Robert K. Merton Zentrum
für Wissenschaftsforschung

BERLIN SCIENCE SURVEY

Competition and research cultures

A cross-disciplinary perspective

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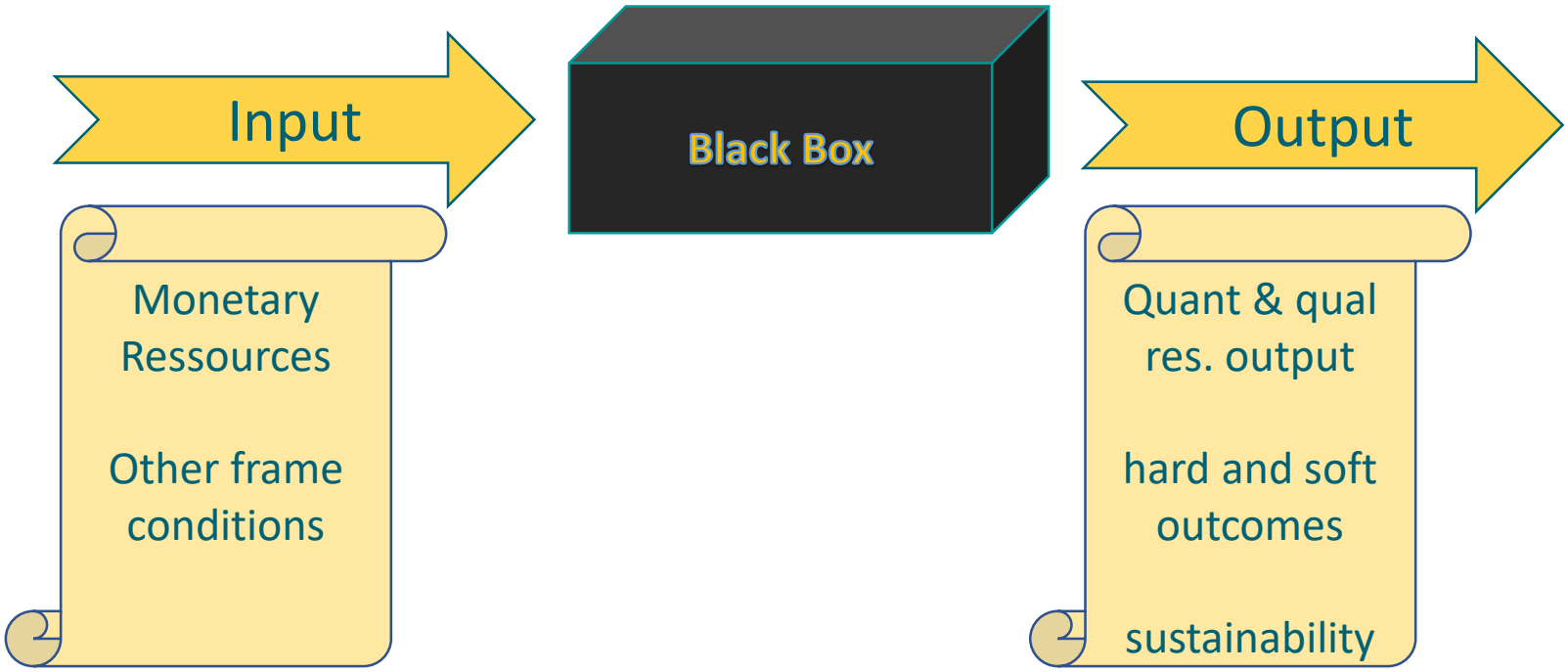
Funded by the Federal Ministry of Education and Research (BMBF)
and the state of Berlin under the Excellence Strategy
of the Federal Government and the Länder

