



Pay Professors for Performance?!

Entwicklung eines neuen Anreizsystems für Forschende und Lehrende an Hochschulen

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Theoretical background and aim of the project

Research questions

Status quo of ongoing studies

- Increasing competition among countries and universities
→ Important to tap the full potential of scientists
- New Public Management: Transfer of for profit management structures and instruments to non profit areas
- Transfer of primarily on extrinsic motivation aiming incentives to universities (e.g. Pay for Performance)

Specific characteristics of academia

- comparably high intrinsic motivation
- life-long work contracts
- non profit objective, focused on creativity and innovation
- knowledge transfer and generation as work outputs

General incentive systems

- Monetary incentives (Gerhart, Rynes, & Fulmer, 2009)
 - Flat pay
 - Individual-performance based incentives: e.g. merit pay
 - Group-performance based incentives: e.g. profit sharing, stock options
- Non-monetary incentives (Luthans & Stajkovic, 2009; Restivo & van de Rijt, 2012)
 - Recognition, acknowledgement, praise
 - Presents, awards

Incentives at universities

- Flat pay
- Performance based compensation (W-Besoldung)
- Stipendia for excellent teaching /research
- Award for teaching /research
- Research semester
- Promotion

Incentives in academia are primarily oriented towards quantitative aspects of publication performance (Gendron, 2008; Fiedler, Welppe, & Picot, 2006)

- Evaluating scientists' performance by assessing their publication productivity is seen critically (Fiedler, Welppe, & Picot, 2006; Gendron, 2008; Osterloh & Frey, 2009)
- Including quality measures of publications into an incentive system is complex (Mannig & Barette, 2005)

Research gap

There are few studies concerning the personal and institutional determinants (incentive systems) for motivation and performance in academia (Fiedler et al., 2008; Baumöl & Fröhling, 1994; Cayarol & Matt, 2004; Davis & Petterson, 2004; Long et al., 1998; Williamson & Cable, 2003)

Development of an adequate incentive system for the specific characteristics of universities

General approach

- ➔ Empirical part: Surveys (partly using scenario-technique), bibliometric analysis and interviews
- ➔ Conceptual part: Development of an incentive system suitable for the characteristics of universities

Theoretical background and aim of the project

Research questions

Status quo of ongoing studies

Personal and institutional determinants of performance

- 1) How do personal and institutional determinants influence performance of researchers and lecturers?
- 2) Which interaction exists between personal and institutional factors on the performance of researchers and lecturers?
- 3) What incentives and incentive systems do currently exist for researchers and lecturers at German universities?
- 4) What positive and negative effects do current incentive systems at German universities have on the performance of researchers and lecturers?
- 5) To what extent are researchers and lecturers intrinsically and/or extrinsically motivated?
- 6) Does the crowding-out-effect (reduction of motivation to perform caused by extrinsic (financial) incentives) occur in academia?
- 7) How can ambidextrous behavior of researchers and lecturers be fostered by an incentive system?

Theoretical background and aim of the project

Research questions

Status quo of ongoing studies

- Personal and institutional determinants influence performance of researchers (Fiedler et al., 2008; Baumöl & Fröhling, 1994; Cayarol & Matt, 2004; Davis & Petterson, 2004; Long et al., 1998; Williamson & Cable, 2003)
- Knowledge about scientists' motivation (intrinsic/extrinsic) is one key criteria for developing an adequate incentive system, e.g. because of a possible crowding-out effect (Frey, 1992; Frey & Jegen, 2001)
- Yet, there are no publications concerning crowding-out-effect in academia (Frey, 1992; Frey & Jegen, 2001)

Research goal

Identification of personal and institutional factors determining performance of scientists

Relevance of the study

- Theoretical
 - Empirical foundations of personal and institutional determinants of performance in academia
 - Knowledge gain about which incentives can be transferred from economy to academia

- Practical
 - Performance enhancement by an adequate performance management (incentive system) in academia

Method

Sample: Professors and junior faculty members (researchers and lecturers) of German economic faculties

Independent variables

- **Personal determinants:** Gender, personality and social background, intrinsic and extrinsic motivation (Work Preference Inventory by Amabile, 1994)
- **Institutional determinants:** Incentives (monetary and non-monetary), university location, reputation, equipment and funding

Dependent variable

- Performance in research (e.g. h-index, IF, third-party funds) and lecture (e.g. questionnaire)

Data assessment

- Online-based questionnaire
- Bibliometric analysis: objective measure
 - Application of multi-level analysis (Hox, 2002; Hofmann & Gavin, 1998; Langer, 2009)
 - Macro level: University
 - Meso level: Chair
 - Micro level: Scientist

Status of the study: Questionnaire is in preparation; bibliometric data is being collected



Fachtagung

„Performance Management in wissensintensiven Organisationen“

am 27. November 2012 an der TU München

Keynote Speaker

- Prof. Dr. Dr. h.c. Margit Osterloh „Forschungsrankings und das Paradox der Leistungsmessung“
- Prof. (em.) Dr. Dr. h.c. mult. Alfred Kieser „Behindern Rankings den Fortschritt der Wissenschaft?“
- Prof. Dr. Alexander Dilger „Vor- und Nachteile der W-Besoldung“

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Thank you for your attention! 😊

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Ambidexterity (Birkinshaw & Gibson, 2004; Gibson & Birkinshaw, 2004; Tushman & O'Reilly, 1996)

describes the capability to balance **exploitation** (refinement, efficiency, implementation and execution) and **exploration** (search variation, risk taking, experimentation, play, flexibility, discovery and innovation) depending on the situation (March, 1991)

Ability to balance exploration and exploitation adequately promotes success (Gibson & Birkinshaw, 2004; Tushman & O'Reilly, 1996; Atuahene-Gima, 2005; Un, 2007)

Research gap

- Up until now, however, primarily investigations of ambidextrous behavior on organizational level (Kauppila, Rajala, & Jyrämä, 2010)
- No investigation of ambidextrous behavior in academia so far

Research questions

- To what extent is personal ambidextrous behavior crucial for scientific success?
- What relationship between exploration vs. exploitation is beneficial?
- How can ambidextrous behavior be incited?
- Is exploitation and exploration fostered by intrinsic and/or extrinsic motivation?

Relevance of the study

- Theoretical
 - Knowledge about the importance of personal ambidextrous behavior for scientific success
- Practical
 - Adequate incentives of personal exploitative and explorative behavior depending on the motivation to perform a task
 - Performance increase due to an (situation) adequate balance between exploitation and exploration

Method

Sample: Junior faculty members and PhD students at management faculties in Germany

IVs:

- Extent of ambidextrous behavior measured by scenario-technique (Wild & Möller, 2009)
- Incentives (e.g., reduction in teaching load, increase in research budget)
- Boundary conditions (e.g. time pressure, interest in task)
- Intrinsic and extrinsic motivation

DV:

- Performance (scientific success rated)
- Short written scenarios about exploitative or explorative tasks
- Assessment of the participants increased or decreased motivation for performing the task depending on the described intrinsic or extrinsic incentive

Status of the study: Scenarios are being developed for the study