

FLOWCHART

Gender and Sex

Considerations in Research

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Gender and Sex Considerations in Research: Flowchart

How to use this flowchart

This flowchart was designed to guide individuals preparing data request proposals as well as grant and trainee support applications to ensure they have adequately addressed sex and gender considerations in their submission. You may also want to review the [Sex and Gender Evaluation Rubric](#), a guide that helps applicants clearly justify how sex and gender are addressed in proposals and applications.

Definitions

- **Sex:** A set of biological attributes (e.g., anatomy, chromosomes, etc.)
- **Gender:** Socially constructed roles, behaviors, expressions, and identities (e.g., women, non-binary people, agender people, etc.)
- **Sexual orientation:** Description of emotional, romantic, or sexual attraction (e.g., lesbian, heterosexual, gay, asexual, etc.)

Note:

Sex and gender are neither dichotomous nor independent: biological and sociocultural factors have a mutual influence on the experience and expression of gender/sex.



Before you begin

Variables related to sex, gender, and sexual orientation are distinct and may differ in their relevance to your proposal. We present these variables together in each step; however, please follow this flowchart for each category (i.e., sex, gender, and sexual orientation, separately) to ensure you have addressed these variables in your proposal.

Topic of Research

Have I considered sex, gender, and/or sexual orientation in my proposed research?

Ask yourself these questions

Have I provided an adequate rationale in my literature review & specified my hypotheses according to sex, gender, and/or sexual orientation, where relevant?

Does my proposal state if/how sex, gender, and/or sexual orientation will be assessed?

Does my proposal state whether my study is inclusive to individuals of all sexes, genders, and/or sexual orientations with clear rationale?

Does my proposal indicate how sex, gender, and/or sexual orientation variables will be analyzed?

Review these resources

Review resources listed in this document and update literature review and hypotheses accordingly.

Review **Measurement** resources and state how variable(s) will be assessed, or provide a clear rationale for why variable(s) will not be assessed.

Review **Participant Eligibility/Recruitment** resources and state and provide rationale for inclusion/exclusion criteria, or provide a clear rationale why eligibility criteria is not relevant.

Review **Data Analysis** resources and state plan for analyses, or provide a clear rationale for why analyses of these variables is not relevant.

Now ask yourself

Are sex, gender, and/or sexual orientation relevant to my proposed research?

Yes

No

You now have the tools to integrate sex and gender effectively in your rationale and in conducting your proposed work.

Provide a clear rationale for why sex, gender, and/or sexual orientation is not relevant.

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Resources

Below are resources related to sex and gender and their integration across the research process. These resources support thoughtful consideration at different stages of research. Resources with bubble text align with steps in the flowchart, though all resources listed here may be helpful depending on your research needs. Not all resources will be relevant to every project. If you are unsure which resources are most relevant to your needs, please contact info@mssu.ca for guidance. We are here to help!

Please be aware that there are sources you may come across online that appear reputable but spread harmful misinformation related to sex and gender diversity and rights. The misrepresentation, misuse, and mismeasurement of gender and sex concepts can perpetuate stereotypes and contribute to the exclusion of marginalized and minoritized participants and communities.

It is critical to learn from trusted sources. The resources provided here have been carefully reviewed for accuracy and appropriateness of information.

RESEARCH GUIDES AND TOOLKITS

1. Centre for Gender and Sexual Health Equity (CGSHE)

[CGSHE](#) is a UBC Faculty of Medicine research centre focused on advancing gender equity and sexual health through research, policy evaluation, implementation science, and education.

[Gender & Sex in Methods & Measurement Research Equity Toolkits](#): Developed by CGSHE, these toolkits provide eight sets of best practice guidelines that address important considerations in various aspects of conducting gender- and sex-inclusive research.

- Tool #1: [Determining and Communicating Eligibility](#) *Participant Eligibility/Recruitment*
- Tool #2: [Effective Recruitment Strategies](#) *Participant Eligibility/Recruitment*
- Tool #3: [Sampling Plans and Data Analyses](#) *Data Analysis*
- Tool #4: [Asking About and Measuring Participants' Genders and Sexes](#) *Measurement*
- Tool #5: [Methodological Responsiveness Across Time](#) *Measurement*
- Tool #6: [Working with Pre-Existing, Secondary & Older Data](#) *Data Analysis*
- Tool #7: [Developing and Working with Validated Scales](#) *Measurement*
- Tool #8: [Before & After: Funding, Ethics & Publications](#)

2. The National Academies Press

The [National Academies](#) brings together experts from sciences, engineering, and medicine to provide evidence-based and independent guidance on pressing issues across these three disciplines.

