- The performance management mechanisms UK HEIs use can be classified into two categories: stewardship-based and agency-based.
  - Stewardship approaches focus on long-term outcomes through people’s knowledge and values, autonomy and shared-leadership within a high trust environment.
  - Agency approaches focus on short-term results or outputs through greater monitoring and control.
- Most UK HEIs adopt a combination of stewardship and agency performance management mechanisms but most institutions are moving towards an increased adoption and greater use of agency mechanisms.
- Institutions with a mission that is focused on long-term and highly complex goals, which are difficult or very costly to measure (e.g., research excellence, contribution to society) are likely to benefit from relying on stewardship performance management mechanisms to convey their mission.
- Institutions with a mission that is focused on short-term and low complex goals, which are often easy or economical to measure (e.g., cost-reduction, surplus maximization) are likely to benefit from relying on agency performance management mechanisms to convey their mission.
- Institutions with a diverse mission including goals with various degrees of complexity and time orientation will benefit from relying on a hybrid performance management approach.
- Most people in professional, administrative and support roles find agency performance management mechanisms helpful as they provide greater clarity and focus.
- Most people in academic roles find agency performance management mechanisms such as individual performance reviews as unhelpful and dysfunctional.
- Institutions’ use of stewardship mechanisms is associated with higher levels of staff wellbeing as well as higher student satisfaction.
Institutions’ use of agency mechanisms is associated with lower levels of staff wellbeing as well as lower levels of institutional research excellence.

High staff wellbeing is associated with higher HEIs research excellence, students’ satisfaction, students’ employability, and financial results.

Recommendations

The report suggests that there is not a ‘once size fits all’ performance management approach for all institution and for all staff. Institutions need to adopt and use those performance management mechanisms that are ‘fit for purpose’. The current missions of HEIs are highly diverse comprising long-term outcomes as well as short-term results/outputs. The roles in their own context required for delivering the different HEIs missions require the co-existence of both stewardship and agency mechanisms. Thus the challenge for UK HEIs is to craft a hybrid performance management approach that will allow them to deliver across the breadth of their mission.
Introduction

3.1 Research and rationale
Economic growth and global competitiveness are driven by knowledge and innovation. UK HEIs play a key role in this context, as they contribute to the development of the UK’s human capital base and innovation capabilities. Additionally, HEIs have a crucial role to play in the communities in which they operate as they stimulate regional development, employment and economic prosperity. Due to this multiplicity of roles universities face major challenges, one of which is the management of their own performance.

Many HEIs are devoting increasing attention to the design, implementation and use of performance management systems to help them govern themselves and respond to their stakeholders’ expectations. Nevertheless, the nature and impact of these systems remains uncertain. Some universities are finding performance improvements after investing considerable thought and effort into the way in which they manage their performance. Others are still resisting, or are fundamentally opposed to the adoption of formal management control mechanisms, considering them to be a part of a managerialist ideology. The pressure to perform is similar in all institutions, but some HEIs respond more effectively than others. The key questions are: why and how?

Previous literature on performance measurement and management suggests that a variety of factors may affect the way in which organisations manage their performance and the degree of success they achieve. There has been little research on performance management systems conducted in the context of UK HEIs due to the fact that the use of these systems in universities is relatively new. Based on this gap in our understanding and due to the importance of performance management for the sustainability of HEIs, there is a clear need for further investigation in this area.

3.2 Research objectives
The purpose of this study is to provide insights aimed at informing practice and policymaking in the area of institutional performance management in UK HEIs. Specifically, our research objectives were to examine:

- How are the concepts of ‘performance’ and ‘performance management’ interpreted in UK HEIs?
- How do UK HEIs manage their performance?
- To what extent do the different ways in which UK HEIs manage their performance influence the wellbeing of the institutions and the wellbeing of their staff?

3.3 Key concepts and their definitions
In this research we focus on three key concepts: institutional performance management, staff wellbeing and institutional wellbeing. We define institutional performance management as the evolving formal management practices and informal mechanisms used to ensure the institution attains its aims and objectives, satisfying its stakeholders and being sustainable. We particularly investigate the nature of the HEI’s strategic planning, performance measures, performance reviews and rewards as formal performance management practices. It is important to note that this definition of performance management assumes that the leaders of an institution are the ones determining the institution’s aims and objectives (normally expressed as ‘vision’ and ‘mission’). This definition does not assume that the aims and objectives chosen by leaders are the ones that best serve the institution.

References:
1 Salmi (2009); Hughes and Kitson (2012)
2 Hughes and Kitson (2012); Deiaco et al (2012)
3 Jongbloed et al (2008); Kubler and Sayers (2010)
4 HEFCE (2006)
6 Donoghe and Kennerley (2008)
7 Deem et al (2007)
8 Franco-Santos and Bourne (2012); Ferreira and Otley (2009)
9 Sousa et al (2010)
10 Broadbent (2006, 2007)
11 Adapted from Ferreira and Otley (2009); Neely (1999); Armstrong and Baron (2004)
12 Wikings and Ouchi (1983)
13 Abernethy and Chua (1996)
Wellbeing has been defined as “living in a state that is in some sense good”\(^\text{14}\). We apply this conceptual definition to both individuals and HEIs. Operationally, we investigate staff wellbeing by examining the extent to which individuals experience a sense of vitality and learning, autonomy, fairness and trust at work; as well as the extent to which they feel stressed. We measure an HEI’s wellbeing using multiple dimensions. In particular, we measure it in terms of: the quality of research outputs, staff wellbeing, student satisfaction and employability, financial sustainability and contributions to society, culture, the economy and the environment.

### 3.4 Research approach and design

In this study we used a systems approach\(^\text{15}\) for our data gathering and analysis. This approach allowed us to better understand:

- the whole as well as its parts (ie, what is the overall ‘system’ HEIs have for managing their institutional performance alongside the individual practices they use);
- how the various performance management mechanisms used interact within the system (ie, how mechanisms such as an HEI’s strategic planning, performance measures, reviews and rewards operate as a package or system rather than in isolation); and
- how staff interact with and are influenced by the system to help deliver their various outputs and outcomes.

To answer our research questions we first conducted a review of the existing literature. We then carried out the empirical part of the research, gathering and analysing qualitative and quantitative data. We adopted a qualitative methodology to better understand the performance management approaches six English HEIs use, based on 110 interviews and the HEIs’ secondary data. We then developed a survey and used external archival data to: (1) examine the extent to which our case study insights were generalisable to a greater population of UK HEIs; and (2) investigate the relationship between performance management and wellbeing. Our survey and archival data analysis are based on a sample of 1017 staff working in 141 UK HEIs.

The research project was approved through Cranfield University’s ethics procedure. Participants were fully informed of the purpose, methods and potential uses of the research. Their participation was on a voluntary basis. We assured confidentiality to our case study universities and individual participants were guaranteed that they would have anonymity in our findings.

### 3.5 Key assumptions about UK HEIs

We embarked on this study with the following assumptions regarding the nature of UK HEIs.

- We assumed that UK HEIs, like most universities around the world, are under continuous pressure to perform. They have to respond to global competition, government accountability measures, reduced funding, new internet technologies, increasing student demands and higher expectations from their business partners and communities\(^\text{16}\). All these pressures force institutions to critically re-evaluate their mission and the way in which they govern themselves to satisfy their stakeholders\(^\text{17}\) (ie, government, students, staff, business and community, and society in general).

- We acknowledge that UK HEIs are undergoing significant changes that are affecting their autonomy in terms of freedom to choose their own direction and actions. However, based on the evidence of the current diversity of the HE sector, we assumed that UK HEIs still have a high degree of autonomy that enables them to choose their own mission and how they wish to achieve it.

- Finally, we assumed that UK HEIs differ in terms of what they do and what their expected outcomes are. At a national level, their performance is reviewed according to a set of minimum quality standards. Some HEIs strongly focus on the production of new knowledge, while others concentrate on the dissemination and delivery of current knowledge. Some operate at a national level while others operate at an international level. UK HEIs follow different missions with a multiplicity of goals that are in constant evolution and change due to the needs and wants of their stakeholders.

---

14 Warr (2012)
15 Ackoff (1971)
16 Lapsley and Miller (2004)
17 Salmi (2009)
3.6 **Structure of the report**

The report is structured as follows. We first report the insights extracted from our review of the literature. Secondly, we describe our qualitative research and discuss its findings. Thirdly, we describe our survey and archival research and include our evidence and insights. Finally, the report summarises the research results, drawing conclusions and proposing recommendations for both practice and policymaking. Our research phases are reflected in Figure 1.

![Figure 1. Structure of report](image-url)
Phase I: Literature review

To provide a foundation for this research, our first phase consisted of a review of the existing literature. We have organised our literature review insights into five sections. Firstly, we examine the meaning of performance and performance management. Secondly, we investigate the origins of performance management in the UK higher education (HE) sector. Thirdly, we analyse the performance management research published in the areas of business and management and education with references to other related sectors. Fourthly, we review studies looking at the consequences of performance management. Finally, we synthesise the main organisational theories that underpin performance management research.

4.1 The meaning of performance and performance management

Performance is a multi-dimensional and ambiguous concept. Conceptually, performance is defined as “a task or operation seen in terms of how successfully it is performed”. At work, individuals are said to perform when they are able to achieve the objectives established by management. Organisations are thought to perform (or to be successful) when they satisfy the requirements of their stakeholders and are more effective and efficient than their competitors. In the literature, researchers often define performance in terms of its content (ie the tasks that need to be performed, the goals that need to be achieved or both), and in terms of the unit or entity that is meant to perform (eg individual, team or organisation). Hence, when defining performance, there is a tendency to focus on the measures of performance and to specify whether performance is being analysed at the individual, team or organisational level.

The use of performance measures or indicators to define performance can be treacherous as this method assumes that performance is measurable. Jensen and Meckling posit that perfect measures of performance are unlikely to be found, as performance is not something that can be perfectly known in advance. Performance can only be understood and evaluated after actions have been completed. It is mainly for this reason that Stewart and Walsh suggest “the dilemma of performance management in the public domain is to secure effective performance when the meaning to be given to it can never be completely defined, and the criteria by which it is judged can never be finally established”. Since perfect measures of performance are unlikely to exist, organisations use proxy indicators (quantitative measures that approximate or serve as surrogates of performance in the absence of perfect measures). For instance, HEIs use the publication of research in highly rated journals as a proxy for quality of research, or student satisfaction as a proxy for teaching quality. Over time, this solution often generates a further dilemma. Eventually, proxy indicators are perceived to represent true performance. Means tend to become ends and critical performance information that cannot be quantified is marginalised or appears invisible with potentially detrimental effects.

Despite the difficulties of finding appropriate measures of performance, organisations operating in all sectors are advised to measure what they do as well as how well they do it. The idea that organisations need to use performance measurement systems (ie a set of metrics used to measure performance) in order to achieve organisational goals resonates with their leaders. The information provided by performance measurement systems is understood to be critical knowledge essential for the improvement of management decision-making processes and, ultimately, organisational performance. In the HE sector, institutions are encouraged to use performance measurement systems to provide greater transparency and accountability and to ensure the best use of limited resources.

---

18 Siegel and Summermatter (2008)  
21 Neely et al (2002); Neely (2005)  
22 Jensen and Meckling (1998)  
25 See for example Chwastiak (2006)  
26 Neely (2005)  
27 Neely (1999)  
In practice, the concept of performance measurement is often conflated with performance management. The old adage “you can’t manage what you don’t measure” or “what gets measured gets managed” are well ingrained in managers’ minds, serving as implied assumptions behind the use of a set of performance measures in performance management systems. Nevertheless, in the academic literature, performance management is often described using an holistic view that may or may not include performance measurement as a key mechanism for ensuring organisational performance. For instance, performance management has been defined as a system that “contributes to the effective management of individuals and teams in order to achieve high levels of organisational performance” or as “the evolving formal and informal mechanisms, processes, systems and networks used by organisations for conveying the key aims and objectives elicited by management, for assisting the strategic process and ongoing management through analysis, planning, measurement, control, rewarding, and broadly managing performance, and for supporting and facilitating organisational learning and change.”

Most definitions of performance management assume that top executives set the aims and objectives of the organisation; and that the purpose of the system is to influence and control the behaviour and performance of employees. A few authors highlight that the role of a performance management system is to support decision-making and influence behaviour but with the purpose of improving performance rather than controlling it. Other authors suggest that the components or mechanisms of a performance management system are determined by the aims and objectives the organisation is pursuing, the underlying assumptions of the creators of the system, the purpose the system is aiming to fulfil, and the idiosyncratic characteristics of the organisation.

In summary, performance and performance management are complex and elusive concepts that lack an agreed upon definition. Based on the existing evidence reviewed, we can argue that, in the context of organisations, performance is likely to be defined based on the measures used to assess it at the individual, team and organisational level. This is despite the fact that the measures selected to define performance may not fully represent it. We can also suggest that performance management constitutes the evolving formal and informal mechanisms that are used to ensure the organisation attains its aims and objectives, satisfies its stakeholders and remains competitive. With performance management there is no such thing as a one size fits all approach. The design and effectiveness of the system depends on the aims and objectives of the organisation, the underlying assumptions of the system, its purpose and the context in which the organisation operates.

4.2 The origins of performance management in UK HEIs

The origins of performance management in UK HEIs has been associated in general with the advent of New Public Management (NPM) and, in particular, to the changes proposed by the Jarratt Committee in the management of universities.

The NPM movement, which emerged in the 1980s and remains influential today, aims to improve the performance of public services in terms of their efficiency and their effectiveness. NPM is based on economic rationalism and promotes practices that are typically used in for-profit sector organisations, such as external audits, results-based management, quantitative performance measures, performance targets and individual performance appraisals. NPM defines itself as fundamentally different from old public management characterised by professionalism, self-management, implicit standards and mostly qualitative performance indicators. NPM promotes the view that management and managers are essential and desirable for the appropriate administration of public sector institutions. NPM emphasises the idea of accountability and the need for increased transparency and availability of information. The NPM movement has led to an increased focus on performance and performance management at all levels in public services.

In line with the NPM movement, in the mid 1980s a committee of vice-chancellors and principals known as the Jarratt Committee was established to review the efficiency and effectiveness of UK HEIs. The recommendations of this committee introduced significant changes in the management of HEIs. Among other actions, the committee proposed that institutions use performance management practices such as quantitative performance indicators and staff performance appraisals. It also suggested that HEIs be less dependent on public funding and more cost conscious when managing their resources.

29 Kennerley and Mason (2007)
30 Armstrong and Baron (2004)
31 Ferreira and Otley (2009); Malmi and Brown (2008)
32 Ferreira and Otley (2009); Malmi and Brown (2008)
34 Broadbent and Laughlin (2009); Ferreira and Otley (2009); Franco-Santos et al (2012)
35 ter Bogt and Scapens (2012); Broadbent (2007)
36 See for example the work of Brignall and Modell (2000); Carter (1991); Cavalluzzo and Ittner (2004); Hood (2007); Micheli and Neely (2010); Modell (2009); Pollitt (2006); Sanderson (2002)
37 Hood (2001), p12553
38 Deem et al (2007)
39 Brooks (2005)
40 Jarratt Committee (1985)
41 ter Bogt and Scapens (2012); Cave et al (1997); Townley (1997)
Following the Jarratt Committee and subsequent government directives, an array of performance management practices has been introduced in the HE sector (such as the Research Assessment Framework (REF), National Student Survey (NSS), workload models, and so on). Regarding the introduction of these practices, two issues are worth highlighting. Firstly, performance practices have often been implemented without a detailed analysis of their degree of appropriateness to the particular context and mission of HEIs. The underlying assumption has been that these practices are effective for all institutions and under all circumstances. Secondly, performance management practices have been implemented without an examination of how they all interact and work together to influence institutional and individual performance. These issues are critical, as suggested by the performance management research that is reviewed next.

4.3 Performance management research

There is a large body of research looking at how organisations manage their performance and the guiding frameworks they use. The most active researchers in this area are those working in the management field. However, research in the design, use and impact of performance management systems is taking place in literature from a range of fields. We particularly review here knowledge from the management and higher education literature, with references to research conducted in the public sector, not-for-profit sector, and creative and R&D organisations.

4.3.1 Performance management knowledge in the management literature

Management researchers suggest that the tools, processes, practices and routines used to manage performance operate as a “package”. They often refer to them as control packages rather than formal systems as they tend to appear as “sets of loosely coupled elements”. In some organisations these control systems might be designed, integrated and coordinated intentionally with the ultimate aim of influencing performance. However, in most organisations, controls are developed by different individuals or groups at different points in time and may operate independently from each other. Based on the idea of interpreting performance management as a package, researchers have proposed a number of frameworks for describing the various components of the package. The most cited frameworks are: Kaplan and Norton’s Balanced Scorecard Framework; Simons’ Levers of control framework; Ferreira and Otley’s Performance Management Framework; and Malmi and Brown’s Management Control System Package. Here we summarise their contributions and compare their purpose, characteristics and underlying assumptions.

The four frameworks consider performance management as a control device, whose main roles are to inform decision-making processes, influence people’s behaviour and enhance learning. These frameworks differ in their audience and purpose. Kaplan and Norton’s and Simons’ frameworks have top executives as their main audience and are prescriptive. Kaplan and Norton’s framework highlights the need to manage and evaluate not only the short-term performance of an organisation but also its long-term performance. Kaplan and Norton’s framework focuses on the use of a balanced scorecard (a performance measurement and visual tool) as the key mechanism to help organisations manage their performance. The balanced scorecard relies on four processes: translating the vision, communicating and linking (also known as cascading), business planning, and feedback and learning. Simons’ framework discusses the importance of what he calls the four levers of control (beliefs, boundary, diagnostic and interactive controls) that organisations should use to implement and control the strategies that will lead to organisational success.
Ferreira and Otley’s\textsuperscript{54} and Malmi and Brown’s\textsuperscript{55} frameworks are descriptive rather than prescriptive. They present the different components of a performance management system and they discuss how these components interact. Their main audience is researchers interested in acquiring a better understanding of the particular characteristics of an organisation’s performance management system. Ferreira and Otley’s framework provides a set of questions to facilitate the design of a performance management system. However, in setting out the questions to address it can also be used to describe an organisation’s existing performance management system\textsuperscript{56}. Their framework focuses on the following components: vision and mission, key success factors, organisational structure, strategies or plans, key performance indicators or information sets, performance targets, performance evaluation, rewards and other informal mechanisms (eg culture, networks etc). Malmi and Brown describe and categorise the key conceptual components of a performance management system (ie planning controls, cybernetic controls, reward and compensation, administrative controls and culture controls) to help researchers study the system empirically.

The four frameworks stress the importance of thinking about performance management as a holistic system comprising different mechanisms. Each framework uses different ways to express and graphically represent these mechanisms, which some authors argue generates confusion and misinterpretation\textsuperscript{57}. Nevertheless, the four frameworks agree with the idea that defining or planning, measuring, reviewing, and rewarding performance are the main performance management mechanisms that organisations can use to help them achieve their aims and objectives. There is also consensus regarding the idea that there are internal contextual factors (eg culture, structure) and external contextual factors (eg risk) that influence the form and functioning of the performance management system.

In the management literature, there is an additional framework developed by Broadbent and Laughlin\textsuperscript{58} that is less well known but very relevant and important for our research. Broadbent and Laughlin, based on evidence from the higher education sector, argue that the mechanisms used by organisations to achieve their aims and objectives do not necessarily have to be the ones suggested by the previously cited performance management frameworks\textsuperscript{59}. According to Broadbent and Laughlin, the particular mechanisms designed and used to convey the organisation's mission will be subject to the organisation's underlying model of rationality. They explain that there are two distinct models of rationality: \textit{instrumental or communicative}.

