

# **GENDER AWAKENING TOOL**

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## **BIBLIOGRAPHY: SEX & GENDER IN BIOMEDICAL AND HEALTH RESEARCH**

**GenderBasic**



# Gender Awakening Tool Bibliography: Sex and Gender in Research

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And was designed as a part of



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a project in the 6<sup>th</sup> Framework Programme.

## **The 'Gender Awakening Tool'**

### **An analytic tool for the assessment of sex and gender integration in research projects**

#### **Objectives**

The "Gender Awakening Tool" is a checklist or step-by-step plan to assess if all relevant aspects of sex and gender have been considered in (life science) research. The checklist can be used to prevent common pitfalls or shortcomings leading to gender bias in research, i.e. over-generalisation, gender insensitivity, and double standards<sup>1</sup>. The "Gender Awakening Tool" can be used in assessing research projects on gender sensitivity, but can also be useful for researchers in conducting gender sensitive research. The checklist is a list of questions regarding the incorporation of sex and gender aspects in all phases of the research process: literature search, formulation of research questions and hypotheses, research methodology, analysis of the results, conclusions and recommendations.

*The presentation of the Gender Awakening Tool at the WISER Tools for Change Market will take place at 13:00 on Friday, October 5<sup>th</sup>. Location: Bonnefanten Museum, Auditorium.*

#### **Considering sex and gender in all research phases**

Sex and gender can play a role in *all* phases of the research process. In order to make sure we consider all relevant aspects of sex and gender in all the areas and

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<sup>1</sup> For more information on overgeneralisation, gender insensitivity and double standards, please see Eichler (1988).

stages of research where they need to be considered, a checklist or step-by-step plan is offered below<sup>2</sup>.

### **Step 1 – Relevance check**

Are gender and/or sex issues relevant for your subject of research?

- Does the project involve human subjects?
- Does the project use human cells, tissues or other specimens? Or animal tissues/cells/other that serve as a model for human biology or 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 already documented in literature?

If you can answer any of these questions with 'yes', you will need to look further into how sex and/or gender can play a role in your research.

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<sup>2</sup> The checklist is based on the Gender Impact Assessment (GIA) protocol, an tool to analyse research projects on their sex and gender dimension. The GIA protocol was developed by Klinge and Bosch (2001) as a part of the Gender Impact Assessment studies of the Fifth Framework Programme of the EU.

## Step 2. Literature search

Was sex or gender addressed in previous studies?  
 Compare your research efforts to existing literature with the help of the table below to assess how you are dealing with sex and gender issues:

<b>Sex and gender differences</b>	<b>Documented in literature</b>	<b>Not documented in literature</b>
<b>Addressed in your research</b>	+	++
<b>Not addressed in your research</b>	-	0

### Your research is:

- + Adequate
- ++ Innovative
- Missing relevant aspects
- 0 Sex and gender aspects remain to be studied

- 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 include or not include gender and/or sex issues?

## Step 3. Research questions & hypotheses

If you are addressing sex/gender issues:

- detail the research questions so that it reflects the population under investigation (and avoid unspecified terms like 'adult' or 'patient');
- preferably add a question that aims at investigating the possible difference between men and women;

- when investigating men and women, make sure the research questions doesn't take the man as the 'standard' by which the woman is evaluated;
- formulate hypotheses on the effects of sex and/or gender

#### **Step 4. Research methods and design**

Describe how sex and/or gender issues are taken into account in the research design and methodology.

- Is substantiated why women or men (or both) are included (or excluded)?
- Is it necessary to collect sex disaggregated data?
- Is it possible to collect sex disaggregated data?

Concerning the instruments you use, consider the following:

- 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**

Including men and women in your research does not lead to detection of differences when the data are not analyzed separately. You can ask yourself:

As what kind of variable do I analyze gender or sex: as an independent variable, as an effect modifier or as a confounder, and why?

- Is the statistical power big enough to analyze gender and/or sex differences?

- Do I need to analyze the results per sex?

Of course those questions need to be considered long before you start analyzing, as you are formulating your research questions and designing your research.

Although all pitfalls can be common in this phase, data analysis is especially prone to being gender insensitive. Make sure none of the below applies to your analysis:

- Men are taken as a norm.
- Normal female biological processes, such as pregnancy or menopause, are pathologized.
- Existing stereotypes are reproduced without scientific ground.

## **Step 6. Report**

Go through your findings with a 'gender lens' and make sure that:

- The pitfalls (over-generalization, gender insensitivity, double standards) are avoided
- The found sex and/or gender differences are visualized in the used tables, figures and conclusions.
- Results and conclusions regarding gender and sex issues are reported.
- It is considered if the results will differently affect women and 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 patient outcomes and improve health and health care?



## **Sex & Gender in Biomedical and Health Research**

### **Bibliography**

In this bibliography you will find the literature that is referred to in the (presentation of) the Gender Awakening Tool, the materials available for inspection at our stand, the review papers from the GenderBasic project as well as suggested readings that elaborate upon why and how sex and gender can be integrated in the research praxis. Please note that the viewing of some webpages requires specific subscriptions.

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### **GenderBasic review papers:**

The review papers that are written as a part of the GenderBasic project will be published late 2007 as a supplement in Gender Medicine. Awaiting publication, the abstracts can be found on

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