



GEFÖRDERT VOM



Bundesministerium
für Bildung
und Forschung

Gender Bias in Research – a Case Study in Sports Medicine

Prof. Dr. Ilse Hartmann-Tews,

Dr. Bettina Rulofs, Prof. apl. Dr. Klara Brixius, Dr. Claudia Combrink

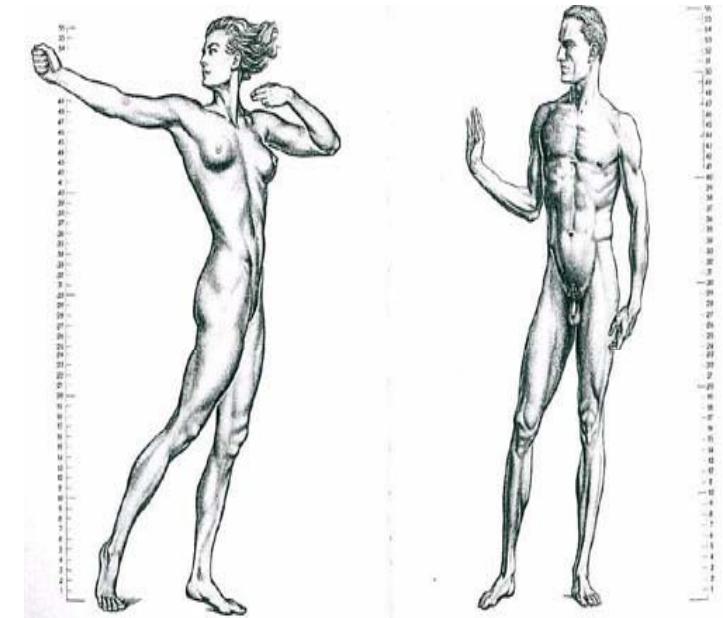
Dones i esport: bones pràctiques en recerca, docència i innovació
Women and sport: innovation in research, teaching and practice

Barcelona, Sept. 26./27. 2011



Structure

- 1. Current state of research**
- 2. Methodological approach**
- 3. First Results**
- 4. Conclusion and prospects**





1. Current state of research

- lack of research with focus on gender issues in health sciences (sex ~ biological aspects; gender ~ social aspects)
- increasing awareness in medicine, but scarcity of gender-sensitive studies
- insufficient knowledge about gender bias

Cp. Risberg Johansson & Hamberg, 2009; Combrink, Rulofs & Hartmann-Tews (2008); Babitsch (2005); Maschewsky-Schneider & Fuchs (2004); Voss & Lohff (2004); Fuchs, Maschewsky & Maschewsky-Schneider (2002); Jahn (2002)



Gender bias in research

1. Androcentrism/ Gynocentrism

- Underrepresentation of women or *men* in study-samples
- Male or *female* perspective in focus

2. Sex/Gender blindness

- Ignoring the relevance of gender and/or sex
- De-contextualization
- No reflection on the relevance of male/ female investigators