\textit{Instrumental rationality}\textsuperscript{60} is concerned with the structure and transparency of the organisation's intended ends and with the formal means to achieve them. Under this logic, means to achieve ends are rationally chosen. This logic assumes that intended ends can be empirically defined and acted upon, at least in the short-term. Another assumption is that people act because they are self-interested and they gain something from acting. This type of rationality will engender a transactional performance management approach in which the ends to be achieved will be highly specified (eg through particular goals, measures and targets) as well as the means needed to achieve them (such as contractual relationships, performance related reviews and rewards etc).

\textit{Communicative rationality}\textsuperscript{61} is concerned with achieving a mutual and constraint-free understanding of ends and means based on informal and systematic “discourses” among the organisation's stakeholders. According to this type of rationality, “ends, in whatever form, should not be predefined either instrumentally or through abstract values or through any charismatic leader but should find their definition, and legitimacy, through the discursive process and consensus agreement of the participants/stakeholders to any action situation”. This logic assumes that there is equal opportunity to speak and the only force allowed is the force of the better argument. This rationality also assumes that people act to put into practice their convictions of what seems to them to be required by duty, honour or the importance of a “cause”, regardless of a possible cost to themselves\textsuperscript{62}. This type of rationality will create a relational performance management approach where the ends and means are deliberately subject to a discourse between stakeholders and agreed by them. High specification of ends and means is possible but only if chosen and agreed by the stakeholders. This approach will be composed of comprise ill-defined projects that are long-term in nature and it will be focused on the long-term survival and sustainability of the organisation even if its outcomes are difficult to observe and measure.

\begin{itemize}
\item \textsuperscript{54} Ferreira and Otley (2009)
\item \textsuperscript{55} Malmi and Brown (2008)
\item \textsuperscript{56} Yap and Ferreira (2010)
\item \textsuperscript{57} Tessier and Otley (2012)
\item \textsuperscript{58} Broadbent and Laughlin (2009)
\item \textsuperscript{60} Weber (1978)
\item \textsuperscript{61} Habermas (1984)
\item \textsuperscript{62} Broadbent and Laughlin (2009)
\end{itemize}
The work of Broadbent and Laughlin is important because it introduces a new perspective that contradicts the ideas of those authors mentioned previously who are interested in describing the components of performance management systems as if they are universalistic in nature (i.e., they are applicable in one form or another to any organisation). Broadbent and Laughlin suggest that not all organisations need to manage performance following the logical processes of defining or planning, measuring, reviewing and rewarding performance. Those organisations following an instrumental logic are likely to use these mechanisms to ensure business results are achieved and to minimise opportunistic behaviours. Those organisations in which an alternative logic dominates will use other ways to manage their performance.

The HE sector is a context in which the instrumental logic may not be dominant and a different performance management approach may well be needed. To explore this idea further, as it is key to our research, we review the literature exploring performance management mechanisms in the context of education institutions.

### 4.3.2 Performance management knowledge in the education literature

Research looking at performance management as a holistic system in the context of education institutions is scarce, as this notion of performance management has been introduced in the sector only recently. Within this literature, the conceptual work of Weick and the research of Bolden et al. are particularly pertinent and useful for our study.

Weick argues that organisations can control performance in two ways. One way is by using mechanisms that focus on the control of who does the work and on whom. For example, a university can attempt to control the performance of its postgraduate programmes by focusing on controlling who teaches on them (e.g., lecturers) and to whom (e.g., students). The university can establish that only lecturers who are accredited by the Higher Education Academy and are active researchers can teach on these programmes; as well as require that only a selective group of students with high marks in their previous degrees can be accepted on them. This approach mainly concentrates on managing organisational performance by selecting the “right” individuals - those with the most appropriate knowledge, abilities and motivation - to fulfil the organisation’s mission.

Another way to control performance is by using mechanisms that focus on how well the work is done. An example of a university controlling performance through this approach would be one that establishes mechanisms by which any lecturer whose student satisfaction scores are below average goes under close supervision by his/her line manager. This alternative approach concentrates on the outputs (the tangible deliverables produced) and outcomes (the impact on social, economic or other indicators arising from the delivery of outputs) of the work rather than on the individuals doing the work or the people receiving it. According to Weick and other researchers, for this approach to be effective it requires: that outcomes are readily observable, that individuals have relatively high control over the outputs they produce, and that the causal relationships that relate outputs to outcomes are fairly well known.

Weick extends his argument by asserting that controlling outcomes is likely to fail when used in isolation as, in most organisations, outcomes are not easily observable, controllable or predictable. Therefore, a combination of both approaches would be more appropriate with tight or loose emphasis on either of them depending on the circumstances. Following this argument, for educational organisations, Weick suggests that the use of loose control on outcomes and tight control on the selection of staff and students with the appropriate knowledge, abilities and motivation seems more appropriate. Indeed, recent research looking at the use of tight control (rather than loose control) on outputs and outcomes in educational organisations finds that this approach generates unexpected consequences such as “teaching to the test,” inequity or dysfunctional behaviours (e.g., gaming, data manipulation, short-termism).
Together with the work of Weick, the recent research of Bolden et al\textsuperscript{71} is worth highlighting. Bolden et al\textsuperscript{72} when investigating leadership-related phenomena in the context of UK higher education, find two distinct explanations of why people perform. On the one hand, they find that people may perform due to the use of management mechanisms such as incentives or monitoring with a strong emphasis on performance measures and targets. This approach assumes that people's performance is the result of “good” management, resonating with the transactional approach highlighted by Broadbent and Laughlin\textsuperscript{73} or the work of Kaplan and Norton\textsuperscript{74}, Simons\textsuperscript{75}, Malmi and Brown\textsuperscript{76}, Ferreira and Otley\textsuperscript{77}.

On the other hand, people perform well because they feel part of a group for which high performance is a defining attribute. That is, people perform because they believe it to be part of who they are. It is intrinsic to them. The attention institutions pay to performance reinforces its importance, giving a strong signal that “we are part of an organisation whose members perform well”\textsuperscript{78}. In some of the universities Bolden at al visited, they found that paying attention to academics’ performance was carried out for its signalling effect rather than for controlling what people do. Performance monitoring or incentives were not necessary, as these mechanisms sent the wrong signals to individuals whose motivation to perform is intrinsic to their identity\textsuperscript{79}. They sent the message that “you are not to be trusted to manage yourself”, which is at odds with the traditional academic values\textsuperscript{80} of freedom, autonomy and peer-reviewed work. As a result, Bolden et al conclude that academic performance could be best attained using the suggested second approach: strengthening social identities around high performance together with an enabling and supportive environment for those who “struggle to belong”. We could call this approach identity-based.

It is noticeable that this alternative explanation of why people perform is not captured in the current business and management literature on performance management. Bolden et al’s\textsuperscript{81} insights are in line with Broadbent and Laughlin’s\textsuperscript{82}. Bolden et al’s evidence from the higher education sector supports Broadbent and Laughlin’s argument that the rational and goal-oriented view of performance management is not universal. It also suggests that individuals are not necessarily opportunistic or self-interested and extrinsically driven; some are intrinsically driven and their individual interests are in line with the organisation’s interests, as previous psychology\textsuperscript{83} research has found. However, Bolden et al’s identity-based performance management approach is somehow different from Broadbent and Laughlin’s relational approach. Further research in this area would be beneficial to explore the synergies, strengths and weaknesses of these alternative approaches. Our research will investigate these phenomena and review the extent to which both approaches can be integrated and further specified to assist HE leaders in their development.

### 4.4 Performance management consequences

In the literature there is vast empirical research investigating the consequences of performance management mechanisms. The evidence suggests both functional and dysfunctional consequences, depending on the idiosyncratic nature of the context in which the research takes place\textsuperscript{84}. It is worth highlighting that research conducted in the public sector\textsuperscript{85}, third sector\textsuperscript{86}, research and development\textsuperscript{87}, and creative industries\textsuperscript{88} contexts concurs that the use of performance management mechanisms enables organisations to focus the attention of their employees on measured performance criteria and can be used to reduce short-term costs. Performance management mechanisms can be especially effective when outcomes are measurable, controllable and predictable\textsuperscript{89}. When outcomes don't meet those criteria, the potential benefits of performance management are questioned\textsuperscript{90}.

In the higher education sector empirical research examining the impact of performance management can be classified in two groups: (1) research that uses a macro perspective, looking at the performance management mechanisms that stakeholders (mainly the government and related agencies) use to review the performance of HEIs; and (2) research that uses a micro perspective, examining specific practices, tools or processes that HEIs use to manage the performance of their staff.

---

\[ \text{References} \]

\textsuperscript{71} Bolden et al (2012)
\textsuperscript{72} Bolden et al (2012)
\textsuperscript{73} Broadbent and Laughlin (2009)
\textsuperscript{74} Kaplan and Norton (1996, 1996)
\textsuperscript{75} Simons (1995)
\textsuperscript{76} Malmi and Brown (2008)
\textsuperscript{77} Ferreira and Otley (2009)
\textsuperscript{78} Bolden et al. (2012)
\textsuperscript{79} Miskel (1990)
\textsuperscript{80} Henkel (1997, 2000)
\textsuperscript{81} Bolden et al (2012)
\textsuperscript{82} Broadbent and Laughlin (2009)
\textsuperscript{83} Deci and Ryan (1985); Ryan and Deci (2000)
\textsuperscript{84} Franco-Santos et al (2012);
\textsuperscript{85} Bevan and Hood (2006); Broadbent and Guthrie (2008); Francis (2013), Frey et al. (2013); Hood (2006); Moynihan and Pandey (2010); Smith (1995)
\textsuperscript{86} O’Dwyer and Unerman (2008); Speckbacher (2003); Yap and Ferreira (2010)
\textsuperscript{87} Abernethy and Brownell (1997)
\textsuperscript{88} Chiaravalloti (2005); Townley and Beech (2010)
\textsuperscript{89} Poister et al. (2013); Jennings and Haist (2004)
\textsuperscript{90} Francis (2013), Frey et al. (2013); Hood (2006); Smith (1995)
From a macro perspective, researchers have paid particular attention to the effects on HEIs and their academic staff of government-led quality assurance mechanisms, such as the Research Assessment Exercise (RAE). For instance, Macdonald and Kam find that, due to pressure to meet the expected performance criteria, researchers are encouraged to write the sorts of papers and conduct the sort of research that top-rated journals favour (that is, research that yields results with which nearly everyone can agree and research that follows current journal priorities and uses accepted procedures). Harley and Lee find that researchers feel constrained to “play the game” and recognise that they have to shift their research areas and methods to better meet the criteria of excellence favoured by the RAE. Martin and Whitley argue that departmental research collaboration is negatively affected due to the individual focus of research performance evaluations. As a result, scholars argue that research audit mechanisms are increasing what Kuhn identified as “normal science” or incremental developments as opposed to “revolutionary science”; which is ultimately damaging innovation and creativity in UK research.

From a micro perspective (ie looking at particular performance management mechanisms such as budgets or performance reviews), recent work has found that the traditional learning and development role of personal/performance development reviews (PDRs) is becoming more “judgemental” and controlling with performance evaluations being more focused on measurable criteria. In various academic fields, there is evidence suggesting that the increased focus on academic performance management has generated mixed results. On the one hand, the volume of academics’ research outputs (ie number of publications) has been significantly increased - even though there is uncertainty regarding the degree to which research quality has been improved. On the other hand, academic performance management has produced significant effects in the day-to-day work of academics with increased levels of anxiety and stress (especially in junior academics), decreased motivation and less attention to teaching and administration duties and service to the community and society in general.

Looking at the insights from these two streams of research and linking them to our previous reviewed knowledge, it is interesting to note that the research examining the consequences of performance management in higher education has mainly focused on the consequences of instrumental performance management mechanisms. Using Weick’s, Broadbent and Laughlin’s or Bolden et al’s lenses, the consequences are not surprising. From Weick’s perspective the undesirable consequences could be explained due to the nature of the outcomes HEIs pursue. HEIs’ research and education outcomes have limited measurability, controllability and predictability, which make any attempt to control how well they are attained inappropriate. Based on Broadbent and Laughlin’s research, the adverse consequences could be explained by the misalignment between the transactional performance management mechanisms adopted in the HEIs studied and the underlying rationality of most people in academic roles (ie communicative rationale). From Bolden et al’s view, the damaging consequences could be a result of the wrong signals that the use of monitoring and incentive mechanisms sends to academics.

At this point, it is important to note that most previous research has concentrated on the consequences of performance management mechanisms on academic performance. Research using a broader view of performance to encompass both academic and professional/support outcomes is absent from the literature. This means that recent research might be misinforming those HEIs with multiple employee populations, pursuing a diversity of outcomes, and in which competing rationalities may co-exist. Our empirical research attempts to shed some light on this gap in our knowledge. However, before embarking on our field and survey work, greater clarity on the theories underpinning the development and use of performance management mechanisms is needed to better ground our research. The next section addresses this need.

91 For a review of research evaluation systems, see Whitley (2007); Martin and Whitley (2010)
92 Macdonald and Kam (2007)
93 Harley and Lee (1997)
94 Martin and Whitley (2010)
96 Kuhn (1962)
97 Martin and Whitley (2010)
99 Harvey and Knight (1996); Sousa et al (2010); Ter Bogt and Scapens (2012); Tytherleigh et al (2005); Winefield et al (2003); Woods (2010); Weick (1976)
100 Weick (1976)
101 Broadbent and Laughlin (2009)
4.5 Organisational theories underpinning performance management research

Research on performance management is often underpinned by economic, psychological and sociological theories. However, in the context of public institutions there are two prominent and opposing theories that have been emphasised. These are agency theory and stewardship theory. These two theories differ in their assumptions about human behaviour and propose different performance management approaches in organisations. The two approaches may resonate with the classical distinction between Theory X and Theory Y of management but their particular characteristics and predictions are different. Theory X and Y concentrate on motivation at the individual level; while agency and stewardship theory focus on organisational performance and the individual behaviours that drive it. We now discuss these two theories as they help us to understand in greater depth the underlying assumptions of different organisational performance management approaches.

4.5.1 Agency theory

Agency theory, also known as the principal-agent theory, is an economic theory that addresses the so-called “agency problem”. An agency problem exists when two cooperating parties, the principal (the owner or administrator/manager) and the agent (the employee), have different interests and roles. The agency problem is generated when the principal delegates work to the agent who is the one that performs the work. Agency theory assumes that both parties are self-interested or “opportunistic” by nature. The goals of the principal and those of the agent are likely to be in conflict. It also assumes that the agent is effort-averse and risk-averse; so the agent is likely to do less and take less risk than might be needed to meet the principal’s goals. Based on these assumptions, the theory suggests that the principal should motivate and closely monitor the agent to prevent opportunistic behaviours, and so ensure goal-alignment and strong performance. However, it may be too difficult or too expensive for the principal to closely monitor and motivate the agent and so a solution for the principal is to establish formal control mechanisms such as performance related pay, performance measurement and evaluation systems.

Although agency theory has received numerous criticisms in the literature, it is still the dominant paradigm in the business context and its ideas have been widely adopted in other contexts. Some scholars argue that agency theory is starting to enjoy “the ontological status of a law of nature”, because it is a “self-fulfilling prophecy” that is difficult to falsify. Based on agency theory, managers should monitor and control employees to prevent their opportunistic behaviours by measuring their work and rewarding (or sanctioning) them to ensure alignment. By adopting these control mechanisms a manager is likely to generate the opposite of what agency theory intends. That is, rather than prevent opportunism, a manager is likely to enhance it or even generate it (especially if it was not actually there in the first place). With the use of monitoring and incentives, employees perceive that what is measured and rewarded is what matters most to the manager. Employees will modify their behaviour (either desirably or undesirably, eg gaming) to meet managers’ expectations. Control mechanisms are likely to crowd-out employees’ intrinsic drives to perform and generate negative feelings towards organisations. Over time, employees’ intrinsic motivation to do their jobs well becomes extrinsic (they act to get something tangible rather than because it is personally rewarding). In addition, their perceptions and feelings about how the organisation treats them (with lack of trust) influence their behaviour, which for many will turn to be opportunistic and the process becomes a vicious cycle.

Empirically and theoretically, an oversimplification or misunderstanding of cause and effect relationships leads organisations to assume that the objectives of agency controls (ie to reduce opportunism and increase alignment) are actually achieved. Evidence suggesting the opposite (ie that these type of controls intensify opportunistic behaviours and disalignment) is likely to be omitted or receives little attention.
4.5.2 Stewardship theory

Stewardship theory draws from psychology and sociology and is often proposed as an alternative to agency theory. Stewardship refers to the willingness of an individual to be guided by public service values, subduing his/her own personal interests to act and protect the long-term welfare of others. Contrary to agency assumptions, stewardship theory assumes that people are not necessarily “opportunistic agents”; they may be stewards, whose behaviour and interests are in line with what the organisation wants to achieve. In the context of work, the two parties that collaborate to ensure performance is achieved (administrators/managers and employees) are constantly reassessing whether to behave as opportunistic agents or as stewards. People have their own personal preferences. Situational characteristics influence their preferences - enhancing them, preventing them or fundamentally changing them. Based on this situational perspective, people can behave as stewards and they can behave as agents. They choose how to behave. This helps to explain the idea that “some good people sometimes do bad things”.

Stewardship researchers propose that alignment and motivation, which in turn influence organisational performance, can be sustained with mechanisms such as: (1) having a clear and well-understood mission (or cause) so individuals can direct their decisions and actions towards it; (2) having a culture of continuous reflection and focus on performance improvement; (3) relying on intrinsic rewards rather than on extrinsic rewards (ie using mechanisms that enable a sense of meaningfulness, autonomy and progress both in terms of development and in terms of positioning, and community); (4) focusing management efforts on employee recruitment, selection and socialisation to ensure that the most appropriate individuals (those that have the desired interests, knowledge, abilities and motivation) are the ones that are attracted and retained in the organisation; (5) ensuring procedural fairness as it increases individual’s propensity to act and protect the long-term welfare of others; (6) fostering relationship-centred collaboration through shared leadership; and (7) promoting employee’s collective responsibility for work outcomes.

Some scholars criticise stewardship, arguing that its assumptions are naïve or unsustainable as they are at odds with the opportunism inherent in human nature. Stewardship might be considered as an idealistic utopianism that is likely to fail in a world of accountability and result-based management. Relying on trust might be impractical for those seeking hard evidence of efficiency and effectiveness, which are more likely to have the public service values required for stewardship to work. However, the evidence found so far is often focused on describing islands of stewardship in only parts of public sector operations. There is little research exploring the adoption and consequences of stewardship as a central performance management approach.

As far as we are aware, only the recent work of Segal and Lehrer has investigated the use of a stewardship approach in the education sector. They describe the transition from an agency-based approach to a stewardship-based approach to govern a Canadian school district with 210 schools with important positive long-term consequences such as improved innovation, increased differentiation in the curriculum and reduced fraud, waste, abuse and mismanagement. Based on their research, Segal and Lehrer suggest that, for educational organisations, it is a challenge to be and to remain in a “stewardship world” where people are morally bound to and fully engaged with the long-term aims and objectives of their organisation. Educational organisations need to create a context where stewardship behaviours are likely to emerge – that is, a high-trust context where intrinsic motivation and self-management is paramount. They also need to develop mechanisms to institutionalise stewardship and prevent opportunistic behaviours.

---

114 Hernandez (2012); Dicke (2002); Segal and Leher (2012); Davis et al (1997)
115 Williamson (1975)
116 Davis et al (1997)
117 Segal and Lehrer (2012)
118 Axelrod (1984)
119 Segal and Leher (2012); Bandura (1990)
120 Hernandez (2012); Segal and Lehrer (2012)
121 Williamson (1975)
122 Marvel and Marvel (2008)
123 Van Slyke (2007); Marvel and Marvel (2008)
124 Van Slyke (2007); Segal and Lehrer (2012)
125 Segal and Leher (2012)
126 Segal and Leher (2012)
4.5.3 So what do agency and stewardship theories mean for our research?

Going back to our research questions, agency and stewardship theories can be used to interpret the meaning of performance and performance management, to better understand the reasons why organisations adopt different approaches to manage performance and to predict the potential consequences of each approach.

