

Cognitive Interview Evaluation of X Gender Marker Definitions for the U.S. Passport Application Form

Collaborating Center for Question Design and Evaluation Research
National Center for Health Statistics

Stephanie Willson, Ph.D.
Kristen Miller, Ph.D.¹

Executive Summary

The U.S. Department of State is updating passport forms DS-11, DS-82, and DS-5504 to better support all passport holders by adding an X gender marker. Several countries offer the option on passports, and 21 states and the District of Columbia currently offer the category on driver's licenses and birth certificates. However, varying definitions of the X marker are used, and it is not known how the marker is interpreted and utilized by the general population. In partnership with The U.S. Department of State, the Collaborating Center for Questionnaire Design and Evaluation Research (CCQDER) at the National Center for Health Statistics conducted a cognitive interviewing study to assess how potential passport applicants would interpret different versions of the definition as well as how various options would inform response choices.

A total of 100 one-on-one cognitive interviews were conducted (both in person and virtually, using the Zoom internet meeting platform) between a single interviewer and respondent, lasting up to 60 minutes. Respondents were first shown a mockup version of the passport application form and then asked to independently complete it. The interviewer then asked follow-up questions to explore respondents' experiences and thought processes, with a focus on the gender marker fields and instructions. Individuals were chosen to participate in the study based on characteristics relevant to the topic under investigation. As such, both gender minorities and gender non-minorities were recruited with a diverse set of demographic characteristics, including age, race/ethnicity, and education level. Seven different X gender marker definitions were evaluated in two rounds of testing.

For both rounds of interviews, the purpose and context of the application served as the primary driver for respondents' interpretations, concerns and, ultimately, their preference for a particular definition. Specifically, the passport would serve as a legal document to identify and affirm themselves as well as to be publicly presented in such places as airport security and customs, not only in the United States, but in countries with different laws and norms. In this regard, respondents focused on three major factors when considering the various definition options: inclusivity, privacy/safety, and clarity. Many gender minority respondents felt excluded by several of the options, particularly those with limited definitions. On the other hand, those more concerned with implications of personal safety preferred the limited descriptions because such

¹ For questions related to this report, contact Kristen Miller, Ph.D. at ksmiller@cdc.gov. Also, see [Q-Bank: Question Evaluation for Surveys \(cdc.gov\)](#) and [CCQDER - Collaborative Center for Questionnaire Design and Evaluation Research Homepage \(cdc.gov\)](#).

definitions eluded labeling—a particular concern when on travel and needing to show identification. Finally, some respondents were more concerned about clarity. They contended that, because X is a relatively new gender marker, the definition requires precision and advised against using specific terms that might soon be out of date. Definitions were modified to account for the three patterns of concern and then assessed in Round 2. While the revised definitions, appeared to perform better than earlier versions, consensus formed around an optimal definition (*unspecified or another gender identity*), which more fully accounted for respondents' concerns of inclusivity, clarity, and privacy.

Introduction

The U.S. Department of State is updating passport forms DS-11, DS-82, and DS-5504 to better support all passport holders by adding an X gender marker. Several countries offer the option on passports, and 21 states and the District of Columbia currently offer the category on driver's licenses and birth certificates. However, varying definitions of the X marker are used, and it is not known how the marker is interpreted and utilized by the general population. In partnership with The U.S. Department of State, the Collaborating Center for Questionnaire Design and Evaluation Research (CCQDER) at the National Center for Health Statistics conducted a cognitive interviewing study to assess how potential passport applicants would interpret different versions of the definition as well as how various options would inform response choices.

In addition to the above purpose, the construct of gender identity measurement is multifaceted, and there is increasing interest to understand more generally how such measures perform. Since gender identity reporting has many applications across the federal government, it is a secondary aim of this study to inform this larger research agenda.

Methodology

This qualitative study is consistent with the socio-cultural approach to question evaluation as described by Miller and Willis (2016)² and is specifically designed to address comparability. The design adheres to each stage of the research process, including data collection, analysis, and documentation, that is fully detailed by Miller et al. (2014).³

A total of 100 one-on-one cognitive interviews were conducted (both in person and virtually, using the Zoom internet meeting platform) between a single interviewer and respondent and were no longer than 60 minutes. Respondents were first shown a mockup of the passport application form which also included four pages of instruction. Importantly, respondents were asked to complete the form as if they were applying for a real passport; the interviewer did not interrupt the respondent until the form was complete. The interviewer then asked follow-up questions to explore the respondent's experience and thought processes, with a focus on the gender marker fields and instructions.

