

CHESS Kompetenzzentrum für Hochschul- und Wissenschaftsforschung











Führend Wissen Schaffen? Empirische Erkenntnisse und praktische Empfehlungen zu Führung in der Wissenschaft



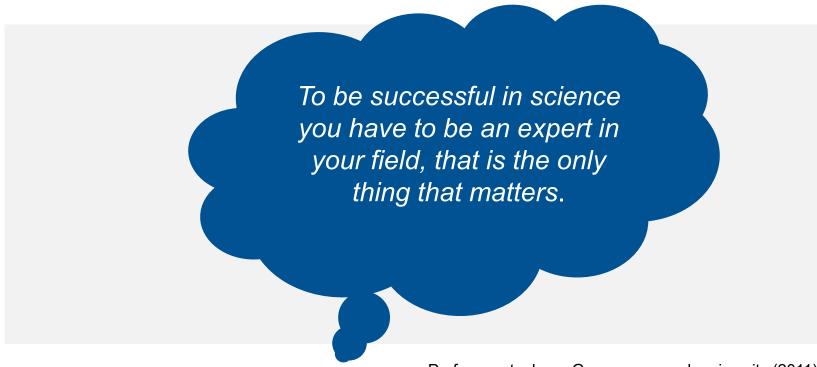
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UZH Leadership and Governance Lecture, 07.03.2024

Changing Roles of Professors





Professor at a large German research university (2011)

Study: Roles of Professors



Method:

- Semi-structured interviews with professors
 (N = 30) in STEM fields on roles and
 requirements for advancement and success
 in academia
- Coding based on content analysis (Mayring, 2010)

Demographics:

Professors of different universities: KIT, LMU Munich, TU Munich, University of Stuttgart

- 13 female / 17 male
- Age: Average 52 (34-75)
- Fields: Mathematics, informatics, biology, chemistry, physics, engineering

Rehbock, S., Knipfer, K., Hubner, S., & Peus, C. (2018). Born Researcher or Political Influencer? Professorial Identity in Higher Education. Paper presented at the 78th Annual Meeting of the Academy of Management in Chicago, Illinois, USA.

Rehbock, S. K., Hubner, S. V., Knipfer, K., & Peus, C. V. (2023). What kind of leader am I? An exploration of professionals' leader identity construal. *Applied Psychology: An International Review, 72*, 559–587.

Study: Roles of Professors



Pure Researcher

"So right now I would say I'm a researcher, born to research."

"I would consider myself primarily a scientist, a researcher."

Cultivating Teacher

"Actually, in fact as a teacher. Although that's not a great thing to say right now..."

"So when someone asks me what I am, I say I'm a university teacher."

Stimulating Mentor

"I try to think of myself as a coach."

"I feel like I would have a responsibility for another career other than my own one."

Enabling Manager

"It is then less own research and more research management (...) so it is also a normal personnel management job."

Political Shaper

"So my role in the research business is different; is more like spiritus rector."

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Experts

- Focus on technical competences
- · Leadership not perceived as relevant





- Focus on collaboration
- Mentoring and coaching juniors



Managers

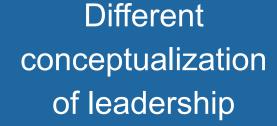
- · Hierarchical leadership
- · Leadership through structures & delegation



Shapers

- Leading towards higher goals
- · Commitment and responsibility





Leadership in Academia



Challenges:

- Autonomy vs. organizational strategy
- Continuous change vs. rigid structures
- High levels of uncertainty
- Diversity of team members
- Leaders question their leadership role
 Peus et al., 2015; Raelin, 1995

Over 90% of publications in natural & engineering sciences are produced in teams



Full Range of Leadership Model (Bass & Avolio, 1998)

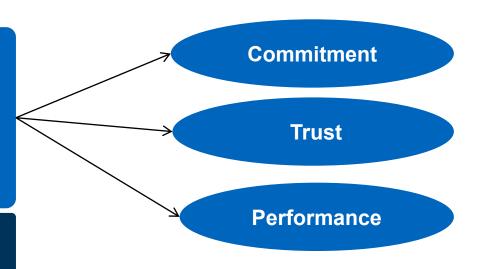


Transformational leadership

Inspirational Motivation
Intellectual Stimulation
Individualized Consideration
Idealized Influence

Transactional leadership

Laissez-faire leadership



Braun, Peus et al. (2013); Deng et al. (2023) Hoch et al. (2018) Judge et al. (2005); Peus et al. (2010); Peus (2012); Peus et al. (2013)

Study: Transformational Leadership in Academia



Research Questions:

- What is the impact of transformational leadership on job satisfaction and publication performance?
- What are key mediating mechanisms at different levels?