Traditionally, due to agency theory’s focus on how to meet the expectations or interests of the principal (owner/shareholder), its aim has been to explain how organisations can maximise their short-term financial performance (e.g., profit maximisation, cost optimisation)\(^{127}\). In recent years, while the interpretation of performance has been reviewed to better reflect its complexity and to accommodate both financial and non-financial dimensions, the focus on assessing performance through clear and measurable indicators remains\(^{128}\). Stewardship theory interprets performance in a broader sense. Stewardship relates to the long-term mission or outcomes of an organisation that by nature are difficult to measure. Its emphasis is more on the agreed definition of those outcomes and its communication to all stakeholders so they can engage with them.

To achieve performance, agency theorists promote the use of monitoring mechanisms, such as performance measures, targets, individual performance reviews, and extrinsic reward mechanisms, such as performance-related pay that resonate with the type of performance management mechanisms previously identified as *transactional*\(^{129}\). Stewardship theory promotes the use of trust-maintenance mechanisms, such as share-leadership, development, socialisation and reflection and corruption-minimising mechanisms, such as self-regulation, peer regulation, outlier regulation\(^{130}\). Stewardship research integrates the *relational*\(^{131}\) and the *identity-based*\(^{132}\) performance management approaches, but it will also advocate for the use of a number of complementary mechanisms that are not captured in these two approaches.

At this point it is important to reflect on Weick’s\(^{133}\) ideas as he suggests that, due to the complexity of organisations, different performance management mechanisms are likely to co-exist. It can be argued that agency-based mechanisms emphasise employees’ performance monitoring and evaluation, referred to as “how well the work is done” in Weick’s words. For instance, performance measures are used to understand how well someone is doing, performance targets are used to differentiate “good” from “bad” performance and incentives are used to reward different degrees of performance. Stewardship-based mechanisms will mainly focus on employees’ and customers’ knowledge, abilities and motivation, which Weick refers to as “who does the work and on whom”.

As suggested earlier, Weick mentions that, for educational organisations, a tight control on *who does the work and on whom* and a loose control on *how well the work is done* is likely to be more effective than any other combination of approaches. Thus, following Weick’s logic, it can be argued that for educational organisations a strong use of stewardship-based mechanisms and a light-touch use of agency-based mechanisms might be an appropriate way to deliver their complex and long-term mission. Little or no empirical evidence exists to support this argument. Our field and survey research will attempt to shed some light on this phenomenon.

---

127 Jensen and Meckling (1976)
129 Broadbent and Laughlin (2009)
130 Segal and Leher (2012)
131 Broadbent and Laughlin (2009)
133 Weick (1976)
The key points of both theories are summarised in Table 1.

Table 1. Agency theory v Stewardship theory

<table>
<thead>
<tr>
<th></th>
<th>Agency theory</th>
<th>Stewardship theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assumptions</strong></td>
<td>• Individuals are self-interested, opportunistic.</td>
<td>• Individuals are service oriented.</td>
</tr>
<tr>
<td></td>
<td>• There is misalignment between what the individual and what the institution want.</td>
<td>• There is alignment between what the individual and what the institution want.</td>
</tr>
<tr>
<td></td>
<td>• Individuals are extrinsically motivated.</td>
<td>• Individuals are intrinsically motivated.</td>
</tr>
<tr>
<td><strong>Focus</strong></td>
<td>• The organisation tightly controls how well the work is done and loosely controls who does the work and on whom.</td>
<td>• The organisation loosely controls how well the work is done but tightly controls who does the work and on whom.</td>
</tr>
<tr>
<td><strong>Time horizon</strong></td>
<td>• Oriented to the delivery of results in the short term.</td>
<td>• Oriented to the delivery of results in the long term.</td>
</tr>
<tr>
<td><strong>Role of information</strong></td>
<td>• Control/monitor and provide incentives.</td>
<td>• Learn and improve performance.</td>
</tr>
</tbody>
</table>

4.6 Insights from literature review

Based on our review, we find that performance is a complex concept that can adopt multiple meanings. Organisations focus on performance at the organisational, group and individual levels. They define performance at these levels often in terms of the particular measures used to review it and assess it. This type of definition can be problematic as the measures used to define performance become performance itself (i.e., means become ends) and marginal information not captured in the performance measures comes to be invisible.

Organisations use performance management mechanisms to ensure that performance at the different organisational levels is achieved. These performance management mechanisms can be formal or informal. They act as a package or system of systems. The key mechanisms comprised in a performance management package have been described in various ways, but for the purpose of this research, the work of Ferreira and Otley\(^{134}\), Simons\(^{135}\), Broadbent and Laughlin\(^{136}\), Bolden et al\(^{137}\) and Weick\(^{138}\) are especially relevant and important. Firstly, Ferreira and Otley’s\(^{134}\) and Simons’\(^{139}\) research is applicable to this study as it can facilitate the data collection and analysis required to describe the type of performance management package or approach UK HEIs adopt and use.

---

\(^{134}\) Ferreira and Otley (2009)  
\(^{135}\) Simons (1995)  
\(^{136}\) Broadbent and Laughlin (2009)  
\(^{137}\) Bolden et al (2012)  
\(^{138}\) Weick (1976)  
\(^{139}\) Ferreira and Otley (2009)  
\(^{140}\) Simons (1995)
Secondly, the work of Broadbent and Laughlin\textsuperscript{141} and Bolden et al\textsuperscript{142} is useful for our research, as they recognise that there are two very distinct approaches for managing performance. These approaches fundamentally differ in their underlying assumptions about human behaviour, their definition of performance and the ways to achieve it. These approaches can be better understood and explained through the lenses of agency theory\textsuperscript{143} and stewardship theory\textsuperscript{144}. Agency theory assumes that people at work are self-interested and risk-averse, needing monitoring and incentives to perform. Alternatively, stewardship theory assumes that people are not necessarily self-interested. People can behave according to public service and personal values that are in line with the interests of their group, organisation and society in general. Stewardship theorists suggest that how people behave is situational. An organisation’s performance management approach is a key factor determining the context in which people work, which in turn influences how people behave and perform. Agency theory underpins what is known in the literature as a transactional\textsuperscript{145} performance management approach. Stewardship research integrates relational\textsuperscript{146} and identity-based\textsuperscript{147} performance management approaches as well as other complementary mechanisms not captured in these two approaches.

Finally, Weick’s ideas are relevant for us as from them we can imply that the two leading performance management approaches are needed to achieve organisational performance due the diversity and complexity of HEIs’ outcomes. Nevertheless, the way in which these approaches are combined or integrated becomes the key determinant of success.

In the context of UK HEIs, there is little research examining the performance management approaches that institutions operate and the consequences they may generate. This is the main purpose of our research. The data collection and analysis methods used are now explained and our findings discussed in detail.

\textsuperscript{141} Broadbent and Laughlin (2009) \hfill \textsuperscript{145} Broadbent and Laughlin (2009) \\
\textsuperscript{142} Bolden et al (2012) \hfill \textsuperscript{146} Broadbent and Laughlin (2009) \\
\textsuperscript{143} Jensen and Meckling (1976); Eisenhardt (1989) \hfill \textsuperscript{147} Bolden et al (2012) \\
\textsuperscript{144} Davis et al (1997); Hernandez (2012)
Phase II. Qualitative research

This section presents the second phase of our study, which comprises the collection and analysis of qualitative data extracted from 110 interviews conducted in six English universities. The next sub-sections describe our research and the insights extracted from it.

5.1 Objectives of the qualitative research

For our case study research we refined our overall research objectives and examined:

- How do the leaders, academics and professional staff of HEIs frame the concept of ‘performance’ and ‘performance management’?
- How do UK HEIs manage their performance at the institutional, school/faculty and individual level?
- What consequences does the specific performance management approach used have on individuals and the institution as a whole?

5.2 Data collection

Based on literature insights, six HEIs were selected according to the following criteria (see Table 2 for a summary): HEI maturity (Russell Group v post-1992), as research suggests that the age of the institution is likely to affect their performance management mechanisms\(^1\); strategic orientation (teaching, teaching and research, and research); sources of income (>80% from government funding v <80% from government funding); and HEI size in terms of number of employees and students (medium v large), as previous work has found that these factors may significantly influence the way in which performance is managed\(^2\). Due to confidentiality agreements we are unable to name the institutions that have kindly participated in this research.

Table 2. Case comparison of HEIs studied based on selection criteria

<table>
<thead>
<tr>
<th></th>
<th>HEI1</th>
<th>HEI2</th>
<th>HEI3</th>
<th>HEI4</th>
<th>HEI5</th>
<th>HEI6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic orientation</td>
<td>Research-intensive</td>
<td>Teaching and research</td>
<td>Research-intensive</td>
<td>Research-intensive</td>
<td>Teaching</td>
<td>Teaching</td>
</tr>
<tr>
<td>Sources of income</td>
<td>&lt;80% gov funding</td>
<td>&gt;80% gov funding</td>
<td>&lt;80% gov funding</td>
<td>&lt;80% gov funding</td>
<td>&gt;80% gov funding</td>
<td>&gt;80% gov funding</td>
</tr>
<tr>
<td>Size</td>
<td>Medium</td>
<td>Large</td>
<td>Medium</td>
<td>Large</td>
<td>Large</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>• Staff: 4,600</td>
<td>• Staff: 2,400</td>
<td>• Staff: 8,400</td>
<td>• Staff: 6,500</td>
<td>• Staff: 2,000</td>
<td>• Staff: 2,300</td>
</tr>
<tr>
<td></td>
<td>• Students: 18,700</td>
<td>• Students: 33,100</td>
<td>• Students: 19,000</td>
<td>• Students: 32,500</td>
<td>• Students: 35,000</td>
<td>• Students: 18,100</td>
</tr>
</tbody>
</table>

\(^1\) Simons (1995)
\(^2\) Segal and Lehrer (2012)
In-depth interviews with 110 key informants were conducted. Academic leaders and professional administrators from the central services of the six institutions were interviewed alongside senior academics, junior academics and support staff from four different disciplines: business and management (BM), education (E), mathematics (M), and arts and cultural studies (A). Business and management and education were chosen under the assumption that individuals working in these areas were familiar with the concepts of performance and performance management, as these concepts are often part of the curriculum in these disciplines. Mathematics was chosen as representative of fundamental or pure science, where academic performance criteria are very difficult to determine and there is evidence suggesting that performance management mechanisms are generating unintended consequences. Arts and cultural studies was chosen as a discipline where measuring and managing performance is highly complex.

Data collection in each institution took place over two to three days at the interviewees' preferred location. Each interview lasted approximately one hour. Interview questions were based on the research performance management framework proposed by Ferreira and Otley (2009) that was briefly discussed in the literature review section (Appendix A presents the complete list of the questions asked). Table 3 presents a summary of the roles of the people interviewed.

Table 3. Summary of people and roles interviewed per HEI

<table>
<thead>
<tr>
<th>Role</th>
<th>HEI1</th>
<th>HEI2</th>
<th>HEI3</th>
<th>HEI4</th>
<th>HEI5</th>
<th>HEI6</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic leaders (eg vice-chancellor, pro-vice-chancellor, head of faculty/school/department)</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>40</td>
<td>36%</td>
</tr>
<tr>
<td>Professional leader (eg registrar, director of finance, director of human resources, director of estates)</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>15</td>
<td>14%</td>
</tr>
<tr>
<td>Senior academic (eg professor, reader, senior lecturer/researcher)</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>12</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior academic (eg lecturer, research fellow)</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional manager/support (eg head of student affairs, head of planning &amp; policy, head of diversity, personal assistants)</td>
<td>8</td>
<td>5</td>
<td>13</td>
<td>8</td>
<td>1</td>
<td>35</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>*Governors</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>16</td>
<td>8</td>
<td>24</td>
<td>20</td>
<td>17</td>
<td>110</td>
<td>100%</td>
</tr>
</tbody>
</table>

5.3 Data analysis

All of the interviews were recorded and transcribed. Transcripts were analysed using the software NVivo9. The analytical procedure focused on recurring themes and concepts and associating them with the insights extracted from the literature review. Interviews are an effective and efficient way to gather rich data; however, they are not free from either researcher or interviewee bias. To minimise potential biases we have also triangulated the interview data with knowledge from the literature and publicly available documents from the HEIs' websites and intranets, such as personnel policies, strategic plans etc. Due to confidentiality agreements with the participating institutions, the names of the participating institutions are not disclosed.

---

151 Ferreira and Otley (2009)  
152 Miles and Huberman (1994)  
153 Eisenhardt and Graebner (2007)
5.4 Findings from the qualitative research

This section presents the findings extracted from our case study research. We present our insights for each of the research questions examined. At the end of the section we summarise these insights and highlight key learning points.

5.4.1 Defining performance in HEIs

The interviews made it clear that institutional performance was a complex issue that related to the delivery of the HEI’s mission. HEIs’ performance was described as multifaceted, comprising what needs to be done. In other words, institutional performance refers to HEI’s ends, objectives or expected outcomes. Regarding what needs to be done, it is important to note that interviewees perceived HEIs’ performance as encompassing diverse outcomes, some of which were mutually exclusive and difficult to harmonise. Additionally, interviewees’ perceptions about the meaning of performance were subject to the interviewees’ role and their position within the institution. These insights are reflected in these quotes:

“Performance, I would say, is to deliver our mission effectively.” [HEI1_CS03_Academic Leader]

“[Performance] is the way that the institution achieves its mission really, in terms of its teaching and its research in our case, the way it goes about that, the outputs, the levels of achievement, the way it organises itself to achieve those things, those aspects of the mission.” [HEI4_CS02_Professional Leader]

“I think there are a lot of aspects to it. […] I don’t think there is any single measure of institutional performance. In a ‘corporate’ you can almost grab performance as being what is the profitability you have made […] I think the higher education sector is very different. So, if you think about the overall mission of the university, which is about a combination of delivering the research, attracting the best possible students and then taking them through a journey. But, at the same time, delivering it in a financially sustainable way. So performance has a number of different aspects at the same time. And they are, to some degree, mutually exclusive, because in enhancing the student experience, one of the things you do is throw money at it, which destroys the financial sustainability.” [HEI1_CS04_Professional Leader]

When defining performance, most people in leadership and academic roles assumed that the concept related to academic performance, suggesting that it was comprised of excellent research (assessed predominantly through the REF criteria), and of excellent teaching (assessed in terms of student feedback). Only the interviewees from HEI3 extended the idea of performance to incorporate service duties referring to those actions and activities that contribute to the academic community, policymaking, and society in general. Junior academics expressed a particular emphasis on the importance of research in terms of publication outputs and placed less focus on teaching.

“I think performance here is largely based around research from my perspective and how well people do in terms of publications that they have in prestigious journals, in particular, and how they perform in the REF, that seems to be huge here and people tend to define themselves by whether or not they are ‘refable’ or not.” [HEI1_A23_Professional Manager]

“Performance relates to the core functions that academics and scholars are meant to perform. For me they sit around research and teaching and there are associated duties […] that relate to those administrative duties that are related to teaching and research. There is also what I’ll call community service and outreach activity either of a professional sort in respect of things like editorial boards or professional associations or perhaps more community-oriented outreach within the life of a university or beyond it. And also particularly for us I suppose seeking to influence and work with policy makers and partnership institutions.” [HEI3_E01_Academic leader]

“For me performance, it feels like it is to publish and to bring in money. So although I’m aware that teaching is part of my role but it feels like there’s much less emphasis on that, much less evaluation done.” [HEI1_E21_Junior Academic]
People in professional roles defined performance mainly as doing your job to the best of your ability, making sure that it contributes to the mission of the institution.

“Performance is achieving the job you’ve been asked to do in a way that’s right and proper and legal and decent and honest and truthful. So that’s performance, depending on the tasks and depending on the job description and whether you go over and above that job description or not.”  

[HEIS_CS01_Support Staff]

Apart from the broader view of academic performance in HEI3 and the greater focus on research outputs in junior academics, there were no observable differences in the definitions of performance across the six cases or according to the diverse disciplines included in the sample.

5.4.2 Defining performance management in HEIs

When defining performance management, most interviewees, in one way or another, suggested that the term had negative connotations. It was associated with staff performance reviews and with the management of people’s underperformance. This negative connotation was especially noticeable in interviewees with academic roles who often highlighted that the performance of people in academic roles does not need to be managed, as people in these roles are intrinsically motivated individuals who monitor their own performance. In none of the universities studied was the term performance management used as such. To refer to individual performance management the preferred term was “personal development review” or “staff development review”.

“It is a technology to support effective delivery of high performance, and that would include targets and blah-blah. Well, you understand what I mean. It implies that it is a means to an end, not an end in itself. Sustaining our values is a central part of delivering our mission, our performance. You could make lots of money and lose the plot. Performance management is not something this university finds easy to accept. We are a university with very high performing people and if we over manage them their performance is likely to fall, rather than rise.”  

[HEI1_CS03_Academic leader]

“The word is used sensitively because performance management would normally, in the profession of HR, be the terminology that is used for how individuals might be managed or assessed in terms of how they are performing […]. For administrative roles and for the big administrative functions that are centrally run you would find the terminology quite comfortable […]. For academic roles, we tend not to use it quite so strongly. We have what we call a staff review and development system, which, if you look at it, you’d say: look this is an appraisal system. We’ve called it a review and development in order to say the emphasis is on performance development rather than on performance management or pay.”  

[HEI3_CS4_Academic Leader]

“It [performance management] is difficult, at least in pure mathematics, because talk to any academic, or nearly any academic in the pure subjects, and they’ve been motivated to become an academic because of their curiosity in the subject that they’re interested in. And some of them are motivated because they really want to teach, but I’d say the majority of people I’ve talked to, their primary motivation is that they like their research in what they’re doing. And it’s a complete disaster if someone directs them.”  

[HEI4_M09_Senior Academic]

“The university is essentially run through a democratic process where every important decision has to be approved by its members, and they have so far resisted the introduction of any kind of formal performance management and those words are almost forbidden in any discussion.”  

[HEI3_CS02_Academic leader]

The idea of performance management as a package or a holistic system was not shared in the context of the HEIs studied. In our cases, different formal mechanisms were used at the various levels of the institution, but they were not integrated into a system of systems or formally designed performance management framework. Different mechanisms were employed. They were temporarily related but not necessarily aligned, which could be interpreted as reflecting a loosely coupled system.

“I assume it is performance management of individuals. I don’t think about performance management as applying to the institution or its units. I think that I would think of that more in terms of, what we might call, process review if it is a process, school review if it’s a school or annual academic review if it’s a faculty. So we tend to review a set period of time where teams of individuals will evaluate how units are doing. I think of that in terms of the language of review rather than performance management.”  

[HEI1_A14_Academic Leader]

154 Weick (1976); Cohen and March (1974)
Regarding the definitions of the terms performance and performance management, there were no meaningful differences in the meanings arising from the six HEIs studied or the four disciplines included in our selected sample.

5.4.3 Performance management mechanisms

We analysed the evidence collected from our case study universities looking for the mechanisms they used to manage their performance at three different hierarchical levels: institutional, school/faculty and individual level. We followed the frameworks found in our literature review phase as reference and guidance. The works of Ferreira and Otley\textsuperscript{155}, Simons\textsuperscript{156} and Broadbent and Laughlin\textsuperscript{157} were especially valuable in this task. We investigated how different performance management mechanisms were operated at different levels and the attention they received. These mechanisms are summarised in Table 4.

