



## **Checklist for Gender-Sensitive Research**

The aim of the checklist is to help researchers reflect on how to integrate the gender dimension across different stages of research projects. The checklist includes set of questions to be asked when creating the research design, conducting the research and disseminating its outcomes. The questions are complemented by short explanatory notes that help the reader understand the concepts addressed in the questions and/or provide practical examples.

Unlike gender-blind research, which does not take gender into account and is based on the often incorrect assumption that potential differences between men and women are irrelevant to the research at hand, gender-sensitive research considers differences between men and women in all aspects of research. Not every research necessarily has the gender dimension, but this dimension is usually present in research concerning society, humans, animals, or human and animal cells and tissues. For a more comprehensive theoretical background as well as practical examples of how to integrate sex/gender analysis in research see e. g. the handbooks issued by the European Commission Gendered Innovation: How Gender Analysis Contributes to Research and Gender Innovation 2: How Inclusive Analysis Contributes to Research and Innovation.

√ Have you analysed the relevance of sex/gender to the research topic?

•	Yes
•	No

"Sex" is a biological quality or classification of sexually-reproducing organisms, generally female, male, and/or intersex, according to functions that derive from the chromosomal complement, reproductive organs, or specific hormones or environmental factors that affect the expression of phenotypic traits that are strongly associated with females or males within a given species. Sex is a fundamental variable in all biomedical research and needs to be analysed—in human and animal research subjects, and in organs, tissues, cells, and their components. Sex may play a role in all studies involving human or non-human animals "Gender" refers to cultural and social attitudes that together shape and sanction "feminine" and "masculine" behaviours, products, technologies, environments, and knowledges. "Feminine" and "masculine" describe attitudes and behaviours on a continuum of gender identities. Gender does not necessarily match sex. Gender comes into play when cultural attitudes and societal factors are important to a project. Gender may play a role in all studies involving human beings. Incorporating gender in the analysis requires researchers to be aware that men and women may have differing needs and expectations for outcomes and may interpret their needs influenced by stereotypes and normative expectations because societies are essentially structured around a gendered division of labour. It is therefore crucial for the researcher to reflect on cultural attitudes and particularly on those "taken-for-granted", invisible assumptions that affect research. When gender assumptions are invisible and remain unexamined, they may introduce bias into science. Research topic: Usually, the formulation of research questions and hypotheses draws upon previous research and existing theories and concepts. Theories provide a framework for explaining and predicting phenomena researched. Concepts relate to how data are described and interpreted, including how particular phenomena are categorized. For that it is crucial to be aware of gendered contents in (some) scientific theories and to avoid theories that are biased. Theories and concepts must be underpinned by the best available information on sex and gender.





✓ Have you checked if men and women or male and female subjects are differently related to the research problem?

<ul><li>Yes</li><li>No</li></ul>
E. g. a research project on war and conflict studies cannot ignore the role women play, even if they are not directly involved in armed struggle. Ignoring women means ignoring about half of the society. When inspecting the role of women, do not analyse only how they are affected (e. g. being victims of sexual violence) but also how they act (their strategies of survival during the war).
$\checkmark$ Have you reviewed the literature and other sources relating to sex and gender differences in the research field?
<ul><li>Yes</li><li>No</li></ul>
The inclusion of a gender/sex perspective in the literature analysis ensures the integration of the concepts of sex and gender in relation to data, methods, results, and objectives, through comparison, rupture or continuity with respect to previous works. An analysis of the literature should explain whether, and to what extent, sources quoted adopted a gender/sex perspective (including animals, tissues, and cells), both from the point of view of research design and from the impact or implications of the research itself. It should be highlighted in which aspect of the research gender and/or sex were integrated. If there is no source adopting a gender/sex perspective, the author should try to make the gap explicit and discuss it.
✓ Does the proposal explicitly and comprehensively explain how gender issues will be handled? If gender issues will not be included, is there a statement explaining why not?
• Yes

In order to make evidence-based judgments about integrating sex or gender into research priorities, it is important to know if the study should differentiate between women and men, and, if so, which specific women or men. Establishing priorities according to gender assumptions rather than evidence may result in lost opportunities for new scientific findings. For example, the focus on testis-determining factor (TDF) historically resulted in scientists overlooking the role of ovarian development in sex determination.





✓ Does the methodology ensure that (potential) sex/gender differences are investigated? (e.g., will sex/gender differentiated data be collected, analysed, and included as part of the final publication?)