[Measuring Sex, Gender Identity, and Sexual Orientation](#): Informed by empirical, community-based consensus data, this report outlines clear guiding principles and best practices for collecting sexual orientation and gender identity information in surveys. [Measurement](#)

3. Gender Identity in U.S. Surveillance (GenIUSS) Group at The Williams Institute

The [Williams Institute](#) is a research centre specializing in sexual orientation and gender identity law and public policy. They disseminate research to policymakers, courts, media, and researchers to ensure that stakeholders are equipped with empirical, data-driven knowledge to guide their decision-making. Their website makes available several key reports that illuminate the systemic challenges facing sexually- and gender-diverse people.

[Best Practices for Asking Questions to Identify Transgender and Other Gender Minority Respondents on Population-Based Surveys](#): This report provides insight into current sex and gender measurement practices and offers strategies for rigorous and consistent data collection among people of minoritized genders. [Measurement](#)

LEARNING MODULES AND COURSES

4. CIHR Institute of Gender and Health (IGH)

Through funding research projects and knowledge translation initiatives, the [CIHR IGH](#) assists researchers in conducting sex- and gender-inclusive research to inform the transformation of health systems, research methods, and the outcomes of sex and gender research. CIHR provides an abundance of learning resources for CIHR grant applicants to learn how to effectively incorporate sex and gender into their research designs.

[Sex and Gender Training Modules](#): Designed to help researchers and peer reviewers assess the integration of sex and gender in health research, these modules discuss how sex and gender can be accounted for when conducting biomedical research and primary/secondary data collection with humans.

- Course 1: [Sex and Gender in Biomedical Research](#) [Measurement](#)
- Course 2: [Sex and Gender in Primary Data Collection with Human Participants](#) [Measurement](#)
- Course 3: [Sex and Gender in the Analysis of Secondary Data from Human Participants](#) [Data Analysis](#)

[Sex/Gender-Responsive Assessment Scale for Health Research](#): This scale provides researchers with a step-by-step tool for assessing how effectively sex and gender are addressed in their projects, ranging from “Sex/Gender-Blind” to “Gender Transformative.”

5. Government of Canada: Gender-Based Analysis Plus (GBA Plus)

[GBA Plus](#) is an analytical tool developed by the Government of Canada to facilitate the development and creation of initiatives that consider the diverse needs of the Canadian population. It ensures that gender and the identities that intersect with it are considered at all stages of research and policy implementation processes.

[Gender-Based Analysis Plus Course](#): This text-based online course provides a comprehensive overview of the Government of Canada's GPA Plus initiative, from why it is useful to how to implement it. [Data Analysis](#)

6. EASE Gender Policy Committee

The [EASE Gender Policy Committee](#) was responsible for the development of the Sex and Gender Equity in Research (SAGER) Guidelines, an international protocol that provides a systematic and standardized approach to reporting sex and gender methods, results, and analyses. Following the SAGER Guidelines can aid in the manuscript preparation and editorial process by ensuring that sex and gender data are reported using inclusive, sensitive, and clear language.

[SAGER Guidelines Course](#): This nine-module online course consists of recorded lectures that provide learners with a thorough overview of the rationale for the SAGER Guidelines, what the guidelines recommend, and how to implement them.

VIDEOS AND OTHER MATERIALS

7. National LGBTQIA+ Health Education Centre

The National LGBTQIA+ Health Education Centre aims to improve health care for LGBTQIA+ people by producing webinars, publications, and other resources for healthcare providers on best practices in inclusive service provision.

[Sexual Orientation & Gender Identity Data Collection Demonstration Videos](#): These videos demonstrate best practices in collecting data on sexual orientation and gender identity for frontline healthcare staff and clinical researchers. *Measurement*

8. UBC Women's Health Research Cluster

The [UBC Women's Health Research Cluster](#) is a global, multidisciplinary network for those working to improve women's health outcomes, including researchers, clinicians, and community organizations.

[Sex and Gender Based Analysis](#): This webpage provides several resources on effectively using Sex and Gender-Based Analysis in research.

- Video: [Sex Cells!](#) *Data Analysis*
- Video: [How to SGBA: Lessons Learned on Incorporating Gender into Research](#) *Data Analysis*
- Video: [How to SGBA: Analyzing and Disseminating your Data](#) *Data Analysis*
- Video: [Why Studying Sex/Gender Differences Isn't Enough to Move the Dial on Women's Health](#) *Data Analysis*

9. Gendered Innovations by Standard University

A peer-reviewed website that discusses practical methods of intersectional sex and gender analysis for scientists and engineers, and provides case studies to illustrate how sex and gender analysis leads to innovation.

- Video: [How to Integrate Sex, Gender, and Intersectional Analysis into Research](#) *Measurement*
- [Methods of Sex, Gender, and Intersectional Analysis](#) *Data Analysis*

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