Table 4. Comparison of mechanisms used at different levels of the institution

<table>
<thead>
<tr>
<th>Performance management mechanisms</th>
<th>Institutional level</th>
<th>School/faculty level</th>
<th>Individual level</th>
</tr>
</thead>
<tbody>
<tr>
<td>How is performance defined?</td>
<td>Mission, vision and strategic goals</td>
<td>Strategic goals</td>
<td>Individual goals (set mainly by them)</td>
</tr>
<tr>
<td>How is performance achieved?</td>
<td>Overall strategy (includes strategic priorities, plans to achieve them).</td>
<td>School/faculty strategic plans.</td>
<td>Attracting and retaining highly talented individuals.</td>
</tr>
<tr>
<td></td>
<td>Key information systems (KIS) and/or Key Performance Measures (KPIs) (including REF, aggregated research income, NSS scores, etc.).</td>
<td>Information systems (REF submissions, students’ recruitment monitoring, NSS, etc.).</td>
<td>Self-management.</td>
</tr>
<tr>
<td></td>
<td>Budget control.</td>
<td>Budget control.</td>
<td>Intrinsic drivers (sense of autonomy, sense of development, sense of community).</td>
</tr>
<tr>
<td></td>
<td>University-wide policies.</td>
<td>School/faculty policies.</td>
<td>Staff review and development.</td>
</tr>
<tr>
<td></td>
<td>Committees and boards.</td>
<td>Committees and boards.</td>
<td>Feedback from reviewers, students and peers.</td>
</tr>
<tr>
<td></td>
<td>Feedback from external reviews and accreditation agencies.</td>
<td>Feedback from external reviews and accreditation agencies.</td>
<td>One-to-ones with colleagues, collaborators and mentors.</td>
</tr>
<tr>
<td></td>
<td>REF.</td>
<td>REF.</td>
<td>Having the appropriate resources.</td>
</tr>
</tbody>
</table>

\textsuperscript{155} Ferreira and Otley (2009) \textsuperscript{156} Simons (1995) \textsuperscript{157} Broadbent and Laughlin (2009)
5.4.3.1 Performance management mechanisms at the institutional level

At the institutional level (vice-chancellor’s office and central services), the six institutions had very similar formal performance management mechanisms, which was not surprising as all the HEIs followed government initiatives\(^\text{158}\) and the recommendations of special committees and reports related to the HE sector\(^\text{159}\). They all had a mission and a vision statement to communicate the overall purpose, objectives or goals (often referred to as strategic priorities), alongside a list of values that each institution considered their own. They had written strategies developed to attain their key institutional goals (eg research strategy, teaching strategy, etc). They also used numerous quantitative indicators (known as key information sets or key success factors) to measure and review critical areas of activity (eg finances, research income, publications, student surveys etc) and to assist in their understanding of how well institutional goals were being achieved. High institutional performance was rewarded mainly through government funding and reputation. In addition, universities also used policies for establishing ground rules and relevant committees and meetings where performance areas were discussed, reviewed and decisions were made. Some of these mechanisms and their peculiarities are now discussed in turn.

Regarding HEIs’ missions, it is worth noting that it is one thing to formally establish them; another thing is the extent to which people understand the missions of their institutions and internalise them in their day-to-day work. Through the cases, it was noticeable that in HEI3 and HEI1 (less so in HEI4) interviewees were consistent when describing what they perceived to be the purpose of their institutions. It was research excellence. In the rest of our case study institutions, there was less agreement about the ultimate mission of the institution. Within the same university, when interviewees were asked about their HEI’s mission, some stressed the importance of student experience or widening participation, others suggested financial sustainability or highlighted research and education. Answers to our question about their HEI’s mission were highly dependent on the role and area of work of the interviewees. This evidence suggests that the overall mission of these institutions was unclear in the “hearts and minds” of their people. An explanation could be that the mission was complex to comprehend (comprised of too many diverse outcomes) or it was too variable or unstable (priorities changed too rapidly). Quotes from two of our case universities, HEI5 and HEI1 can be used to reflect these points.

**HEIS:**

“*I suppose the mission at the moment is student satisfaction. It’s customer service, it’s very much customer service focused in that respect. Also, I suppose, academic excellence is a large part of that but it’s also, the mission and vision I suppose at the moment is to get the best possible performing organisation out of what’s left of higher education in terms of the context that we’re now in.*”

[HEIS_07_Professional-support]

“Well, our mission is to educate young people.”

[HEIS_011_Professional leader]

“It’s a very difficult time to answer that question because of course the mission of all universities has changed dramatically and literally on a weekly basis. So if I define what I think it was last year and then perhaps tell you where I think the challenges are coming. The mission of the university has always been one of widening participation, in a very broad sense, so that would include for example, internationalisation.”

[HEIS_05_Academic leader]

“(The university) has got several missions. One of them is to prepare students for work, so we want to prepare students to go out and to have the best work and to be prepared for the market and to get the best job. So I would say in one word we train to students to know things for employment, that’s what I would say. So we prepare students, that’s the first mission. The second mission I would say it is research.”

[HEIS_03_Lecturer]


\(^{159}\) For example: Diamond (2011); Wakeham (2010); CUC (2010, 2008, 2006); Jarratt Committee (1985);
Research and Development Series

HEI1:

“Well I think the excellence in education and research and enterprise are the key things.”  
[HEI1_05_Professional leader]

“People see or they want to see [the university] as an internationally recognised and engaged university, recognised through its excellence in teaching and research.”  
[HEI1_11_Academic leader]

“I think it’s just to be the very best at what we do and that’s excelling in both teaching and research.”  
[HEI1_23_Professional manager]

“Its mission is I suppose to … be regarded as one of the top quality institutions for research within the UK as well as globally.”  
[HEI1_22_Lecturer]

Regarding the strategies that institutions adopted to ensure their missions were realised, all the institutions had formally developed an institution-wide strategy that stated and clarified the institution's strategic priorities and integrated the different plans and actions proposed to achieve those priorities (eg research and REF strategies, teaching strategy, internationalisation strategy, workforce/staff strategy etc). In HEI5, HEI2, HEI4, HEI6 the overall direction of the university was mainly set at the top. In HEI3 and HEI1 the direction of the administrative/support side of the institution appeared to be set at the top but the direction of the academic side of the institution was driven by its schools/faculties. In all, the research strategy and teaching/learning strategy were developed using a bottom-up approach through a consultative process.

It is worth noting that most staff at the school/faculty level (especially those that did not have administrative duties) had difficulties understanding strategies in general. Some argued that from their position it was hard to get the “big picture” of what the university was planning to do and what it meant for them and their roles. Many were not even aware of the strategies of their own school/faculty. The following quote is highly representative of this point:

“Strategies? It doesn’t mean anything [to me]. Are you talking about documents that I should know? Sorry, I don’t know. I haven’t really checked. I know about research, the key factors and everything, but I haven’t read the [strategy] documents. I’m sorry but now that you are telling me I will go and read about them.”  
[HEI5_03_Lecturer]

The case study universities used a variety of methods to communicate priorities and plans to staff. The favoured way to communicate strategic priorities and plans was through official documents that were discussed in relevant committees and town hall meetings as well as being uploaded to the university intranet. HEI4 was innovative in this area as they used strategy maps throughout the institution to communicate their mission and strategic priorities. HEI2 was very active in using its intranet to highlight particular priorities and to communicate the university’s successes. These mechanisms appear to be relatively effective with people in support or professional roles, less so with people in academic roles. Communication with academics (especially for those that were not in leadership positions) was perceived as more effective when done verbally through departmental meetings or through conversations with line managers and colleagues.

“The vision and values statement is well publicised on the internet, on the intranet. We update that every year through the corporate plan and the operating statement with key performance indicators which are fed down, cascaded down through the senior management levels, then on down through their own teams of staff. So everything within the corporate plan and the operator feeds up into that mission and vision.”  
[HEI5_01_Professional-support]

“The corporate plan is communicated annually and, depending upon whether it’s a radical change, the actual change might have involved obviously a series of meetings and things, but assuming it’s just a normal tweak here and tweak there, then that will go via various different presentations and things, so the vice-chancellor himself holds what we call Meet the Executive meetings.”  
[HEI2_02_Professional-manager]

“I think is the most useful are the school and department meetings. I should say I’ve never been to any university meetings or university briefing sessions. I mean usually they’re in term and you’re just far too busy to go to them. The school meetings are very useful because the head of school who is the guy who is I guess closest to what’s going on at the higher level speaks.”  
[HEI4_08_Lecturer]
All of the institutions used performance measures and performance reviews. The six institutions were all going through numerous changes regarding their information systems with each of them trying to make performance information more automated, objective and integrated. Many interviewees highlighted how difficult it was to have high quality data that was easily accessible and up to date. It is worth stressing how differently institutions used their performance information system at the top (vice-chancellor’s office and powerful committees). In HEI5, HEI2, HEI4, and HEI6 the use of quantitative performance information in meetings was very important. These institutions used performance indicators to track their progress and, when there was sufficient benchmarking data available, they adopted performance aspirations or targets. Academic leaders and administrators paid a lot of attention to quantitative information. They used it to report externally but also to drive decision-making and monitor activities internally. HEI3 and HEI1 also had information systems with quantitative performance indicators. Professional leaders in these institutions focused on them, but academic leaders did not pay too much attention to the numbers. Academic leaders at the top used the information mainly to encourage conversations and debates internally and to report externally. Specific performance targets were rarely used in HEI3 and HEI1.

When we compared the key performance measures that universities used with the mission they were trying to achieve, it is worth mentioning that performance measures captured only a few of the performance dimensions defined as important by the institutions. The measurement of performance was perceived as problematic, especially in relation to complex priorities such as research and education excellence. For instance, all of the institutions stated “the pursuit of knowledge/research to transform lives and contribute to society” in various ways in their mission. This statement was translated into particular strategic priorities, for example: “to be recognised for our research excellence”, which was measured by the university’s results in the Research Excellence Framework (REF). They also highlighted in their missions their focus on “education and student experience”, which was translated into specific objectives such as “to provide high quality education” measured by the National Student Survey (NSS) alongside other secondary metrics. Despite the fact that the REF and the NSS results are proxies of “research excellence” and “high quality education” respectively, universities seemed to interpret them as if they were a perfect reflection of these strategic priorities. Most interviewees in academic roles perceived that leaders’ close attention to the REF and the NSS was driving dysfunctional behaviours (eg reduced risk taking in research projects, concentration of main stream research).

The increased attention universities are paying to measurable results such as those obtained from the REF or the NSS was explained as being driven by rewards and recognition mechanisms. Universities’ income is highly dependent on measurable research performance as the government is progressively making funding decisions based on criteria that focus on results or outputs rather than inputs. Reputation is increasingly being influenced by quantitative, publicly available, criteria. Students (and their parents) assess universities based on information such as the NSS scores or newspaper league tables, as this information is understood as signifying the “quality” or the “value” of the university and its courses. Governors look for objective criteria to review how well the university is doing and either praise or critique its leaders. Due to these rewards and recognition mechanisms, interviewees mentioned that their universities were increasingly paying more and more attention to performance measures and their results than in the past.

“I think it’s intensifying […] Because I mean the key thing that’s changing is competition and it’s going to take a while for the public at large to understand that getting something cheaper isn’t necessarily better and what you might get for going for the cheaper model is a cheaper quality of product and a cheaper… perhaps, rightly or wrongly a lower valued product at the end. So therefore to distinguish ourselves between that it puts even more pressure on all those uppers, so actually in a kind of tightening situation your outputs have got to be even better, so it’s putting even more of an emphasis on those KPI’s.” [HEI5_02_Academic leader]

The universities investigated had contextual and cultural values that made them use their performance management mechanisms differently. Using Simons’ framework as our analytic tool, we found that HEI1 and HEI3 relied on their belief systems (ie strong values and shared mission) to facilitate and support performance as opposed to monitoring and controlling it. They also used boundary systems (eg university policies, codes of conduct and formal rules) to minimise undesirable actions. The leaders of these universities believed that a supportive community, academic freedom and highly talented individuals who are intrinsically motivated competent professionals were the key drivers of their institutional performance, defined as high quality research and education. We perceived that the leaders of HEI1 and HEI3 accepted management practices as playing an important role in enabling performance, but thought that they were not the basis for it. Due to external pressures, they had to pay attention to

160 ter Bogt and Scapens (2012)
162 Simons (1995)
objective performance measures, but they used them interactively, as discussion tools and to reflect on the information they provided. Failing to perform triggered improvement and development actions; it did not seem to have financial or reputational effects (unless poor performance was systematic and all the available supportive actions had been adopted with little success). As reviewed in the literature section, the performance management approach used by HEI3 and HEI1 resembles the approach described by Broadbent and Laughlin as relational rather than transactional. The following quotes adequately reflect this finding.

“How does one know what the academics are supposed to do unless one has some sense of what the institution’s mission and objectives are on the one hand. On the other hand, a university is hugely dependent on individuals being encouraged to pursue their individual aims and goals and not over determining what those are supposed to be […] . They [universities] are creative institutions ultimately not top-down managed institutions, and one needs to some extent trust and encourage those individuals and assume that the flourishing of individual abilities and potentials is going to be of benefit to the institution in ways which are not always predictable.”  

[HEI3_Academic leader]

“The institutional performance can be measured by things like what proportion of the national research grant income have we got, relative to other competing universities; what proportion of new fellows to the Royal Society, etc. […] Although we pretend that they don’t really matter, obviously one looks at the increasingly high profile league tables. And although we don’t like to make too much use of them because they are rather volatile and they’re rather fickle and their criteria are not at all rational, you know, if we keep coming out in the top then that says we have at least in the past been doing something right. It’s not a very good measure of what you’re doing now or in the future”  

[HEI3_Academic leader]

HEI5, HEI2, HEI4 and less so HEI6 had dedicated a considerable amount of time, attention and resources to the development of formal performance management mechanisms like the ones described by Broadbent and Laughlin as transactional. Their leaders paid close attention to performance measurement information even though this was not consistent across their different hierarchical levels or schools/faculties. Interviewees’ comments suggested that decisions in these institutions were increasingly being led by performance data. Data was discussed and reflected upon, as this approach is part of the way of working in the HE sector; however when making decisions, objective performance information was increasingly having more weight than subjective information. This is shown here:

“I think [being a successful university] is keeping your eye on the key indicators of success, the key performance indicators basically. It’s keeping your eye on the ball in terms of what makes a successful institution, which is basically results.”  

[HEI5_Academic leader]

5.4.3.2 Performance management mechanisms at the school/faculty level

At the faculty level, strategic priorities and plans were often developed in a consultative way.

 “[Strategy planning] it’s very collegiate. So in this faculty we collectively write a faculty business plan focused on objectives. […] I do the first draft, then we go on an away day and then we refine it and then we collectively agree on that. So there’s quite a lot of negotiation and discussion over the clarity of what we want to do.”  

[HEI2_Academic Leader]

The most important formal performance management mechanisms were the budget/accounting system, the workload models, the REF aggregated submissions and the NSS scores. How these systems were used depended on the academic discipline, the personalities of the leaders and the extent to which the decision-making power resided in professionals or academics. Business and management, and education schools/faculties used and paid more attention to performance management mechanisms than mathematics and arts schools. Some schools/faculties had leaders who had a transactional leadership style and emphasised the use of management mechanisms to monitor and control performance. Others had leaders whose style could be defined as transformational or relational and paid little attention to performance management tools. It is also interesting to note that staff in professional roles often used performance management tools to monitor their activities. They paid high attention to them. Schools/faculties with highly powerful professionals were also more likely to establish clear objectives, plans, performance measures and targets to monitor individual performance.
At the school/faculty level it is also critical to highlight the importance of feedback provided by accreditation agencies and independent external reviewers of courses and programmes. The information received from these reviews had a strong impact on school/faculty’s operational matters. This type of feedback was thoroughly reviewed and considered to improve.

5.4.3.3 Performance management mechanisms at the individual level
Looking at the mechanisms used to guide and influence the performance of people, we found that the performance of those in academic roles was influenced by a set of mechanisms different to the ones that influenced the performance of people in professional and support roles.

“There is a problem in universities, particularly on the academic side, obviously you pick this up at appraisals, which are seen as intrusive and blah, blah, blah, and linked to performance; appraisals to manage performance is seen as the end of the world. But not so much on the service side, not so much on the professional services side, where having objectives, being assessed and all this sort of stuff seems to be a much more normal thing.”  [HEI5_Professional leader]

The performance of people in professional and support roles was guided and influenced by: individual and team goals, individual performance evaluations (with measurable activities and actions to achieve) usually conducted once a year through the Personal Development Review (PDR) process, continuous feedback received from supervisors and peers, pay increments and promotion prospects. People in these types of roles found PDRs useful and valuable. They argued that PDRs helped them clarify their role requirements and the extent to which these requirements were being met. They did not find PDRs to be threatening or challenging. They perceived them as relevant and supportive of their work. They also suggested that the continuous feedback they received from their superiors was valuable.

The performance of most people in academic roles seemed to be determined by intrinsic drivers. Aspects such as autonomy, external recognition, reputation, promotion prospects, having the appropriate resources and a nurturing and supportive environment encouraged academics' motivation. Feedback was also perceived as a key factor influencing individual performance but academics argued that valuable feedback was that received from peers, mentors or reviewers of their research. The feedback obtained from PDRs was perceived as useful by junior faculty. The rest of those in academic roles view PDRs helpful when their main purpose was developmental and career-focused. This was the approach used in HEI3 and HEI1, HEI6 and to some extent in HEI4.

“Academics are self-motivated. Now, there might be the odd example of an academic who's lost interest in his research, and there will be some impasse, and then the manager has to shift that person to something else, I mean, there's probably three things we're supposed to do: teaching, admin and research. Just increase the other things. There can, of course, be a problem if the person is a poor teacher and poor at admin. And that is a management problem that I don't think we've tackled sufficiently in the university, quite honestly.”  [HEI4_09_Lecturer]

“There is a staff review process which operates every two years. It's fairly light touch. It's much more carrot than stick and it is an attempt I guess to assist people with their career progression and development.”  [HEI3_Academic leader]

Most academics agreed (with some exceptions coming from academics with full-time management roles) that PDRs are increasingly being perceived as a monitoring device that, together with workload models and the Research Excellence Framework, is unhelpful and to some extent dysfunctional. In particular, most people in academic roles perceived PDRs as unnecessary. Firstly, these tools are time bound and short-term oriented. PDRs assess performance within particular timeframes (normally one year) that are not in line with how academic performance is generated, which is with a long-term view. Secondly, these tools increase the amount of the things people do but not necessarily their quality. Thirdly, due to these tools, people are becoming more risk averse, as failing to comply with performance requirements can threaten their employability and reputation. Fourthly, these tools reduce the willingness of academics to work in teams within their departments (they do still work in teams but with people in other institutions or internationally, as this action does not affect their refability). It also reduces their willingness to pay attention to things that are difficult to measure or are not reflected in a PDR (such as helping colleagues or servicing the community). Finally, these mechanisms are costly in terms of the time they take to operate and respond to.
It is important to note that in the universities studied, apart from the use of goals, performance measures, performance reviews and various reward mechanisms, there was an additional performance management mechanism, which was the recruitment and probation of people (especially those for academic posts). In particular HEI1 and HEI3 highlighted how important the attraction and retention of the best possible talent was for their performance at all levels.

5.4.4 Performance management approaches using theoretical lenses

Once we had analysed the performance management mechanisms designed and used by our case study institutions, we examined them through the lenses of agency and stewardship theory. We found that the universities studied adopted a particular overall approach, either towards agency or towards stewardship when designing and using their performance management mechanisms. None of them had elements of pure agency or pure stewardship. To illustrate this point we present the institutions in an stewardship-agency continuum (see Figure 2).

Figure 2. Position of case study HEIs in the agency-stewardship continuum

Due to the pressures to perform and the performance management mechanisms placed by external forces on UK HEIs (such as the REF, NSS, league tables), the leaders of the universities studied often commented in their interviews that their intention for the future was to put more emphasis on monitoring and incentive mechanisms. In the particular cases of HEI3 and HEI1 many leaders complained that they were being pushed to pay more attention to measurable performance information due to the pressures they were under. Based on this evidence we foresee that in the near future, unless there are significant changes in the HE sector, institutions will be moving towards a stronger agency-based model and away from a stewardship-based one.

