

# A Question of Gender: Gender classification in international research

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## Abstract

The research community acknowledges that in many countries and cultures there is greater recognition of the diversity of genders with which people identify. In this paper we define and discuss the categories of “sex”, “gender” and related categories and how research participants might identify themselves within these categories. We discuss methods researchers use to classify participants. We examine in depth the principal method the research community uses, namely “asking questions”, but we also cover techniques based on observation. We evaluate the possible formats of questions – the introductory question posed, the response options, and, where appropriate, offer suggestions. We note the implications for international research, especially in countries where diversity and associated inclusivity are not yet recognised. The need for research in different cultures is recommended. We note the consequences and implications of adopting or not adopting questions that recognise diversity.

## Keywords

diversity, inclusivity, gender, gender identity, sex, non-binary, transgender, classification, measures, international

## Introduction

Diversity and inclusion are increasingly discussed and valued in many parts of the world and it is important that research questions asked, as often as possible, include response options that allow respondents to select an answer that includes them to ensure both accuracy and representation. Research should provide an opportunity for everyone’s voice to be heard and for respondents to feel engaged, motivated and valued for who they are. Diversity refers to the variety of differences among people, including ethnicity, race, gender, gender identity, age, disability, sexual orientation, religion, culture, to name but a few. It is important to collect data that is as diverse as the people and issues researched and to ensure it is inclusive and that participants feel valued. This paper focuses specifically on gender and aims to raise awareness of some of the challenges that researchers may encounter to help them make better choices based on relevant considerations when classifying gender.

Given the growing recognition of the diversity of gender identities and the pressure and need for inclusivity, researchers increasingly need to appreciate the considerations that apply to the classification of gender. These considerations include definitions of relevant constructs and classifications and ways to measure that are ethical, respectful, justifiable, safe, practicable and economic. On weighing up these various factors, the question posed is whether it is possible to formulate a universal rule that could be included in codes of research conduct and apply across countries and modes of data collection. Alternatively, is it more realistic to provide guidelines

that recognise situational factors per country and industry sector.

This paper outlines our research approach, defines key terms, then provides potentially useful sources of relevant information on the topic including guidelines. This is followed by guidance on when or when not to collect gender data and associated insights on the acceptance of a third gender. The paper then examines in detail the possible question formats and whether it is possible to formulate universal guidance on question format. The relevance of data privacy, data analysis, reporting and modes of data collection are outlined with conclusions being drawn and suggested avenues for further research provided.

### *Our Research Approach*

We used a variety of research methods. We carried out literature searches from journals, online articles and publications. We also had discussions with some recognised experts on research and the LGBTQ+ community, including tapping into the employee network at an international social and marketing research agency.

We endeavoured to use these findings to cover the issues and options as exhaustively as possible.

### *Definitions*

People often use the terms sex and gender interchangeably and they are not always distinguished even in legal documents. However, although connected, the terms are not equivalent, so it is important to understand the difference. The distinction between sex and gender is very important for those who have a gender identity or lived experience that does not align with their sex registered at birth. There are different aspects of gender and consideration should be given to which category of information would be most useful and ethical to collect for the research being conducted.

The definitions in italics are principally from the glossary of terms from ([Stonewall, 2022](#)), an LGBTQ+ rights charity, though we have added comments on some of these.

*Sex. Assigned to a person on the basis of primary sex characteristics (genitalia) and reproductive functions. Sometimes the terms 'sex' and 'gender' are interchanged to mean 'male' or 'female'. Sex is usually assigned and registered at birth and the categories are typically binary – male or female and, on some occasions, may include intersex.*

*Intersex. A term used to describe a person who may have the biological attributes of both sexes or whose biological attributes do not fit with societal assumptions about what constitutes male or female. Intersex people may identify as male, female, or non-binary. In some countries there is the option to choose "X" as a neutral sex descriptor on the birth certificate for intersex people, in others their sex will be designated as either male or female.*

*Gender. Often expressed in terms of masculinity and femininity, gender is largely culturally determined and is assumed from the sex assigned at birth. Usually parents assume their child's gender aligns with the sex at birth and it is only as a child develops that they may realise that they do not identify in that way and identify or express themselves differently.*

*Gender identity. A person's innate sense of their own gender, whether male, female or something else which may or may not correspond to the sex assigned at birth.*

*Cisgender.* Someone whose gender identity is the same as the sex they were assigned at birth. *Non-trans* is also used by some people.

*Gender expression.* How a person chooses to express their gender identity through their name, pronouns, clothing, hair style, behaviour, voice, or body features. (My Health: Alberta, 2020)

*Trans/transgender.* An umbrella term to describe people whose gender is not the same as, or does not sit comfortably with, the sex they were assigned at birth.

*Non-binary.* An umbrella term for people whose gender identity doesn't sit comfortably with 'man' or 'woman'. Non-binary identities are varied and can include people who identify with some aspects of binary identities, while others reject them entirely. It is important to distinguish that having a non-binary gender identity is different from being born with an intersex body.

*LGBTQ+.* An acronym and abbreviation used to represent lesbian, gay, bisexual, trans, queer, questioning. The "+" represents those who are part of the community, but for whom LGBTQ does not accurately capture or reflect their identity.