The qualitative sample was purposive and non-random. Individuals were chosen to participate in the study on the basis of characteristics relevant to the topic under investigation. As such, both gender minorities and gender non-minorities were recruited. Additionally, a mix of racial/ethnic identities and educational attainment was achieved to account for intersectionality in respondent experiences and perspectives. Table 1 shows the sample composition in total and across the two rounds. To ensure a well-balanced end sample, particular effort was made in Round 2 to recruit more gender minority and racial minority respondents.

² Miller, K., and G.B. Willis. (2016) "Cognitive Models of Answering Processes". In *The Sage Handbook of Survey Methodology*. C. Wolf, D. Joye, T.E.C. Smith, T.W. Smith, Y. Fu (Eds.). Sage.

³ Miller, K., Willson, S., Chepp, V., and Padilla, J. (Eds.). (2014). *Cognitive Interviewing Methodology: An Interpretive Approach for Survey Question Evaluation*. Wiley and Sons.

Table 1: Sample Composition by Round and in Total

	Round 1 N = 77	Round 2 N = 23	Total N = 100
Age (in years)			
18 – 29	19	10	29
30 – 49	30	7	37
50 – 64	21	5	26
65 and over	7	1	8
Educational Attainment			
High school diploma or less	22	10	32
2- or 4-year college degree	24	12	36
Graduate degree	31	1	32
Race/Ethnicity			
Non-Hispanic	74	21	95
White	58	7	65
Black	10	10	20
Asian	2	1	3
Multiple races	4	3	7
Hispanic	3	2	5
Gender Identity			
Gender minority	31	18	49
Gender non-minority	46	5	51

The mockup version of the form was similar to an actual passport application with spaces for full name, date and place of birth, gender, address and contact information, social security number and previously used names. Box 1 below illustrates a portion of the form that respondents completed.

Box 1: Excerpt of the Mockup Passport Application

U.S. Department of State
APPLICATION FOR A U.S. PASSPORT

OMB CONTROL NO. 1405-0004
EXPIRATION DATE:
ESTIMATED BURDEN: 85 MIN

CLEAR
*Use **black ink** only. If you make an error, complete a new form. Do not correct.*

Select document(s) for which you are submitting fees:

U.S. Passport Book U.S. Passport Card Both
The U.S. passport card is **not** valid for international air travel. See instructions Page 3

Regular Book (Standard) Large Book (Non-Standard)
The large book is for frequent international travelers who need more visa pages.

1. Name Last

 First _____ Middle _____
 D O S NFR
 End. # _____ Exp. _____

2. Date of Birth (mm/dd/yyyy) 3. Gender (Read Instruction Page 3) 4. Place of Birth (City & State if in the U.S. or City & Country as it is presently known.)

 M F X Changing gender marker? Yes _____

5. Social Security Number 6. Email (see application status at passportstatus.state.gov) 7. Primary Contact Phone Number

As depicted above, the gender markers (M, F and X) stand alone with no definition or meaning attached. The actual definitions appear on page 3 of the instructions along with a travel warning statement appearing in bolded text. Unless respondents made the effort to read the instructions (most did not) the meaning was either assumed or intuited. Box 2 shows the gender marker information in the instruction section, with a version of the definition (in this case, ‘non-binary, intersex, and/or gender non-conforming’) appearing in the second sentence.