At the individual level, it is interesting to note that where universities formally adopted the same mechanisms (the more prominent being the PDR process), they were used differently on the academic and the professional side of the institution. People in academic roles preferred the mechanisms associated with the stewardship approach and disliked those related to the agency approach. In all the institutions (especially in HEI3 and HEI1 and to a lesser extent in HEI4), people in academic roles perceived that their institutions had stewardship mechanisms in place (high-trust mechanisms were identified, not so much corruption-minimising mechanisms). They also highlighted that these mechanisms were being influenced by an increased emphasis on agency mechanisms (eg individual performance reviews, REF). People in professional and support roles had a positive perception of agency-based mechanisms (clear tasks, measures, evaluations and rewards). They also valued stewardship mechanisms in particular those related to the context of work (such as a collaborative and supportive culture).

5.4.5 Consequences of performance management on HEIs’ and staff wellbeing

When asked about the consequences of performance management, interviewees focused on the impact that the various mechanisms used to manage performance had on them or their colleagues (ie their behaviour or wellbeing). In particular, participants stressed the influence of PDRs, the REF and student satisfaction surveys. We believe that this is so because interviewees did not perceive their universities to have a holistic system or a package of interrelated performance management mechanisms. They primarily perceive PDRs, REF and the student satisfaction surveys as the only tools their institutions used to manage performance.
Regarding PDRs, as shown earlier, people in professional roles did not question their use and were neutral about the potential consequences of this tool on the wellbeing of individuals. Professional leaders and senior academic leaders with management responsibilities in HEI5, HEI6, HEI2 and some in HEI4 shared this neutral view of PDRs with the overall idea that it was a necessary evil. On the contrary, most people in academic roles perceived that PDRs affected behaviour and were unhelpful and unnecessary (at least when used to monitor and control performance), as PDRs often define performance in a reductionist way (a set of measures and targets). They found PDRs useful for development and for receiving career advice, especially for junior faculty. Although, many suggested that these developmental conversations happened informally anyway without the need for PDRs.

“[Consequences of PDRs] It depends on the monitoring, if they monitor my quality, I try to increase my quality. If they monitor my numbers that’s when I don’t like it, but you try to balance and increase the number of course. It’s like strategic learning I would say. If they monitor me in X, I will do X. It’s not deep learning, it’s strategic learning.” [HEI5_Lecturer]

Looking at the REF, which only applies to people in academic roles, the views were practically unanimous. People in academic roles from all the disciplines examined had, in different degrees, concerns about the REF. They argued that it had become a performance management device, which was affecting institutions’ and academics’ behaviour with potential detrimental effects for UK research. The following quotes illustrate this point.

“[The REF] It’s causing a variety of kinds of risk-taking behaviour. I suppose many organisations are seeing who they can poach now and there’s a lot of movement on that basis. I think that the REF system is most unhelpful in that respect […] there’s an awful lot of time being spent headhunting and the like, so it just has created this dysfunctional, wasteful system. Yet as I’ve said already I think probably you can predict a very high correction between the scores last time and the scores next time.” [HEI5_Professional]

“[The REF] It’s certainly had an effect on individual researchers and I mean looking at it in two ways. I mean those who’ve got a history of being active researchers have been through it an RAE before and so that pressure has been on them for a long time and so they eventually … they know their system and they’re working towards that. I think it’s particularly the case with new entrants who’ve not been through that and they’re coming into it, so the way they feel there’s a great deal more pressure on them than perhaps there might’ve been in the past. So the pressure on them to perform, to deliver. And there is a kind of awareness of the conflicts that they feel between commitment to teaching and commitment to research.” [HEI2_Academic Leader]

The negative views on the REF were particularly strong in the schools of mathematics.

“The REF does and has changed behaviour, so you must produce four papers. An old fashioned academic who is just studying something for years and then writes a book […] would not even get into the REF if he didn’t have the four papers. Right, so […] it’s changed behaviour, not all for the best.” [HEI4_Senior Academic]

For junior academics the consequences of the REF seem more prominent.

“All I hear is REF, REF, REF.” [HEI03_BM08_Junior Academic]

“[The REF] It’s certainly had an effect on individual researchers and I mean looking at it in two ways. I mean those who’ve got a history of being active researchers have been through it an RAE before and so that pressure has been on them for a long time and so they eventually … they know their system and they’re working towards that. I think it’s particularly the case with new entrants who’ve not been through that and they’re coming into it, so the way they feel there’s a great deal more pressure on them than perhaps there might’ve been in the past. So the pressure on them to perform, to deliver. And there is a kind of awareness of the conflicts that they feel between commitment to teaching and commitment to research.” [HEI2_Academic Leader]
It must be highlighted that some of the universities studied and, in particular, some of their schools addressed the REF using a supportive approach.

“The REF is obviously an individual thing, but there is... we do take a very collective view as a school, about supporting everybody to achieve their REF target. We don’t, as a school, say you’re not up to snuff on your targets, it’s your problem, sort it. In some schools they do that. You know, it’s a sink or swim model. We don’t.”  

[HEI4_Academic Leader]

Similar concerns and comments about the dysfunctionality of the REF were received about the NSS.

“Everything is about the NSS. So we have to try and cajole students into filling them in the final year. We have to be very nice, I mean I shouldn’t say this because you’re not supposed to, but we have to be very nice to students in their final year, in the months leading up to NSS time. It’s all a bit commercial and ingenuous, I think.”  

[HEI6_Senior Lecturer]

5.5 Insights from the qualitative research

When synthesising our evidence, six key findings emerge. Firstly, the concept of performance in the context of HEIs is similar to the concept used in other contexts. Performance in UK HEIs is multifaceted. Interviewees suggested that institutional performance referred to the HEI’s mission or expected ends or outcomes. UK HEIs’ missions include a combination of short-term and long-term goals, most of which are mutually exclusive and difficult to measure, observe or predict. It is important to note that the overall performance of an institution, as described in its mission statement, is translated into a reduced number of performance measures, which are considered to be means to help understand and represent performance. However, there is evidence suggesting that most interviewees, especially those in leadership positions, were using performance measures (eg REF, NSS, etc) as true representations of institutional performance.

Secondly, performance management is not understood according to our definition of the term. It is not viewed as a package or a system of formal and informal mechanisms used to attain performance. Performance management is perceived to be a tool used mainly to manage individual performance. It is a concept that has negative connotations, especially on the academic side of institutions.

Thirdly, we find that the performance management mechanisms HEIs adopt are to some extent homogenous and standard (with various degrees of sophistication). However, the way in which HEIs use these mechanisms and the attention and resources they devote to them is different. The type of performance management mechanisms HEIs use can be grouped into six categories: (1) mechanisms for planning performance; (2) mechanisms for measuring performance; (3) mechanisms for reviewing performance; (4) mechanisms for rewarding performance; (5) mechanisms for leading and coordinating performance; and (6) mechanisms for employing for performance. Our data shows that the HEIs studied have the mechanisms suggested by powerful stakeholders such as government, which are influenced by the NPM ideology underpinned by agency theory premises. These agency-based or directive mechanisms operated alongside stewardship-based or enabling mechanisms that rely on traditional academic values such as autonomy, trust and collaboration. Table 5 describes in greater detail these mechanisms.
Table 5. A classification of performance management approaches used in HEIs

<table>
<thead>
<tr>
<th>Planning for performance</th>
<th>Agency-based/directive performance management mechanisms</th>
<th>Stewardship-based/enabling performance management mechanisms</th>
</tr>
</thead>
</table>
|                          | • Performance is defined in terms of goals at the different levels of the institution (individual, group, school/faculty, institution). These goals are often short term in nature.  
• The top leadership team sets the mission and its strategic priorities.  
• Strategies are devised to reach the goals established.  
• Defined projects, short term in nature and concerned with tangible outputs are developed. | • A mission (or cause) is selected and embedded throughout the institution. The key expected or intended outcomes are long-term in nature.  
• Strategic priorities are discussed and agreed among the different institution stakeholders through active discussions and dialogues.  
• Ill-defined and long-term oriented plans and projects are created to support the delivery of the mission. |
| Measuring performance    | • Performance measures are developed and used to assess the extent to which goals are achieved (ie monitor performance).  
• Performance targets are used to differentiate ‘good’ from ‘poor’ performance. | • Where applicable measures of performance are developed, agreed and used by the institution stakeholders; but their role is to encourage understanding, learning and improvement rather than control. |
| Reviewing performance    | • Review of performance at the individual level (eg through performance appraisals).  
• The focus of performance reviews are to monitor how well the work is done. | • Review of performance occurs at the group level (individuals’ performance is self-managed).  
• Individuals may have annual or bi-annual development reviews, which focus on learning and career progression. |
| Rewarding performance    | • Extrinsic rewards (base pay increases, incentives and promotions are based on measurable performance criteria). | • Total rewards – comprising extrinsic rewards (base pay at market rate, promotions based on strengths, recognition, awards) and intrinsic rewards (sense of autonomy, sense of community, sense of development, sense of meaningfulness). Greater reliance on intrinsic rewards. |
| Coordinating/leading performance | • ‘Command and control’; transactional leadership.  
• Leaders pay close attention to the results of performance measures and operate accordingly (ie what can be measured can be managed). | • Self-management, shared leadership, and/or transformational leadership.  
• Leaders pay attention to what is meaningful for the institution and for staff (even if what is meaningful cannot be measured). |
| Employing for performance (recruiting and probation) | • Focus on how well the individual has performed in the past and performs during the probation period according to measurable criteria. | • Focus on the individual (his/her intrinsic motivation, values, alignment with the mission and overall talent).  
• Tight control of who joins the institution and who stays after the probation period. |
| Resources (time and money) | • Resources are invested in the development of: monitoring and incentive mechanisms, actions/activities that deliver outputs, and a controlled environment. | • Resources are invested in individuals (on their recruitment, selection and development as well as on the appropriate tools they require to do their jobs) and on creating an enabling/high-trust environment. |
Agency-based and stewardship-based performance management approaches are in operation in our six case study institutions, but they do not receive the same attention or dedicated resources. We observe that those institutions with a mission that is clearly and unanimously focused on the long-term contributions of their staff to the public good (through excellent research and education even though these outcomes are complex and difficult to observe or measure) pay little attention to their agency-based mechanisms (currently suggested as best practices in the HE sector). They formally rely on their stewardship-based mechanisms to guide, facilitate and support their people's performance and their overarching mission. Institutions pursuing a mission where short-term financial or operational objectives have more weight than long-term scholarly objectives pay more attention to their agency-based mechanisms and less to their stewardship-based ones.

Fourth, we show that agency-based performance management mechanisms are perceived to generate dysfunctional consequences when used to monitor and control performance objectives that are difficult to measure and evaluate (such as excellence in research and education, understood as REF and NSS results respectively). This is not a novel insight. It is well known in the management literature that performance information and extrinsic rewards only work well when outcome uncertainty is low (ie, performance is easy to measure, observe and predict and performance information is cheaply available). When performance is complex to define and the cost of measurement is high, agency-based solutions may be ineffective166.

Fifth, due to institutional and economic pressures, we observe that HEIs are tending to increase their reliance on agency-based performance management mechanisms. Interviewees perceive that the emphasis on performance measurement and performance reviews at all levels is growing. For many of them, these mechanisms are not aligned to their scholarly mission and values. HEIs are accentuating their focus on agency-based mechanisms because failing to do so can seriously affect their funding and reputation. Academics are complying with the REF (previously the RAE), because failing to comply may put at risk their reputation and their careers. This tendency is worrying because, as suggested by Ghoshal and Moran167, over time the adoption of mechanisms based on agency assumptions of opportunistic behaviour intensifies or can even generate (if that assumed behaviour was not there in the first place) opportunistic behaviours. Agency theory has been described as a “self-fulfilling prophecy”168. The more people focus on performance measures and targets that are poor definitions of performance, the more people may “hit the targets but miss the point”169. Furthermore, performance management mechanisms have a sorting effect. They attract and retain those individuals that operate well in them, which means that people with the values and motivation needed to best deliver the long-term mission of HEIs - stewardship values and intrinsic motivation - are likely to adapt to the agency paradigm, move to institutions where stewardship mechanisms still remain or leave academia.

Finally, we identify that people's perceptions about the usefulness and consequences of agency-based performance management mechanisms are dependent on their type of job role. Most people in leadership and in professional/administrative roles seem to appreciate the value of agency-based performance management mechanisms such as clear goals, plans, performance measures and targets. On the contrary, people in typical academic roles find agency-based mechanisms unhelpful and inappropriate for delivering their performance. The majority of participants positively perceived high-trust stewardship-based mechanisms, but many highlighted that their institutions struggled to implement mechanisms to prevent potential opportunistic behaviours (ie, poor performers or people that may benefit from the system).

166 Eisenhardt (1989)
167 Ghoshal and Moran (1996)
168 Ghoshal (2005); Segal and Leher (2012)
169 Hood (2006)
Phase III: Quantitative research

This section presents the third phase of our research: the analysis of the quantitative data extracted from a survey of staff working in UK HEIs and from external information. The external information comes from four different sources: the Higher Education Statistics Association (HESA); the last Research Assessment Exercise (RAE 2008); the National Student Survey (NSS); and the Universities and Colleges Union (UCU). We begin by explaining the specific objectives of this phase of research and how it was carried out. We then present and summarise our insights.

6.1 Objectives of quantitative research

Based on our literature review and qualitative research findings we refined our initial research objectives and embarked on the quantitative data gathering work with the following objectives:

- To better understand the extent to which UK HEIs rely on agency- and/or stewardship-based performance management approaches.
- To investigate the relationship between the mission of the institution and its performance management approach.
- To analyse the extent to which different performance management approaches relate to individual and institutional wellbeing.
- To examine how job roles moderate the relationships between HEI mission, performance management approach and individual wellbeing.

6.2 Conceptual model

To guide our quantitative research we developed a conceptual model based on the key relationships found relevant in our case study research and literature review (see Figure 3).

Figure 3. Analytic framework

Our conceptual model suggests that the performance management mechanisms UK HEIs adopt can be classified into agency-based and stewardship-based performance management mechanisms. HEIs have both types of mechanisms in operation. HEIs’ overall mission (i.e., institutional goals) determines how much they rely on each type of mechanism. As we found in our case study research, in our conceptual model we assume that those HEIs pursuing institutional goals that are easily measured and short-term oriented will rely more on agency-based mechanisms to achieve their goals; and those HEIs pursuing institutional goals that are highly complex to measure and long-term oriented will rely more on stewardship-based mechanisms to achieve their goals.

The way in which an HEI manages its performance by relying on either an agency-based or a stewardship-based approach will in turn influence the wellbeing of both staff and institution. It will influence staff wellbeing as the performance management approach used has a direct effect on the content and context of work. It is important to note, however, that this relationship will be highly dependent on the job role of staff (i.e., the nature of the goals they need to attain). In our case study research, we found that people in academic roles preferred the use of stewardship-based mechanisms. People in these roles were disappointed with agency-based mechanisms (e.g., individual performance appraisals), as the short-term and rigid nature of these mechanisms was at odds with the nature of their jobs. On the contrary, people in non-academic roles were pleased with the clarity and formality of agency-based mechanisms without being unsupportive of stewardship-based mechanisms. In our quantitative data analysis we concentrate on the relationship between the performance management approach used and academic staff’s wellbeing.
Our conceptual model also proposes that there will be a relationship between the way in which an HEI manages its performance and its overall wellbeing in terms of the results it achieves (eg, quality of research outputs, student satisfaction etc). This will occur because, by definition, performance management mechanisms are designed and used to facilitate the achievement of institutional goals. Also, the performance management approach an HEI uses will be associated with the wellbeing of its staff, which in turn will be associated with HEI's wellbeing, as education institutions' results are highly dependent on the “hearts and minds” of the people that work for them.

The relationships included in our conceptual model can be summarised in the hypotheses presented in Table 6. The main aim of our quantitative research is to explore how well the evidence collected supports these hypotheses.

### Table 6. Hypotheses to be tested with survey and archival data

<table>
<thead>
<tr>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: There is a relationship between the mission of an institution (ie, its key goals) and the type of performance management mechanisms it relies on.</td>
</tr>
<tr>
<td>a) An HEI that focuses on institutional goals that can be easily measured and are short-term oriented will rely on agency-based performance management mechanisms to achieve its goals.</td>
</tr>
<tr>
<td>b) An HEI that focuses on institution goals that are difficult to measure and long-term oriented will rely on stewardship-based performance management mechanisms to achieve its goals.</td>
</tr>
<tr>
<td>H2: There is a relationship between the performance management approach an institution uses and the wellbeing of its staff.</td>
</tr>
<tr>
<td>H3: There is a relationship between the performance management approach an institution uses and its wellbeing in terms of the results it achieves.</td>
</tr>
<tr>
<td>H4: There is a relationship between staff wellbeing and institutional wellbeing.</td>
</tr>
</tbody>
</table>

### 6.3 Data collection

To test our hypotheses we collected data with a survey instrument and from external databases.

#### 6.3.1 Survey data

We developed an online survey based on the literature and our case study insights. Through this survey we assessed an array of issues related to performance management in HEIs (the report with the complete information of this survey can be found at [http://bit.ly/1bf4QxJ](http://bit.ly/1bf4QxJ)). For the investigation of our conceptual model we concentrated on three key variables: (1) the extent to which staff perceived that their institution valued cost effectiveness, widening participation, learning and teaching excellence, and contributing to society, culture, the economy and the environment; (2) the extent to which staff perceived that their institution used an agency-based performance management approach; and (3) the extent to which staff perceived that their institution used a stewardship-based performance management approach. Appendix B includes a detailed description of the measures used to assess each of our survey variables. All measures had a 7-point Likert scale. Appendix C shows the results of our factor and reliability analysis.
The survey aimed to gather responses from members of staff working in 162 UK HEIs\textsuperscript{171}. Our sample strategy was to focus on the responses of staff working in UK HEIs. We developed a database of 3,650 people working for UK HEIs based on the public data available online. We gathered the email addresses of staff working in leadership academic roles (eg vice-chancellor, pro-vice-chancellors, academic head of school/faculty or department), leadership professional roles (eg director of finance, director or HR, registrar), professional managers and support roles (eg accountant, secretary and PA) and academic roles (professor, reader, senior lecturer, lecturer, researcher). Two organisations, the Universities and Colleges Employers Association (UCEA) and the Universities and Colleges Academic Union (UCU), also helped us to gather further responses by sending an email about our research with a link to our questionnaire to their members. The survey took place from September to October 2012.

In total we received 1,342 survey responses out of which 1,017 responses from 141 institutions were usable\textsuperscript{172}. In conducting the analysis of our conceptual model we excluded those institutions for which we did not have multiple respondents (that is more than 3) and information from our archival research. These choices left us with 951 responses in 99 HEIs. Table 7 shows descriptive information about the survey respondents. Appendix D shows the HEIs from which we received usable responses to our survey.

Table 7. Demographic information of survey respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Roles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blended role - academic leader (eg vice-chancellor, pro-vice-chancellor, head of faculty/school/department) and professional services leader (eg registrar, director of finance, director of human resources)</td>
<td>198</td>
<td>19.5%</td>
</tr>
<tr>
<td>Academic role (eg professor, reader, senior lecturer, senior researcher, lecturer, researcher, post-doc)</td>
<td>588</td>
<td>57.8%</td>
</tr>
<tr>
<td>Professional role - professional services manager (eg head of training and development, head of student affairs, head of planning and policy), support (eg assistants) and &quot;other&quot;</td>
<td>231</td>
<td>22.7%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>532</td>
<td>52.3%</td>
</tr>
<tr>
<td>Male</td>
<td>485</td>
<td>47.7%</td>
</tr>
<tr>
<td><strong>Job location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central services</td>
<td>266</td>
<td>26.2%</td>
</tr>
<tr>
<td>A school/faculty</td>
<td>751</td>
<td>73.8%</td>
</tr>
<tr>
<td><strong>Years of working for their current HEI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;=2008</td>
<td>245</td>
<td>24.1%</td>
</tr>
<tr>
<td>2002-2007</td>
<td>309</td>
<td>30.4%</td>
</tr>
<tr>
<td>1996-2001</td>
<td>197</td>
<td>19.4%</td>
</tr>
<tr>
<td>1990-1995</td>
<td>136</td>
<td>13.4%</td>
</tr>
<tr>
<td>1984-1989</td>
<td>76</td>
<td>7.5%</td>
</tr>
<tr>
<td>1978-1983</td>
<td>41</td>
<td>4.0%</td>
</tr>
<tr>
<td>1972-1977</td>
<td>13</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>7</td>
<td>0.7%</td>
</tr>
<tr>
<td>26-35</td>
<td>91</td>
<td>8.9%</td>
</tr>
<tr>
<td>36-45</td>
<td>226</td>
<td>22.2%</td>
</tr>
<tr>
<td>46-55</td>
<td>397</td>
<td>39.0%</td>
</tr>
<tr>
<td>56-65</td>
<td>279</td>
<td>27.4%</td>
</tr>
<tr>
<td>66 and over</td>
<td>17</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

\textsuperscript{171} HEIs were selected using 2011 data extracted from the Higher Education Statistics Agency (HESA). For this reason, institutions that were not included in the 2011 HESA HEIs database were not included in the survey.