It is also important to make a distinction between gender and sexual orientation which are often incorrectly conflated. They are two distinct but related aspects of self. Gender is personal, how we see ourselves while sexual orientation is interpersonal and is who we are emotionally, romantically and/or sexually attracted to (Lewis & Reynolds, 2021). There are several types of sexual orientation, examples include gay/lesbian, bisexual/pansexual, heterosexual, and asexual.

### *The Prevalence of the Non-Binary*

In the research world and world more generally, gender is often used as an umbrella term for sex and gender identity and accurate data has been fairly limited, with the census data around the world often having been used as a reference and generally only asking about a person's sex. Hyde et al. (2019) discuss the costs to research progress in the discipline of psychology and to society of the reliance on a simple binary classification. These costs include limiting theory development and the fact it "denies and denigrates the existence of individuals whose bodies or identities fall outside of the categories of males or females" (Hyde et al., 2019, p184). Of course, there are other costs which we will touch on later, including non-response, should the question or some part of the question be seen by research participants to be unacceptable.

To provide some estimates of the prevalence of the non-binary it is useful to review data that exists. In a study of  $n=19,069$  online adults aged 16–74, conducted by Ipsos in 2021 across 27 countries the global average of adults interviewed who described themselves as something other than male or female was 1% (a further 1% preferred not to say). On average across the 27 countries surveyed the percent of respondents identifying as something other than male or female was highest among the younger generations:

- 4% in Gen Z (born in or after 1997),
- 2% of Millennials (born 1981–1996),
- 1% of Gen X (born 1965–1980), and
- less than 1% of Baby Boomers (born 1946–1964).

Sweden and Germany showed the highest numbers of respondents describing themselves as

transgender, non-binary, non-conforming, gender fluid or in another way, at 3% with a further 1% preferring not to answer, with India and Brazil among other countries at 2%, with a further 1% preferring not to answer ([Ipsos LGBT+ Pride 2021 Global Survey, May 2021](#)). This data clearly shows that there is a higher prevalence among the younger age groups and/or more comfort in disclosing that they do not consider themselves part of the traditionally viewed gender binary.

A US publication from June 2021 supported this, reporting that 1.2 million LGBTQ people in the US identify as non-binary, 11% of LGBTQ adults, and that the majority of non-binary LGBTQ adults are under 29, urban and white ([Williams Institute, 2021](#)).

Canada was the first country to publish official census statistics on these populations and their data further supports the finding of higher prevalence among the younger age groups. On their May 2021 census they asked for extended gender information for the first time. The census showed that 1 in 300 Canadians aged 15 and older identified as either transgender or non-binary. Of this 0.33% of the population, 27.7% identified as transgender men, 31.3% identified as transgender women and 41% wrote in non-binary or another term, collectively called non-binary. More than 62% of those identifying as non-binary or trans were under the age of 35. One in 100 young adults ages 20– 24 identified as either transgender or non-binary ([The Globe and Mail, 2022](#)).

### *When and When Not to Collect Gender Data*

Given the different sex and gender constructs there are a number of key questions researchers should consider:

1. Is there a need to capture such information for a proposed project?
  - a. Do you need sex and/or gender classifications to meet the research aims?
  - b. And if so, do you need to have quotas or screening on these questions?

If there are topic related sex or gender differences, then the researcher needs to identify which of the sex or gender classifications are required. If the proposed measure of sex or gender is different to a recognised population measurement such as a census, does this mean that in interviews two questions may be needed - one that may be less relevant but on which there is published data. This data could be useful to provide an indication of how representative the sample might be on at least one variable. In some market categories researchers should question whether gender or involvement in a market category is the more important. For instance, certain products may be used by any gender, though one gender may predominate in either usage or purchase involvement. So simple screening out on gender may mean ignoring a relevant segment but, of course, stops a disproportionate of effort and cost going into the capture of data from the less involved gender(s). Two screening questions, one on gender and the other on usage/purchase involvement may be the solution. For some types of research, for example medical research, there may be the need to determine (ask) biological sex or ask more specifically about their body to understand if someone should qualify or not as a research participant. By not distinguishing we may have trans women who describe themselves as female for example being asked questions about topics that are not relevant to them such as pregnancy and being excluded from something relevant such as prostate screening.

2. Not unrelated to the above, consideration should be given to the possibility that a binary

gender or sex question may be received negatively by some research participants who may feel excluded and therefore disengage. In addition, not providing an option that applies to some participants may breach market research guidelines. For example, in the UK the MRS code of conduct states that the design and content of data collection processes should be appropriate for the audience being researched and that participants should be able to provide information in a way that reflects the view they want to express, including don't know/prefer not to say where appropriate ([Guidelines for Questionnaire Design, The Market Research Society, 2014](#)). Efforts should be made to ensure all research participants feel equally valued and satisfied that their personal preferences are being respected in terms of how they wish to describe and categorise themselves.

3. Moving away from the more traditional binary question may also result in negative reactions from some research participants who could be less accepting of the additional options or potentially be confused by question wording that they don't fully understand and thereby disengage from the project. [Morgenroth et al. \(2020\)](#) examine the nature of potential resistance to change in gender management that might be relevant to researchers. We assume that such reactions may differ widely from country to country and in different parts of society. We also note that in the UK those moving in the direction of the "politically correct" are described and often derided as being "Woke" and going too far in terms of change.