Box 2: Application Instructions on Gender Marker Information

GENDER MARKER INFORMATION	
<p>We print passport holders' gender in the 'Sex' field of U.S passports. The gender markers we use are: M (male), F (female) and X (non-binary, intersex, and/or gender non-conforming). The gender marker that you check on this form will appear in your passport regardless of the gender marker(s) on your previous passport and/or your supporting evidence of citizenship and identity. If changing your gender marker select Yes in the "Gender" field on page 1. If no gender marker is selected, we will print the gender as listed on your supporting evidence. Please Note: We cannot guarantee that other countries you visit or travel through will accept the gender marker on your passport. Research the laws of the countries you plan to visit or travel through to make sure you understand their entry requirements. Some countries and travel companies may not recognize the X gender marker. Visit travel.state.gov for more information.</p>	

Seven different X gender marker definitions were evaluated in two rounds of testing. Every version of the form was identical except for the X gender marker definition presented in the instructions. Versions A through G included different definitions of X inside the parentheses. They are shown in Table 2 along with the corresponding round in which it was tested.

Version	Definition, Round 1	Definition, Round 2
A	Non-binary, intersex and/or gender non-conforming	
B	Neither male nor female	
C	Unspecified	
D		Unspecified, including non-binary and/or gender non-conforming
E		Unspecified, non-binary, and/or gender non-conforming
F		A different gender identity or unspecified
G		Neutral or unspecified

Each respondent was initially shown one version of the instructions when completing the form. However, in the follow-up interview, all versions were shown to respondents, with interviewers eliciting respondents' interpretations, concerns, and preferences for each version.

The research process was iterative. Three versions of the definition were assessed in Round 1. Based on findings from analysis of initial interviews, four modified definitions were developed and then tested in Round 2, leading to a clear determination.

Findings

Significance of Context

For both rounds of interviews, the purpose and context of the application served as the primary driver for respondents' interpretations, concerns and, ultimately, their preference for a particular definition. First, the application was typically seen as a request for documentation of legal identification. Particularly for gender minority respondents, the presence of an X held the promise of a more accurate representation of themselves. Since they did not identify as M or F, the fact that they could mark X allowed their inclusion when, in so many places, this is not the case. One respondent, for example, explained, "I prefer to have X because I'm not in the other boxes." Another respondent stated, "The X feels, to me, like it seems good. I know in [my state] you can have the gender X on your driver's license, so yeah. Yeah, I feel good about that. It's not very complicated."

The fact that the passport serves as legal documentation made the option of selecting X even more poignant. One respondent summed up, "I would say that [including an X] means that the US is finally recognizing that my gender identity is valid... to have an official identifier for my gender identity." For some respondents, the symbolism and legal seriousness of a passport also brought concerns of verification, specifically, what other types of documentation would need to be presented so that the applicant would "be allowed" to mark X. As stated earlier, the vast majority of respondents (at best) scanned the instructions and did not realize that self-attestation is accepted. So, when asked if she had any final thoughts before the interview ended, one respondent explained:

I would have preferred it to be drawn out to my attention—bolded like the travel warning, that it would say in bold: 'You don't need anyone else to tell you that you are trans enough to put X here.' That to me is what is relevant that I wish wasn't skipped.

At the same time the document was seen as legal form of identification, it was also seen as a requirement for travel. Thus, while the passport could serve as a legal document to identify and affirm oneself, it would also need to be publicly presented in such places as airport security and customs, not only in the United States, but in countries with different laws and norms. Within this context, selecting X could be perceived as dangerous and unwise. One respondent, for example, who marked F instead of X, explained why: "Yeah...maybe being denied entry [into a country] due to that [X]. Because if they [border patrol] don't recognize that [X] as a gender, who knows how their specific security will respond to that." Another respondent explained:

I actually probably would choose X. And then I would stop. I would think, is someone going to see this? ...Like customs somewhere. ...Would they go, 'oh we don't accept X here, so you have to go home'... It's a little scary. I'd be concerned. 'We don't accept that, GO HOME! Sorry, NO ITALIAN FOOD FOR YOU! Go Home!' [Or] if they see X, they will KILL me? Or just not let you have Italian food. That's scary.

As with the respondent above, multiple gender minority respondents opted to forgo the X category specifically because of the travel context. For other contexts, there would be different factors to consider. For example, one respondent explains why she chose F (and not X) in this context:

Yeah, especially thinking about international travel... I'm thinking about the best way to mitigate any sort of issues that could come up.... I think I would [select X] at a doctor's office. Just because I think as medical professionals, instead of assuming, it's kind of your job to, like, ask questions and build rapport with your patients.... I think I would choose it on a driver's license. Because nobody's really looking at your gender on the driver's license. But on a passport, I feel like it's a little bit different. Because everything on a passport is under heavy scrutiny.

