## QUESTIONS AND ANSWERS ABOUT GENDER AND RESEARCH (2023)

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## 1.- INTRODUCTION

This brief document of questions and answers is based on a translation of the "PREGUNTAS Y RESPUESTAS SOBRE GÉNERO E INVESTIGACIÓN (23 de enero 2022)" produced by the Gender Equality Unit of the Universidad Autónoma de Madrid (UAM), adapted to ICN2. The aim of the original document was to give some keys to how gender issues can be integrated into a research project for the Call for Knowledge Challenges 2022. Even though, the main ideas remain valid in the current days.

## 2.-QUESTIONS AND ANSWERS

## 2.1.- Why is it necessary to include a gender perspective in research?

For many years in all branches of scientific knowledge, from the humanities to STEM (Science, Technology Engineering and Mathematics), through the social, political and legal sciences, the variables of sex and gender have not been sufficiently considered. This is why there were (and still happens in many investigations) important limitations (gender biases) both in the theories, concepts and analytical tools that are used and, in the results, including scientific innovations or technological developments that are generated. There are also important challenges to guarantee the equal participation of women and men in research, especially in areas of knowledge where significant gender gaps persist (see the EU report She Figures 2021).

For this reason, both European and Spanish regulations, have included the need for all research projects to integrate, in a transversal way, the gender perspective. Likewise, ANECA was firmly committed to this objective, promoting a firm equity policy in 2020 (see here) and approved an Equality Plan in May 2022.

In this regard, it is important to highlight that the new Law 17/2022, of September 5, on Science, Technology and Innovation, includes two specific articles related to gender mainstreaming (article 4 bis) and the adoption of measures for effective equality. It also includes the obligation for all public agents of the Spanish Science, Technology and Innovation System to adopt, among other measures, to "promote and guarantee diverse, inclusive and safe working environments, as well as egalitarian", as well as "to prevent, detect early and eradicate any direct or indirect discrimination" (art, 4. ter, section 3). To this end, the Law establishes that "measures will be implemented", among others, to "integrate intersectionality both in the design of gender equality policies in science and innovation and in the content of research and knowledge transfer (Article 4.ter, section 3, a.)

## 2.2.- What does the concept of gender mean?

The concept of gender refers to the dynamic, historical and changing process by which, in a given society, what is meant by male or female. These meanings often attribute to women and men a different set of physical, mental, emotional characteristics, as well as different behaviours, roles and social functions or opportunities.

In most societies, in a different and changing way, these meanings (of masculine and feminine) tend to shape and order political, social, economic, cultural life, as well as the care and reproduction of life, so that unequal access is generated for men and women. Therefore, the concept of gender refers not only to social mandates, ideals or stereotypes of femininity or masculinity, but also to social practices and relations and power structures that generate unequal access to resources (political, social, economic, cultural) between men and women.

Nowadays, for various currents of feminist studies, the concept of gender also refers to the fact that in every society there are discourses that produce and standardize gender and sexuality from cis heteronormative social practices and that exclude or stigmatize other sexual practices and/or gender identities and expressions. These practices generate discrimination and violence against LGBTI+ people (Lesbians, Gays, Bisexuals, Trans-transgender, transsexuals and transvestites).

## 2.3.- What about the concept of intersectionality?

In an approach that underlines that, in social reality, gender (sex-gender) is intertwined with other concepts (class, religion, race, ethnic origin, age, nationality, migratory status, disability or diversity, sexual orientation, gender expression or identity, etc.), all of them interacting intertwined on multiple and often simultaneous levels. It is, therefore, a framework, formally introduced in the social sciences by the Afro-descendant jurist Kimberlé Crenshaw in 1989, which helps to investigate how different systems of discrimination interact and intersect and what its consequences are.

## 2.4.- What does gender-sensitive research mean? And a gender-specific one?

Gender-sensitive research is the one that asks whether the gender dimension is a significant category for the approach and interpretation of research problems, and if so, it addresses them.

The omission to its consideration may occur as a result of a lack of training and awareness on gender issues (García Calvente et al., 2010). Sometimes behind a supposed gender neutrality what is hidden is gender blindness. This gender bias in research can be produced by understanding gender stereotypes as scientific assumptions, without conducting a rigorous analysis in terms of sex and gender. It is based on the erroneous assumption of equality between men and women (adopting the masculine as a universal referent) or the erroneous assumption of differences between men and women (exacerbating biological differences or

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essentializing - naturalizing - socially constructed differences). To do this, they should ask themselves questions such as:
*Who will benefit and who will not?
A particular line of research or technological development can have a very different impact between men and women, or between certain groups of men and women.

It is necessary to reflect on the possible impact differentiated according to sex; consider what are the characteristics that define the beneficiary and non-benefited groups of men or women; decide which gender norms or relations are relevant and whether biological differences between the sexes should be taken into account.
*What gender norms or relations can be transformed or reinforced?
A particular line of research or technological development can contribute to perpetuating traditional gender norms and relations, or on the contrary contribute to their transformation. When the research approach is guided (explicitly or implicitly) by gender stereotypes, it is likely to result in further reinforcing traditional gender norms and relations.