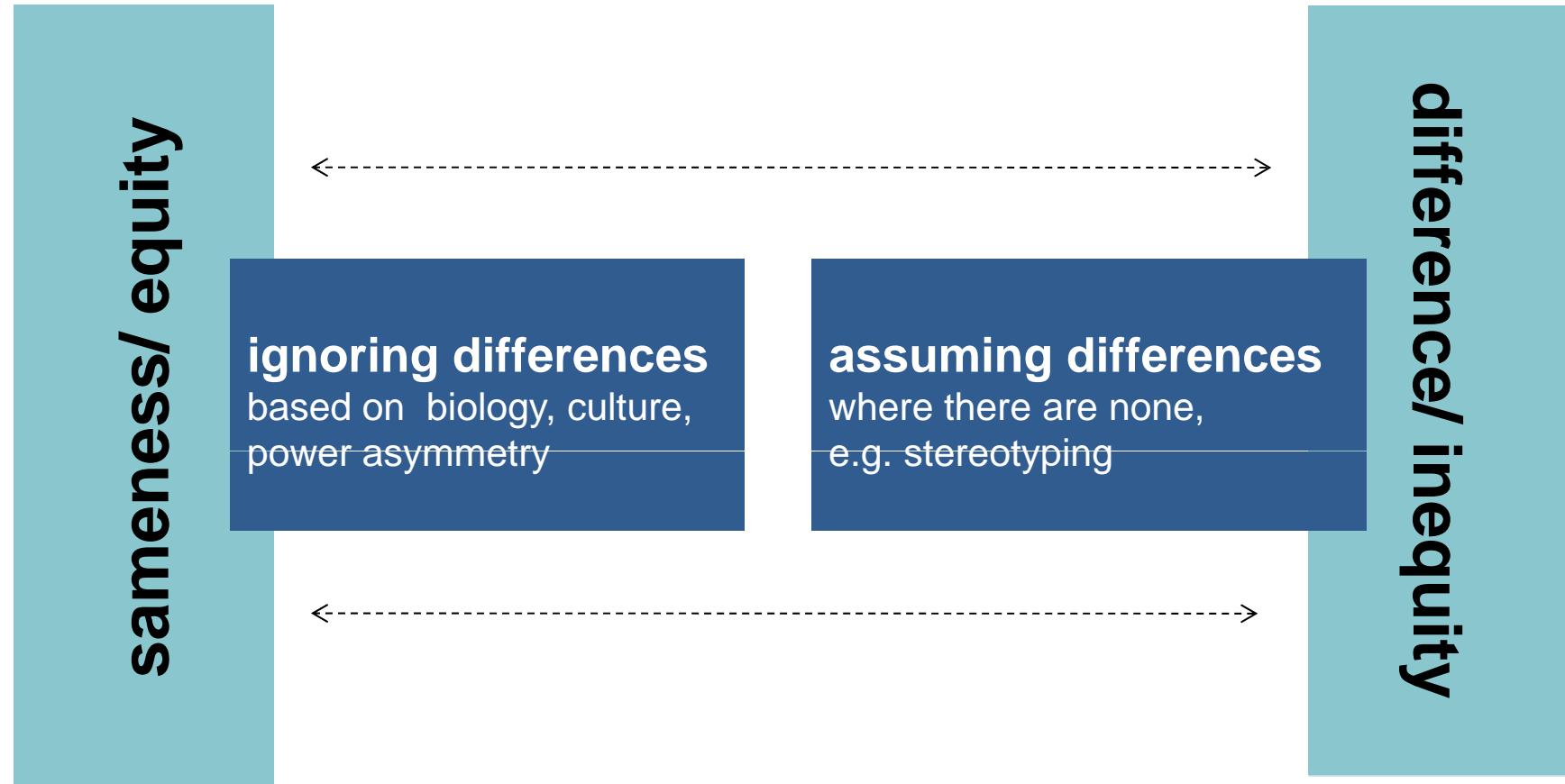
3. Unequal standard of measurement

- Interpretation of results guided by stereotypes

Cp. Risberg Johansson & Hamberg, 2009; Combrink, Rulofs & Hartmann-Tews (2008); Babitsch (2005); Maschewsky-Schneider & Fuchs (2004); Voss & Lohff (2004); Fuchs, Maschewsky & Maschewsky-Schneider (2002); Jahn (2002)



Reasons for gender bias in research



(cp. Risberg Johansson & Hamberg, 2009; Combrink, Rulofs & Hartmann-Tews, 2008; Ruiz & Verbrugge, 1997)



Questions

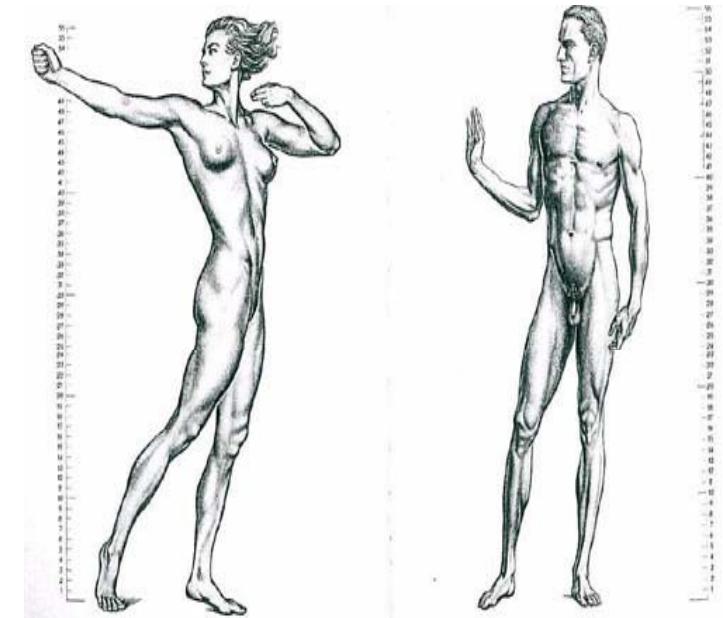
In how far does gender bias occur in sports medicine and sport-related health research?

What kind of social structures foster or impede gender bias in research designs?



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Gender Bias in sports medicine and sport-related health research

1. Survey of the relevance
of sex and gender aspects

2. Analysis of reasons
for gender bias

3. Development of criteria for
gender-sensitive research

A

Quantitative
content analysis of
abstracts in the
field of sports
medicine

B

In-depths analysis
of selected articles

C

Interviews with
experts
from scientific
institutions, funding
bodies and journals