\textsuperscript{172} Out of the total of 1,342 responses we excluded those that did not answer our key questions relating to goals or roles and those that answered less than 60% of the questionnaire.
6.3.2 Archival data
We downloaded archival information from the Higher Education Statistics Association (HESA), the 2008 Research Assessment Exercise (RAE) as the new Research Excellence Framework (REF) does not take place until 2014, the 2012 National Student Survey (NSS) and the 2012 Universities and College Academic Union (UCU) wellbeing survey. Table 9 shows the measures extracted from these databases. This data was used to measure both individual wellbeing and institutional wellbeing. Its inclusion aims to address the potential common method bias\(^{173}\) that is likely to exist in survey research.

Individual wellbeing has been conceptually defined as “living in a state that is in some sense good”\(^{174}\). We measured individual wellbeing using the results of the 2012 UCU survey on academics wellbeing as this survey provided us with responses to the same questions by all UK HEIs. For HEIs, we interpret institutional wellbeing as functioning in a way that is perceived as “good” by the sector standards. We operationalised institutional wellbeing with the following measures: quality of research outputs, financial sustainability, employability of students and students’ overall satisfaction with their courses. It must be noted that it is not our intention to use these measures to reflect institutional performance. These measures reflect the results obtained by institutions according to those particular criteria.

6.4 Data analysis
We translated our conceptual model into an analytic model (see Figure 4) that includes the variables measured in our study. For testing our analytic model we used simultaneous equations. This decision was made due to the volume of variables included in the model and to better understand the relationships studied. We estimate our model under missing data theory using all available data and full-information maximum likelihood (FIML)\(^{175}\), and the estimation method is maximum likelihood parameter estimates (MLR) with standard errors that are robust to non-normality. Our approach is to compute standard errors taking into account stratification, non-independence of observations due to cluster sampling, and unequal probability of selection\(^{176}\). The software used was MPlus\(^{7}\).

![Figure 4. Analytic model with measured variables](image)

6.5 Findings of the quantitative research
When we analysed our proposed hypotheses we found the results shown in Figure 5. Table 8 shows the estimates (β) obtained in our model. Only significant relationships at p<.05 are shown in the visual representation the models. The arrows included in each of the models represent associations (sequence of relationships among the variables in the model) rather than cause-and-effect relationships.

---

174 Warr (2012)  
175 Enders (2001)  
176 Satorra (1992)  
177 Muthen and Muthen (2012)
Hypothesis 1 suggested that there was a relationship between the mission of an institution (i.e., its key institutional goals) and the type of performance management mechanisms it relied on. To examine how well our data supported this hypothesis, we analyzed the relationship between the extent to which HEIs focused on five key institutional goals: cost effectiveness, widening participation, learning and teaching excellence, research excellence and contribution to society, culture, the economy and the environment (these goals were found to be important for all UK HEIs in our case study research) and the extent to which HEIs relied on either agency-based or stewardship-based performance management mechanisms.

In particular, for testing H1a we analyzed the relationship between the extent to which respondents perceived cost effectiveness as a key institutional goal and the extent to which they perceived that their institution used agency-based or stewardship-based performance management approach. Cost effectiveness is a goal that can be easily assessed using accounting information and it is often evaluated on an annual basis. Our data shows that an institutional focus on cost-effectiveness is positively related to the use of an agency-based performance management approach ($\beta = .37$, $p < .001$). The relationship between a focus on cost-effectiveness and the use of a stewardship-based approach is not significant.

Hypothesis 1b related a HEI’s focus on long-term complex goals to a reliance on a stewardship-based performance management approach. We used contribution to society, culture, the economy and the environment; widening participation; teaching and learning quality; and research excellence as examples of goals that are long-term oriented and complex to measure. We find that an institutional focus on these type of goals is positively related to the use of a stewardship-based performance management approach ($\beta = .34$, $p < .05$ and $\beta = .30$, $p < .001$ respectively). An institutional focus on either teaching and learning quality or widening participation, which can be considered goals of moderate complexity and time orientation, is not significantly related to any performance management approach.

Hypothesis 2 suggested that there was a relationship between the performance management mechanisms a HEI uses, either agency-based or stewardship-based, and the wellbeing of its staff. For testing this hypothesis we particularly looked at the influence of performance management on academic staff. We find that an agency-based performance management approach is negatively related to the wellbeing of academic staff ($\beta = -.33$, $p < .001$), while a stewardship-based approach is positively related to the wellbeing of people in academic roles ($\beta = .22$, $p < .05$).

Hypothesis 3 proposed that the performance management approach an institution uses is associated to its wellbeing in terms of the results it achieves. In our analysis, we find that the perceived use of an agency-based approach is negatively associated with institutional wellbeing in terms of the quality of research outputs ($\beta = -.15$, $p < .05$). A stewardship-based performance management approach is positively related to student satisfaction ($\beta = .24$, $p < .05$) and marginally related to student employability ($\beta = .21$, $p > .01$) (please note that this last relationship is not shown in Figure 5 as this figure only shows significant relationships that have $p \leq .05$).

Hypothesis 4 presented the relationship between staff wellbeing and institutional wellbeing. We find that staff wellbeing assessed in terms of low occupational stress of academics is positively associated with all the measures used to operationalise institutional wellbeing: student satisfaction ($\beta = .29$, $p < .001$), student employability ($\beta = .33$, $p < .001$), quality of research outputs rated as four stars in the last RAE ($\beta = .18$, $p < .05$) and financial sustainability ($\beta = .29$, $p < .001$).

From our analysis, it is also worth highlighting the direct relationships we find between the respondents’ perceptions of the goals their institutions value and the wellbeing of staff and the institution. We find that an institutional focus on widening participation (i.e., accessibility to all motivated learners) is negatively related to student wellbeing in terms of satisfaction ($\beta = -.39$, $p < .001$) and employability ($\beta = -.42$, $p < .001$). An institutional focus on research excellence is directly and positively related to the wellbeing of people in academic roles ($\beta = .28$, $p < .05$) and to institutional wellbeing in terms of the quality of research (positively to outputs rated as four stars ($\beta = .63$, $p < .001$) and negatively to outputs rated as one star ($\beta = -.73$, $p < .001$). Finally, an institutional focus on contributing to society, culture, the economy and the environment is, interestingly, negatively related to the quality of research outputs rated as four stars ($\beta = -.32$, $p < .001$) and positively to those rated as 1 star ($\beta = .30$, $p < .001$) in the last RAE.

178 Gibbs (2010)
Table 8. Estimates of simultaneous equations - Institutional data (Aggregated individual responses >=3 per institution)

<table>
<thead>
<tr>
<th></th>
<th>Cost effectiveness (β)</th>
<th>Widening participation (β)</th>
<th>Learning &amp; teaching excellence (β)</th>
<th>Research excellence (β)</th>
<th>Contribution to society (β)</th>
<th>Agency-based (β)</th>
<th>Stewardship-based (β)</th>
<th>UCU (β)</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency-based</td>
<td>.374***</td>
<td>-.174*</td>
<td>-.013</td>
<td>-.034</td>
<td>.162</td>
<td></td>
<td></td>
<td>.175</td>
<td>.392</td>
</tr>
<tr>
<td>Stewardship-based</td>
<td>.066</td>
<td>.116</td>
<td>.157</td>
<td>.298***</td>
<td>.338**</td>
<td></td>
<td></td>
<td>.399</td>
<td>.360</td>
</tr>
<tr>
<td>UCU</td>
<td>.092</td>
<td>-.219</td>
<td>-.076</td>
<td>.278**</td>
<td>.043</td>
<td>-.326***</td>
<td>.220**</td>
<td>.262</td>
<td>.286***</td>
</tr>
<tr>
<td>NSS</td>
<td>-.110</td>
<td>-.393***</td>
<td>.096</td>
<td>.133</td>
<td>-.060</td>
<td>-.111</td>
<td>.237**</td>
<td>.286***</td>
<td>.399</td>
</tr>
<tr>
<td>EMP</td>
<td>-.140</td>
<td>-.415***</td>
<td>.142</td>
<td>.034</td>
<td>.062</td>
<td>-.064</td>
<td>.210*</td>
<td>.332***</td>
<td>.665</td>
</tr>
<tr>
<td>R4</td>
<td>-.102</td>
<td>-.092</td>
<td>.013</td>
<td>.630***</td>
<td>-.315**</td>
<td>-.146**</td>
<td>-.021</td>
<td>.184**</td>
<td>.706</td>
</tr>
<tr>
<td>R1</td>
<td>.130**</td>
<td>.159</td>
<td>.007</td>
<td>-.729***</td>
<td>.300***</td>
<td>.027</td>
<td>.050</td>
<td>.012</td>
<td>.286***</td>
</tr>
<tr>
<td>SUR</td>
<td>.012</td>
<td>.100</td>
<td>-.164</td>
<td>.115</td>
<td>-.183*</td>
<td>.093</td>
<td>-.024</td>
<td>.160</td>
<td></td>
</tr>
</tbody>
</table>

*** p-value < 0.001; ** p-value < 0.05; * p-value < 0.10

Figure 5. Model 1: Institutional data (Aggregated individual responses >=3 per institution)

Key:
gce – cost effective
ag – agency based
st – stewardship based
ucu – academics wellbeing
nss – student satisfaction
emp – student employability
r4 (Number of research output 4* in RAE)
r1 (Number of research output 1* in RAE)
sur – financial sustainability

p-value < 0.05; STDYX Estimate (S.E.); Residual Variants=1-R².
6.6 Insights from the quantitative research

Following our quantitative data analysis, we extract four key insights from this evidence.

Firstly, the type of performance management mechanisms an institution uses is associated with the nature of its mission (i.e., institutional goals). We find that institutions where respondents perceived that their HEI's mission is to focus on goals that are highly complex to measure and long-term oriented, as in the case of research excellence goals or contribution to the public good goals, are likely to rely on a stewardship-based approach to manage their performance. Institutions where respondents perceived that their HEI's mission is to focus on goals that are easy to measure and short-term oriented such as cost effectiveness are likely to rely on an agency-based performance management approach. This finding is consistent with the qualitative evidence obtained in our case study research and with previous agency\textsuperscript{179} and stewardship theory research\textsuperscript{180}.

Secondly, the research finds that the type of performance management approach an institution relies on is associated with the wellbeing of its academic staff. A high reliance on agency-based performance management mechanisms is related to low perceptions of wellbeing in academic staff. A high reliance on stewardship-based performance management mechanisms is related to high perceptions of wellbeing in academic staff. This finding supports the insights obtained in our case studies and it is also in line with the findings of previous research in the HE sector\textsuperscript{181}.

Thirdly, we show that the performance management approach an institution relies on is directly related to the institution's results. Respondents' perception of a high emphasis on agency-based mechanisms in their institution is negatively related to the quality of research outputs that institution achieves. That is, the more respondents perceive that their institution relies on agency-based mechanisms to manage performance the fewer research outputs in the last Research Assessment Exercise the institution has. Contrary to this, the more respondents perceive that their institution relies on stewardship-based mechanisms to nurture performance the higher student satisfaction results the institution has. The recent work of McCormack et al\textsuperscript{182} looking at the influence of management practices on the performance of universities supports our results.

Finally, the evidence suggests that there is a strong and positive relationship between academic staff wellbeing and the wellbeing of the institution assessed by all the measures studied (i.e., student satisfaction, student employability, quality of research outputs and financial sustainability). In the management literature these relationships have also been found and explained with the common knowledge that "happy employees enable happy customers and better organisational results"\textsuperscript{183}.

\textsuperscript{179} Eg Eisenhardt (1989)
\textsuperscript{180} Eg Segal and Lehrer (2012); Hernandez (2012); Davis et al (1997)
\textsuperscript{181} Broadbent (2006, 2007); Bolden's et al (2012)
\textsuperscript{182} McCormack et al (2013)
\textsuperscript{183} Reichheld (1996); Heskett et al (1997)
A summary of the results of our hypotheses testing is shown in Table 9.

**Table 9. Summary of results of hypotheses testing**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>UK HEIs data findings</th>
</tr>
</thead>
</table>
| **H1:** There is a relationship between the mission of an institution (ie its key goals) and the type of performance management mechanisms it relies on. | Supported  
• HEIs that focus on cost-effectiveness goals are likely to rely on agency-based performance management mechanisms  
• HEIs that focus on research excellence and on contributing to society, culture, the economy and the environment (ie the public good) are likely to rely on stewardship-based performance management mechanisms |
| a) An HEI that focuses on institutional goals that can be easily measured and are short-term oriented will rely on agency-based performance management mechanisms to achieve its goals.  
 b) A HEI that focuses on institutional goals that are difficult to measure and long-term oriented will rely on stewardship-based performance management mechanisms to achieve its goals. | Supported  
• Reliance on an agency-based approach to manage performance is negatively related to academic staff’s wellbeing  
• Reliance on a stewardship-based approach to manage performance is positively related to academic staff’s wellbeing |
| **H2:** There is a relationship between the performance management approach an institution uses and the wellbeing of its staff. | Supported  
• Reliance on an agency-based approach to manage performance is negatively related to the quality of research outputs an institution achieves.  
• (Note: the direct relationship between an agency-based approach and the other measures of institutional wellbeing is non significant)  
• Reliance on a stewardship-based approach to manage performance is positively related to the degree of students satisfaction an institution achieves  
(Note: the direct relationship between a stewardship-based approach and the other measures of institutional wellbeing is non significant) |
| **H3:** There is a relationship between the performance management approach an institution uses and its wellbeing in terms of the results it achieves. | Supported  
• Reliance on an agency-based approach to manage performance is negatively related to the student satisfaction, student employability, quality of research outputs and financial sustainability an institution achieves |
| **H4:** There is a relationship between staff wellbeing and institutional wellbeing. | Supported  
• The degree of wellbeing of academic staff is positively related to the student satisfaction, student employability, quality of research outputs and financial sustainability an institution achieves |
Summary of overall findings and conclusions

In this research we wanted to investigate the following research questions:

- How are the concepts of “performance” and “performance management” interpreted in UK HEIs?
- How do UK HEIs manage their performance?
- To what extent do the different ways in which UK HEIs manage their performance influence the wellbeing of the institutions and the wellbeing of their staff?

To address these research questions we used a multi-method research approach. We conducted six in-depth case studies in England and an online survey addressed to all the staff of UK HEIs. We also obtained archival data from the Higher Education Statistics Association (HESA), the Research Assessment Exercise (RAE), the National Students Survey (NSS) and the Universities and College Union (UCU).

The next subsections summarise our insights regarding each of our research questions.

7.1 The meaning of performance and performance management

We find that performance is a complex and ambiguous concept that relates to the delivery of an HEI’s mission (or its higher ends). Interview data suggests that HEIs define performance according to specific performance measures (e.g., research outputs, student satisfaction) at different hierarchical levels (individual, group, school/faculty or institution as a whole). Performance measures are considered to be imperfect representations of performance (i.e., the mission of an institution), as there are multiple aspects of performance that are unobservable and thus difficult to measure. The use of performance measures is justified as they are considered a means to attain the expected ends. It is interesting to note that these means are starting to be interpreted as ends in themselves. For instance, most leaders are interpreting the outputs of the REF or the NSS as a reliable representation of research quality or student wellbeing respectively. This is a sign of concern as previous literature has highlighted how dysfunctional the interpretation of means as ends can be.

When means are interpreted as ends, people focus their attention and decisions on increasing means, sometimes at the expense or to the detriment of ends. Means capture measured information (either qualitatively or quantitatively) so other critical information that cannot be readily measured is marginalised, eventually becoming invisible. Over time, the results of means or performance measures improve due to either positive learning (people learn how to improve their performance in whatever they are being measured on); perverse learning (people learn how to meet the specific requirements of a performance measure adapting their behaviour or manipulating information); or selection (institutions learn with time, positively or perversely, how their staff operate and decide to substitute the people that do not perform well according to the specific measures of performance with those that do perform well). However, despite the fact that performance measures improve with time, it may happen that an HEI’s higher ends are not achieved or, even worse, they might be harmed.

185 Meyer and Gupta (1994)
Our evidence shows that HEIs need to excel in multiple areas or dimensions of performance. For instance, HEIs are expected to excel not only in the quality of their teaching and research but also in their capacity to provide access to all motivated learners (normally referred to as widening participation), reduce unnecessary costs, be financially sustainable and, overall, contribute to our society, culture, economy and environment. Achieving excellence in all these areas is extremely complicated as it often happens that to increase performance in one area means to decrease in others. For instance, as one of the interviewees suggested, “for enhancing students’ experience, one of the things you do is throw money at it, which destroys the financial sustainability”. Finding the right balance between the different performance dimensions and resolving the tensions generated by needing to perform in all areas is arguably the most important challenge UK HEIs are currently facing. Performance management mechanisms are perceived by institutions as a way to address this challenge. Indeed, we find that UK HEIs are putting more and more emphasis on their performance management mechanisms.

We started our research with an operational definition of performance management to help us focus our work. We preliminary defined performance management as “the evolving formal and informal mechanisms used to ensure the institution attains its aims and objectives satisfying its stakeholders and being sustainable.” Following Ferreira and Otley’s performance management framework we concentrated our research on investigating the extent to which institutions adopted and used: a clear definition of their vision and mission with strategic goals, key success factors, a particular organisational structure to influence performance, strategies or plans, key performance indicators or information sets, performance targets, performance evaluation, rewards and other informal mechanisms (such as peer pressure and self-management).

In our interviews we find that the phrase performance management is not understood according to our definition. It is primarily associated with individual performance appraisals or the management of poor individual performance. Performance management has negative connotations for the majority of people interviewed, especially for those in academic roles. This phrase is not part of the common lexicon of most HEIs. Indeed institutions often avoid it and adopt alternatives such as “performance review” or “personal review”.

7.2 Different performance management approaches used by UK HEIs

We find that HEIs adopt a combination of mechanisms that operate at different levels of the institution, that is, at the institutional, school/faculty and individual level (see Table 10). These mechanisms are not observed as being integrated into a package or a system of systems as we initially expected to find. Instead, we perceive that the performance management mechanisms HEIs used are loosely coupled (ie temporarily related rather than logically related). For example, individual performance appraisals take place at a particular point in time after institutional goals and overall strategic plans have been set; however, the content of performance appraisals is not necessary related to the higher aims of the institution or the strategic plans established.