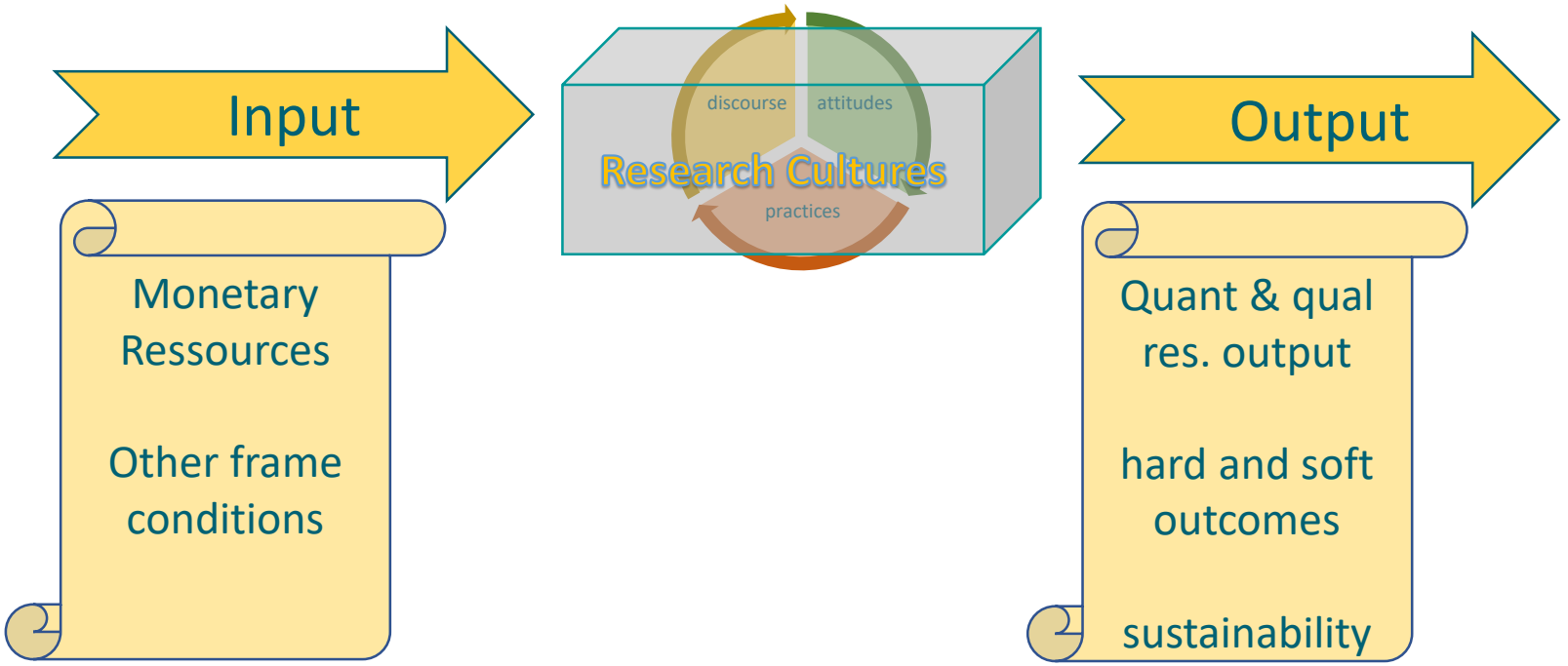
Berlin University Alliance

Governance, evaluation, and research information

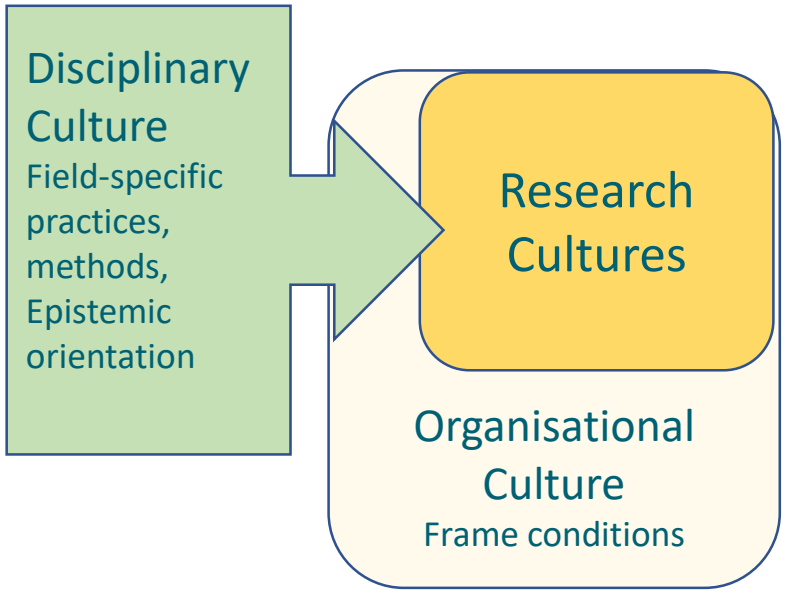
The visible and the invisible side of research evaluation



Making the invisible visible



Conceptualizing research culture



1. Culture as a sociological concept
   - Dynamically stable patterns of shared practices, attitudes and world-views (Patterson 2014)
   - Mostly embodied in the Habitus (Bourdieu 1977,1990, Lizardo 1916, Vaisey 2009)
2. Research culture(s) as small cultures at the intersection of two cultural dimensions (Holliday 1999)
3. Culture as a holistic concept, encompassing many facets that cannot be
   - conclusively defined
   - entirely measured