In some research, only a sex analysis is relevant to the problem at stake; e.g. preclinical studies on cells and tissues, and in animals in many cases, given that an over-reliance on male animals, and neglect of attention to the sex of cells, can lead to neglect of key sex differences that should be guiding clinical studies, and ultimately, clinical practice. In some other cases, only a gender analysis is necessary (mainly in studies where biological differences do not play a role), and in some cases both sex and gender analysis are relevant. Pain, for example, exhibits biological sex differences in the physiology of signaling. Pain also incorporates sociocultural components in how symptoms are reported by women, men, and gender-diverse people, and how physicians understand and treat pain according to a patient's gender.  V Have you considered the possibility that there will be different outcomes and impacts of the research on all genders?  Pes  No  Research interferes with gender equality whenever the results or developing technology benefits men more than women, e. g. despite heart disease being a major killer of women, it has long been considered and thus studied as a male disease.  V Have you considered other intersecting factors with sex and gender (e.g., age, ethnicity, disability, religion, sexual orientation) in your methodology?  Pes  No	
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Intersectional approaches may be relevant in studies involving human subjects. While sex and gender are important concepts to consider, they are shaped by other social and biological factors. Gender identities, norms, and relations both shape and are shaped by other social attributes. Sex often interacts with gender while being intersected by factors such age, race, socioeconomic status, geographic location, language, or religion. For example, as far as brain development is concerned, those social and cultural factors interfere with the interaction between sex attributes (such as genes, chromosomes, or hormones) and gender attributes (such as parental stimuli, formal education, or the media). In social sciences, research focused on the situation of women in the labour market should not omit ethnicity and social class as variables.





 $\checkmark$  Are there any ethical implications as relate to sex and/or gender that you need to address in your research?

• Yes • No
E. g., the World Health Organization (WHO) pointed out how gender inequality and inequity influence people's health. For example: • A woman cannot receive needed health services because norms in her community prevent her from traveling alone to a clinic. • A country's lung cancer mortality rate for men far outstrips the corresponding rate for women because smoking is considered an attractive marker of masculinity, while it is frowned upon as unfeminine in women.
✓ Are the research tools (questionnaires, surveys, focus groups, experiments, etc.) designed to disclose potentially relevant sex and/or gender differences in your data?
<ul><li>Yes</li><li>No</li></ul>
Data collection tools (such as questionnaires and interview checklists) need to be gender-sensitive, use gender-neutral or gender-sensitive language and should make it possible to detect the different realities of men and women.
√ Have you disaggregated and analysed the data by gender/sex?
• Yes • No
Even if in most social research concerning human subjects, data are routinely disaggregated by sex, in some cases they can be missing. Where sex-disaggregated data are not available, it is very useful to indicate such gaps in data availability. Identifying such gaps is the first step towards solving the problem of missing data.
✓ Are the groups involved in the project (e.g., samples, testing groups) sex/gender-balanced?
• Yes • No

When conducting population polls, ensure you obtain proportional gender ratio. If you organise focus groups, provide equal number of men and women in the sample. Interview equally men and women. When conducting laboratory or medical experiments, always report sex of the cells, tissues, animals or subjects you are using. If you are using one sex only, justify why, and note limitations in your discussion.



□ No

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✓ Do analyses present statistics, tables, figures, and descriptions that focus on the relevant gender differences that came up in the course of the project?
<ul><li>Yes</li><li>No</li></ul>
Relevant gender differences that arose throughout the course of the research project should be presented with statistics, tables, figures, and descriptions, but also report when sex/gender differences are not detected.
√ Have you included stakeholders that focus on gender among the target groups for dissemination, along with mainstream research conferences or journals?
<ul><li>Yes</li><li>No</li></ul>
Gender should be included in 'mainstream' (not focused primarily on gender problematics) publications as it is as much part of daily reality as any other variable studied.
✓ Have you considered a specific publication or event on gender-related findings?
Ves
<ul><li>Yes</li><li>No</li></ul>
Specific dissemination actions (publications or events) for gender findings can be considered. You can contact institutions and departments that focus on gender to help you find suitable dissemination and publication opportunities.
✓ Are you using gender-sensitive language? (e.g., avoid overusing masculine pronouns)
• Yes

Language can be regarded as both reflecting, but also constructing a reality. As such, when sexist language is used, it might reinforce existing gender inequalities rather than challenge them. This is particularly the case in languages that use masculine terms as a universal referent. For concrete recommendations concerning gender-sensitive language see e. g. • The SUPERA Guidelines for gender-sensitive communication in research and academia • The UN ESCWA Guidelines for gender-sensitive language





√ Are word choices or naming practices gendered?

•	Yes
•	No
	terms for general purposes makes women

Using masculine terms for general purposes makes women invisible and supports a fundamentally androcentric view of the world, in which the male is depicted as the norm and the female as deviant.

✓ Are graphs, charts, or images used to visualize abstract concepts gendered in unintended ways?

□

• Yes

Try to use symbols, including icons, colours, and patterns that do not reinforce a binary and/or fixed view on gender in visualizing results. For more information on how to make visuals and graphics gender-sensitive see the SUPERA Guidelines for gender-sensitive communication in research and academia

 $\checkmark$  Is there a gender balance in the project consortium and team, at all levels, and in decision-making positions?

•	Yes
•	No

To achieve a gender balance in research teams, looking on how many men and women are represented is not enough. The broader understanding of this concept refers to an equitable distribution of opportunities and resources between women and men. GEDII' project offers a simple online tool enabling to measure gender diversity at the team level

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