Procedure:

- Two-Step online survey
- Outcome variables: Job satisfaction and publications in peer-reviewed journals

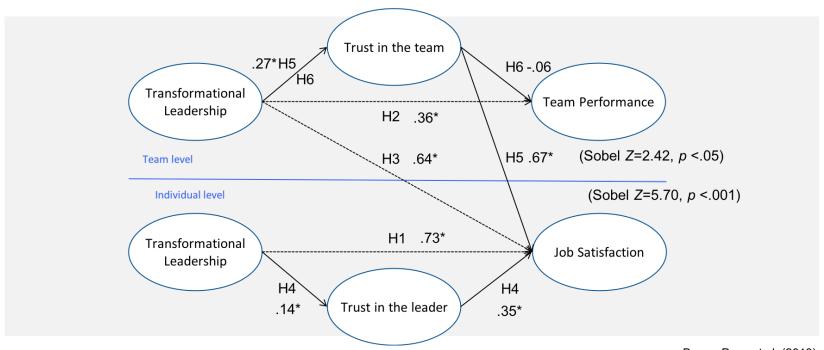
Sample:

360 employees of 39 scientific teams (68% female, 55% natural sciences, 57% doctoral candidates)

Braun, S.*, Peus, C.*, Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. *The Leadership Quarterly, 24,* 270-283. [*equal contribution]

Study: Transformational Leadership in Academia





Braun, Peus et al. (2013)

Study: Transformational Leadership in Academia



- Transformational leadership predicts job satisfaction and (objectively measured) team performance
- In addition to trust in supervisors, trust among team members is relevant

Practical implications

- > Leadership matters in academia!
- > Transformational leadership is a useful framework

Study: Changing Leadership Requirements in Academia



Procedure:

- Semi-structured interviews with professors (N = 26) on requirements for advancement to and success in academic leadership positions
- Use of photo elicitation task
- Coding of requirements and success factors (Mayring, 2010)

Sample:

- 26 professors from STEM fields (8 female / 18 male)
- Age 34 75 (average 52)

Rehbock, S. K., Knipfer, K., & Peus, C. (2021). What got you here, won't help you there: changing requirements in the pre- versus the post-tenure career stage in academia. *Frontiers in Psychology*.

Study:



Changing Leadership Requirements in Academia

Pre-Tenure

Professors see agentic requirements such as self-discipline and perseverance as critical for advancement to a leadership position

Codings

Agentic*: 196

Communal**: 30

Post-Tenure

For success in the leadership role, they cite requirements such as collaboration skills and supporting others as most important

Codings

Agentic*: 144

Communal**: 285

Rehbock, Knipfer, Peus (2021)

^{*}Stereotypically male

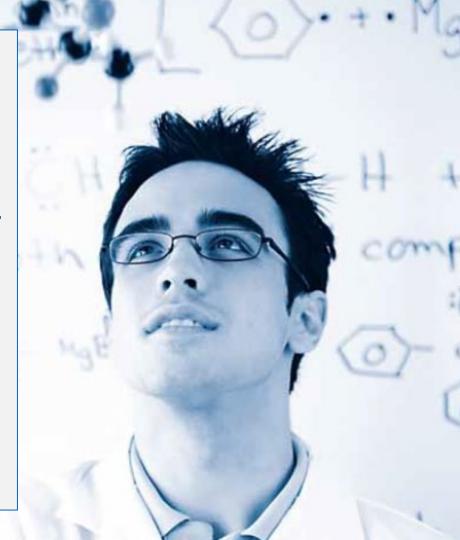
^{**}Stereotypically female

Professors fulfil multiple roles beyond research and teaching.

Leadership is an important aspect of those.

Transformational leadership seems to be a useful model.

Specific leadership requirements change over the course of the academic career.



TUM Institute for LifeLong Learning



Faculty@TUM







Workshops

Our workshops focus on topics that are tailored to the current needs and challenges of professors.

Consulting

In a personal conversation, we will discuss which TUM resources could be most useful for you, given your current needs.

Leadership Profiles

Our personal Leadership Profiles are designed to support you in further developing teamwork.

Leadership in Academia: systematic development

1. Assessment:

Self- and external assessment and identification of individual development areas (Peus, Knipfer, & Schmid, 2015)

2. Personalized development plan:

Individual determination of goals and tools (Schmid, Knipfer, & Peus, 2016)

3. Qualification and certification:

Completion of various modules within a curriculum (z.B. "Leadership Academy", "Women Leadership Program") (Braun, Peus, Weisweiler, & Frey, 2013)

4. Training transfer:

Coaching und structured self-reflection (Sparr, Knipfer, & Willems, 2017)

5. Sustainable assurance of qualification success:

Building reflective capacity (Knipfer & Peus, 2015)





Leadership in academia:



Individual feedback

Intellectual Stimulation:

Leader promotes creative thinking, questions assumptions and processes, and encourages creativity.

Individual Appreciation:

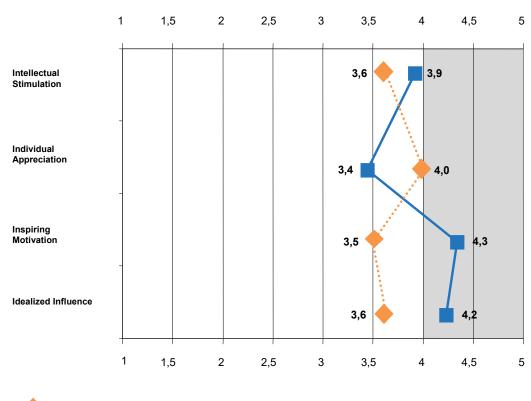
Leader supports and nurtures employees individually, acting as a coach/mentor.

Inspiring Motivation:

Leader conveys visions of the future and inspires employees toward their goals.

Idealized Influence:

The leader sets an example; words and actions align, and ethical/moral principles are the cornerstone of their actions.



Selbsteinschätzung