If there is a genuine need and no negative reaction is anticipated, then the researcher's next requirement is for information to help guide the research process.

### *Official and Professional Sources of Gender Information*

It may be informative for researchers to examine official sources that may provide relevant statistics and examples of how gender is measured.

A recommended starting point for researchers is to examine official documentation and data sources and understand the reasons for the format of the questions and how the topic is evolving in the country. As an example, for the 2021 ONS census in the UK ([The Office of National Statistics, 2021](#)), the guidance on answering the question on sex was updated for England and Wales to include what is recorded on the birth certificate or gender recognition certificate. The question asked was:

- "What is your sex?" with the options of male and female.

A note was included that there would be a question to follow about gender identity for those aged 16 or over. This voluntary question asked:

- "Is the gender you identify with the same as your sex registered at birth?" providing the options of "yes", "no", or "write in gender identity".

In Scotland for the 2022 census, they are currently proposing to follow a question about sex with a voluntary question ([Scotland's Census, 2021](#)):

- "Do you consider yourself to be trans, or have a trans history?" with the options of "no", and "yes, please describe your trans status (for example, non-binary, trans man, trans woman)".

In the US the 2020 census did not make any changes and continued to ask binary sex, stating that the question wording very specifically intends to capture a person's biological sex and not gender ([United States Census Bureau, 2021](#)).

In Canada, the 2021 census asked about the gender of Canadians for the first time, firstly asking a question about sex assigned at birth, with the binary options of male and female, followed by a question about gender with the options of male, female and a write in. This included a note, that it refers to current gender which may be different from sex assigned at birth and may be different from what is indicated on legal documents. Some key data from this study is shown in the earlier section – The prevalence of the non-binary. ([Statistics Canada 2022](#)).

At the time of writing there are very few census questionnaires or official data sources that have added in questions that distinguish between sex and gender. Where this has been done there hasn't been a consistent approach across countries, with differences even between the four countries in the United Kingdom. There is increasingly an effort to gather more detailed information about sex and gender and numerous countries have reviewed making changes to their census through public consultation. Even following consultation some have not made any changes to their census in this respect. It is something that is likely to continually be reviewed, though the speed of progression is likely to vary significantly from one country to another, based on cultural differences, perceived need, and also may be hindered by the infrequency of census programmes.

As a second potential source for guidelines, in particular, codes of conduct, it is wise to turn to relevant professional bodies. These may be for market research or professional bodies for polling or more widely for the social sciences (psychology, sociology, social research, anthropology, etc.). For example, in 2016, the UK Market Research Society updated their guidelines on asking gender to include a non-binary option and prefer not to answer option. Increasingly we have noted that clients raise the topic as part of their initiatives to be inclusive in the research that they conduct and it is important to ensure that there are options that provide a suitable answer for all people. Despite the increasing awareness of the topic and guidance it seems a large part of research that we come across is yet to adopt an approach that moves beyond the standard male/female binary question. The UK Market Research Society ran a study at the beginning of 2022, reaching out to research agencies, sample providers and clients to get more insight into "Representation in Research". This study has not yet been published, but results suggest that there is still wide use of the binary gender question and that not all respondents include additional answer options to male and female in their research. There is a need for further guidance on the implementation of gender questions in terms of quotas, screening and weighting and also to recognise and respect differences across countries.

Armed with the best information available from official sources and professional bodies, we need to examine international considerations and different approaches to classifying sex and gender. There is a need to strike the right balance between the researcher's perceived need for such data and providing a feeling of inclusivity, being valued, as well as sensitivity to research participants' concerns, feelings and potential to disengage.

Whilst our focus is principally on marketing research, we should note that in the wider context some countries do recognise that not all people identify as male or female and provide them with another option for legal documents, such as birth certificates, driving licences, national identity

cards and passports. Examples include New Zealand, Denmark, The Netherlands, Iceland, Malta, Argentina, Bangladesh, India, Nepal, US, Canada and Australia. In some countries trans men and trans women are able to change the sex on their birth certificates to reflect their lived identity. For example, the UK Gender Recognition Act has allowed this since 2004. However, there is not yet any legal recognition of other genders or the ability to legally have no gender or an unspecified gender in the UK. Some countries are starting to gather official statistics on how the population defines their gender, but in other countries there is little to no investigation nor changes being considered. Checking these types of official documents may give useful clues to a country's position on gender.

### *International Considerations*

In addition to keeping up to date with the acceptability of the question in certain countries, cultures and markets, we also need to look at the ease of understanding the question and how this translates into other languages. It has only been in recent decades that the language of non-binary has become increasingly prevalent within English speaking cultures, but the concept of another gender has been around for centuries. Numerous indigenous communities around the world do not conflate gender and sex, with some countries having traditional third genders deeply rooted in their history and culture, such as the hijras in India, who are referenced in ancient Hindu texts, two-spirited people in Native American culture, the Muxe in Mexico and the Bakla in the Philippines. Although considered a third gender they may not identify as non-binary or transgender.