## *What opportunities can be missed by not considering the relevance of sex and gender?

There are many opportunities that can be lost when a certain line of research or technological development omits the gender perspective. The scientific validity of the results may be called into question, certain social needs may remain unanswered, market opportunities may be lost.

On the other hand, a gender-specific research or a research on gender issues, is one aimed at improving the understanding of gender stereotypes in any field, to reduce the inequalities they may be causing, as well as their intersection with other aspects of human and social diversity.

## 2.5.- What does it mean that research has gender biases?

Research has gender biases when, often involuntarily and implicitly, the research focuses on the experience and point of view of men or women and presents the results as universally valid. It is also when, often unconsciously, distinctions are made between men and women as a result of certain stereotyped ideas of masculinity or femininity.

This video (in Spanish) gives more details about gender bias in research: Los sesgos de género en la I+D+I de la Unidad de Mujeres y Ciencia (Ministerio de Ciencia e Innovación).

## 2.6.- What does it mean to mainstream a gender approach or perspective in research?

It means taking action on:
a) Incorporate the gender dimension throughout the research cycle, that is, incorporate gender and sex variables in all aspects of the research process, from the definition of priorities, the problem to be investigated, the theoretical and explanatory frameworks, the methods to be used, the collection and interpretation of data, conclusions, as well as applications and developments.

Incorporating gender as a key analytical variable in research allows us to address the differences between women and men in the research population. If gender issues are not considered or are addressed superficially, research results will be partial, unrepresentative, and potentially biased. E.g. a medical research should include patients of both sexes in order to achieve a complete and a social picture, if it wants to cover a whole population it cannot be limited to male or female points of view. Even research that is not about human population can have human end users so it must consider the different needs or aspirations of women and men. Therefore, taking gender into account and asking at the outset who will use the results and how and when they will use them can prevent unintended gender bias in the results.

In short, addressing the gender dimension in research contributes to a higher quality, efficiency, effectiveness, and validity of research and to make it more relevant to society.
b) Promote gender equality, that is, the equal participation of women and men in research.

To this end, the research project must incorporate concrete measures to stimulate and recognize the presence and participation of women in the research team at all levels, as well as measures that guarantee equal opportunities for women and men who compose it, since this implies an improvement in the performance of the teams and allows to get the best possible talent.

This type of measures can be contemplated both in the initial composition of the team and in the proposal for hiring personnel, evidencing in the project, for example, how possible gender biases will be avoided in the selection processes: mixed selection committees, training the selection committees on gender bias, explicitly encouraging women to apply,
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considering atypical career models, etc. It is important to remember that there is a lot of evidence and reports that prove that men and women (and/or their achievements) are not evaluated on the same basis.

It is also essential to create the conditions and a work culture that allows men and women to research in a safe, diverse, and nurturing environment, as well as motivates those (men and women) who want to combine work and private life in a satisfactory way. To this end, we can mention, for example, the measures that will be adopted when planning and organizing meetings or activities that require geographical mobility to guarantee the reconciliation of work and family of the team or to counteract the differences that may exist in career structures.

## 2.7.- When should gender be considered in a research project?

As can be seen in the following graph, it must be considered throughout all stages of the research cycle:


Source: Publications Office of the European Union, 2011 • doi 10.2777/62947.

Gender aspects can be addressed within the research project as a specific work package or as a task within the different work packages.

## 2.8.- How can gender be included in the formulation of research ideas and hypotheses?

Nowadays, in practically all areas of knowledge there are numerous studies on the relevance of gender in the content of any type of research, so that its review and analysis can help, significantly, to the formulation of the question, the objectives and the hypotheses of the research, as well as reference material of the same.

## 2.9.- And during its implementation?

There are now numerous manuals on how to use gender-sensitive data collection tools and research methodologies, as well as how to use non-sexist language. Some guides for genderneutral language can be found:

- GENDER-NEUTRAL LANGUAGE in the European Parliament
- Non-sexist use of language from the European Institute for Gender Equality
- Gender-neutral language as part of the Interinstitutional style guide of the European Union

Other references.
European Commission: Toolkit gender in EU-funded research.
Unión Europea: Gendered innovations 2. How inclusive analysis contributes to research and innovation: policy review
Union Europea: Horizon Europe guidance on gender equality plans

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## 3.- SOME SPECIFIC CLUES FOR PROPOSALS.

In some research project proposals, you can be requested to fill in some information regarding gender issues.

## * Does the research proposal contain a gender dimension due to its theme, results or applications?

Consider all the above and answer consciously regarding your specific research proposal.

* Does the applicant entity have an Equality Plan?

The answer at ICN2 is Yes.

You can even include the link to the document on our website:
https://icn2.cat/images/pdf/0 iii equality of opportunities and diversity management pla n icn2 2023 2026.pdf

More information to fill in this section of your proposal can be found in the Gender Crosscutting section of the ICN2 intranet.

## Bibliography

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