Methodological warning

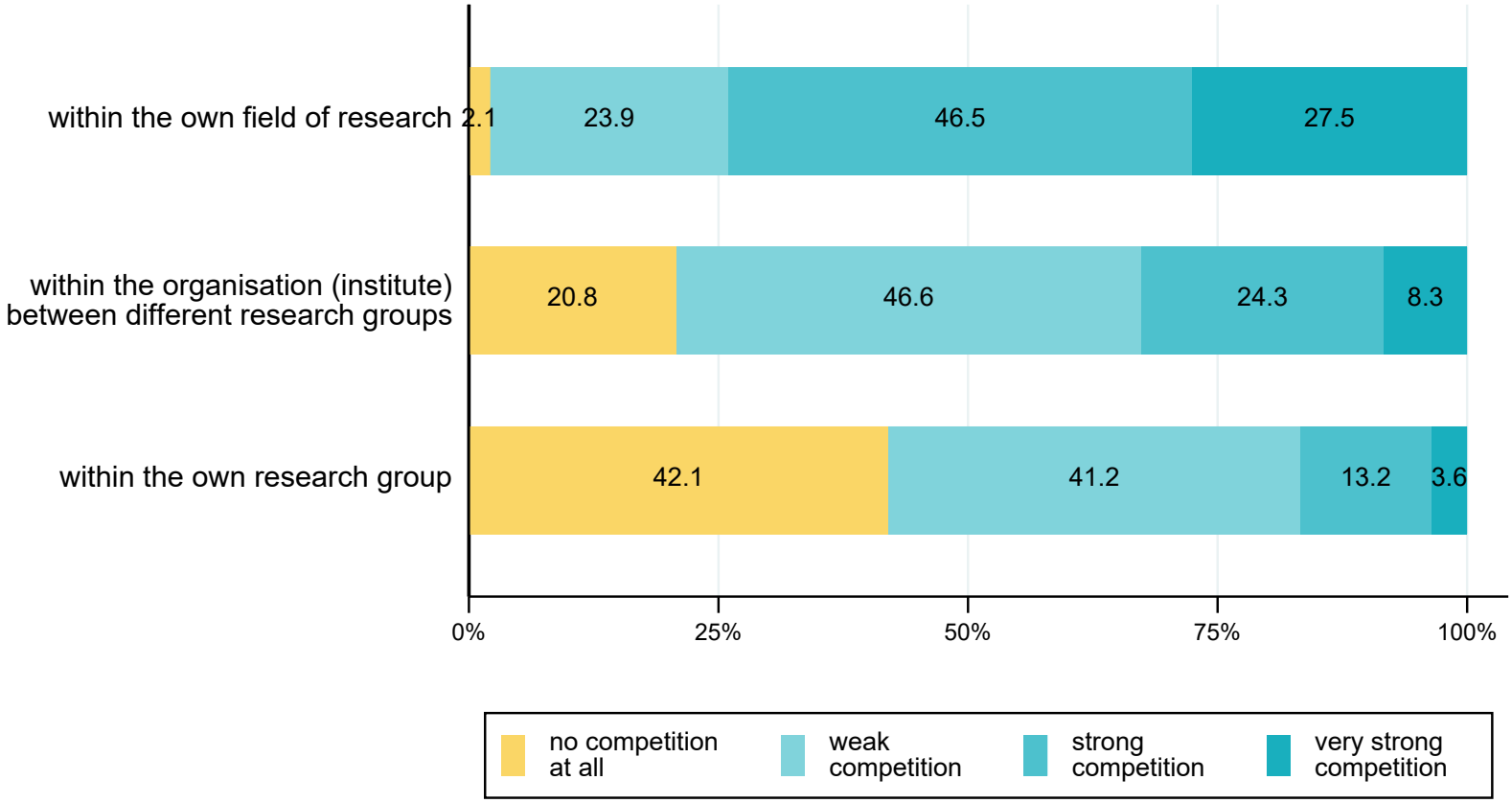
Berlin Science Survey

Complementary research information

- Scientific trend study (biennial) on changing research cultures in the Berlin area
- Target group: researchers of status groups (predocs, postdocs, professors) and all subject fields
- Recent wave (2024): **N = 5.238**
  - Berlin Sample: N = 2.767
  - additional Sample: N = 2.471 (five non-Berlin excellence universities)

Lüdtke, D., Ambrasat, J. (2024). Methods Report Berlin Science Survey wave 2024. https://doi.org/10.18452/31164