D

Evaluation of
research projects in
sports medicine
concerning gender
sensitivity



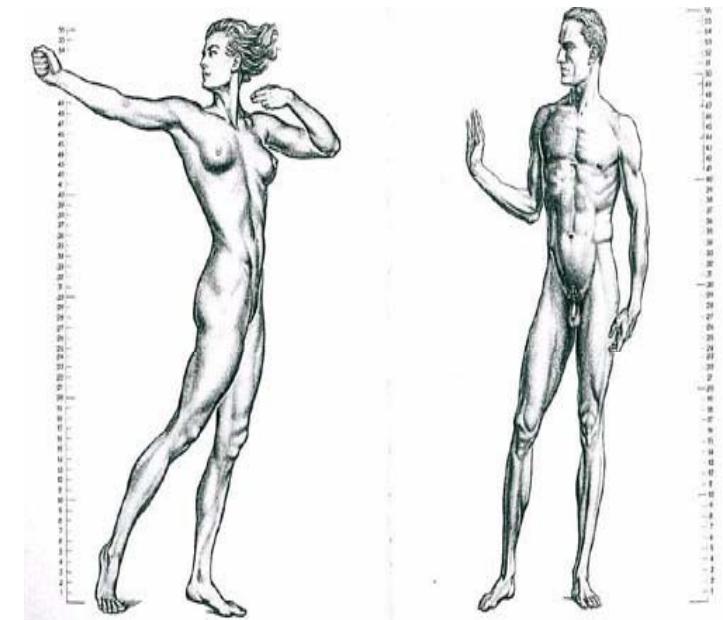
Content analysis of abstracts in sports medicine (Subproject A)

- Data set: **2.922** abstracts of Journal articles
 - Database: Pubmed/Medline and Spolit
 - Complete inventory of the years 2005-2008
 - Sports medicine [broad field]
 - Research institution in Germany
- Standardized short-answer questionnaire
- Interrater-reliability: 90%

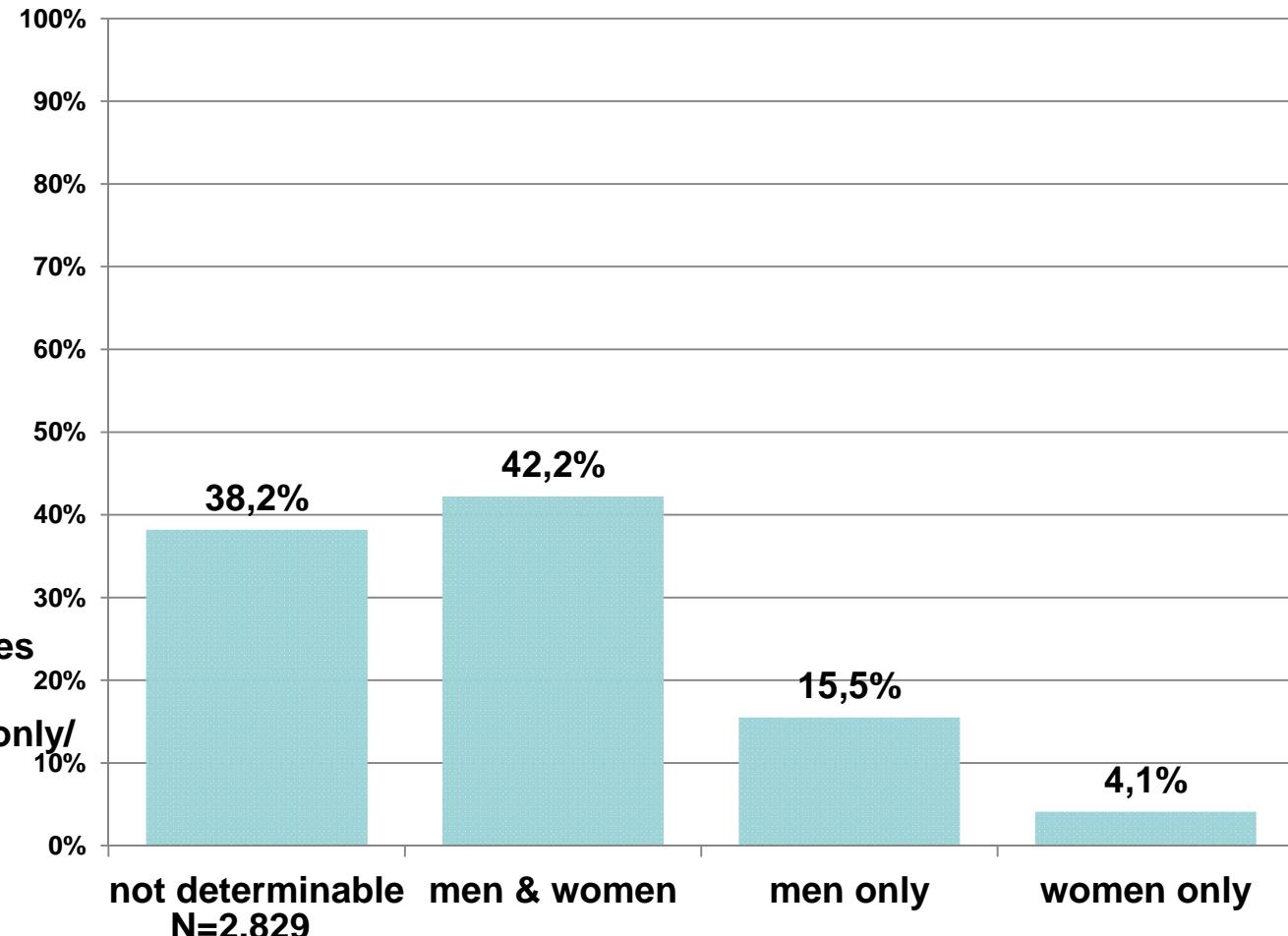
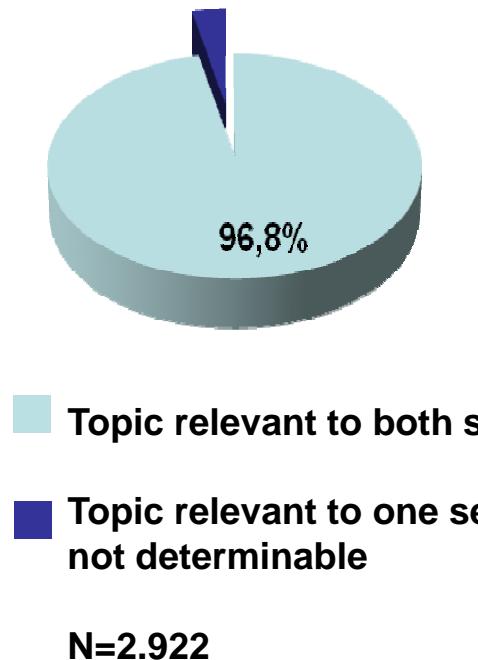