As a legal identification document required for travel, the full context represents a paradox of opposing interests where, on one hand, applicants are able to make themselves known in a legal and affirming way while, at the same time, that self-attestation puts them at risk. Many respondents, regardless of gender status, recognized and lamented the irony. One non-binary respondent fully summed up the situation:

I guess it confirmed to me that having an X on my United States passport is only validating to me, and only a hazard if I were to leave the country. So, if TSA is going to question me—internally, or whether they actually make a question, if other people are going to see it and judge me or whatever. But then if I go to another country, and I'm victimized or harassed or questioned or judged, I'm thinking 'what's the benefit?'

Concerns and Definition Preferences

To the extent that respondents thought of the passport application as a travel document and/or a legal document, three main factors were considered when deciding how to answer the gender marker: 1) inclusivity and the ability to authentically identify within a legal category, 2) privacy and concerns of personal safety, and 3) clarity, specifically, respondents' ability to comprehend the definition. This was true for both rounds of interviews. The factor of most concern to any given respondent served as the basis for their preferred definition of the X gender marker. However, particularly for Round 1 interviews (with the unmodified versions), even when respondents shared a similar perspective, this did not necessarily translate into an agreement on which definition was best. For example, respondents who focused on inclusivity as the most important factor in defining X did not form a consensus on the version that best achieved that goal. As a result, no definition emerged as the best choice in Round 1. Details of findings from Round 1 follow.

1. Inclusivity

In defining the X marker, some respondents focused on their concern of inclusivity, specifically, the idea that each category could account for all types of people regardless of their personal understanding. In some cases, respondents who were focused on inclusion preferred version A (non-binary, intersex and/or gender non-conforming). Both gender non-minority and gender minorities expressed this view. For example, one gender non-minority respondent said, "I like this one [version A] a lot better. I feel like it's more inclusive, and I don't know, more human?"

Not surprisingly, gender minority respondents were even more likely to consider the importance of inclusivity when thinking about how to define the X marker. For some respondents it was seen as a recognition of their personal understanding and existence. One respondent said, “My preference is usually for the stand-alone [version A] because I’ve had to select gender markers to access things that aren’t true for me—and I think expanding that experience and legitimizing and normalizing that people can have a home in these terms.” Others preferred version A because it presented their identity in the positive instead of as something they are NOT. For example, one respondent said, “I like the first one [version A] and because of explicit recognition of non-binary and intersex folks. I’m not a big fan of defining people based on what they are not—not male or female.”

However, not all respondents saw version A as the best for addressing inclusion. This was true to the extent that the definition did not (and could not possibly) include all gender minority identities. These respondents saw versions B (neither male nor female) and/or C (unspecified) as being more inclusive. As one respondent said, “I’d lean towards B or C as an option. I personally fit all three of the boxes in the first [Version A: Non-binary, intersex and/or gender non-conforming] but other people might not fit those categories but feel strongly that they identify as neither male nor female or nonbinary or feel a complete absence of gender—agender.”

Other respondents had clear preferences for either B or C, but not both. To many, versions B and C were not equivalent. For example, one respondent preferred version B (“Um, in my opinion it’s more... it encompasses more identities. I think it’s more inclusive.”) while another respondent preferred version C, giving the same rationale (“I guess if I had to pick just one, I would go with ‘unspecified’ just because that’s the broadest.”). There was no consistent preference for B or C among respondents who were concerned with inclusion.

There was also no consistency regarding the view that versions B or C were best in promoting inclusivity. In fact, some respondents came to the opposite conclusion and saw versions B and C as *least* inclusive. There were two reasons for this. First, versions B and C were sometimes seen as ‘othering’ people who do not identify as male or female. One person said, “I think that defining it in terms of a negative is likely to make some people unhappy because they’ll see it as othering.” Second, those versions—especially version C—were sometimes interpreted as demeaning, insulting, or dismissive. One respondent had a strong reaction to version C. They said, “I hate it. Because it is so dehumanizing. Am I an animal that you’re trying to classify, and it doesn’t fit into your taxonomy? ‘Unspecified’ is a taxonomic term that says, ‘We looked at you, and we can’t determine what to do with you.’ That is disgusting.”

