

Berlin Science Survey

Bringing the Scientists' Perspectives into Research Evaluation

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Background

- Ongoing debates about research evaluation (Wilsdon 2015, Hallonsten 2021, Kulczycki 2023)
- Metric Fixation: the endeavor to solve all supposed problems in HE with ever new, ever more and further improved metrics
- In particular, quality is a blind spot from a metricized perspective (Peterson & Panovsky 2021)
- Critics and corrections: Leiden Manifesto, Metric Tide, DORA, CoARA, Barcelona Declaration
- The field of research evaluation is undergoing a major orientation process.
- It should be asked: **What research information for what purposes?**
- We believe that for many management processes, knowledge about research cultures and practices is more valuable than information about output
- Shifting the focus **from research output to knowledge about research cultures** as the enabling structures of any outcome.

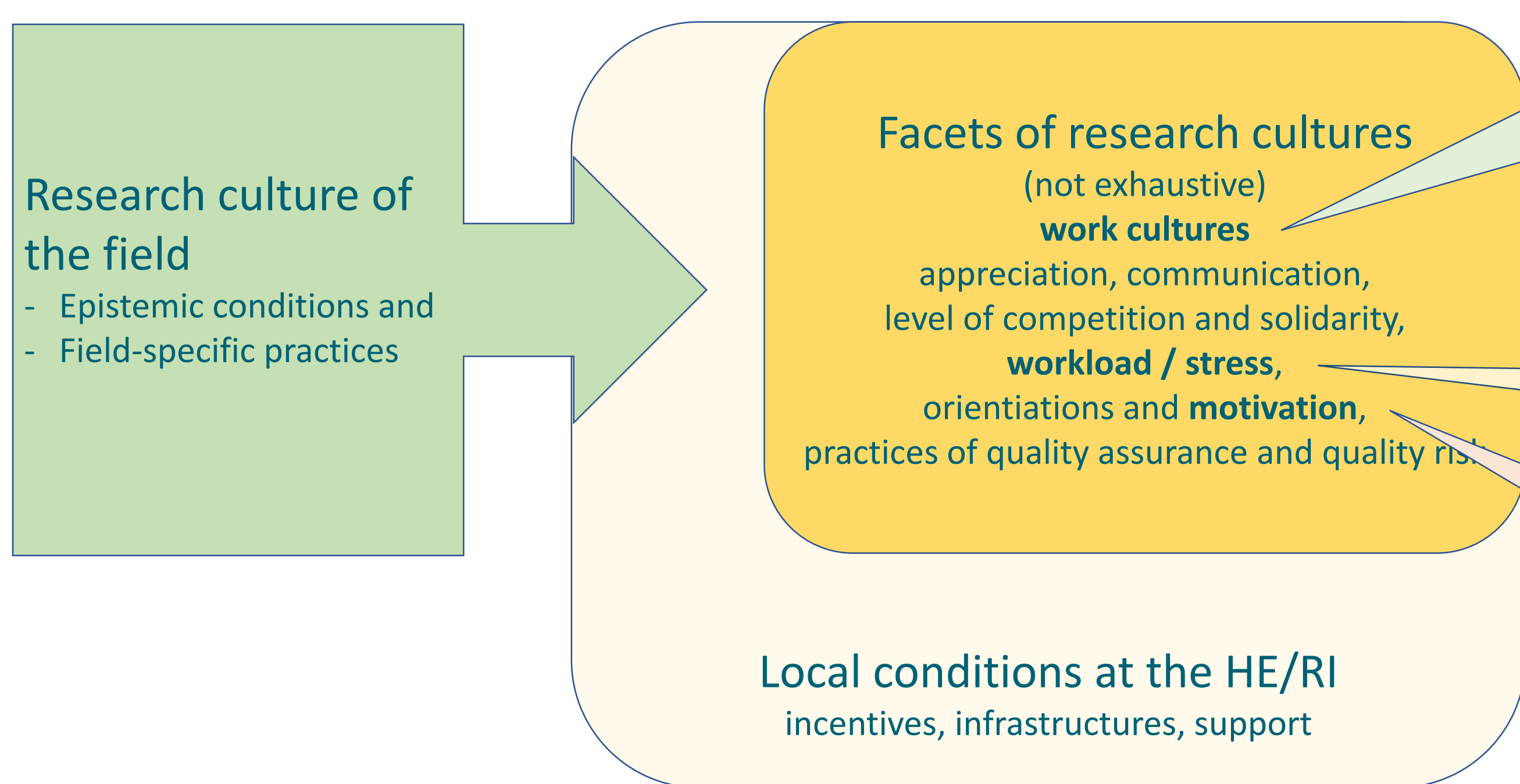
About the Study

- Scientific trend study on changing research cultures in the Berlin area
- Biennial monitoring of research practices, attitudes, and orientations of researchers from all genders, status groups (predocs, postdocs, professors) and subject fields
- The scientists' perspectives are at the center, in particular differences between subject groups.
- Online Survey started in 2022, pilot study: N = 1.098
- Current wave (2024): N = 2.767 (Berlin Sample) + 2.471 (control group of five non-Berlin excellence universities)
- Results are communicated to managers, politicians, academics and media in order to contribute to the policy discourse.
- Participatory approach in research evaluation

Conceptualizing Research Cultures

Research Cultures can be conceptualized as ...

- Small cultures at the intersection of field-specific practices and organisational conditions
- Comprehensive concept comprising many facets of practices, attitudes, world-views, and orientations



Measures (extract)

How would you describe the work culture in your research group? To what extent do the following descriptions apply to it?