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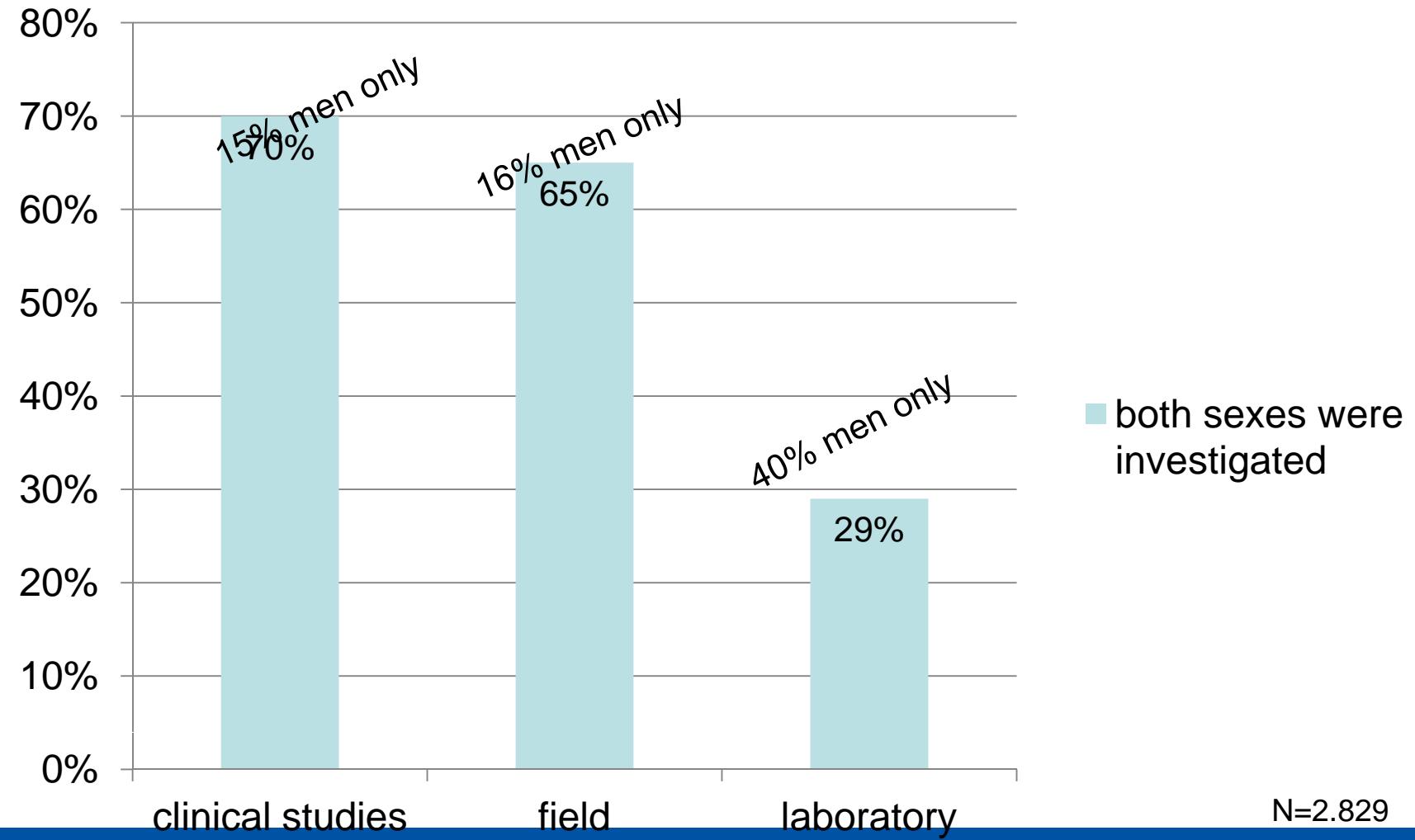


Sample composition: Androcentrism / Gynocentrism?