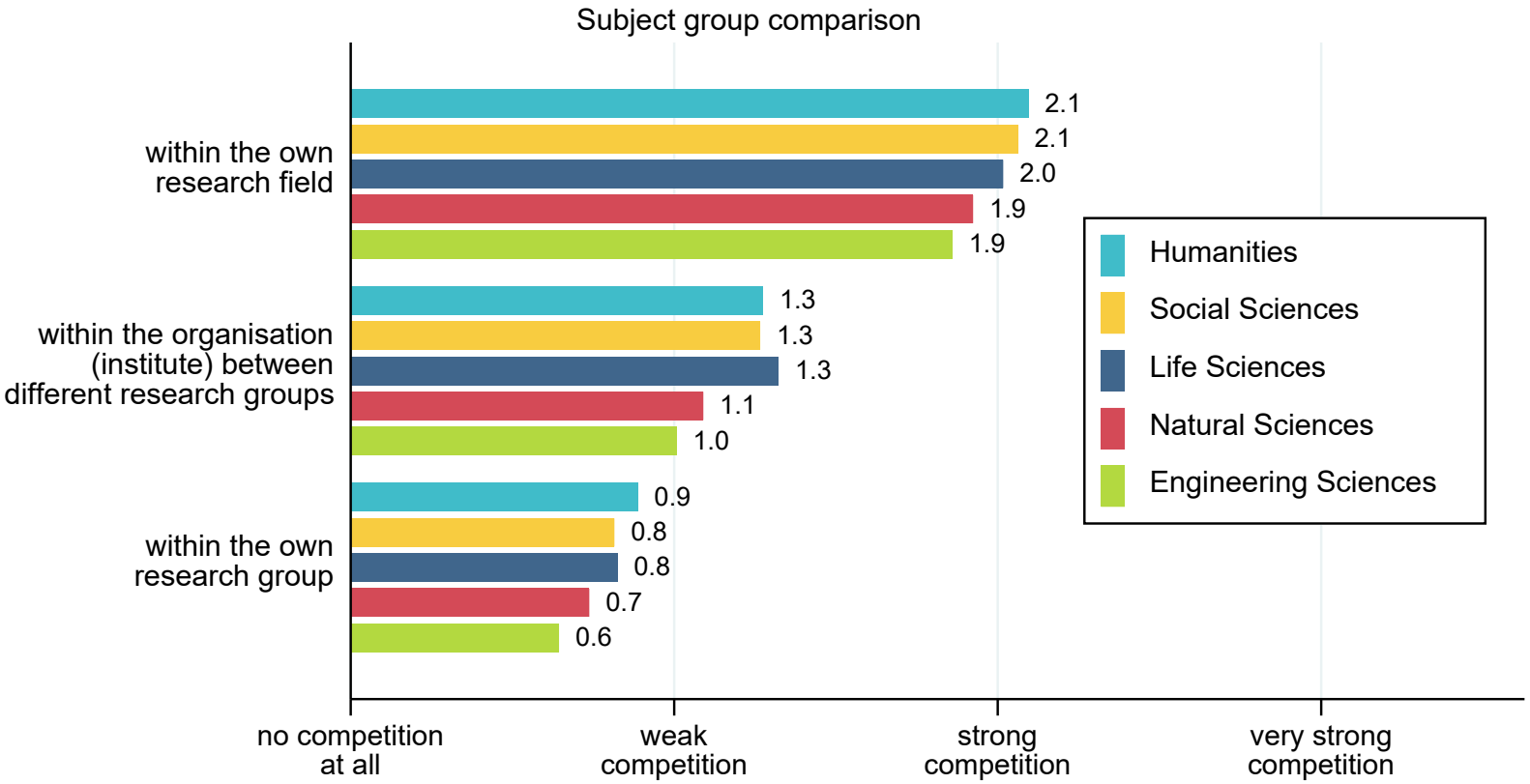
How do you perceive competition within science in the following areas?



Percentages calculated without item-category 'I cannot judge'.

Bln Sample + ExU Sample N= 5193
Berlin Science Survey 2024
www.berlinsciencesurvey.de

How do you perceive competition within science in the following areas?



Mean values were calculated without the item-category 'I cannot judge'.

