## The 'Gender Awakening Tool'

Workshop scientific excellence and 'sexy' research March 19th, 2007





### Sex and gender sensitive research

- Prerequisite for good research
- But: sex and gender sensitivity not (yet) standard in research praxis
- Structure of this presentation:
  - Common pitfalls and shortcomings
  - Gender sensitivity in the different phases of research

### Common pitfalls or shortcomings

- One sex is studied, but the data are presented as if it were of general (rather than sexspecific) applicability (over-generalisation)
- Sex and gender are ignored as variables although relevant (gender insensitivity)
- Identical situations, traits or behaviours are measured, treated or evaluated differently for different sexes (double standards)

### Over-generalisation

#### Sexist language

- Sex specific terms are used for generic purposes
- Generic terms are used for sex specific purposes
- Make sure your title is not overgeneral!

#### Overgeneral data interpretation

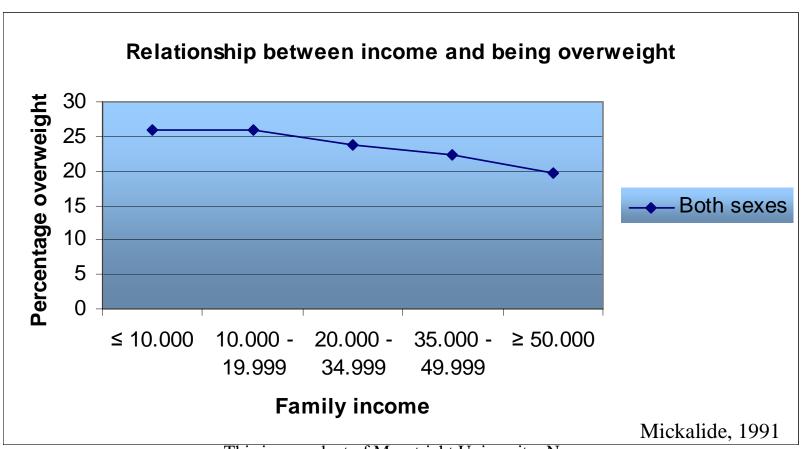
Applying the results found for one sex

to the other

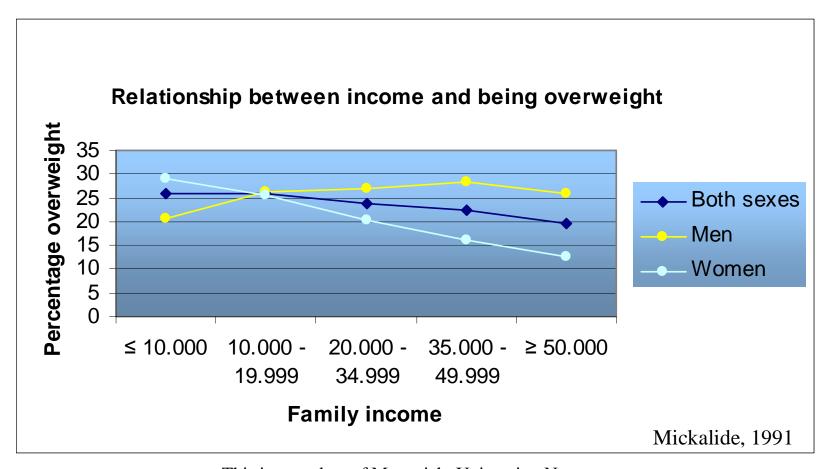
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## Gender insensitivity (Eichler, 1988)



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### Gender insensitivity (Eichler, 1988)

- The sex of subjects is not reported
- Data are not analysed by sex
- Influence of sex of experimentator on subject is ignored (Holdcroft, 2007)
- Familism/householdism: the family or household is wrongly treated as one unit Example: parents assessing allergic child's quality

of life (DunnGalvin et al., 2006)

### Double standards

- Language and concepts
- Sex appropriateness: "the assumption that there are behaviour patterns or character formations that are more appropriate for one sex than for the other" (Eichler, 1988)
- Methods
- Data interpretation

# Gender and sex issues should be considered in the:

- Literature study
- Research questions and hypotheses
- Development of the research protocol
- Choice of the research methodologies
- Data-analysis & -interpretation
- Conclusion and recommendations

### Step 1: Relevance check

- Does the project involve humans subjects?
- Does the project use human cells, tissues or other specimens? Or animal tissues / cells/ other that serve as a model for human biology/physiology?
- Does the project aim at modifying, changing or developing (health) policies which have an (in)direct impact on human beings?
- Is it expected that humans will be confronted with the effects of this research in daily life?
- Are gender and sex differences with respect to your research documented in literature?

### Step 2. Literature search

	Documented in literature	Not documented in literature
Address sex and/or gender differences in your research	+	++
No address of sex and/or gender differences in your research		

### Step 2. Literature search

- Did I undertake enough efforts to explore possible gender and/or sex differences relevant to the research questions in the preceding literature survey?
- Did I substantiate my choice to do or not do something with gender and/or sex issues?



• You are addressing gender and sex issues in the right way if you can answer both questions with 'yes'.

### Step 3. Research questions & hypotheses

- If you are addressing sex/gender issues you should:
  - detail the research questions related to sex and gender aspects in research;
  - formulate hypotheses on the effect of sex and/or gender.

humans

healthy volunteers,

panents.

congamers, familie

Use language carefully!

## Step 4. Research methods and design

- Is substantiated why women or men (or both) are included?
- Is it necessary to collect sex disaggregated data?
- Is it possible to collect sex disaggregated data?
- Is it necessary to validate my instrument for both sexes? Is my instrument validated for both sexes? And if not, do I use it for both sexes or only for the sex that it is validated for?

### Step 5. Data analysis and interpretation

- As what kind of variable do I analyse gender or sex: as an independent variable, as an effect modifier or as a confounder, and why?
- Is the statistical power big enough to analyse gender and/or sex differences? (Prins et al., 2007)
- Do I need to analyse the results per sex?
- Especially in this phase: avoid the pitfalls! E.g.:
  - Are men taken as a norm?
  - Are normal female biological processes pathologized?
  - Are stereotypes reflect of Maastricht University. No part of the workshop or its presentations may be utilized or reproduced in any form without prior written permission of the authors.

## Step 6. Report

- Did we avoid the pitfalls?
- Did we visualise the found sex and/or gender differences in the used tables, figures and conclusions?
- Did we report our results and conclusions regarding gender and sex issues?
- Did we consider if the results will differently affect women or men?

# Step 7. Conclusions & recommendations

- Is it necessary that future research on this topic pays attention to gender and/or sex issues?
- How can information on sex differences be translated into preventive, diagnostic and therapeutic practice?
- How can the new knowledge about and understanding of biological sex differences and similarities most effectively be used to positively affect patients outcomes and improve health and health care?

### Application to a case