---

186 Neely (1999)
187 Based on Ferreira and Otley (2009)
188 Ferreira and Otley (2009)
189 Malmi and Brown (2008)
190 Cohen and March (1974)
### Table 10. Key performance management mechanisms in six English HEIs (copy of table 4)

<table>
<thead>
<tr>
<th>Performance management mechanisms</th>
<th>Institutional level</th>
<th>School/ faculty level</th>
<th>Individual level</th>
</tr>
</thead>
<tbody>
<tr>
<td>How is performance defined?</td>
<td>Mission, vision and strategic goals</td>
<td>Strategic goals</td>
<td>Individual goals (set mainly by them)</td>
</tr>
<tr>
<td>How is performance achieved?</td>
<td>Overall strategy (includes strategic priorities, plans to achieve them).</td>
<td>School/faculty strategic plans.</td>
<td>Attracting and retaining highly talented individuals.</td>
</tr>
<tr>
<td></td>
<td>Key information systems (KIS) and/or Key Performance Measures (KPIs) (including REF, aggregated research income, NSS scores, etc).</td>
<td>Information systems (REF submissions, students’ recruitment monitoring, NSS, etc).</td>
<td>Self-management.</td>
</tr>
<tr>
<td></td>
<td>Budget control.</td>
<td>Budget control.</td>
<td>Intrinsic drivers (sense of autonomy, sense of development, sense of community).</td>
</tr>
<tr>
<td></td>
<td>University-wide policies.</td>
<td>School/faculty policies.</td>
<td>Staff review and development.</td>
</tr>
<tr>
<td></td>
<td>Committees and boards.</td>
<td>Committees and boards.</td>
<td>Feedback from reviewers, students and peers.</td>
</tr>
<tr>
<td></td>
<td>Feedback from external reviews and accreditation agencies.</td>
<td>Feedback from external reviews and accreditation agencies.</td>
<td>One-to-ones with colleagues, collaborators and mentors.</td>
</tr>
</tbody>
</table>

To facilitate the analysis of the different performance management approaches used in HEIs, we investigated the performance management mechanisms found through the lenses of agency theory\(^\text{191}\) and stewardship theory\(^\text{192}\). Based on the literature reviewed and on the evidence gathered through our case study research we organised the various performance management mechanisms employed by HEIs into six critical systems: performance planning, performance measurement, performance review, rewards, coordination and leadership and recruitment. We also classified the mechanisms under two types of performance management approaches: agency-based or directive and stewardship-based or enabling. Table 11 describes both approaches in detail.

\(^{191}\) Eisenhardt (1989); Jensen and Meckling (1976)
\(^{192}\) Davis et al. (1997); Hernandez (2012)
<table>
<thead>
<tr>
<th>Planning for performance</th>
<th>Agency-based/directive performance management mechanisms</th>
<th>Stewardship-based/enabling performance management mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance is defined in terms of goals at the different levels of the institution (individual, group, school/faculty, institution). These goals are often short term in nature.</td>
<td>A mission (or cause) is selected and embedded throughout the institution. The key expected or intended outcomes are long-term in nature.</td>
<td></td>
</tr>
<tr>
<td>The top leadership team sets the mission and its strategic priorities.</td>
<td>Strategic priorities are discussed and agreed among the different institution stakeholders through active discussions and dialogues.</td>
<td></td>
</tr>
<tr>
<td>Strategies are devised to reach the goals established.</td>
<td>Ill-defined and long-term oriented plans and projects are created to support the delivery of the mission.</td>
<td></td>
</tr>
<tr>
<td>Defined projects, short term in nature and concerned with tangible outputs are developed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measuring performance</th>
<th>Agency-based/directive performance management mechanisms</th>
<th>Stewardship-based/enabling performance management mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance measures are developed and used to assess the extent to which goals are achieved (ie monitor performance). Performance targets are used to differentiate ‘good’ from ‘poor’ performance.</td>
<td>Where applicable measures of performance are developed, agreed and used by the institution stakeholders; but their role is to encourage understanding, learning and improvement rather than control.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reviewing performance</th>
<th>Agency-based/directive performance management mechanisms</th>
<th>Stewardship-based/enabling performance management mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review of performance at the individual level (eg through performance appraisals). The focus of performance reviews are to monitor how well the work is done.</td>
<td>Review of performance occurs at the group level (individuals’ performance is self-managed). Individuals may have annual or bi-annual development reviews, which focus on learning and career progression.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rewarding performance</th>
<th>Agency-based/directive performance management mechanisms</th>
<th>Stewardship-based/enabling performance management mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic rewards (base pay increases, incentives and promotions are based on measurable performance criteria).</td>
<td>Total rewards – comprising extrinsic rewards (base pay at market rate, promotions based on strengths, recognition, awards) and intrinsic rewards (sense of autonomy, sense of community, sense of development, sense of meaningfulness). Greater reliance on intrinsic rewards.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coordinating/leading performance</th>
<th>Agency-based/directive performance management mechanisms</th>
<th>Stewardship-based/enabling performance management mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Command and control’; transactional leadership. Leaders pay close attention to the results of performance measures and operate accordingly (ie what can be measured can be managed).</td>
<td>Self-management, shared leadership, and/or transformational leadership. Leaders pay attention to what is meaningful for the institution and for staff (even if what is meaningful cannot be measured).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employing for performance (recruiting and probation)</th>
<th>Agency-based/directive performance management mechanisms</th>
<th>Stewardship-based/enabling performance management mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on how well the individual has performed in the past and performs during the probation period according to measurable criteria.</td>
<td>Focus on the individual (his/her intrinsic motivation, values, alignment with the mission and overall talent). Tight control of who joins the institution and who stays after the probation period.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources (time and money)</th>
<th>Agency-based/directive performance management mechanisms</th>
<th>Stewardship-based/enabling performance management mechanisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources are invested in the development of: monitoring and incentive mechanisms, actions/activities that deliver outputs, and a controlled environment.</td>
<td>Resources are invested in individuals (on their recruitment, selection and development as well as on the appropriate tools they require to do their jobs) and on creating an enabling/high-trust environment.</td>
<td></td>
</tr>
</tbody>
</table>
In our qualitative research, we find that the performance management mechanisms HEIs adopt at the institutional level are to some extent homogenous and standard with various degrees of sophistication. The agency-based mechanisms introduced in the last few decades as a result of the NPM movement and other economic and institutional pressures (e.g., performance indicators, appraisals, etc.) operate alongside the stewardship-based mechanisms that emanate from the traditional academic values and ways of working. Despite the homogeneity found in the type of mechanisms adopted, the HEIs studied differ in the amount of resources and attention they dedicate to either agency or stewardship mechanisms. Russell Group institutions, characterised as being research-intensive, devoted more attention and resources to their stewardship-based performance management mechanisms. Post-1992 institutions, typically known for having a teaching and practice-driven focus, relied more on their agency-based practices to ensure the delivery of their mission. Apart from the mission orientation of these institutions, it is important to note that the differences observed in the performance management mechanisms used might be due to an array of additional factors such as history, ethos, size or location - factors that this particular research is not fully capturing.

It is interesting to note that within the institutions studied, at the individual level we find that staff in professional and support roles rely more or put more emphasis on agency-based performance management mechanisms during their day-to-day work. People in academic roles are more likely to rely on stewardship-based mechanisms but due to the increased focus on academic short-term measurable performance, such as via the REF and the NSS, these type of mechanisms are under threat and in some institutions, agency-based mechanisms are increasingly being used to influence academic performance.

We also find that all HEIs intend to gradually intensify their reliance on agency-based performance management mechanisms. HEIs are investing more and more time and money in defining and communicating their strategic priorities and plans and in designing, implementing, and managing performance indicators and performance reviews at all levels. Some HEIs use or are planning to increase their use of performance-related rewards. We believe that this tendency is mainly due to the pressures to perform in the short-term, comply with regulations and continue to follow the practices promoted by the NPM movement.

In our view, this finding is extremely important and worrying, especially for those institutions that pursue a traditional scholarly mission. HEIs that aim to educate our next generations and conduct research that contributes to society, the economy, culture, and the environment may find that an over-reliance on agency-based mechanisms harm their mission. In essence, education and research excellence are goals that are highly complex and difficult to measure and, by nature, long-term oriented. Taking into consideration the knowledge provided by agency theory and stewardship theory, if an HEI aims to achieve these goals then the predominant mechanisms should be stewardship rather than agency. This assertion does not mean that an HEI needs to abandon its agency-based mechanisms. Together with their long-term goals, HEIs have short-term goals as well. For example, HEIs need to be financially sustainable and they need to run their daily operations. We believe that UK HEIs with a traditional scholarly mission need to find a way to balance the two approaches, with stewardship being the predominant approach. Our view is in line with the work of other researchers that have conducted similar research in other countries.*

Indeed, our survey and archival evidence supports our argument. We find that the mission or higher ends of the institution, as perceived by its staff, is a key determinant of the institution’s leading performance management approach. People perceiving that their institutions pursue and value cost-effectiveness, which is a short-term and highly measurable goal, are more likely to perceive that their institutions rely on agency-based mechanisms to manage performance. People perceiving that their institutions pursue and value contributions to society, culture, the economy, and the environment are likely to perceive that their institutions rely on stewardship-based mechanisms to guide and encourage performance. We also find that a mismatch between the types of goals the institution aims to achieve and the predominant performance management approach it uses to achieve them can be detrimental in terms of staff and institutional wellbeing.

193 See for example the work of Aghion et al (2010)
7.3 Performance management approaches and wellbeing

When investigating the relationship between the use of different performance management approaches and wellbeing we find the following. Please note that our findings show relationships. They do not show causation.

Reliance on agency-based performance management

- Respondents’ perceptions of agency-based mechanisms are negatively related to the wellbeing of academic staff. That is, those institutions where agency-based mechanisms are emphasised present higher levels of occupational stress in academics. In turn, low academic staff wellbeing is associated with low student satisfaction, low student employability and low surplus over time or high deficit figures.
- Respondents’ perceptions of agency-based mechanisms are negatively related to institutional wellbeing. Those institutions in which agency-based practices are emphasised show lower levels of research excellence according to the last REF.

Reliance on stewardship-based performance management

- Perceptions of stewardship-based mechanisms are positively related to the wellbeing of academic staff. Those institutions where stewardship-based practices are emphasised present lower levels of occupational stress in academics. In turn, high wellbeing of academic staff is associated with high research excellence, high student employability and high surplus or low deficit figures. This finding reinforces previous research looking at the influence of wellbeing on institutional results\textsuperscript{194}
- Perceptions of stewardship-based mechanisms are positively related to institutional wellbeing in terms of student satisfaction. Those institutions in which stewardship-based practices are emphasised present high levels of student satisfaction according to the last NSS. This finding is in line with similar research recently conducted in the UK with a different dataset\textsuperscript{195}.

Based on the above, it can be argued that academic staff wellbeing and institutional wellbeing is positively related to an HEI’s reliance on stewardship-based mechanisms and negatively to an HEI’s reliance on agency-based mechanisms. This might be explained due to the fact that scholarship goals are complex and long-term oriented. Thus, as suggested by stewardship researchers, they benefit from a context of trust, autonomy and collaboration, which are favoured by stewardship-based performance management mechanisms\textsuperscript{196}. These findings focus on people in academic roles so they do not show the relationships that performance management mechanism may have with the wellbeing of people in other roles.

7.4 Advantages and disadvantages of performance management approaches

We must highlight that both agency-based and stewardship-based performance management approaches have advantages and disadvantages as Table 12 shows. Initially, agency-based mechanisms provide an illusion of sense of control, as these mechanisms help leaders to reduce the degree of ambiguity and uncertainty surrounding their jobs. Due to HEIs’ pressures to perform, agency-based mechanisms are perceived as “low risk”, as they are in line with the NPM ideology prevalent in public services. They require a low upfront cost (although maintenance cost will be high due to the cost of gathering, analysing, and evaluating performance information); they minimise “observable” opportunistic behaviour (ie poor performance defined according to a reduced set of parameters); they can be used as a means of change (a modification of the performance measures and rewards would change behaviour); and they enable standardisation. In particular, leaders and managers can perceive all these characteristics as advantageous.

\textsuperscript{194} See for example the research published at http://www.wellbeing.ac.uk
\textsuperscript{195} McCormack et al (2013)
\textsuperscript{196} Davis et al (1997), Hernandez (2012), Segal and Lehrer (2012)
However, over time agency-based mechanisms may generate unobservable opportunistic behaviours\textsuperscript{197}. For instance, there is evidence suggesting that the introduction of measurement criteria to encourage and monitor the quality of the research and teaching produced by HEIs (eg REF, NSS) is generating low risk taking and low innovative behaviours\textsuperscript{198}. These unintended behaviours are likely to lead to dysfunctional consequences especially in HEIs that strive to deliver a scholarly mission. Evidence of these dysfunctional consequences has been observed in organisations with similar long-term and complex missions such as schools\textsuperscript{199} or hospitals\textsuperscript{200}. To some extent, we are all experiencing the negative results of a high reliance on agency-based mechanisms as some authors attribute the cause of our recent financial crisis to agency-based practices such as bonuses and performance monitoring\textsuperscript{201}.

A stewardship-based approach has a number of advantages at the individual and institutional level. It provides the sense of autonomy, meaningfulness, community and development that are key benefits for people in roles in which intrinsic motivation is required (eg academic roles). It has a low maintenance cost in terms of time and money. It facilitates adaptation to local situations and environmental changes as individuals and groups can easily adapt without the need to change the performance management mechanisms in operation.

A stewardship-based approach also has its limitations and disadvantages. In the short-term it might be expensive to set up due to the fact that it takes time and money to get individuals whose personal interest is naturally aligned to that of the institution, and to generate the enabling context in which they can perform or, in the words of some interviewees, \textit{flourish}. The outcomes of stewardship-based mechanisms may only be observable in the mid- to long-term, which may pose some risk for institutions that have to deliver short-term measurable results to their stakeholders. In addition, institutions relying in these mechanisms may find difficulties for creating quick institution-wide transformations, as the decentralisation that characterises stewardship-led institutions may limit change initiatives driven from the top.

Some authors argue that a key disadvantage of a stewardship-based approach is that it allows free riders (ie people that benefit from the institution but do not contribute to its success) and that the poor performance of some individuals may go unnoticed because this approach lacks of formal “corruption controls”\textsuperscript{202}. In the literature, the use of an institutionalised stewardship-based approach in the education sector has been found to minimise corruption and other dysfunctional behaviours\textsuperscript{203}. Despite this encouraging evidence, it is a fact that a stewardship-based approach cannot fully eradicate abuses from people that for one reason or another become or temporarily behave as non-stewards. In any organisation there will always be a percentage of free riders. But, as suggested by some researchers, this fact does not invalidate the stewardship-based approach and should not be used as a justification for the adoption of agency-based mechanisms\textsuperscript{204}.

Agency-based mechanisms have corruption controls but they are also not free from corruptive behaviours\textsuperscript{205}. Agency-based mechanisms address poor \textit{measured} performance but they incentivise behaviours that may be detrimental to the higher aims of the institution, especially when these mechanisms are implemented in contexts where agency assumptions are not valid and institutional goals are complex and long-term oriented\textsuperscript{206}. To minimise the free rider effect, stewardship researchers suggest the use of “corruption minimisers” that do not affect trust and intrinsic motivation. Examples of these are: suitable organisational designs, inner values, leaders as examples, control at the entry stage (ie recruitment and probation periods), self-monitoring and peer pressure\textsuperscript{207}.

\begin{flushright}
\textsuperscript{197} Ghoshal (2005); Ghoshal and Moran (1996); Segal and Lehrer (2012)\hspace{1cm} \textsuperscript{203} As the work of Segal and Lehrer (2012) in 210 schools in Canada shows. \\
\textsuperscript{198} Brown and Carasso (2013) \hspace{1cm} \textsuperscript{204} Segal (2012) \\
\textsuperscript{199} Jozefkowicz (2006) \hspace{1cm} \textsuperscript{205} Ghoshal and Moran (1996) \\
\textsuperscript{200} Francis (2013) \hspace{1cm} \textsuperscript{206} Der Ter Bogt and Scapens (2012), \\
\textsuperscript{201} Blundell-Wignall et al (2008); Krugman (2008); Smithers (2013) \hspace{1cm} \textsuperscript{207} Davis et al (1997), Hernandez (2012), Segal and Lehrer (2012), Segal (2012) \\
\textsuperscript{202} Segal (2012) \\
\end{flushright}
Table 12. Advantages and disadvantages of performance management approaches

<table>
<thead>
<tr>
<th></th>
<th>Agency-based/directive</th>
<th>Stewardship-based/ enabling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td>• Provides a sense (or illusion) of control.</td>
<td>• Helps to promote self-determination: a sense of autonomy, meaningfulness, community and development.</td>
</tr>
<tr>
<td></td>
<td>• Helps to minimise opportunism in the short term.</td>
<td>• Low risk for the long term.</td>
</tr>
<tr>
<td></td>
<td>• Low risk in the short term.</td>
<td>• Less expensive to run (self-management).</td>
</tr>
<tr>
<td></td>
<td>• Less expensive to set up.</td>
<td>• Adapts to natural environmental changes.</td>
</tr>
<tr>
<td></td>
<td>• Can be used as a means of change.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enables standardisation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.5 Limitations and further directions

As with any research, ours is not free from limitations. Firstly, for our qualitative investigations we intentionally focused on two groups of HEIs - Russell Group universities and post-1992 universities. This means that our work does not fully represent the diverse nature of the institutions comprised in the UK HEI population. Further research looking at for-profit higher education institutions or specialist institutions could be useful.

Secondly, our data collection period was quite volatile economically and politically (with the implementation of new visa and student fee policies), which might have a particular effect on the emphasis institutions are currently putting on their cost-effectiveness goal, suggesting that a focus on this financial and short-term goal might not be as prominent as found. Replicating this research in a more economically stable period could improve our work.

Thirdly, our analysis of the quantitative data we obtained from various sources and gathered at different points in time could be reviewed and further improved. We encourage new research looking at the same phenomenon using more robust measures. We used the data available at the time of this research based on the idea that the performance of HEIs’ is relatively consistent year on year.
Fourthly, our choice of the UCU survey for representing the wellbeing of people in academic roles could be considered as a limitation because the UCU may not fully represent the views of the academic population. The UCU survey was used in our analysis as it provides a single source of data with the same questions for each institution. Its data was also gathered in the same period of time than our research. The use of HEIs’ own wellbeing surveys would have been ideal but their questions tend to be adapted to their contexts and the data is not easily available.

Finally, our research did not look in depth at any of the performance management mechanisms used as we were mainly using a holistic view. Future research looking at each of the five systems described in Table 10 may be beneficial. In particular, given the interest of the sector in the leadership of HEIs, understanding the type of leadership characteristics required to operate a hybrid performance management approach might be worth investigating.

7.6 Key insights for practice and policymaking
When we embarked on this research it was not our intension to be normative. The intention of our work was to produce evidence to inform the thinking of higher education leaders and policymakers and to serve as a discussion tool for decision-making.

Based on our evidence we believe that HEI leaders should consider the following in their discussions about performance and performance management.

• The concept of performance in HEIs refers to the overall mission or higher ends the institution aims to achieve. These higher ends cannot be fully reflected in the means or performance measures staff perceive to be important based on the amount of attention the institution (its leaders and managers) dedicates to them. For instance, some institutions include in their mission statement a diverse set of higher ends such as widening participation, teaching and learning excellence, research excellence, financial sustainability and contribution to society. However, leaders and managers mainly focus their attention and communication on performance measures such as research outputs, student satisfaction and income. Performance measures are a means to better understand the extent to which higher ends are achieved. Means should not become ends, especially when means are a poor reflection of end. When this happens dysfunctional behaviours that might not be visible are likely to occur.

• Performance management should be considered as a package or system of formal and informal mechanisms that the institution adopts and uses to ensure its mission is attained. In some institutions, the mechanisms adopted and used will be loosely coupled (ie they can operate independent from each other although they are temporarily related). In other institutions the performance management mechanisms adopted and used will be tightly coupled (ie highly interdependent and logically related).