With many research programmes being international, it is important to consider the implications in other countries when making recommendations to ask gender related questions. With limited information about the acceptance of non-binary genders in different countries, other than where there is legal recognition, a possible surrogate for understanding the acceptance of non-binary genders is the acceptance of same sex relationships. As of December 2020, 69 UN member states have laws that criminalise homosexuality and nearly half of these are in Africa. For those who don't identify as being male or female it is possible in some countries or cultures that claiming this at this time could be considered culturally unacceptable, cause research participants to feel unsafe or possibly even have some legal implications (ILGA World, 2020). In those societies it is probable that there is less familiarity with non-binary gender terminology and lower acceptance. Even in more accepting countries there are still pockets of communities that are less accepting. This could, for example, be influenced by their experiences, their age and culture.

[The Accelerating Acceptance study \(2021\)](#) looked at the familiarity, comfort and understanding of non-LGBTQ Americans of the LGBTQ experience, and comparing to their earlier study, found that Americans are becoming more understanding that the LGBTQ community is a diverse community of various identities across gender and sexuality. Non-LGBTQ Americans are becoming increasingly aware that there are more than two genders, with many polled also understanding that transgender and non-binary people will continue to be a more visible and familiar part of life.

- 43% of non-LGBTQ American people believe that gender is not limited to female and male, an increase from 38% in 2020.
- 81% of non-LGBTQ American people expect that non-binary and transgender people will become a more familiar part of life just as gay and lesbian people have.

While awareness is shown to be increasing, approximately half of non-LGBTQ people find conversations about gender identity and the LGBTQ community complicated or confusing.

In the 2019 Discrimination in the European Union report ([European Commission Eurobarometer, 2019](#)) that researched the opinions of over 27,000 respondents in the EU, the variation of acceptance by countries is indicated.

- 59% agreed that transgender people should be able to change their civil documents to match their inner gender identity, although there is considerable variation in opinion across countries, from 83% in Spain and Malta to 12% in Bulgaria,
- 46% agreed that official documents should offer a third option besides male and female, with variation from 67% in Malta to 7% in Bulgaria.

Although this is continually evolving, we believe non-binary gender terminology is becoming increasingly mainstream, though there are still many countries and cultures where non-binary gender is not recognised. In short, some research participants in some regions may feel they have been disrespected and overlooked whilst others may be frustrated by what they see as giving in to “politically correct” trends. Researchers need to be mindful of these potentially differing reactions in the questions that they ask.

With this in mind, a pragmatic approach to asking questions that could be perceived as sensitive is advised, as it is important that market research is as representative as possible. Care should be taken to formulate questions that will balance being inclusive of all with acceptance by the majority of the population being sampled. This will help minimise any biases from non-response both at the survey stage and also when being recruited for a study or joining or engaging with online panels. With the evolution of gender identities it is likely that the way we ask and perceive genders will continually change over the coming years especially for the younger generations who have grown up with an understanding of non-binary gender and gender fluidity in their lives.

### *Thoughts on the Format of Gender Questions*

From a research perspective the next important step is to decide on how the question should be posed and then what answer options should be provided.

#### *Posing the Question*

Whilst some studies have explored two-step measures involving a question on sex assigned at birth and another on gender identity ([Tate et al., 2013](#); [Lombardi & Banik, 2016](#)), we have focused on a one step measure. This one question focuses on how someone identifies and lives their life rather than biological information which would only be asked when relevant as it may be considered intrusive for some people. Currently a common form of asking gender is a binary question of: Are you... male/female?

One discussion that has come up, before considering the expansion of the answer options to cover other genders, is that on most surveys (and legal forms for that matter) in the English language the answer list order when asking gender or sex is often male first, followed by female. Conventionally, in market research, many fixed list questions are listed alphabetically, however in the case of gender and sex it is the reverse. It is possible that having male first is left over from the days of clear gender inequality. There is an argument to say the binary gender question should start with female first or the options male and female be randomised to treat them equally. There are a number of considerations when looking at amending the “standard” binary question to account for non-binary respondents and so capture more accurately the identity of an individual at that point in time. These include, for example, ensuring that the answer list provides as far as



possible an option that would apply for each participant. The question should also be clear and relevant to all, and ideally not open to misunderstanding or misinterpretation by respondents. It also should ideally not lead to rejection by those perhaps irritated by perceived overly socially correct “interference”. In addition, consideration can be given to how easily the question could be translated across different countries and cultures, implemented from one mode of data collection to another, and how it would be received by a respondent, whether interviewer led or self-completion. It is very important that interviewers do not code through observation or make any assumptions about a participant’s gender, so should always ask the question in an appropriate way.

Some key introductory questions considered are shown in Exhibit 1:

Exhibit 1	Possible Introductory Questions
1	• Are you...
2	• Which of the following describes how you think of yourself?
3	• What best describes your gender?
4	• How do you identify?
5	• What is your gender identity?
6	• What is your gender?

Traditionally sex and gender questions have mostly followed the format of “Are you”... male, female with no other non-binary options, without clarification of whether the question related to sex or gender. This captures biologically assigned sex but may also capture transgender people with their new gender identity due to no clear distinction of what is being asked, leaving respondents to determine the meaning for themselves. By adding more options there is a consideration as to whether the question wording can remain the same or whether it should be adjusted to provide more clarity or to reflect the wider options. Leaving the question wording as traditionally posed, could be the simplest option and less confusing to some participants who are accustomed to this question. However, “Are you” could be considered vague and open to confusion, especially to those who are not cisgender, as it is open to interpretation if the question is asking about, gender or sex, unless clear from the answer options.

