INCLUDING GENDER DIMENSION IN RESEARCH PROJECTS

-A guide for evaluators-

Interreg Europe
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WeSTEMEU

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INTRODUCTION

In the framework of the Women for Science, Technology, Engineering, and Mathematics in Europe – WeSTEMEU project, implemented under the Interreg Europe Programme during the period March 2023 – May 2027 partners from Catalonia (Spain), the Capital Region of Lithuania, Bucharest-Ilfov (Romania), Western Greece, Podkarpackie (Poland), and Donegal (Ireland) work together with the shared objective of improving policy instruments that support increased participation of women in STEM sectors, foster workplace diversity, and enhance job accessibility across European regions.

WeSTEMEU promotes interregional learning and cooperation among public authorities, policymakers, private employers, educational institutions, and other relevant stakeholders. By facilitating the exchange of experiences and the identification of good practices, the project contributes to strengthening regional capacities to design inclusive policies aligned with the European Skills Agenda and the EU work–life balance directive.

A key dimension of the initiative is the integration of the STEM perspective into project development and evaluation processes, ensuring that gender equality considerations are embedded throughout research and innovation ecosystems.

This guide is intended to support evaluators involved in research and innovation projects by providing a structured framework that encourages gender-responsive assessment practices. In line with the policy instruments improved within the project, it aims to help identify barriers affecting women's participation in STEM research, improve evaluation quality, and contribute to the development of evidence-based recommendations that advance equality, inclusion, and excellence in research, development, and innovation activities.

Objectives of the Guide

The document is aimed at project evaluators, providing them with support for assessing the gender dimension in publicly funded research projects. The overall objective of the document is to provide evaluators with a clear set of steps to follow in order to integrate gender equality principles into the evaluation process.

If the research evaluation process excludes (or only superficially includes) the gender dimension, there is a risk of overlooking or underestimating the contributions and perspectives of underrepresented groups. This can lead to a narrower range of research results and a poorer understanding of the diverse needs of society. By integrating gender equality into evaluation processes, we ensure that research is more inclusive, more representative and more oriented towards addressing a wider range of societal challenges.

The specific objectives of the guide are:

Awareness: we believe it is essential to raise evaluators' awareness of the importance of gender equality and the risks of gender-based discrimination or bias.
Establishing good practices: in order to carry out fair and impartial evaluations, we believe that evaluators need practical advice and guidance to help them in their work.
Encouraging continuous learning: we need to encourage an environment of continuous learning and training, in which gender equality is supported and integrated into our research evaluation culture.

Through these objectives, UEFISCDI aims to set an example, demonstrating its commitment to gender equality and promoting international best practices in research evaluation. We believe that by drawing attention to to gender bias and promoting equality, we can enhance the overall quality and impact of research.

Understanding Gender Bias in the Context of Research Project Evaluation

Definition of gender bias

Gender bias in research evaluation refers to the presence of biased attitudes or practices that favor one gender over another. This can manifest itself in various ways, such as giving preferential treatment to researchers of a certain gender or having preconceived notions about the relevance or quality of research based on the gender of the researcher. Gender bias, whether conscious or unconscious, can significantly distort the evaluation process, leading to inequity and unequal access to research opportunities.

Examples of gender bias

To better understand how gender bias can arise in research evaluation, here are some common examples:

> ***Perceptual bias:*** The assumption that certain research topics are more or less relevant depending on the gender of the researcher

Perceptual bias refers to the systematic errors or distortions through which people view and interpret information based on their preconceptions, stereotypes, or cognitive filters. It occurs when our perceptions are shaped by unintentional biases, unique experiences, cultural contexts or social conditioning, causing us to perceive information in a biased and subjective manner. Biased perception has an impact on our ability to see and judge others, interpret events or situations, and make judgements.

Specific situation: Suppose there is an evaluation in which two candidates, a woman and a man, present their projects. The interviewer has a stereotype that women are less competent in technical fields than men. As a result, during the evaluation process, the evaluator may unconsciously assess the woman's project as less relevant, even if she provides solid arguments. Conversely, the evaluator may overlook or neglect any weaknesses in the project submitted by the male researcher, assuming that men are more suited to technical fields.

Differentiated standards: Applying different criteria in the evaluation of researchers of a particular gender

A study[1] conducted in 2022, which examined the evaluation of project proposals submitted to a pan-European funding programme (EUROCORES) over more than a decade, highlighted a correlation between the outcome of peer review and the gender of research consortium members. The authors of the study concluded that those consortia/research teams with a higher proportion of female researchers had a lower success rate and received lower scores from external evaluators.