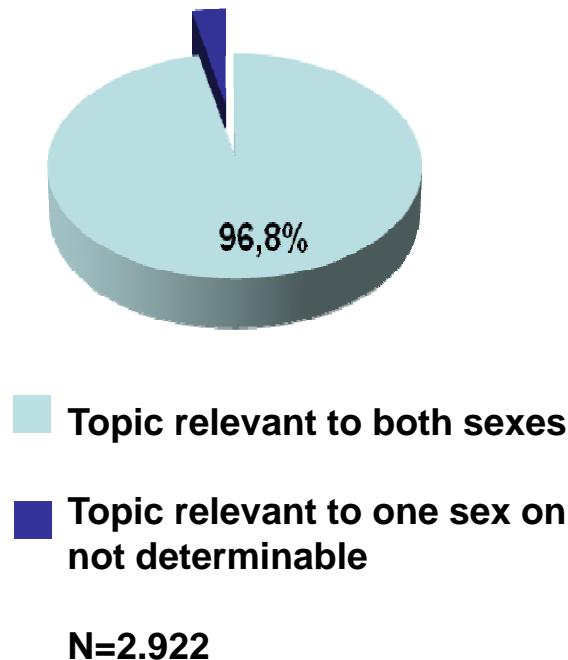


Sample composition of different research designs





Gender-sensitive research ?

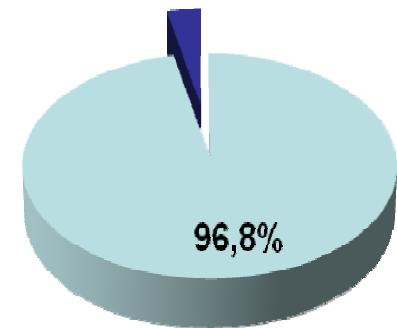


Do the abstracts

- Inform about the relevance of sex or gender in research ?
- address sex or gender differences and/or similarities ?
- reflect on gender order ?