Bln Sample + ExU Sample N= 5193
Berlin Science Survey 2024
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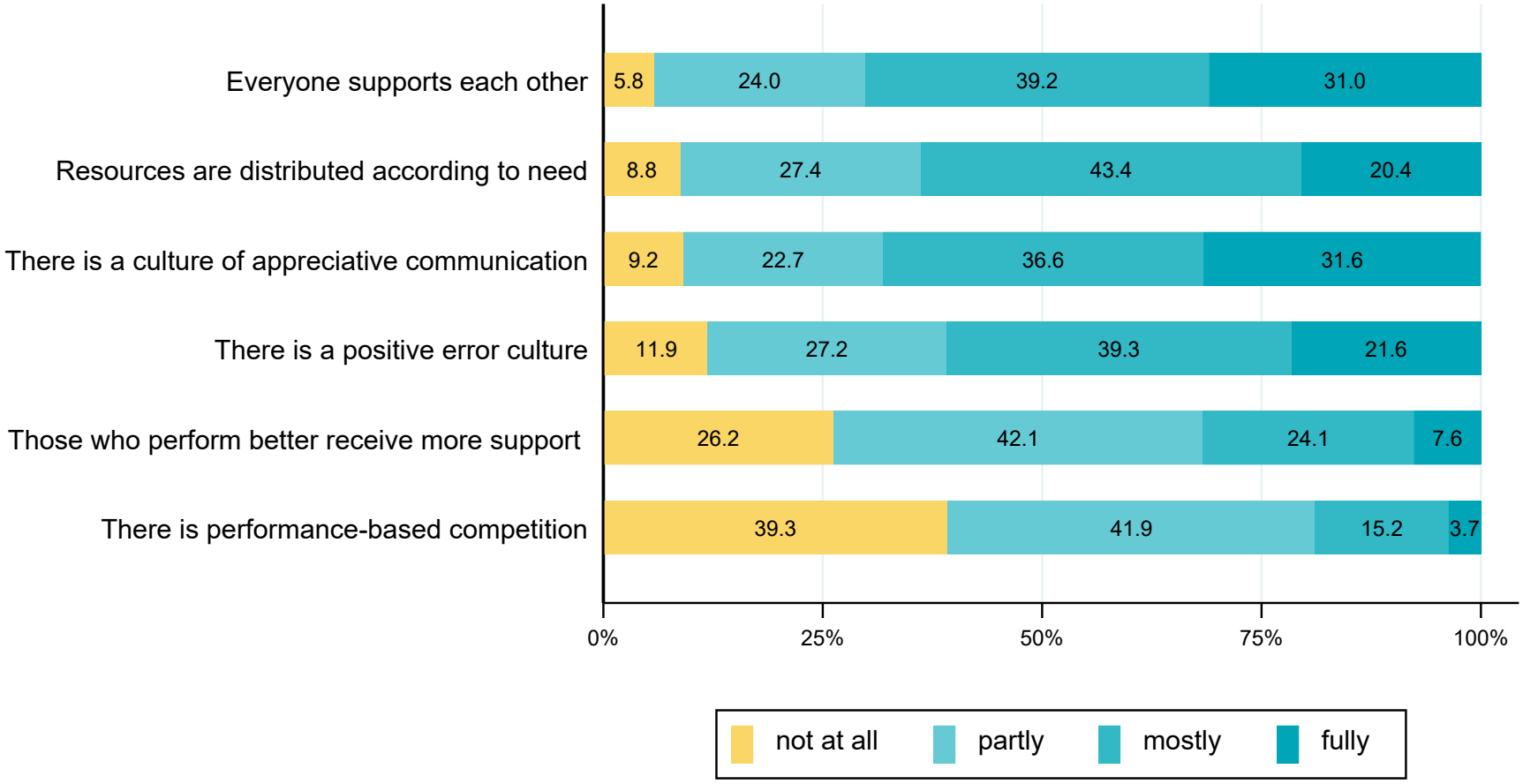
Work culture in the direct working environment (research group)

To what extent do the following descriptions apply to it?



