

## Testing of Demographic Questions in an ACASI Format

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### Background

In 2011, as part of the Healthy People 2020 directive, which mandates health monitoring of populations where health disparities exist, QDRL was tasked with developing and testing a revised sexual identity question to be used in the NHIS. This testing was primarily generated due to the high rates of missing data in previous versions of sexual identity questions utilized in NCHS surveys, including the National Survey of Family Growth (NSFG). Additionally, in examining the missing data analysts found that the missing data rates were not equal across all subgroups. For example, in the 2002 NSFG the missing data rate among males with less than a high school degree was 11.4 percent, while male respondents with an education above a high school degree had a missing data rate of only 2.1 percent. While additional alterations improved the question in later years, this problem was still prevalent among Spanish speaking respondents. Given these issues, QDRL developed a revised question and tested it in the context of a number of standard demographic questions using an audio computer assisted self-administered instrument (ACASI). This report presents the results of testing conducted on the demographic questions asked during interviews, while a separate report was generated specifically examining the results of testing the sexual identity question. (See Miller, K and Ryan, M. 2011. Design, Development, and Testing of NHIS Sexual Identity Question. Q-Bank. Hyattsville, MD. National Center for Health Statistics.)

### Methodology

The method used to examine the performance of these questions was cognitive interviewing. Cognitive interviewing is the primary method used by the federal statistical community to ensure data quality. It is also the only known method that can provide insight into question validity, that is, insight into the phenomena that a question actually captures—the substance that makes the statistic. The aim of cognitive interviewing is to investigate how survey questions perform when asked of respondents, specifically, how respondents understand a question and how they decide which response option to select. Cognitive interviewing is a qualitative method that provides rich, contextual information regarding the ways respondents interpret a question, consider and weigh relevant aspects of their lives and, finally, formulate a response based on that consideration. As such, cognitive interviewing provides in-depth understanding of the ways in which a question operates, the kind of phenomena that it captures,

and how it ultimately serves (or fails) the scientific goal. Findings from a cognitive interviewing project typically lead to recommendations for improving a survey question, or results can be used in post-survey analysis to assist in data interpretation. (For a more thorough discussion of cognitive interviewing, see Madans, Miller, Maitland, and Willis 2011).

### **Recruitment of Respondents**

To test the questions, QDRL conducted 139 cognitive interviews: 93 in English and 46 in Spanish. These interviews were conducted on-site at the QDRL interview lab in Hyattsville, Maryland as well as at several off-site locations including The DC Center for the LGBT Community, Mpoderate (a center for Latino gay male and transgender youth), Casa de Maryland, and a rented office building located in the Colombia Heights neighborhood in Washington, D.C. English speaking respondents were recruited through the QDRL database, newspaper advertising, flyers and by word-of-mouth. Spanish speaking respondents were recruited through flyers, by word-of-mouth, and with the assistance of several non-profit organizations catering to the Latino community.

Table 1 presents respondent demographics for the study. An attempt was made to capture a broad range of respondents; however, particular emphasis was placed on recruiting gay and lesbian respondents as well as a range of those reporting ‘something else’ including, those who identify as transgender, queer or who are still in the process of figuring out their sexuality.

Table 1. Respondent Demographics

<b>Interviews Completed:</b>	<b>139</b>	
	<b>Count</b>	<b>Percentage</b>
<b>Gender</b>		
Male	65	46.8%
Female	66	47.5%
More Complicated	8	5.8%
<b>Sexual Identity</b>		
Straight	86	61.9%
Gay or Lesbian	24	17.3%
Bisexual	9	6.5%
Something Else	19	13.7%
<b>Education</b>		
Less than HS degree	23	16.5%
High School Degree/GED	38	27.3%
Some college, no degree	22	15.8%
Associates Degree	17	12.2%
Bachelors	21	15.1%
Graduate School	17	12.2%
<b>Race</b>		
White	32	23.0%
Black	62	44.6%
Indian American	7	5.0%
Asian	4	2.9%
Other	18	12.9%
Latino	49	35.3%
<b>Language</b>		
English	93	66.9%
Spanish	46	33.1%
<b>Age</b>		
Under 25	21	15.1%
26-40	45	32.4%
41-60	48	34.5%
Over 60	16	11.5%

**Interviewing Procedures**

Respondents were scheduled for specific interview times (with the exception of a few “drop-ins”) and reported to a set location for their interview. Interviews lasted between 30 and 90

minutes with the typical interview lasting from 45-60 minutes. All interviews were audio recorded using both a cassette recorder as well as a sound recording program on the computer. Respondents were asked to check an anonymous consent form before the interview began and were also asked to give their oral consent once the taping began. At the conclusion of the interview all respondents were given \$50 as remuneration.