Everyone supports each other.
Resources are distributed according to need.
There is a culture of appreciative communication.
There is a positive error culture.
Those who perform better than others receive more support.
There is performance-based competition among the colleagues.

Revealed two independent dimensions of working cultures
Cooperation and Competition

Now it's about various stresses that can occur at work. How often does it happen that ...

- ... you have to work under time pressure?
- ... you are behind with your work?
- ... you have to cut back on the quality of your work?
- ... you are unable to complete your work due to a lack of input from others?
- ... you feel (physically or emotionally) exhausted by your work?
- ... you are frustrated due to poor structural conditions?
- ... you consider your health to be at risk due to your work situation?
- ... your private life is impaired because of work?

Motivation

To what extent do the following statements apply to you personally?

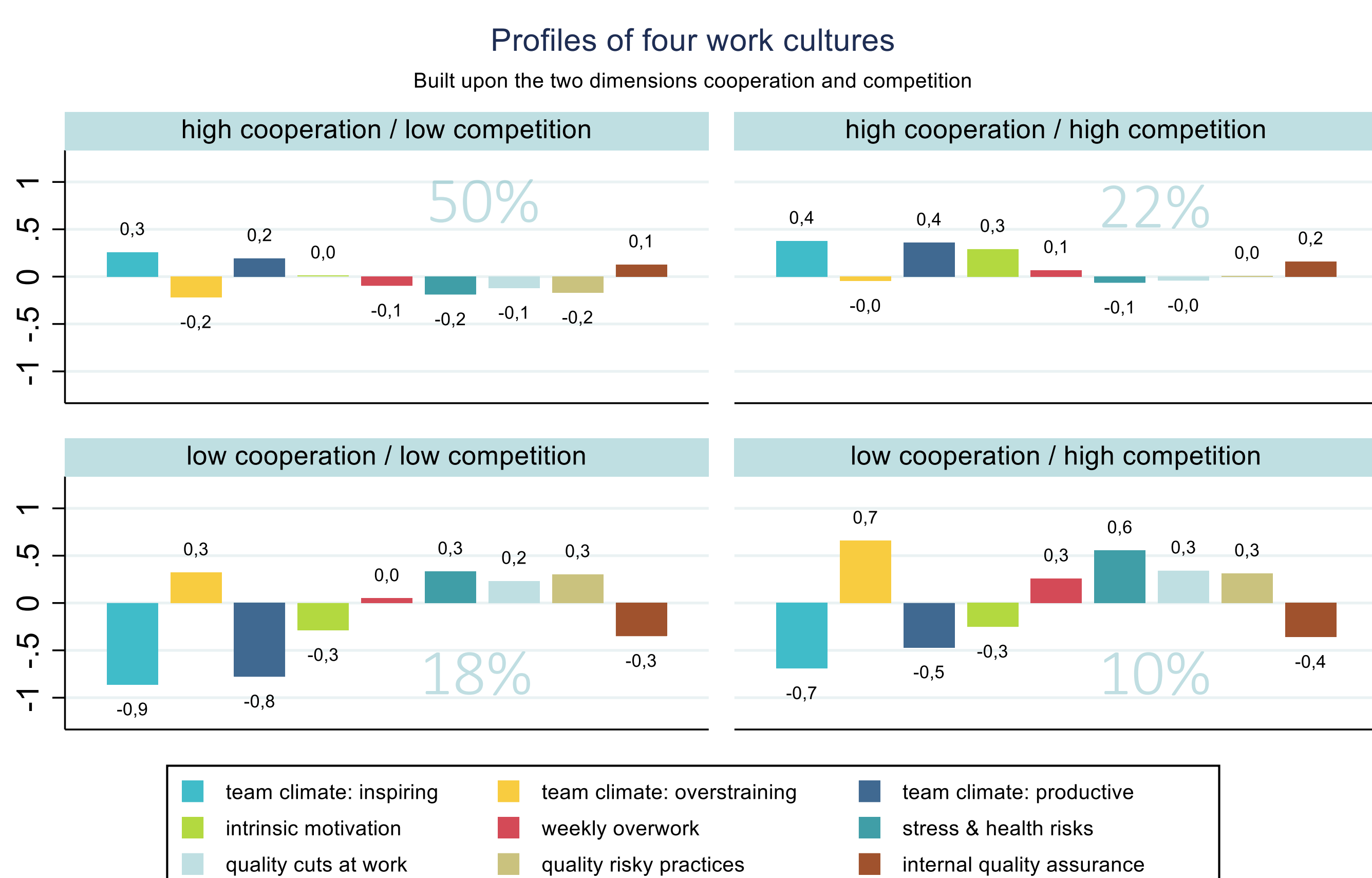
For me science is a vocation, not just a job.
I really enjoy my academic work.
I consider my scientific work to be meaningful.

Combined into a single
Motivation-Index

Combined into a single
Stress-Index

Associations between work cultures and outcome related indicators

Results



All variables were z-standardized to ensure comparability.

N=5207
Berlin Science Survey 2024
www.berlinsciencesurvey.de

Interpretation

Strength of Cooperation

- 72% work in cooperative contexts
- 22% in cooperative contexts with competitive incentive structures
- The non-cooperative contexts (28%) score more negatively on all indicators:
 - Lower motivation
 - More stress/health risks
 - More frequent reduction in the quality of work

Limited role of competition

- Competition shows only small effects, which are also context-dependent
- In contexts of general cooperation, competitive elements can increase motivation and perceived productivity, but at the cost of increased stress and quality risks

Outlook

- Further facets of research cultures will be analyzed
- Political implications will be derived
- Results will be discussed with the management and scientific community
- Establishing a monitoring about research cultures as part of research information