BIn Sample + ExU Sample N= 5212
Berlin Science Survey 2024
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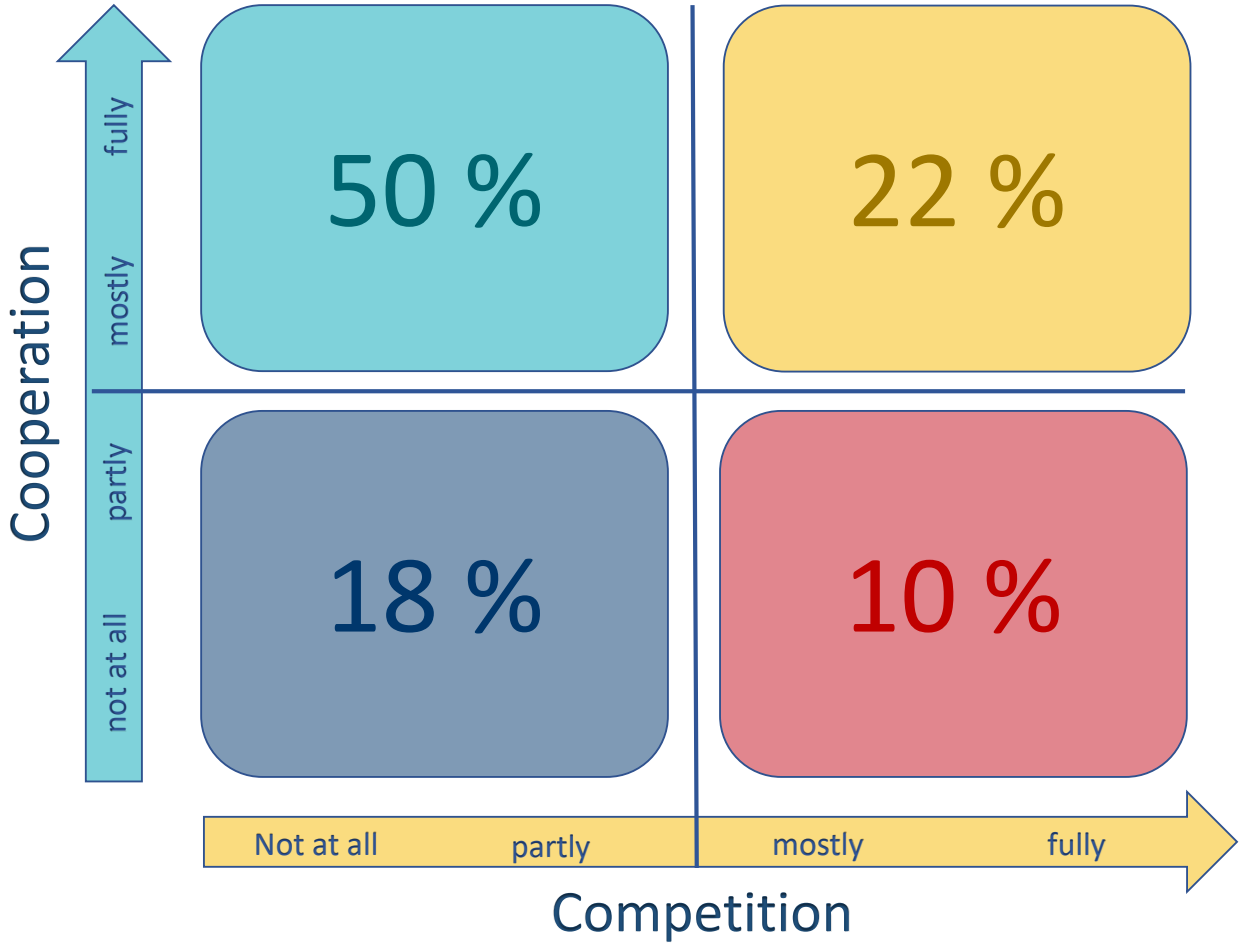
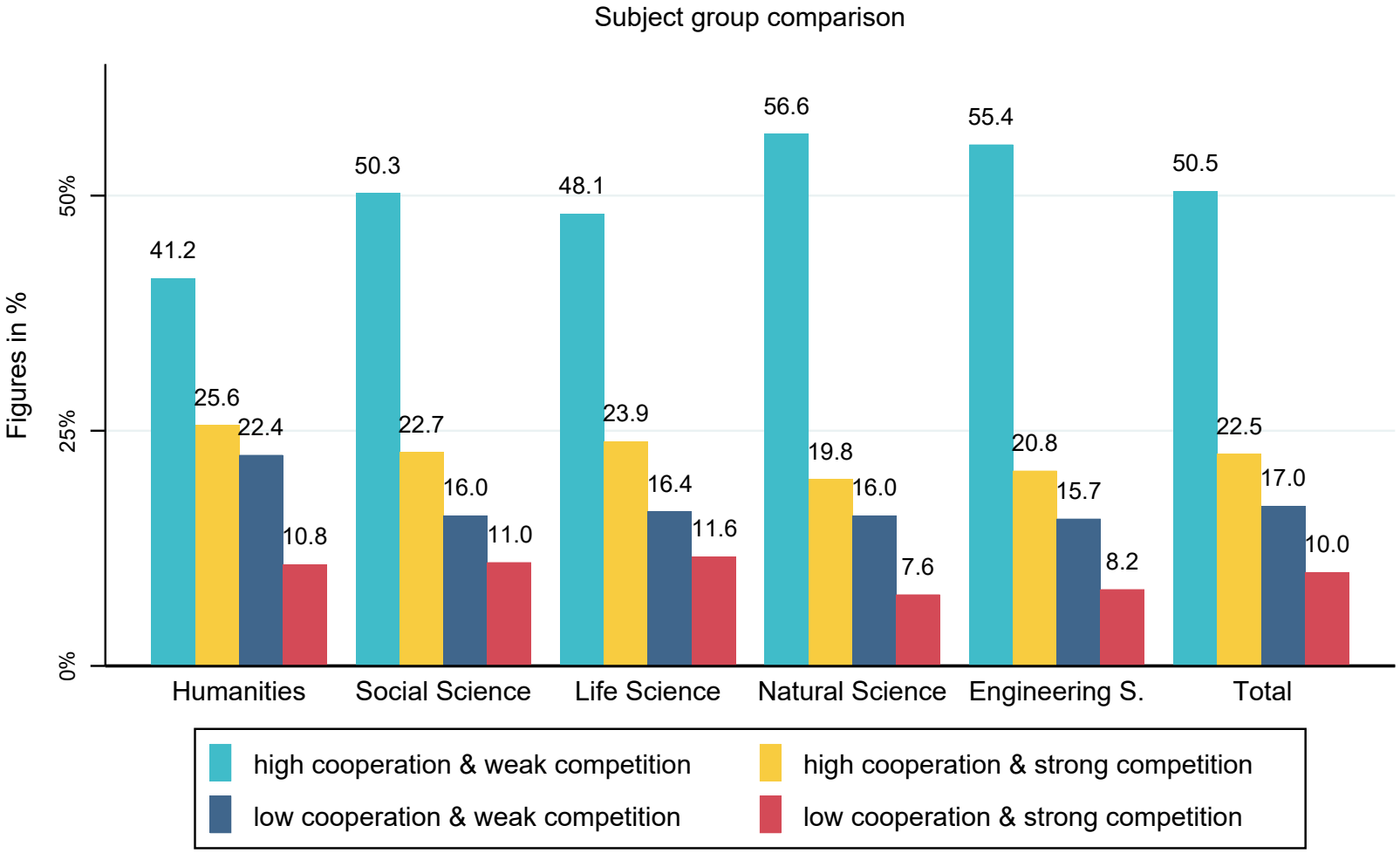
Four types of working culture