The questionnaire for this project was administered using an audio-computer assisted self-interview (ACASI) instrument. (Although not relevant to the findings of this report, the ACASI system was also being tested as one piece of this overall project). Respondents were asked to answer 8-10 demographic questions using the ACASI system and without any assistance from the interviewer. At the conclusion, respondents were asked each item and were then asked to explain their answer. Typical follow-up questions included, “How so?” and “Why do you say that?” If a respondent’s answer seemed vague or unclear, the interviewer asked: “Can you give an example to describe what you are talking about?” Specifically for the sexual identity question, respondents were also asked how they typically referred to themselves and were also asked about other words (i.e. heterosexual and homosexual) that were not appearing in the question. The culminating text from the interview related how respondents understood or interpreted each question and also outlined the types of experiences and behaviors respondents considered in providing an answer.

### **Data Analysis**

Data from the interviews were analyzed using qualitative techniques, specifically, the constant comparative method (Lincoln and Guba, 1985; Corbin and Strauss, 1990; Creswell, 1998). Analysts used Q-Notes, an analysis software tool developed by the National Center for Health Statistics. As data were entered into the Q-Notes software, patterns of question interpretation and cognitive processing problems were identified. Some analyses, specifically assessment of question performance and identification of problems, were conducted simultaneously with interviews.

After interviews were conducted, more intensive analyses were conducted so as to more systematically identify patterns of interpretation. The first step of data analysis involved reviewing the data and identifying the analytic themes as well as the categories that made up each theme. For example, the factors that defined a respondent’s gender was identified as an important analytic theme, and the categories underneath this theme reflected all of the different ways in which respondents conceptualized their gender. Each interview was coded to reflect the particular interpretation. Categories were created as new interpretative patterns were discovered. In order to specify the dimensionality of the themes and categories, we compared respondents whose narratives were assigned similar patterns, resolving any discrepancies and noting similarities. Additionally, we examined the relationship of the themes and categories to each

other. These core themes served as the unifying link between all patterns and denoted a working theory that depicts the phenomena captured by the survey questions.

Below is a detailed review of findings from each of the questions tested.

### **Question by Question Review**

#### **Gender**

**English:** Do you consider yourself to be... Male, Female, or It is more complicated (Go to 1a)?

**Spanish:** Usted se considera ser... Hombre, Mujer, o Es más complicado (Go to 1a)?

**English Followup:** [If it is complicated is selected] By answering it's complicated, do you mean that...

Male, assigned female at birth

Female, assigned male at birth

Masculine, assigned female at birth

Feminine, assigned male at birth

Transgender or genderqueer, assigned female at birth

Transgender or genderqueer, assigned male at birth

Something else

I didn't mean to choose this option

**Spanish Followup:** [If it is more complicated is selected] Cuando dice es más complicado, quiere decir que...

Hombre, al nacer asignado como mujer

Mujer, al nacer asignado como hombre

Masculino, al nacer asignado como mujer

Femenina, al nacer asignado como hombre

Transgénero o géneroqueer, al nacer asignado como hombre

Transgénero o géneroqueer, al nacer asignado como hombre

Algo diferente

No quise elegir esta opción

During probing respondents were asked why they chose the response that they selected. These responses were grouped by analysts into three categories: gender as biological, gender as sexuality, and gender as socially constructed.

Interviews were coded as “gender as biological” if respondents mentioned anatomical, reproductive, physical, or genetic aspects in describing their response to the question. Respondents mentioned a wide variety of biological factors in relation to their gender. Some respondents mentioned the genitals that they have determine their gender, while others said that genetics determined their gender. An example of a response coded as “gender as biological” was a respondent who said, “...because I was born female and I have all the female parts.” Another

example includes a respondent who said “I was raised to believe if you have a penis you’re a man and if you have a vagina you are a woman.”

Interviews were coded “gender as sexuality” if the respondent mentioned their sexual identity to explain their gender. A number of respondents referenced their sexual identity in explaining their gender identity. For example, one respondent said that he was “strictly heterosexual” in explaining what makes him male. Another respondent explained that she was a female because she “desires men”, while a different respondent said that she was female, “Because I’m attracted to the opposite sex.”