Another option considered is taken from the UK’s [Equality and Human Rights Commission \(2011\)](#) who ran focus groups and cognitive testing to understand the views of transgender and cisgender participants to various questions around sex and gender identity. In their guidance ‘Which of the following describes how you think of yourself?’ was part of a combination of questions including a question about how they were described at birth. It was clear and appreciated that this question was asking the respondent to self-identify, but it was felt it could be made clearer by adding gender or gender identity. A similar conclusion could be drawn for “How do you identify?”.

However, in the context of our research, at various stages we tapped into the multi-country network mentioned in the Research Approach. Some feedback from the LGBTQ+ community about this question was that using “describe” could be considered jarring or loaded in so much as it is an identity and not just a description. For these reasons we also felt that it was better to discount the next option of “What best describes your gender”. The word “best” could be useful to consider in a question text if extensive answer options are included and a single code is required.

“What is your gender identity” is a clear question and was popular among members of the LGBTQ+ community, though “What is your gender” was slightly more popular. However, based on some

unpublished research conducted internally at the multi-country research agency mentioned earlier, in the US and the UK, this question, although not rejected, was not generally a preferred choice. Where possible keeping the question text to the simple and accustomed question of “Are you” is our recommendation for basic research needs, assuming that this works with the topic and response options. This results in the question being almost unchanged for the majority of the population who would fall into one of the male or female categories and allow for additional options for those that don’t. It was also selected as the preferred option from the internal research study mentioned previously, of nationally representative samples in the US and the UK and is easily translatable. If the answer options don’t make it sufficiently clear, a further instruction indicating that the question refers to gender could be included. This could be a rollover of a word or phrase using the cursor on an online study and a note or instruction for other modes.

### *Gender Response Options*

Beyond the binary options of male and female there are numerous other terms that people choose to describe their gender. People whose gender is not male or female use many different terms to describe themselves, at the time of writing Facebook has more than 50 gender classifications, (including for example: Genderqueer, Pangender, Polygender, Neutrois, Gender Non-conforming, Genderfluid, Gender variant, Two-spirit person, Non-binary, Transgender female, Transgender male, Intersex, Bi-gender, A-gender). However, for most research we don’t require this level of detail. For the response options the aim has been to keep the overall question as simple as possible, while remaining inclusive, with follow up questions or more detailed questions recommended where re- quired for the research. The answer list would of course still include female and male (the order of which can be debated), include at least one non-binary as the third option in countries or cultures where acceptable and a “prefer not to answer” option. Care should be taken that the non-binary option is inclusive and allows for different interpretations or identities within that answer option.

For the purposes of this paper, we comment in Exhibit 2 on some possible third options.

#### **Exhibit 2:**

<b>Possible third options</b>	<b>Comments</b>
Other	<i>Potentially sound dismissive or of little importance</i>
Neither male nor female	
None of the above	
I identify on my own terms	<i>More positive and inclusive, easily translated, however it is not that you “identify as” it, but “you are”</i>
Another gender identity	
Alternative identity	<i>Alternative could be understood in different ways, meaning another choice, or could be interpreted as unusual or radical</i>
Different identity	<i>Different could be understood as odd or negatively perceived for some</i>
Another gender	<i>Positive, inclusive, and respectful</i>
I use another term	<i>Allows for ambiguity in the question, but consequently could make it difficult to know what the data is showing</i>
My gender is not listed	<i>Affirming and respectful, works well for self-completion but does not work so well for interview led surveys</i>
In another way	<i>Only works with specific question wording, e.g. How would you describe yourself?</i>

I prefer to self-describe ( <i>open ended</i> )	<i>Liked by the non-binary community but requires coding, and may require data privacy. The detail is not necessary for most studies on the general public</i>
I prefer to use another term ( <i>open ended</i> )	
Non-binary	<i>Liked by the LGBTQ+ community, not well understood by the wider community in some parts of society. Not understood in some countries or cultures, and may not be easily translatable</i>
Transgender	<i>Liked by the LGBTQ+ community, however, may require a multi-code question as transgender individuals may tick male or female and transgender</i>
Gender non-conforming	<i>Often understood as someone whose gender expression does not conform to cultural and social gender expectations</i>
Gender Fluid	<i>Not considered a sufficiently umbrella term, some non-binary individuals won't identify as gender fluid</i>
Gender Queer	<i>Often used as an umbrella term, for a person who does not subscribe to conventional gender distinctions</i>
None	<i>Having no gender, often included under umbrella terms of non-binary or gender queer</i>
No gender	

For some people gender is fluid, so there may be respondents who present with different genders in different contexts, so it should perhaps be asked at each survey rather than routed from stored information (for example on research panels). It is also important to include a “prefer not to answer” option for those that may find the question too intrusive or perhaps who are actively questioning their gender at the time of answering the survey.

There is also potentially some discussion about whether a gender question could be presented as a spectrum, however a spectrum from female to male as an example may be interpreted differently by different respondents and would not provide an answer for those that don't identify with having any gender.