Another study reveals that projects submitted by consortia with a higher proportion of women receive lower scores, even though the language used in the evaluation reports does not reflect a biased or discriminatory attitude on the part of the evaluators.[2]

Affinity bias: favouring researchers from well-represented gender groups because of existing relationships or prior familiarity

This type of bias involves giving preferential treatment to people whom the evaluator perceives as belonging to a group with which they identify. There are several types of bias, such as: age bias (people tend to evaluate those in their age group positively because they consider them to have similar experiences and perspectives); educational favouritism (when people perceive those who graduated from their university more favourably because of the familiar context); confirmation bias (when evaluators tend to favour project proposals that confirm their own opinions or beliefs and reject opinions that contradict them).

Visibility bias: ignoring the achievements or contributions of researchers from underrepresented gender groups

Stereotypes: This is a type of unconscious bias that occurs when someone makes assumptions about people based on their membership of a particular social group or category

[1] Bianchini et al (2022). 'Gender diversity of research consortia contributes to funding decisions in a multi-stage grant peer-review process', Humanities and Social Sciences Communications, 9, 195. https://doi.org/10.1057/s41599-022-01204-6
[2] Cruz-Castro and Sanz-Menéndez (2023). "Gender bias in funding evaluation: A randomised experiment," Quantitative Science Studies, 4 (3), pp. 594–621. doi: https://doi.org/10.1162/qss_a_00263

These assumptions can, in most cases, be offensive and, unfortunately, can lead to unfair treatment of people belonging to certain minority groups. They can manifest themselves as follows: the assumption that younger researchers lack experience or that older ones are not up to date with new innovations, the assumption that women are less capable than men or that they do not understand technical fields as well as men, etc.

> ***Recency bias –*** a subtle but pervasive cognitive bias that affects decision-making processes, including evaluations, by assigning disproportionate weight to recent events or experiences

It is often unintentional and unconscious, as the human brain tends to rely on readily available information when making judgements, and recent events are often more accessible in a person's memory. As a result, the evaluator fails to capture the full picture of a project's outcome, as they may not take into account previous achievements or results. This bias can compromise the fairness and accuracy of evaluations.[3]

We recommend[4] reading the "Guide to a recruitment process free of prejudice and stereotypes developed by UEFISCDI in 2023, a tool that aims to help identify and better understand the most common types of unconscious bias that can affect the decision-making and evaluation process.

The Impact of Gender Bias

The existence of gender bias in research has powerful consequences, with the risk of treating men and women differently. For this reason, the impact on research results can range from favourable to neutral or, even worse, harmful. It is encouraged that the evaluation process should value equality between women and men.

The impact of gender bias in the evaluation of research projects can be far-reaching, leading to:

[3] Fermin, J. (2023) Mitigating Recency Bias in Performance Reviews, Mitigating Recency Bias in Performance Reviews | AllVoices
[4] UEFISCDI (2023). Guide to a recruitment process free of prejudice and stereotypes, Ghid_pentru_un_proces_de_recrutare_fara_prejudecati_si_fara_stereotipuri.pdf (uefiscdi.ro)

Limiting research diversity: *Gender bias can lead to a lack of diversity in research topics and perspectives, limiting the overall progress and relevance of the field.*

Undermining fairness and equity: *It creates an uneven playing field, where merit is overshadowed by gender-based biases.*

Limiting innovation: *Diverse teams and inclusive research foster innovation. Gender bias restricts this by maintaining homogeneity in teams and research topics.*

Damage to reputation: *Perceptions of gender bias can damage the reputation of research institutions, undermining their credibility and attractiveness to diverse talent.*

To counteract these effects, it is essential that evaluators identify and actively work against gender bias in evaluation processes. By recognizing and addressing these biases, evaluators ensure that projects funded projects actively contribute to promoting inclusion, diversity and fair treatment of all people in society.

Practices for Gender-Sensitive Evaluation

In order to operationalize the integration of the gender dimension in evaluation, we propose a series of practices that can guide evaluators in creating a more inclusive and equitable research environment.

Inclusive language

- Use gender-neutral language in evaluation documents and reports. This helps to create an inclusive atmosphere for all genders.
- Avoid gender stereotypes. Close attention should be paid to gender stereotypes that may appear in evaluation reports and communications due to the language or examples used.
- More examples of inclusive communication can be found in the "Guide to Inclusive Communication" developed by UEFISCDI in June 2022[5]

Anonymous review

- Implementing anonymous evaluations, where possible, will minimize the influence of gender bias. This involves anonymizing proposals so that the identity and gender of researchers are not disclosed to evaluators.

[5] UEFISCDI (2022). Inclusive Communication Kit, Kit_comunicare_incluziva.pdf (uefiscdi.ro)

Including diversity in research perspectives:

- Leveraging different research approaches by recognizing and valuing different methodologies and perspectives and understanding that diversity can enhance the quality and relevance of research outputs will lead to greater impact of research outputs.
- Fair evaluation of projects, regardless of the research topic or field, including those related to fields that are traditionally dominated by one gender or another.

Identifying and addressing unconscious or intentional biases.