Interviews were coded as “gender as socially constructed” if the respondent mentioned their behavior, actions, appearance, clothing choices, or hobbies in explaining their gender. This category manifested in a variety of ways in respondent’s narratives, but all of these factors ultimately stem from factors that have been generated by society over time. For example, a number of male respondents discussed liking sports as making them male, while female respondents mentioned cooking and cleaning as being a part of their gender identity.

Additionally, some respondents mentioned their appearance as a determining factor of their gender. One example of this came from a respondent who said that the way she dresses and wears her hair makes her a female. Another group of respondents who were included in the “gender as socially constructed” group mentioned their upbringing as a part of their gender. One respondent laughed at first when asked why he considered himself to be a male and said, “It’s because ever since I was born I was told that I was a male.” Another respondent said, “That’s how I view myself [as a male], that’s how I was raised, that’s what I was told I was.” Respondents who used multiple themes to describe their gender were coded with all of the applicable themes.

Table 2 below shows the frequency and percentage of respondents that used each theme to explain their gender identity. Respondents also used various combinations of these themes to explain their gender. For example, one respondent explained his gender by saying, “I have manly interests, like sports and obviously I like women.” This respondent explains their gender through their sexual identity and also as being socially constructed.

Table 2: Frequency and Percentage of Respondents in Each Theme

	Frequency	Percentage
Gender as biological	65	50%
Gender as sexuality	30	23.1%
Socially Constructed	69	53.1%
No Substantive Response	13	10%

There are some distinctive differences between the way that English speaking respondents discussed their gender in comparison to Spanish speaking respondents. While twenty one respondents in English explained their gender as biology, only four respondents in Spanish responded this way. A plurality (37%) of respondents who were interviewed in Spanish

explained their gender as socially constructed, while only nineteen percent of respondents interviewed in English did so.

Additionally, respondents were asked about the addition of the “it is more complicated” option to the traditional male and female options to determine who they felt who be included in this category. Responses to this probing fell into four categories. The first category included transgender individuals or others questioning their gender, as well as hermaphrodites. One respondent said that when she saw the “it is more complicated” she thought of “hermaphrodites or trans or people who don’t really identify as either male or female”. Responses similar to this were common. Often respondents described transgender individuals or hermaphrodites but did not know the correct terminology. For example, a number of respondents discussed this being an appropriate response option for people who “change genders”. The second category that responses fell into encompassed lesbian, gay, and bisexual individuals, as well as those questioning their sexuality despite the fact that this question preceded the sexual identity question in the survey. For example, one respondent was asked who would fit into this category and they said, “Obviously, if you are gay.” The third category includes respondents who simply did not see the “it is more complicated” option. A few respondents said that once they saw the response option that fit them they selected this and quickly moved on. One respondent who fits into this category said that she saw her category on the screen and immediately chose this answer. Finally, a number of respondents simply had no idea how to interpret “it is more complicated” and were grouped into a don’t know category.

Table 3 shows the frequencies of each of these response interpretations. Some respondents mentioned multiple possibilities; these responses are counted in each of the categories that they mentioned.

Table 3: Interpretations of ‘It is more complicated’

<b>Themes</b>	<b>Frequency (Percentage)</b>
Transgender, Hermaphrodites, Questioning Gender	45 (38.1%)
Lesbian, Gay, Bisexual, or Questioning Sexuality	28 (23.7%)
Don’t Know	10 (8.5%)
Didn’t see “it is more complicated” option	5 (4.2%)

Note: Not all respondents were probed about this topic.

The way that English speaking respondents interpreted the “it is more complicated” response option differed from the way that Spanish speaking respondents interpreted the response option. The most striking difference is the number of Spanish speaking respondents who thought that this category referred to Lesbian, Gay, Bisexual, or individuals questioning their sexuality compared with the number of English speaking respondents. This difference is given that similar numbers of English and Spanish respondents explained their gender as sexuality.

While most respondents had little difficulty answering this question, one respondent was unable to comprehend the question. When the question first appeared on the screen the

respondent said aloud, “I’m gay.” The respondent then went through the response options again and decided the it is more complicated was the option that best fit his situation. On the follow-up question the respondent became very confused by the response options. Ultimately the respondent selected something else and then typed in “gay”. During probing the respondent stated that he felt the question was asking about his sexual identity, which led to response error since the respondent should have selected male.