In natural language, at least in English, man and male, and woman and female are often used interchangeably both in everyday life and in law. We note that there could be alternatives to female and male for gender, namely woman and man. At the time of writing the [World Health Organisation \(2022\)](#) states:

*“Gender refers to the characteristics of women, men, girls and boys that are socially constructed. This includes norms, behaviours and roles associated with being a woman, man, girl or boy, as well as relationships with each other. As a social construct, gender varies from society to society and can change over time”.*

Increasingly we are seeing more distinctions, especially among the LGBTQ+ community that man/woman be used to refer to gender with male/female being considered to refer to sex, however this is not always consistent. [The Oxford English dictionary \(2022\)](#) does not make a distinction in this way and defines a woman as *“an adult female human being”*.

Many LGBTQ+ organisations still refer to male and female for gender identity, for example PFLAG, Mermaids, Stonewall. As an example, [\(Stonewall's, 2022\)](#) definition of gender identity at the time of writing is *“A person's innate sense of their own gender, whether male, female or something else which may or may not correspond to the sex assigned at birth.”*

With the evolving conversations around gender there is an argument for saying that woman and man refers more to somebody's social and lived identity than male and female. Using man and woman as the options instead of male and female, however, can complicate asking gender across different age groups, as they are not age neutral words. This is further complicated because the age at which someone legally becomes an adult and, therefore, a man or a woman varies from country to country. Within some cultures and religions there are differing beliefs, such as according to Jewish tradition adulthood is reached at 13 and in other cultures a girl becomes a woman at the age of menstruation.

[The EHRC Research Report 75 \(2011\)](#) on Developing a Gender Identity Question showed that although some participants of their research were in favour of man and woman, the overall finding was that generally participants preferred the answer options 'male' and 'female'. Participants indicated that 'man' and 'woman' were age specific terms. For example, a trans participant (aged 21) did not associate herself as being a woman. Participants articulated that before the ages of 17–18 they would associate with being a boy/girl and not a man/woman. A trans participant selected both man and 'in another way' and self-described as 'boy'. It was pointed out that younger people may select 'In another way' because they do not associate with being a woman/man yet because of their age.

Another option considered was whether combining the answers could work, for example female/woman, male/man. However, the authors thought that this could be considered ambiguous or confusing and still may not work for the younger participants who could still prefer to select a third option.

Keeping with male and female as the two options remains consistent with what has been asked for years and removes the need to consider adjusting the question wording by age. In addition, where countries have introduced new questions to their census, there has not been a move to change the language for gender away from male and female. We have no evidence or thoughts that there is a strong requirement to change the wording to man and woman. At this time we believe it is acceptable to keep with the male and female options and it is unlikely to be offensive. We also don't have any evidence to show that changing the answer options would change how people would answer. It should be noted that the use of male/female or man/woman is not consistent across languages, with for example in Spanish "hombre"/"mujer" often being used as the translation of male/female. Adapting the response options to man/woman when asking gender in English (and perhaps in other languages) could be something that changes in the future as the discussions and terminology continue to evolve. However, further investigation of how this might impact responses especially among the younger generation is recommended.

It seems likely that although there have been efforts to add the broader non-binary question into surveys, when it is implemented it still may not be totally inclusive. For example, the language that is used may not be inclusive. In a study on education, it is better to refer to headteacher rather than headmaster or headmistress. Non-binary and transgender respondents may either be incorrectly screened out of an interview or not be included in the analysis when they should be. The same issues may apply to those who prefer not to answer.

### *The Issue of a Universal Question Format*

The authors have stated that their preference is for the question posed to be simple and

where possible consistent with what the wider population is familiar with, leaning towards “Are you”.

“What is your gender?” is also considered a good option and provides additional clarity in the question. This could be particularly important should there be a series of questions including, for example, sex and gender, for studies specifically researching the LGBTQ+ community, or if the answer options do not make it sufficiently clear that the question is about gender.

As regards to the response options we provide guidance for differing research needs. For a basic question the authors recommend in general to include only one answer option that is fully inclusive of those that don’t identify as male and female. To only have one additional option may be considered a catch all category for everyone who doesn’t identify as male or female. However, consideration needs to be given to what level of detail is required for the research being carried out and that personal data collected are relevant and not excessive.

When reviewing the comments about the third options in combination with the preferred questions the authors prefer “Another gender” with the following points directing their views:

- Keeping gender in the answer response, allows for additional clarity, even if the question doesn’t specifically refer to gender (for example using “Are you”) or if a respondent is confused by the use of female/male versus man/woman.
- The terminology is inclusive and translatable. Terminology is evolving, and this answer option is likely to continue to be relevant for newly recognised genders and can include third genders for cultures with a history of third genders.
- This answer option works well both for self-completion and for an interviewer led survey.

With all the above in mind a possible question framework could be the options in Exhibit 3 below.

A non-binary question that could be used for most basic research needs in most countries and cultures is shown in column 1.

**Exhibit 3:**

<b>1) Basic non-binary question</b>	<b>2) Basic binary question</b>	<b>3) More detailed question</b>
<i>Can be used where non-binary is accepted</i>	<i>Can be used where non-binary not accepted or safe</i>	<i>Can be used in more accepting countries or cultures, or other population groups if required</i>
Are you	Are you	Are you
<ul style="list-style-type: none"> <li>• Female</li> <li>• Male</li> <li>• Another gender</li> <li>• Prefer not to answer</li> </ul>	<ul style="list-style-type: none"> <li>• Female</li> <li>• Male</li> <li>• Prefer not to answer</li> </ul>	<ul style="list-style-type: none"> <li>• Female</li> <li>• Male</li> <li>• <i>(insert local cultural non-binary category/categories)</i></li> <li>• Another gender... <i>(closed or open ended)</i>...</li> <li>• Prefer not to answer</li> </ul>

In countries and cultures where it may not be considered safe or acceptable to indicate that someone is non-binary, at current times having the question as optional to research participants or adding a “prefer not to answer” option to the binary question, for those not identifying as male or female may be the first step (see column 2 in Exhibit 3). In time these countries and

cultures may move to ask more detailed questions.

