
Measuring Interdisciplinarity

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My Background

Methodologist

Studies of inequality in science:
 extent of specialization
 subfield integration

Hurdles before us

 Conceptual clarity & consensus

 Comparing proposed measures

 Measuring IDR on a large scale

I. Conceptual Clarity & Consensus

✌️ 📁 Definition

👉 📁 Units of analysis

👍 📁 Dimensions

👉 📁 Time

👉 📁 Purging correlates?

I. Conceptual Clarity & Consensus

  Definition



I. Conceptual Clarity & Consensus

  Definition

  Units of analysis

I. Conceptual Clarity & Consensus

  **Definition**

  **Units of analysis**

- **Articles** (Rinia et al 2001)
 - **Individuals** (Song 2003)
 - **Projects** (Cummings and Kiesler 2005)
 - **Institutes** (van Raan & van Leeuwen 2002)
 - **Journals** (Bonjean 1994)
 - **Body of research** (Porter et al. 2007)
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I. Conceptual Clarity & Consensus

  Definition

  Units of analysis

  Dimensions

I. Conceptual Clarity & Consensus

  Definition

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  Dimensions

- Object of integration
 - Extent/degree of integration
 - Novelty/creativity of integration
 - ?
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I. Conceptual Clarity & Consensus

  Definition

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  Time

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👉 📁 Purging correlates?

- Collaboration
 - Impact
 - Outcomes
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II. Comparing proposed measures

Requires

- rich data on same units
 - possibly multiple data sources:
 - self-reports (scales, identity)
 - bibliometric (CVs, Web of Science)
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Hurdles before us

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III. Measuring IDR on a large scale

Bibliometric data

1. Vantage Point
 2. James Moody's SAS macros
 3. Donna Ginther's SDR effort
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