Gender Non-Conforming Respondents

In the course of interviewing, we recruited a number of gender non-conforming respondents, that is those who do not conform to traditional gender norms. We conducted interviews with twenty transgender respondents and one respondent who identified as genderqueer, which represents 15.1 percent of the total sample. Eleven of these interviews were conducted in English, while ten of the interviews were conducted in Spanish. These respondents provided a unique perspective on the gender question. Responses from transgender and genderqueer respondents varied greatly amongst respondents and ultimately reflect the diversity in their backgrounds. Table 4 summarizes the responses from these respondents to the gender question.

Table 4: Gender Non-Conforming Respondents Answers to Gender Question

	Frequency
Male	5
Female	9
It is more complicated	7

Additionally, respondents who selected “it is more complicated” were taken to a follow up question table 5 summarizes their responses:

Table 5: Gender Non-Conforming Respondents Answers to ‘It is more complicated’ Followup

	Frequency
Transgender or genderqueer, assigned male	3
Transgender or genderqueer, assigned female	2
Masculine, assigned female	1
Feminine, assigned male	1

The differing responses to this question is a reflection of the fact that respondents were at differing points in the process of transitioning genders. Respondents who selected a gender tended to be further along in the process of changing genders, while those who were in the process of transitioning or who hadn’t yet begun tended to gravitate more towards the “it is more complicated” response option. One respondent who had completed their transition explained why they did not select it is more complicated by saying, “I felt the wording to be.... Not a

comfortable fit for me, the wording was [pause] awkward is not necessarily what I would describe it as. I don't find it to be complicated because I know what it is. Trying to articulate it is a different matter. I don't want the perception be that it is more complicated." A number of gender non-conforming respondents stated that because they had completed their transition they wanted to select the gender that they present as.

One consistent finding amongst gender non-conforming respondents was the fact that overall while they liked having a third option available when discussing their gender; however, a number of respondents said that they found the phrasing of it is more complicated to have a negative connotation. Twelve transgender respondents (60%) said that they either didn't like the wording of "it is more complicated" or said that the option was "not for them". Respondents stated that the "it is more complicated" response option was for people who were still questioning their gender or people transitioning genders. Additionally, three respondents stated that they did not view their gender as being complicated therefore they did not feel that this response option was right for them. One respondent said, "I don't see it as being complicated, just different." Another respondent asked, "Why is it complicated that I'm neither [male or female]?" While another respondent went so far as to say that he felt that "it is more complicated" made it sound like he "had issues" because of his transgender status.

Overwhelmingly, transgender respondents described their gender as being socially constructed. Seventy percent of transgender and genderqueer respondents described their gender as being socially constructed, which is not unexpected given that transgender respondents have to learn to be men and women. In explaining why they consider themselves to be female, one transgender respondent said, "[Its] Not so much biological, but mental... In my mind I more associate with the female gender." Responses similar to this were common in interviews with transgender respondents. One distinction from non-transgender respondents is that nobody identified the "it is more complicated" category as relating to sexual identity.

Another pattern that emerged during the interviews is that a number of transgender respondents don't know the term "genderqueer". Eight gender non-conforming respondents said they did not know this term. This theme is primarily in Spanish (only 2 of the 8 respondents unfamiliar with the term were interviewed in English). This pattern also appears to be influenced by education level. Half of the respondents who were unfamiliar with genderqueer had less than a high school degree, while two had a high school degree and the remaining two had an Associate's Degree. This is a particularly important finding given the fact that the majority of our gender non-conforming respondents were very involved with LGBT advocacy groups and who, one would think would be exposed to the common terminologies.

Another issue arose with the "it is more complicated" follow-up question. Four respondents in Spanish interviews noted that they found the response options under the "its more complicated" follow-up question to be confusing. Many respondents noted that they were confused about the differences between the response options. This problem did not arise in English interviews, indicating that Spanish speaking transgendered individuals might use

different terminology that English speaking transgender individuals or that there are some problems in the translation of the terminology from English.

One limitation in our analysis stems from education differences between Spanish speaking transgender respondents and English speaking transgender respondents. These education differences could account for some of the differences between the English and Spanish transgender respondents, particularly in their understanding of the response options and terminology used.

The higher education levels for English speaking transgender respondents could explain why none of the English speaking transgender respondents found the response options for the “it is more complicated” follow-up to be confusing.

It should also be noted that one respondent when he was completing the survey did not see the “it is more complicated” response option, but during probing he saw this option and said that he should have picked that option. The respondent said that he did not see it because it “it is more complicated” is not a standard gender category, and so he was not expecting there to be options beyond the standard male and female options. Ultimately, this issue led to response error.

### **Relationship Status**

**English:** