Snowmass2021 - Letter of Interest Details

Topical Group(s):

	(CEF1)	Applications	& Industry
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☐ (CEF2) Career Pipeline & Development

☑ (CEF3) Diversity & Inclusion

☐ (CEF4) Physics Education

☐ (CEF5) Public Education & Outreach

☐ (CEF6) Public Policy and Government Engagement

☐ (Other) [Please specify frontier/topical group(s)]

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Sponsors: SEC DEI

Best Practices for Demographic Surveys: A Discussion

The Problem: Existing demographic collection methods tend to be restrictive and legalistic in their approach, even if the organization collecting the information has no legal obligation to conform to US government definitions of identifying categories. For example, the legal separation of Hispanic from other ethnicities, and that it is sometimes only considered a followup question to whether someone is white. Additionally, Native American descendance is often only considered in the case of tribal affiliation, even though many in those populations have spent generations trying to assimilate, and there is no legal option for response if one is even 100% Native American if they do not also hold a tribal affiliation. It is as much a shame to pressure multiracial people into picking which category they most identify with, as if one could choose which segments of their DNA are separable from the rest, as it is to suggest that all multiracial people share a similar cultural experience. Another example can be found in the usual question for gender. The way we understand and perceive gender evolved in the last years and sticking to the notion of binary gender is unrealistic and exclusive. The standard boxes are thus insufficient (1).

Two Solutions: Over the course of collecting demographic information from the SEC Leadership for the purpose of evaluating diversity (broadly defined), the question arose of whether it would be better to improve the method of creating boxes for people to check off or to use a free response method with prompts and resources to steer people in the direction of the level of specificity desired. For small surveys, such as the evaluation of SEC leadership teams, the benefit of the free response format is that the survey coordinators need not think of every last category or circumstance, and rather allow the participants to define the appropriate parameters. This is at the very least helpful as a learning tool for survey teams, as a first step in building a better set of options, based on the responses given by participants in practice. Additionally, it is not hard to find support in psychology literature for the idea of open questions in a survey. Open-ended questions allow people from different cultural backgrounds to identify themselves without being othered, allowing participants to feel included, no matter how they identify (1).

The main challenge of the free response method is that it becomes the responsibility of the survey organizers to create appropriate categories from the information provided after the fact. This means they have the power to decide if a description fits one category or another, rather than the participant choosing which label they feel best applies. In unscrupulous hands, there is some potential for the interpretation of the survey team to overshadow the raw answers. However, in this case, we chose to forge ahead, with the value of the learning experience outweighing the potential downsides. As a mitigating factor, we requested contact information so that if any response was unclear we as the survey interpreters could clarify it (see notes on consent below).

Alternatively, the benefits of the "improved box" method are that there is no after the fact decision making process by the surveyors to interpret the data. The drawback of boxes in general is that they can miss important information that the surveyors have no prompt for ahead of time. This is of course the more obvious method, and perhaps better suited in all eventualities or for large survey groups. However, it requires either data as collected in the first method, or an incredibly diverse and insightful survey team to construct.

Consent: It is important when collecting demographic (or any) survey information from participants that the parameters of how the information will be used, who will see it in each form, and why is well thought out before the survey is given and clearly explained on the survey form itself. Careful consideration should be given to whether the data can be anonymous or who will be responsible for making it anonymous (because that person will see the non-anonymous data), and these items also should be printed clearly on the form instructions. This is especially important where merely demographic data such as 'female' (in some departments there is only 1 or 2) or even 'black female professor' (for which there are not so many per sub-field), makes the participant identifiable. Thus care should be given to separating especially data which will be made publicly available such that individual's responses are not clearly tied to them. Otherwise, consents requested should clearly specify that will not be the case.

The purpose of the SEC leadership survey was twofold, and involved some potentially sensitive questions. In order to collect consent for the use of the data, we decided to ask for consent for each purpose on each question, thus enabling one to opt out of as little information as possible, while maintaining their boundaries.

Prompts: In the case of using a free response format for questions, the prompt becomes very important to the type of response participants will give. It is important that the prompts be short and skimmable, but also provide examples (i.e. PhD student, 2nd postdoc) to demonstrate the level of detail requested.

Further, it became apparent that we could not list all possible options, but rather linked resources with further explanation of terminology relevant to each category (see bibliography). As such, we compiled a glossary of terms for commonly used demographic groups, as well as their nuances.

The categories for which we collected information included the following. We asked specifically about "Home Country" rather than citizenship to avoid implications of legal status, especially in

the US. We asked about Ethno-racial identities (2,3), gender and sexual orientation (4), neurodiversity (5,6), disability (7), and adverse home circumstances (8) whether during childhood upbringing or present challenges. Present challenges might also include spouses in or outside academia, caregiving, parenthood, etc. The childhood upbringing was intended to probe for 1st or 2nd generation immigrants, 1st generation college, or anything that might statistically inhibit participation in the field.

We hope that this experience can be the start of a conversation about what are and what should be the standards for demographic information collection in the field. We need to be inclusive while understanding the complexity of everyone's individual identity.

Bibliography:

- (1)Hughes, Camden, &Yangchen. Psi Chi Journal of Psychological Research, Fall 2016. VOL. 21, NO. 3, p. 138 (ISSN 2164-8204). https://cdn.ymaws.com/www.psichi.org/resource/resmgr/journal_2016/21_3Fall16JN-Hughes.pdf
- (2)<u>https://apastyle.apa.org/style-grammar-guidelines/bias-free-language/</u>racial-ethnic-minorities
- (3) https://jech.bmj.com/content/58/6/441
- (4) https://lgbtqia.ucdavis.edu/educated/glossary#:~:text=LGBT%3A%20Abbreviation%20for%20 Lesbian%2C%20Gay.other%20communities%20under%20our%20umbrella.
- (5) https://www.psychologytoday.com/us/blog/my-life-aspergers/201310/what-is-neurodiversity
- (6) https://bectu.org.uk/article/glossary-of-neurodiversity-terms/
- (7) https://ncdj.org/style-guide/
- (8) https://www.cdc.gov/violenceprevention/acestudy/about.html