Explorative frequency distribution



Distribution of the four work cultures in the subject groups



Bln Sample + ExU Sample N= 5207
Berlin Science Survey 2024
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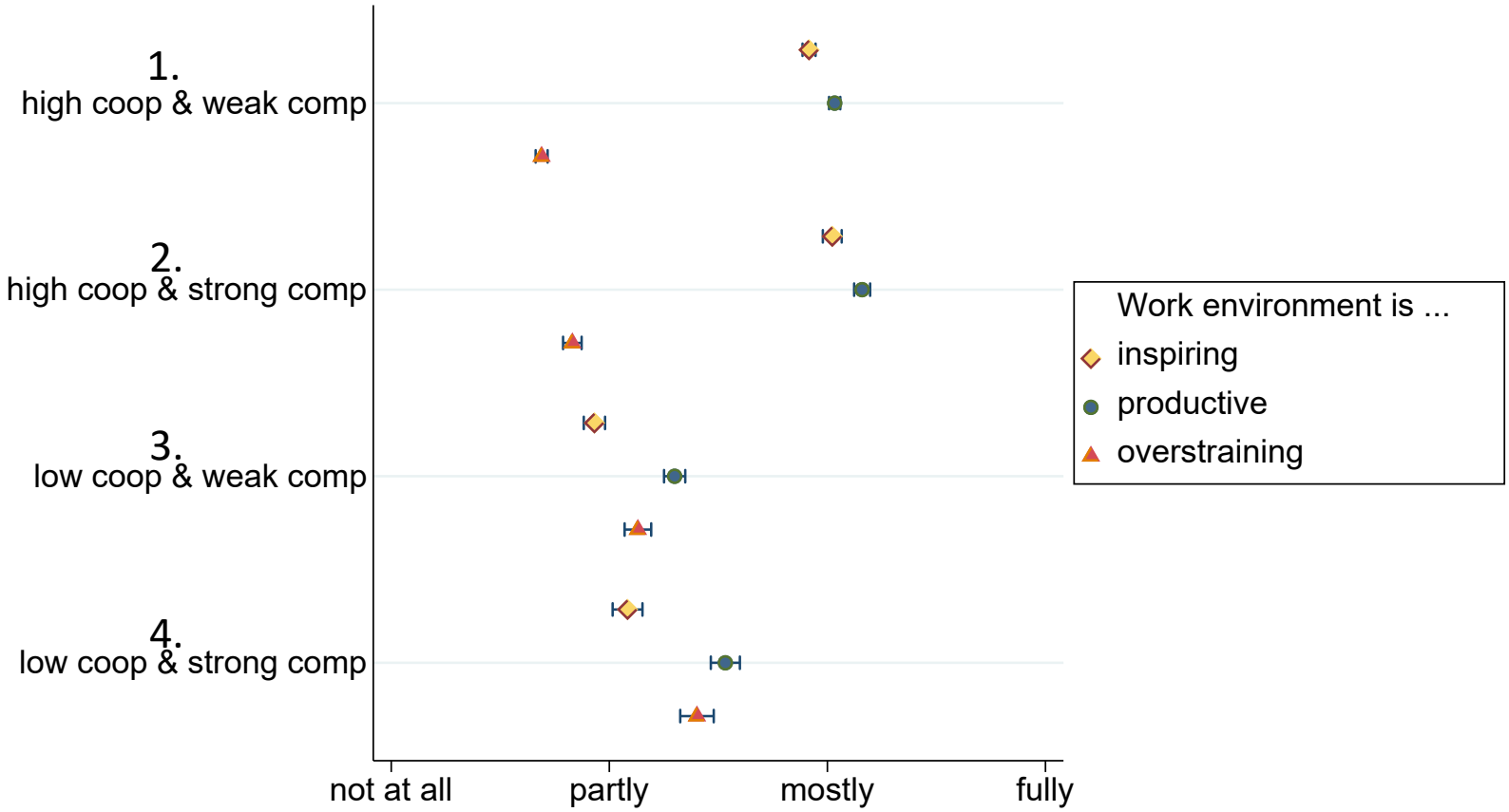
Work environment of the own research group