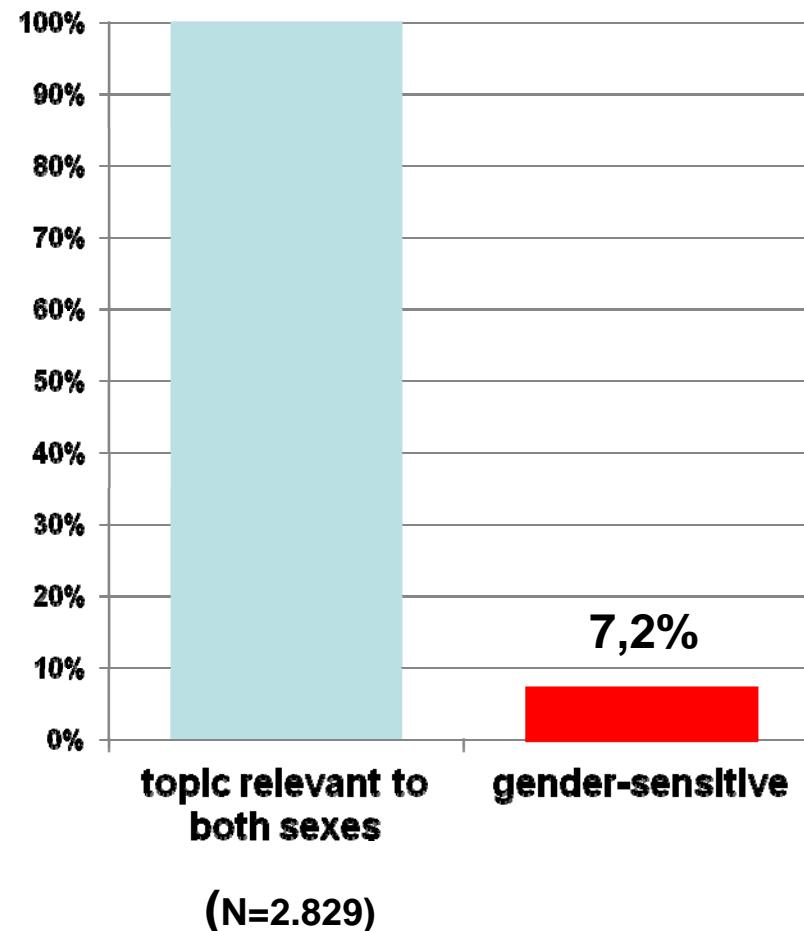
Gender-sensitive research



■ Topic relevant to both sexes

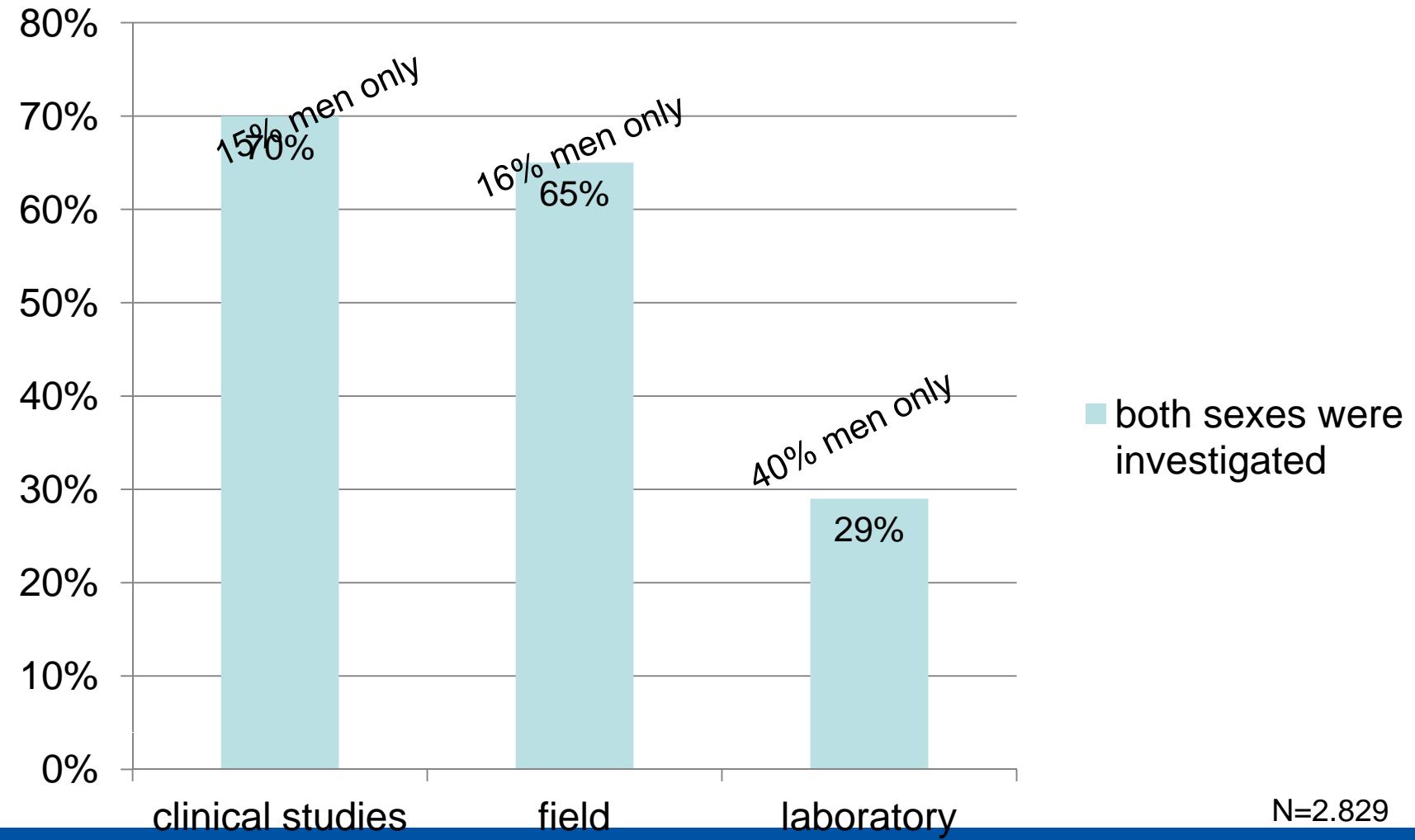
■ Topic relevant to one sex only/
not determinable