2. *Privacy/Safety*

Not all respondents drew on the notion of inclusion as a guide for answering or how best to define the X gender marker. Some respondents thought of privacy and personal safety as their primary consideration. When this was the case, version C was generally preferred because its non-specific wording offered a way of opting out, essentially allowing them to escape labeling altogether.

Even though both gender minority and gender non-minority respondents saw version C as a way of avoiding a specific answer, they had somewhat different interpretations of the word ‘unspecified.’ For example, gender non-minority respondents were more likely to be concerned with privacy in the sense that a person has the right to report as little personal information to the government as possible. As one respondent said, “‘Unspecified’ could mean, I’m not picking either of the previous ones [genders], so that [unspecified] is what I have left. Or it could mean, I have one [a gender], but I don’t want to tell you.” Among gender non-minorities, ‘unspecified’ was often interpreted as ‘decline to answer’ because of their inherent right to privacy.

On the other hand, gender minority respondents mentioned the issue of privacy but saw it as a consideration for personal safety, particularly in the context of international travel. One respondent summed up this perspective: “I feel like out of the three options that [version C] is the safest. It could mean, ‘oops,’ you were in a hurry and didn’t fill out the box. Or they went ahead and processed your passport, and it was unspecified at the time. It could mean so many things under that one word.... I’m intersex and I’m proud to be intersex but my reason of not putting it on my passport is absolutely safety related.” Hence, gender minorities were more likely than non-minorities to see ‘unspecified’ as a way to maintain privacy for personal safety when traveling abroad.

3. Clarity

Finally, some respondents thought that because X is a relatively new gender marker, its definition needs to be clear. This view was most prominent among older (age 50 and above) gender non-minority respondents. Some expressed a lack of understanding of newer gender identity terms and suggested that the presence of an X as a gender field could be confusing. As one respondent said, “Sometimes when people have conversations about gender, I feel like I’m behind the times and, you know, I’m stuck back in the 90s. There’s all this new language.” In these cases, X could be misinterpreted as a refusal field and not understood as representing an additional gender identity.

Other respondents, both gender minority and non-minority, cautioned that using specific terms in the definition of X might render the form out-of-date as gender identities evolve. What might be clear today could become unclear or even insulting in the future. One respondent liked version A but remarked, “But then there may be another option down the road. To me it seems like they’re constantly—they’re very fluid. And then one term that we decide to use today might become a different terminology used tomorrow.”

Round 2 Versions

For the second round of interviews, definitions were modified to account for the three patterns of concern with the specific goal of accommodating the concerns of inclusion and privacy, while at the same time retaining clarity. (See versions D through G in Table 2). During Round 2 interviewing, it soon became clear that the revised definitions performed better than those in the previous round, and a consensus formed around the best (and worst) versions. The themes of inclusivity, privacy/safety, and clarity continued to shape respondents’ orientation to the X gender marker definitions.

Version G (neutral or unspecified): This version was generally viewed as the worst option. Respondents reacted to it in much the same way that they reacted to ‘Unspecified’ (version C) in round 1—that is, it was seen as demeaning, insulting, or dismissive. One respondent who illustrates this perspective said, "The least preferred version would probably be G. I think the wording is just not ideal. It just kind of like throws the idea of non-binary people to the side, 'Yeah, you're not kind of real.' So, like I said, it's just a form but it does kind of feel like if you identify as non-binary, then you're not even worth listing on the list."

Respondents concerned with clarity also thought version G was the least preferred choice because it did not say specifically what was intended by X. This could lead to confusion for both gender minorities and gender non-minorities. For example, one respondent said, "I don't know, like 'neutral or unspecified?' I just...I like that there's a little more information in the other [versions]. You know, giving maybe an example for people who see this who are non-binary or are gender non-conforming will be like 'okay.' You know? G is a little more ambiguous."

Versions D and E: Versions D (unspecified, including non-binary and/or gender non-conforming) and E (unspecified, non-binary and/or gender non-conforming) overcome the clarity problem associated with version G. Versions D and E were judged as best for respondents concerned with clarity, because the D and E definitions contain specific examples of what is intended by the X marker. One respondent commented, "I prefer D the most. It's more wordy but that gives somebody a very clear distinction. An understanding of what it is."