Work culture comparison



Bln Sample + ExU Sample N= 5189
Berlin Science Survey 2024
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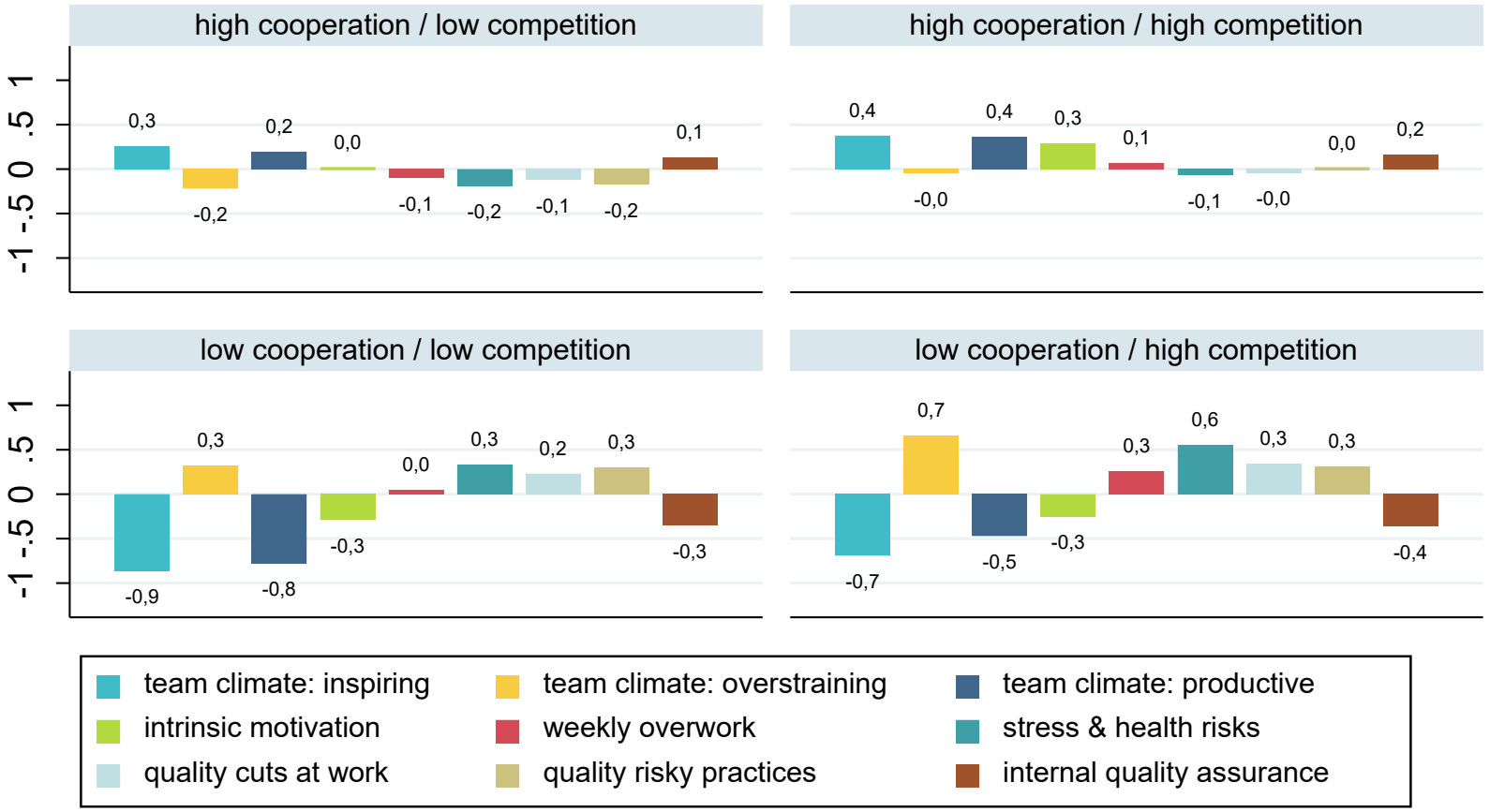
Profiles of four work cultures

Built upon the two dimensions cooperation and competition



All variable were z-standardized for reasons of comparability.

BIn Sample + ExU Sample N=5207
Berlin Science Survey 2024
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Interpretation

Strength of Cooperation

- 72% work in cooperative contexts
- 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 subtle effects, which are also context-dependent
  - In contexts of high cooperation, competitive elements can increase motivation and perceived productivity, but at the cost of increased stress and quality risks
  - In contexts of low cooperation, they cannot turn it into any positiv

Outlook

The role of the Berlin Science Survey in the context of evaluation

- Establishing a long-term monitoring providing complementary research information
- Results are communicated to managers, politicians, and media in order to contribute to the political discourse.

The role of research cultures

- Investigating the structures that precede research output
- Recognising undesirable developments at an early stage
- Changing the perspective for evaluation and governance:
  Away from the individual scientists towards meso level of research contexts and areas

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BERLIN SCIENCE SURVEY

Thanks for your attention!

All previous results of the *Berlin Science Survey* you'll find on our website:
www.berlinsciencesurvey.de

As well as in the archive at the open access server of the Humboldt-University:
https://edoc.hu-berlin.de/handle/18452/26894

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