N=2.922



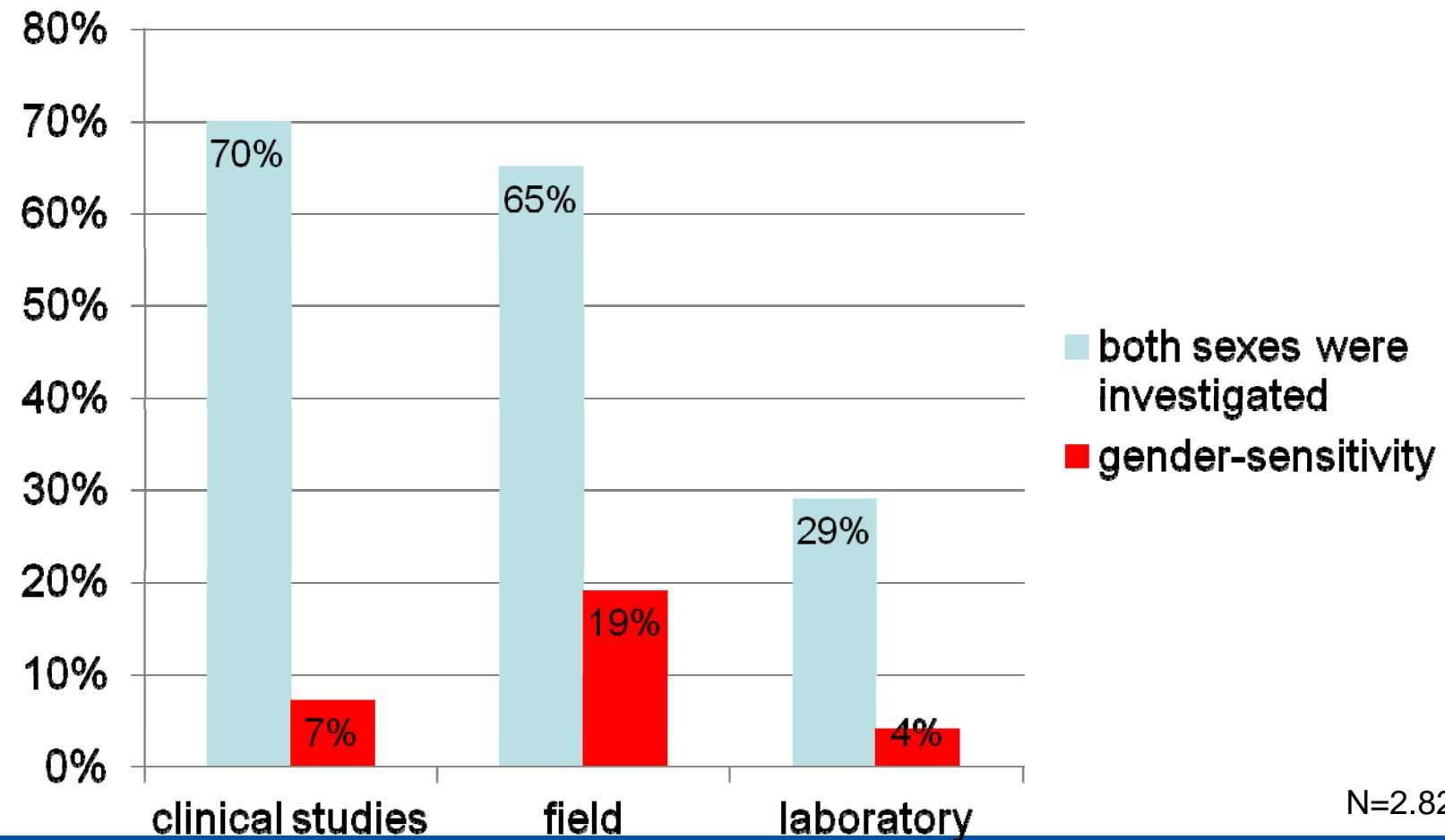


Sample composition of different research designs



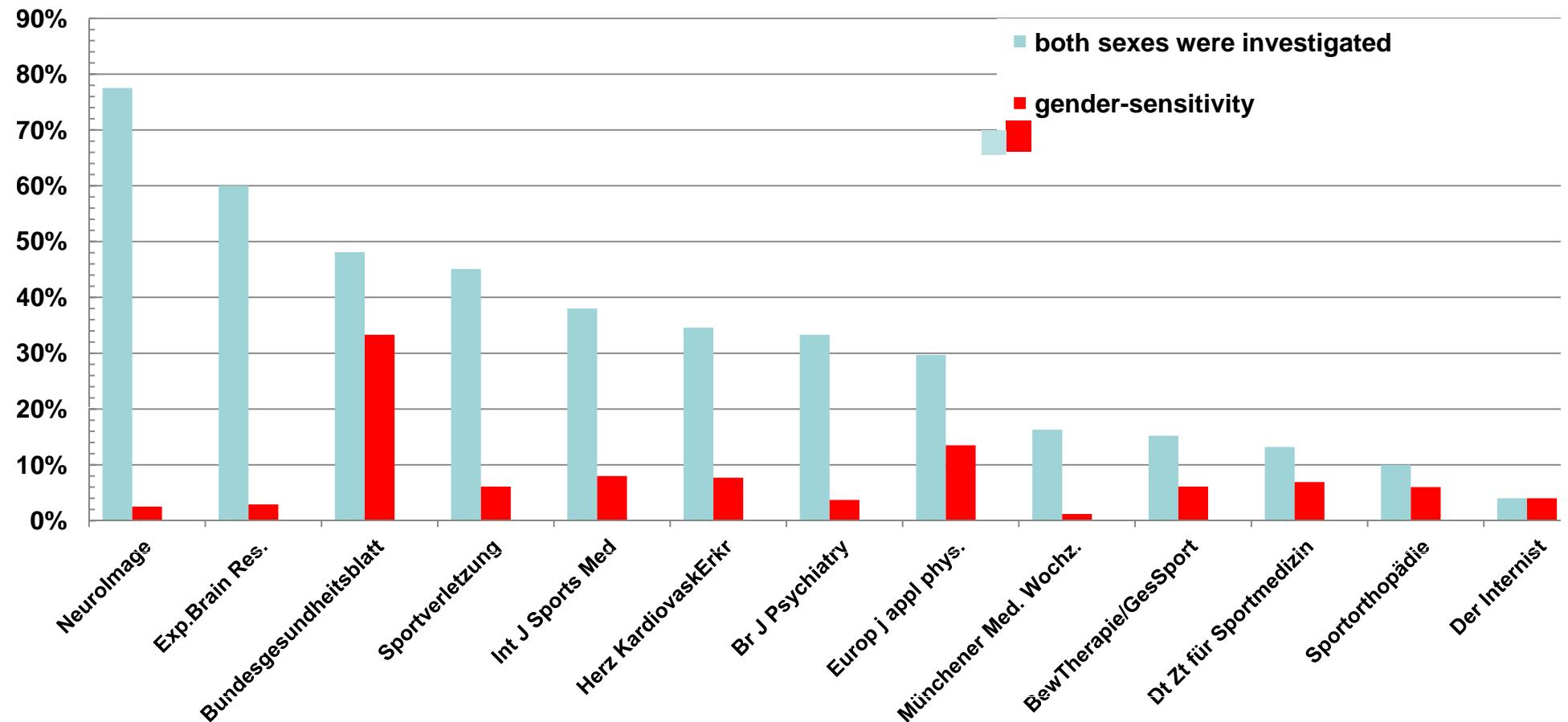


Gender sensitivity with different research designs





Gender sensitivity with respect to central journals

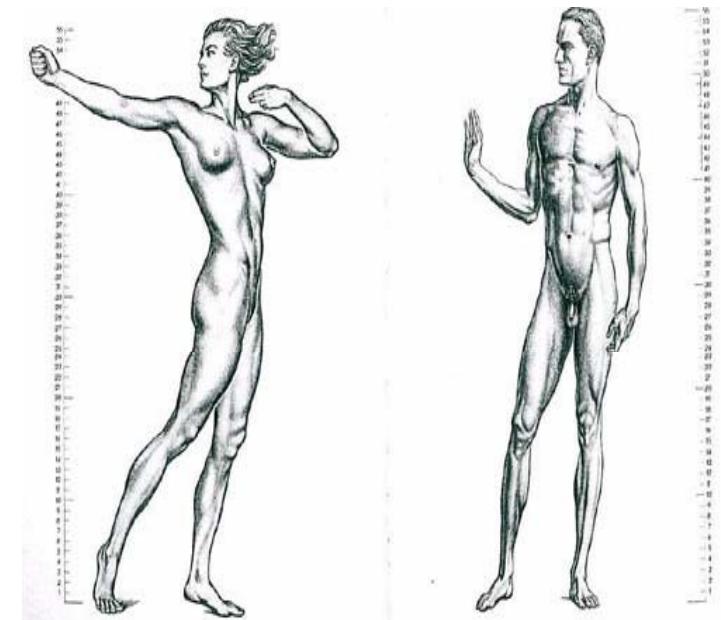


N=2.829



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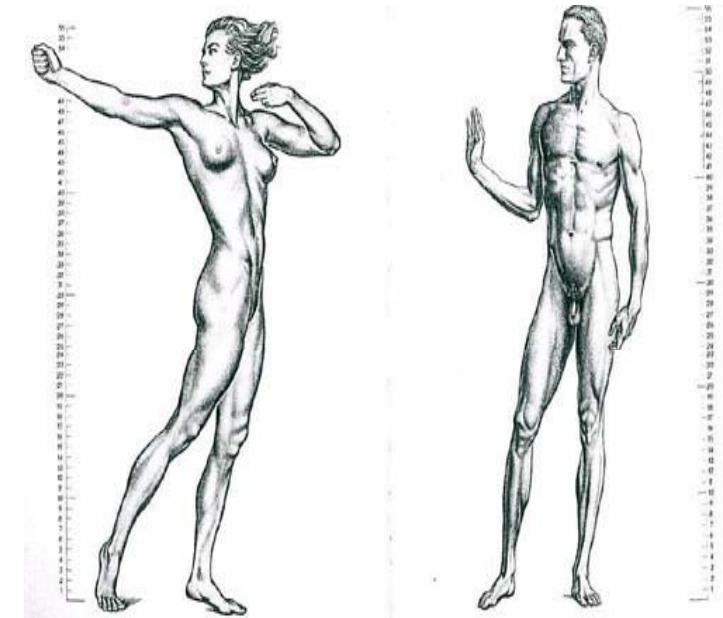
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Prospects

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In depth-analysis of articles

Gendered ? Central parts of an article

- | | |
|-------|-------------------------------|
| ~ 20% | • State of the art |
| ~ 3% | • Intervention / Method |
| ~ 46% | • Results |
| ~ 24% | • Discussion / Interpretation |
| ~ 8% | • Deficits / Prospect |



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Thank you for your attention!

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Literatur

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