• We found that the mechanisms institutions adopt and use to manage their performance can be classified into agency-based mechanisms and stewardship-based mechanisms. The idiosyncratic characteristics of HEIs, such as history, size, culture, resources, location etc, will determine and influence the performance management mechanisms institutions rely on. Despite the influence of context, we believe that HEIs’ leaders have some choice regarding how much emphasis or attention they put on their different performance management mechanisms. When doing so they should be aware of the importance of relying on those mechanisms that are fit for purpose (ie those mechanisms that ultimately facilitate the delivery of their institution’s particular mission). As shown in this research:
  • HEIs whose mission is focused on low-complex (easy to measure) and short-term oriented goals (eg efficiency-driven goals) are likely to benefit from relying on an agency-based umbrella approach to manage their performance.
  • HEIs whose mission is focused on highly complex (difficult and costly to measure accurately) and long-term oriented goals (eg education excellence, research excellence, contribution to society, the economy and culture) are likely to benefit from relying on a stewardship-based umbrella approach to deliver their mission.
  • HEIs whose mission is focused on a combination of goals with various degrees of complexity and temporal orientation are likely to benefit from relying on a hybrid performance management approach. This overall approach integrates agency-based performance management mechanisms for areas, units or individuals responsible for the delivery of short-term operational goals and stewardship-based performance management mechanisms for areas, units or individuals responsible for the delivery of long-term complex goals.
For example:

• In the functions that deal with administration, where delivering short-term results that are highly measurable are important, then an agency approach could dominate. Again this needs to be appropriately applied to the HE context but the specific nature and temporal focus of the goals favours an agency approach. Based on our research evidence we believe, in the main, that professional and administration staff appreciate the clarity of direction and the type of rewards that agency-based mechanisms provide.

• In the functions that deal with education and research a stewardship approach should dominate. A stewardship-based approach will provide people in academic roles with the space and autonomy to perform to their best. This approach will need to be appropriately implemented and will require strategic decisions that may contradict market trends. For instance, HEIs will need to focus their time and resources on improving their recruitment, selection and probation processes and on creating an appropriate working environment rather than on individual performance reviews or any version of performance-related pay.

• For people in leadership roles, the approach could be predominantly stewardship with agency elements incorporated in situations that require efficiency-driven goals. Our research shows that HEI leadership probably is currently over-relying on agency mechanisms. For some institutions this needs to be re-balanced if they wish to deliver their long-term mission.

Keeping both approaches in operation and managing the perception of fairness and justice among staff will be a key challenge. To address this challenge leadership skills, continuous communication and transparency (regarding how the different management practices work, why they are used and on whom) will ease and facilitate positive perceptions of fairness and justice among HEI staff.

• A high reliance on agency-based mechanisms such as individual performance appraisals and performance-related pay to influence the performance of people in academic roles should be re-considered. It is likely to be unfit for purpose, as most academic roles do not to fit with the timescales and requirements of agency-based mechanisms. A greater attention to and investment in stewardship-based mechanisms is likely to have better performance outcomes for people in these type of roles. This insight is based on our evidence showing that the wellbeing of people in academic roles is negatively associated with agency-based performance management mechanisms and positively associated with stewardship-based mechanisms. This insight is of great importance due to the positive relationship found between the wellbeing of people in academic roles and the wellbeing of HEIs (assessed in terms of the quality of research outputs, students’ degree of satisfaction and employability, and financial sustainability).

7.7 Concluding remarks

As concluding remarks the research team argue that surviving in this complex economic, social and political environment will require institutions to establish a range of performance management mechanisms, both stewardship-based and agency-based, that help them manage and balance their short-term and long-term performance. We expect that the crafting of a hybrid system that fits their particular circumstances will be the key challenge for institutions. There is no such a thing as one size fits all regarding performance management.

The context in which each UK HEI operates will influence its choice of performance management mechanisms. Indeed, due to this context, some HEIs may be able to exert more choice than others in their system design. As a result, we would expect significant differences in the mechanisms used across disciplines, at hierarchical levels and at functional levels. We also expect that these mechanisms will be in continuous evolution and changing over time.
References


Ackoff, R (1971) Towards a system of systems concepts, Management Science, 17(11), 661-671.


BIS (2011) Higher Education: Students at the heart of the system, UK.

BIS (2012) Government response to consultations on: Students at the heart of the system; A new, fit-for-purpose regulatory framework for the higher education sector, UK.


Broadbent (2007) If you can’t measure it how can you manage it, Roehampton University working paper.


Committee of Universities Chairs (2009) *Guide for members of Higher Education governing bodies in the UK: Governance code of practice and general principles*, CUC.


Diamond, I (2011) *Efficiency and effectiveness in higher education*, Report by the Universities UK Efficiency and Modernisation Task Group, UK.


Ghoshal, S (2005), ‘Good management theories are destroying good management practices’, *Academy of Management Learning & Education*, 4(1) 75-91.


HEFCE (2008) [www.hefce.ac.uk](http://www.hefce.ac.uk)

HEFCE (2013) [www.hefce.ac.uk](http://www.hefce.ac.uk)


Research and Development Series


Jozefkowicz, E (2006) Too many teachers ‘teaching to the test’, [www.guardian.co.uk/education/2006/jul/20/schools.uk5](http://www.guardian.co.uk/education/2006/jul/20/schools.uk5)


Smithers, A (2013) *The road to recovery: How and why economic policy must change*, Sussex: John Wiley & Sons Ltd.


Appendix A. Case study interview questions

Interviewee details (name, role, position within the HEI)

**Performance and Performance management**
How would you define performance? How would you define performance management?

**Culture**
How would you describe the culture of the HEI?

**Mission, vision, strategy and culture**
Could you please describe the vision and mission of the HEI?

**What strategies (or plans) has the institution adopted to ensure its success?**
How is this (mission, vision, strategy) brought to the attention of managers, academics and supporting staff?

**Key performance indicators**
How would you know if the HEI is being successful in doing what it does?
What are the institution’s key performance indicators deriving from its mission, vision and strategic plans?
How are these specified and communicated?
What role do they play in the HEI?
Are there any significant omissions?
How important it is for the HEI to do well on these performance indicators?

**Performance targets**
What level of performance does the institution need to achieve for each of its key performance indicators (identified in the above question)?
How does it go about setting appropriate performance targets for them?
How challenging are those performance targets?

**Performance reviews**
How is the performance of individuals reviewed in this university?
How is the performance of schools reviewed in this university?
How is the performance of the University reviewed?
Are these reviews primarily objective (based on evidence, data driven), subjective or mixed?

**Rewards**
What rewards (monetary and/or non-monetary) will managers, academics and supporting staff gain by achieving performance targets or other assessed aspects of performance?
Conversely, what penalties will they suffer by failing to achieve them?

**Information flows**
What specific information flows (feedback and feed-forward), systems and networks has the institution in place to support its performance management mechanisms?

**PMS change**
How has the performance management system changed in the light of the change dynamics of the institution and its environment?

**Consequences**
What consequences does the HEI’s approach to managing performance have on individuals, schools and the institution as a whole?
What consequences is the REF having on the performance and behaviour of HEIs? And academics?
What consequences is the NSS having on the performance and behaviour of HEIs? And academics?
## Appendix B. Survey variables and their measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure (items in survey)</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mission (goals and values)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| HEI's Mission | • Cost-effective procedures and processes (gCE)  
• Widening participation (accessibility to all motivated learners) (gWP)  
• Excellence in learning and teaching (gT)  
• Excellence in research and scholarship (gR)  
• Contribution to society, culture, the economy and the environment (contribution to the greater good) (gCS) | This measures capture the views of respondents regarding the areas they perceive most staff in their institution value | Cranfield case study data |

### Performance management approach

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure (items in survey)</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
</table>
| Stewardship-based PM approach (st) | MEAN of stewardship-based items (st):  
• My institution develops its strategic plans following a thorough consultation process  
• My institution is always looking for ways to improve  
• My institution provides us with the necessary resources to do our work well  
• My institution equally promotes and recognises excellence in whatever shape or form it comes (eg teaching, research, management/administration)  
• My institution provides constant opportunities for learning and development  
• Performance reviews encourages learning and development | The extent to which respondents perceive the institution to use mechanisms or practices that are representative of an stewardship-based performance management approach. | Cranfield case study data; Ferreira & Otley (2009); Hernandez (2012) |
| Agency-based PM approach (ag) | MEAN of agency-based items (ag):  
• My institution uses specific performance indicators or ‘critical success factors’ to monitor its performance  
• My institution sets specific performance targets to differentiate good and bad performance  
• Performance reviews are used to monitor what people do and don’t do  
• Rewards are based on whether you meet the objectives set by your supervisor | The extent to which respondents perceive the institution to use mechanisms or practices, which are representative of an agency-based performance management approach. | Cranfield case study data; Ferreira & Otley (2009); Eisenhardt (1989); Hernandez (2012) |
## Appendix C. Survey data - Factor and reliability analyses results

This table includes the results of factor analysis (using Varimax rotation) and reliability analyses.

<table>
<thead>
<tr>
<th>Variables measured and items included</th>
<th>Factor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stewardship-based performance management approach</strong></td>
<td></td>
</tr>
<tr>
<td>• My institution develops its strategic plans following a thorough consultation process</td>
<td>.807</td>
</tr>
<tr>
<td>• My institution is always looking for ways to improve</td>
<td>.765</td>
</tr>
<tr>
<td>• My institution provides us with the necessary resources to do our work well</td>
<td>.826</td>
</tr>
<tr>
<td>• My institution equally promotes and recognises excellence in whatever shape or form it comes (eg, teaching, research, management/administration)</td>
<td>.836</td>
</tr>
<tr>
<td>• My institution provides constant opportunities for learning and development</td>
<td>.806</td>
</tr>
<tr>
<td>• Performance reviews encourages learning and development</td>
<td>.784</td>
</tr>
<tr>
<td>Kaiser-Meyer-Olkin= .899</td>
<td></td>
</tr>
<tr>
<td>Eigenvalues= 3.881</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s alpha= .890</td>
<td></td>
</tr>
<tr>
<td><strong>Agency-based performance management approach</strong></td>
<td></td>
</tr>
<tr>
<td>• My institution uses specific performance indicators or ‘critical success factors’ to monitor its performance</td>
<td>.830</td>
</tr>
<tr>
<td>• My institution sets specific performance targets to differentiate good and bad performance</td>
<td>.872</td>
</tr>
<tr>
<td>• Performance reviews are used to monitor what people do and don’t do</td>
<td>.519</td>
</tr>
<tr>
<td>• Rewards are based on whether you meet the objectives set by your supervisor</td>
<td>.614</td>
</tr>
<tr>
<td>Kaiser-Meyer-Olkin= .627</td>
<td></td>
</tr>
<tr>
<td>Eigenvalues= 2.095</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s alpha= .678</td>
<td></td>
</tr>
</tbody>
</table>
# Appendix D. Archival variables and their measures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy measures (data downloaded)</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institution wellbeing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research output quality</td>
<td>RAE 2008 % of submissions 4* (r4)</td>
<td>Percentage of 4* submissions per institution</td>
<td>RAE 2008</td>
</tr>
<tr>
<td></td>
<td>RAE 2008 % of submissions 1* (r1)</td>
<td>Percentage of 1* submissions per institution</td>
<td>RAE 2008</td>
</tr>
<tr>
<td>Financial sustainability</td>
<td>Surplus (2006-2011) (sur)</td>
<td>Standard Deviation of the last 5 years of surplus (or deficit)</td>
<td>HESA</td>
</tr>
<tr>
<td><strong>Students’ wellbeing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employability</td>
<td>Employability (2011) (emp)</td>
<td>Percentage of students in work or continuing studies (6 months after graduating)</td>
<td>HESA</td>
</tr>
<tr>
<td>Students’ satisfaction</td>
<td>NSS (q22)(2012) (nss)</td>
<td>Question #22 of the NSS questionnaire. Students’ response to: Overall, I am satisfied with the quality of the course</td>
<td>NSS-HEFCE</td>
</tr>
<tr>
<td><strong>Students’ wellbeing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wellbeing (stress)</td>
<td>UCU wellbeing (2012) (ucu)</td>
<td>It measures the level of wellbeing (stress) relating to control at work. It includes the staff ability to decide when to take a break, choice over how to do their work and what to do at work 209</td>
<td>UCU 2012</td>
</tr>
</tbody>
</table>
Appendix E. Universities included in this research

The higher education institutions represented in this research are:

Aberystwyth University
Anglia Ruskin University
Aston University
Bangor University
Bath Spa University
Birkbeck College
Birmingham City University
Brunel University
Buckinghamshire New University
Canterbury Christ Church University
Cardiff Metropolitan University
Cardiff University
Central School of Speech and Drama
Conservatoire for Dance and Drama
Coventry University
Cranfield University
De Montfort University
Edge Hill University
Edinburgh College of Art
Glasgow Caledonian University
Glyndŵr University
Goldsmiths College
Harper Adams University College
Heriot-Watt University
Heythrop College
Imperial College of Science, Technology and Medicine
Institute of Education
King's College London
Kingston University
Leeds College of Music
Leeds Metropolitan University
Leeds Trinity University College
Liverpool Hope University
Liverpool John Moores University
London Business School
London Metropolitan University
London School of Economics and Political Science
London School of Hygiene and Tropical Medicine
London South Bank University
Loughborough University
Middlesex University
Oxford Brookes University
Queen Mary and Westfield College
Ravensbourne
Roehampton University
Royal Agricultural College
Royal College of Art
Royal College of Music
Royal Holloway and Bedford New College
Royal Northern College of Music
Scottish Agricultural College
Sheffield Hallam University
Southampton Solent University
St Mary's University College
Staffordshire University
Swansea University
Teesside University
The City University
The Institute of Cancer Research
The Manchester Metropolitan University
The Nottingham Trent University
The Open University
The Queen's University of Belfast
The Robert Gordon University
The Royal Veterinary College
The School of Oriental and African Studies
The University of Aberdeen
The University of Bath
The University of Birmingham
The University of Bolton
The University of Bradford
The University of Brighton
The University of Bristol
The University of Cambridge
The University of Central Lancashire
The University of Dundee
The University of East Anglia
The University of East London
The University of Edinburgh
The University of Essex
The University of Exeter
The University of Glasgow
The University of Greenwich
The University of Huddersfield
The University of Hull
The University of Keele
The University of Kent
The University of Lancaster
The University of Leeds
The University of Leicester
The University of Lincoln
The University of Liverpool
The University of Manchester
The University of Newcastle-upon-Tyne
The University of Northampton
The University of Northumbria at Newcastle
The University of Nottingham
The University of Oxford
The University of Plymouth
The University of Portsmouth
The University of Reading
The University of Salford
The University of Sheffield
The University of Southampton
The University of St Andrews
The University of Stirling
The University of Strathclyde
The University of Sunderland
The University of Surrey
The University of Sussex
The University of the West of Scotland
The University of Wales, Newport
The University of Warwick
The University of West London
The University of Westminster
The University of Winchester
The University of Wolverhampton
The University of Worcester
The University of York
University Campus Suffolk
University College Birmingham
University College London
University College Plymouth St Mark and St John
University for the Creative Arts
University of Bedfordshire
University of Buckingham
University of Chester
University of Cumbria
University of Derby
University of Durham
University of Glamorgan
University of Gloucestershire
University of Hertfordshire
University of London (Institutes and activities)
University of the Arts, London
University of the Highlands and Islands
University of the West of England, Bristol
University of Ulster
University of Wales Trinity Saint David
Writtle College
York St John University
## Appendix F. Correlation matrix - Institutional data

Correlation matrix – Institutional data (Aggregated individual responses >=3 per institution) - N: 951 (from 99 HEIs)

<table>
<thead>
<tr>
<th></th>
<th>Means</th>
<th>gCE</th>
<th>gWP</th>
<th>gT</th>
<th>gR</th>
<th>gCT</th>
<th>ag</th>
<th>st</th>
<th>UCU</th>
<th>NSS</th>
<th>EMP</th>
<th>R4</th>
<th>R1</th>
<th>SUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-effectiveness</td>
<td>4.691</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widening particip.</td>
<td>5.163</td>
<td>0.069</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning-teaching</td>
<td>5.722</td>
<td>0.142</td>
<td>0.616***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research exc.</td>
<td>5.513</td>
<td>0.075</td>
<td>-0.234**</td>
<td>0.029</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contrib. to society</td>
<td>5.154</td>
<td>0.088</td>
<td>0.530***</td>
<td>0.545***</td>
<td>0.133</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agency-based</td>
<td>4.353</td>
<td>0.377***</td>
<td>-0.078</td>
<td>0.022</td>
<td>0.124</td>
<td>0.100</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stewardship-based</td>
<td>3.864</td>
<td>0.196</td>
<td>0.347***</td>
<td>0.466***</td>
<td>0.312***</td>
<td>0.524***</td>
<td>0.173*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCU</td>
<td>2.491</td>
<td>-0.008</td>
<td>-0.212**</td>
<td>-0.082</td>
<td>0.377***</td>
<td>0.007</td>
<td>-0.191*</td>
<td>0.173*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSS</td>
<td>85.243</td>
<td>-0.122</td>
<td>-0.372***</td>
<td>-0.116</td>
<td>0.371***</td>
<td>-0.086</td>
<td>-0.120</td>
<td>0.138**</td>
<td>0.476***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMP</td>
<td>90.418</td>
<td>-0.133</td>
<td>-0.306***</td>
<td>-0.037</td>
<td>0.314***</td>
<td>0.022</td>
<td>-0.100</td>
<td>0.183**</td>
<td>0.476***</td>
<td>0.585***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R4</td>
<td>11.196</td>
<td>-0.146*</td>
<td>-0.439***</td>
<td>-0.238**</td>
<td>0.645***</td>
<td>-0.306***</td>
<td>-0.171*</td>
<td>-0.026</td>
<td>0.472***</td>
<td>0.434***</td>
<td>0.297***</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R1</td>
<td>19.061</td>
<td>0.131*</td>
<td>0.514***</td>
<td>0.288***</td>
<td>-0.691***</td>
<td>0.333***</td>
<td>0.009</td>
<td>0.070</td>
<td>-0.321**</td>
<td>-0.498***</td>
<td>-0.279***</td>
<td>-0.820***</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>SUR</td>
<td>5.157</td>
<td>0.025</td>
<td>-0.184*</td>
<td>-0.210**</td>
<td>0.188*</td>
<td>-0.179*</td>
<td>0.025</td>
<td>0.002</td>
<td>0.316***</td>
<td>0.067</td>
<td>0.066</td>
<td>0.418***</td>
<td>-0.367***</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*** p-value < 0.001; ** p-value < 0.05; * p-value < 0.10
p-value < 0.05; STDYX Estimate (S.E.); Residual Variants=1-R2.
Biographies

**Dr Monica Franco-Santos** is a senior research fellow at Cranfield School of Management. Her research broadly concerns the design, implementation, and management of performance measurement and management systems. In particular, Monica is interested in the relationship between performance measurement systems and reward systems in both private and public sector organisations. Questions such as “how should performance be measured and how should it be linked to rewards?”, “how do organisations reward good performers?”, and “to what extent do performance related rewards have an impact on employees’ behaviour?” are at the centre of her research agenda. Due to the multidisciplinary nature of her work, it has been published in journals such as Corporate Governance: An International Review, Management Accounting Research and International Journal of Operations and Production Management.

**Dr Pilar Rivera** is an associate professor in market research at the University of Zaragoza. She has published widely (Supply Chain Management: an International Journal, Journal of Cleaner Production; Management Decision, Annals of Forest Science, Total Quality Management & Business Excellence, Strategic Management Journal, Environment And Planning A, Environmental Management, Latent Variable and Latent Structure Models) and participated in conferences and congresses both in Spain and internationally. Her main interests are marketing research, corporate environmental issues, quality management and econometric issues (SEM).

**Professor Mike Bourne** is professor of business performance, at the Centre for Business Performance, Cranfield School of Management. His research is broadly in the area of performance measurement and management, the interface between these systems and strategy, the resource-based view of the firm, budgeting, HR practices and risk management. Because of the interdisciplinary nature of his work, he has published in journals such as the International Journal of Operations and Production Management, Management Accounting Research and the British Journal of Management.