- Encouraging evaluators to regularly reflect on their potential biases and discuss them in a safe and open environment will lead to awareness. When necessary, sessions are recommended on this topic to help them become aware of their own biases.
- Implementing strategies to mitigate bias will lead to a much fairer and more inclusive assessment process and will mitigate the effects of possible unconscious bias. Example: diverse composition of the assessment panel, structured decision-making processes, etc.

Criteria for assessing the gender dimension in research projects[6]

We must bear in mind that the introduction of the gender dimension in the evaluation of research project proposals is a fairly new element. Therefore, it is difficult not only for the research team but also for the evaluators to understand and assess it correctly. Taking gender aspects into account during data analysis and interpretation should go beyond simply counting participants or terms such as 'gender', 'women', 'feminine', etc. Regardless of the funding mechanism, programmes, area of interest of a project or portfolio of projects developed by a funding body, there are some basic questions that need to be addressed at the start of the project evaluation process:

[6] Inspired by CALIPER (https://caliper-project.eu/) and the WeSTEMEU Booklet of Good practices and Regional Stakeholder Events (https://www.interregeurope.eu/westemeu)

Is the size of the project taken into account in the correction project?

If YES, then

- To what extent is gender mainstreaming integrated?
- What are the benefits and opportunities for integrating gender into the project?
- What are the gender equality objectives achieved (or likely to be achieved) by the project?

If NO, then

- Can you identify objective reasons for integrating the gender dimension?
- To what extent do you consider that this project has missed an opportunity to analyse the gender dimension in your research/field of research?

Below is a selection of indicative questions[7] (grouped by relevant criteria) that can help evaluators understand what is involved in introducing the gender dimension into research projects. Once again, we emphasise the importance of checking whether the gender dimension is applicable to the project being evaluated.

Relevant criteria

- To what extent does the project address the needs and priorities of both men and women?
- How have the different needs and priorities of men and women been taken into account women taken into account in order to achieve the benefits estimated in the proposal?

Effectiveness criterion

- Has gender equality been integrated into the aims and objectives of the proposal? (e.g. included in the project's direct outputs, short- and medium-term results, and expected long-term impact)
- Has a set of gender-sensitive results been incorporated?
- Are the proposed implementation modalities consistent with the project and its objectives in terms of gender equality?
- Has the project set gender targets or indicators?
- Does the project proposal refer to studies or analyses on the gender dimension in the research topic?
- Is gender dimension an explicit requirement in the composition of the research team?

[7] UN Migration Agency (2018). Guidance on addressing gender in evaluations, p. 11, iom-gender-and-evaluation-guidance-2018.pdf

Criterion efficiency

- How is gender mainstreaming addressed during the planning and implementation stages of the project?
- Is gender mainstreaming part of the expected results of the project?

Results and sustainability

- To what extent has gender mainstreaming led to better results? (assess results and impact)
- Do the project results meet the needs of all stakeholders, men and women, as specified in the project design phase? If not, why not?
- Are the results achieved distributed equitably among the target groups of the project?
- What were the assumptions about gender roles, norms and relationships that supported or hindered the implementation of the project?
- How did these factors affect the sustainability of the results?

Finally, the findings, conclusions and recommendations in the evaluation report should reflect how gender mainstreaming has been integrated into the research proposal. The evaluation report should also provide, where possible, examples of lessons learned, challenges encountered and recommendations for improving gender mainstreaming in future research projects. In this way, we can ensure that research teams are better prepared to include the gender dimension in future research, thus contributing to a comprehensive view of the subject under study.

Conclusion

A study published in 2020[8] showed that although there has been an increase in women's participation in science over the last 60 years, this has also led to an increase in gender gaps in both productivity and impact. Gender inequality and inequity continue to exist in academia, despite the efforts and policies adopted in recent decades. The study showed that women are underrepresented in most scientific disciplines and publish fewer articles throughout their careers, and their work is less cited.

Gender equity means being fair to men and women, boys and girls. Gender equality means that the interests, needs and priorities of all are taken into account, recognising the diversity and heterogeneity of different groups of women and men.

Although we understand that change cannot happen as quickly as we would like, it is essential that efforts to combat gender inequality and inequity in academia and research continue. And a first step in supporting these efforts is to conduct fair and gender-neutral evaluation processes. It is recommended that attention be paid to how the gender dimension is integrated into research projects. Evaluators are encouraged to self-assess their biases so that they do not affect the evaluation process and so that the selected projects do not perpetuate or even increase inequalities.

By following these steps, we aim to build a context that stimulates the integration of gender equality in the evaluation of research projects, thus contributing to the development of a diverse, innovative and inclusive research framework.

[8] Huang et al (2020). "Historical comparison of gender inequality in scientific careers across countries and disciplines", Proc Natl Acad Sci U S A, 117(9), pp. 4609-4616. doi: 10.1073/pnas.1914221117

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