In addition to improving clarity, combining ‘unspecified’ into the definitions of versions D and E also addresses privacy and safety concerns, as it allows for a degree of anonymity when answering. One gender minority respondent summed up their concerns and preferences: "So keeping that 'unspecified' first is really important to kind of neutralize it. Because that doesn't automatically mean that someone is a trans or a non-binary. It could also mean they just decline to answer, but also leaving room for trans and non-conforming people to still pick that category without as much scrutiny [from border patrol]."

However, version D and E were not seen as identical. Version D was consistently preferred over version E because of the word ‘including.’ For those concerned with inclusion, the word ‘including’ opened the definition up to all gender identities, where version E limited identities to those mentioned in the definition. As one respondent said, "If I had to choose one, [pause] maybe E. Or no, D. I'll just say D since it says ‘including.’ The word ‘including’ makes it seem like it's broader to me."

Additionally, the word ‘including’ was preferred because it allows for gender identity terminology to evolve. One respondent said, "I actually prefer D to E." When asked why, they said, "Let's say the terms do expand. You can say it includes these things but unspecified might not capture who you are. I think that leaves a lot more room for changes in the future."

Version F (a different gender identity or unspecified): This version also performed well and was preferred by many respondents. For some this was because the phrase ‘different gender identity’ addresses inclusivity. One respondent said, "I actually like ‘a different gender identity or

unspecified' [version F]. I think that casts a broader net and some people don't necessarily resonate with just non-binary or the way the top two [versions D and E] are presented."

Additionally, that phrase addresses the issue of clarity (by specifying 'gender identity') as well as avoids the trap of containing potentially dated terms in the future. One respondent summed up their preference by saying, "[F is better] because non-binary, gender nonconforming is contemporary language. For now, in 2022. When I was a kid none of that existed. I lived in a very binary world. So, it evolved over time and this form [passport application] is going to be around for 10 years. You want to write things so they can last a long time. F is the broadest language and it's not labeling."

However, there were two potential limitations to version F. One is that the word 'different' can invoke a negative connotation for gender minority respondents by 'othering' them. One respondent reacted by saying, "I think the worst option would be F because it automatically others that person. It's starting out with 'a *different* gender identity.'"

A second limitation noted was the ordering of phrases in relation to the other versions. Similar to versions D and E, the incorporation of the term 'unspecified' provided a means by which respondents can preserve a degree of privacy and safety when answering. However, in version F, gender identity is read first and 'unspecified' is second. Those concerned with safety saw this ordering as framing the definition of X to focus more on gender identity and minimizing the ability of 'unspecified' to offer anonymity. For example, one respondent said, "Because whoever's reading that -- whatever agent's reading that -- they're really just going to focus on that -- 'a different gender identity' [because it appears first]. And that could potentially put people at more harm. Or more issues with being able to travel."

Final Recommendation

A US passport with an X gender marker would serve as a legal document to identify and affirm gender minority applicants as well as be publicly presented in such places as airport security and customs, not only in the United States, but in countries with different laws and norms. This context creates a paradox of opposing interests, specifically, the need for inclusive identification as well as the need for privacy. The optimal definition would account for both concerns while at the same time retain clarity. Based on findings from both rounds of interviews, the optimal version is determined to be: **Unspecified or another gender identity.**

By switching the ordering of the language in version F to begin the definition with the term 'unspecified,' and also by changing the word 'different' to 'another,' this updated version addresses all concerns respondents had when answering gender and interpreting definitions for the X gender marker. These concerns included: inclusivity, clarity/evolving terms, and privacy/safety.

Inclusivity: The phrase 'another gender identity' is not limited to any specific identity and can, therefore, accommodate a wide range of identities. Moreover, by changing the word 'different' to 'another' the definition minimizes the potential of othering those gender identities that are not in the traditional male/female categories.

Clarity/evolving terms: The term ‘gender identity’ gives people direction on what the X marker is referring to. In addition, it accommodates evolving identities and future terminology.

Privacy/safety: Including ‘unspecified’ in the definition and locating it first allows people to make a more anonymous, non-committal response.