In countries or cultures where there is high acceptance and well-known terminology in this area, or where the research topic requires a deeper understanding of gender, researchers may decide to add another option or options to the question. For example, adding in “non-binary” as an additional option could be appropriate in countries or cultures where this is a well-recognised term. Other options that could be included are “none” or “no gender”. If adding in additional options, care should be taken to ensure the question still works effectively. For example, if adding in an option, such as “Transgender” the researcher should consider having the question as a multi-code or adjusting the question wording to account for the possibility of more than one answer applying to a respondent. For some people their gender is fluid and it may be appropriate to enable participants to choose more than one option if doing so describes their identity more accurately. This is especially the case where more detail would benefit the research. If the question were to be kept as single code, guidance could be provided for those that felt more than one option applied to them to specify their own answer.

Consideration should be given to data privacy rules such as the EU’s GDPR and whether explicit informed consent is required. This is likely to be required if there are more detailed options or open-ended options that could perhaps indicate a medical procedure.

Keeping the question simple and with few options helps to simplify collecting this data across countries and cultures, and for more specialised research where more options might be used there will be time to consult with countries to understand the best descriptors and translations.

A person assigned female at birth who has transitioned may identify as a male rather than transgender (and likewise a male at birth as female) and therefore select their newly adopted gender from the initial binary responses. Where we have observed questions with male, female and transgender as options it does not necessarily follow that all transgender people will choose transgender; it is likely that many will pick the gender that they now identify as and live as.

With this in mind, it is likely that the options for a gender question will be understood as:

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**Exhibit 4****Answer Option****Likely Understanding**

Female

Females including trans women born male

Male

Males including trans men born female

Another gender

Anyone who does not identify as male or female (often referred to as non-binary) and may also include trans men and trans women

Prefer not to say

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So, because some transgender individuals may select any one of the above there is still some lack of precision but in most research projects this may not matter for analysis purposes and if it is important to distinguish then more detailed questions should be asked.

Consideration should also be given as to whether these questions should be adapted when asking for information about other members of the household including children, and whether there needs to be another option provided such as “unknown” or “undecided” as there are parents who choose to leave the decision on gender for their child to make.

For certain areas of research, we may require more detailed information and therefore choose to ask a more detailed question or set of questions. For example, on a medical or mental health study about the LGBTQ+ community we may capture self-described biological sex, gender and sexual orientation along with age and other demographics and then also ask a question to confirm whether their gender is the same as the sex registered at their birth or directly ask whether they are transgender or have a trans history. Other questions that may be considered useful include asking about the pronouns that they choose to use or asking about their gender expression.

Alternatively for medical research, where gender history is not relevant, specific questions could be asked to understand who the topic is relevant to from a physiological perspective. For example, for a study about ovarian cancer there could be a question specifically asking if the respondent has ovaries.

### *Analysing and Reporting Data*

Once it is clear that a non-binary gender question should be asked, there remains the question of how to manage the analysis and reporting. There is a lack of population data that represents the non-binary community, and it is likely to remain that way for some time. While most census surveys don't hold information on sex or gender beyond the binary, all non-binary participants that qualify for a research survey should be included within the data set and, assuming sample sizes allow, the non-binary respondents can be represented and analysed as required. Currently the number of respondents who claim to be in the non-binary category is very low, however this is something that is expected to increase as it becomes more accepted in society. It is already apparent that there are higher proportions of the younger age populations and of the LGBT community who don't identify as either male or female and it is possible that people will become increasingly confident to openly identify this way even if inhibited at this time. Until there are official or robust statistics on the proportions of people in the population that don't identify as either male or female there is a challenge for researchers to know how to weight this population making it difficult to justify applying any weighting other than 1 to these participants. It should be noted, that most research asks about gender and so for many years it has included the potential inaccuracy of weighting the binary gender question to the binary sex question on the census.

It is also important to be mindful of gendered language and avoid unconscious bias by using neutral and inclusive language in the data analysis and reporting. When there is a choice between a word which specifies a person's gender and a word that doesn't, it is more inclusive to use the neutral one unless the gender is relevant to the context. For example, Chairperson rather than Chairman. In addition, assumptions should not be made about a person's pronouns or household composition, so unless clear from the answers, neutral pronouns of they/them should be used when speaking about other household or family members.

An additional consideration in reporting international work should be in the translating of reports, with translators briefed on the importance of using inclusive language. This can be more complicated depending on the language; some languages such as Spanish, French and German are gendered where people and objects are given a gender, and on the other spectrum there are genderless languages such as Chinese, Estonian and Finnish where they use the same word for he or she. With the evolving conversations around gender, language and guidance is evolving in a number of countries and cultures to help address this need.

## *Mode of Data Collection*

In terms of collecting gender information for self-completion questions online, or CAPI (Computer Assisted Personal Interviewing) or by postal survey this can be through direct questioning if deemed the most likely method to yield the desired information accurately. There are then still numerous considerations related to the form of question. These include the nature of the introductory question and the response options provided.

There could be some participants who are less comfortable about disclosing their gender or expressing it to another person. Therefore, may be some differences seen between interviewer led and self-completion studies, with self-completion providing more anonymity and as a result possibly more accuracy, especially among pockets of society less comfortable with being outside the traditional binary.

So far we have focused on posing questions on a person's gender but observation is also a possibility we need to consider.

Researchers may rely on interviewer observations in face-to-face situations and historically many interviewers will have been trained to code sex and gender without asking. Whilst the validity of these may be relatively high given the low numbers of non-binary people in the population, at this time it should not be relied upon. It is also possible that telephone interviewers have made assumptions purely on the basis of the respondent's voice. It is increasingly important that respondents are asked to answer questions for themselves rather than any assumptions being made. Interviewers should be briefed or provided with guidance around how to ask this question and the potential sensitivities for a respondent.

There have been studies that examined whether observing a person's gait ([Igal et al., 2013](#)), handwriting ([Siddiqi & Chibanni, 2018](#)) or written content ([Figueroa, 2017](#)) offer ways of classifying gender but some studies often seem unclear in their focus (sex or gender). This raises the potential drawbacks of automating the process without human intervention and perhaps indicates that despite advances in Artificial Intelligence, it is likely to be impracticable, uneconomic and potentially non-compliant with codes of conduct for marketing researchers.

Finally, researchers need to gauge whether the proposed mode of data collection (questioning or observation) is likely to cause concern over privacy, safety, or anonymity that may lead to non-response.

## **Conclusion**

In the introduction we posed the question whether we could formulate questions to be used universally or simply provide guidelines and consideration? Given there are numerous countries where it is likely to still be unacceptable and potentially unsafe to ask a gender question beyond the traditional binary, there seems a limit on a universal approach at this time. Given the different levels of acceptance in countries (and among different subsets of populations) we have provided a basic framework that we believe works for both self-completion and interviewer led surveys. It could be used as is or built upon to meet requirements for a specific research objective, country, culture or target group. How detailed the response options need to be will depend on the purpose of the research and researchers should consider where they need detail and where they don't.



If the research focuses on a representative sample of the general public, then from a research perspective, as opposed to an equality perspective, while numbers of non-binary people are low, a catch-all third response option on a single code question may suffice. This would create space for both newly recognised genders and traditional third genders from countries with this deeply rooted in their culture. As their prevalence increases the size of the sample group that can be analysed may also increase and more distinction in the answer options might be required. It is acknowledged that gender is complex, and people may identify as more than one category. For research where more detailed information would be desirable, a fuller set of response options that could be multi-coded with an open-ended option and the appropriate data privacy consents might provide additional detail useful for analysis. If single coding is preferred with a longer list, then an open-ended option could be provided so that the respondent can express the gender they choose. In countries or population groups where there is strong resistance to an extended gender question having a binary question with the addition of “prefer not to answer” may currently be the best solution. Researchers in different countries and cultures should be careful to review this regularly and expand the question when appropriate.

Consideration has also been given to how changes to the question design could result in both positive and negative reactions from respondents, resulting in increased engagement or drop out, and potentially affect representivity. We looked at the balance of having an inclusive question that meets the needs of the non-binary community, captures the level of data required for the research need, while minimising non-response from respondents who may be unfamiliar or less accepting of a more expansive gender question. Where there is concern about drop out, adding a more detailed voluntary question at the end of the survey could be considered, so as not to impact the overall research findings. There is the potential for future research on the effect of different types of gender questions on research participants’ engagement and drop-out – an issue that [Tate et al. \(2013\)](#) touch on with their reporting of missing data. In addition, research could examine the associated trade-offs on duty of care for minorities, duty of care for the research project’s validity and indeed for duty of care for the involved researchers with potential concerns of offending one party or another.

We noted that sex and gender are typically used interchangeably in society, and that there are some contexts where it is really important to understand the distinction. The physical or biological sex status can be misleading as it may not reflect the psychological state of mind and associated behaviours. When requiring information about someone’s physical attributes, it may be simpler and help with response to ask directly about that, providing some context and explanation as to why the information is needed.

In the coming years gender questions are likely to evolve, although we don’t know what the options will be or whether they will be cross culturally relevant. We recognise that this is a rapidly developing area and that in more accepting countries and in some subsets of the population it is likely to evolve more quickly, for example among the younger generation and the LGBTQ+ community. Periodic research in countries and different cultures will help understand how it is evolving and when the questions may need updating or re-writing. It is likely that the number of gender options will increase and pluralistic gender will become more and more common. Inclusivity should be the priority everywhere where it would not compromise safety of the participant or the integrity of the research. Respondents are core to what we do, and it is important to ensure there are appropriate and dignified response options for all respondents. This will in turn support

us in taking steps towards being able to systematically measure those communities, whilst ensuring all feel respected, engaged and valued for who they are in the changing world around us.

We hope that this paper will help to drive discussion from practitioners and professional bodies around the world in refining our understanding and approach both now and in the future to keep up with this evolution.

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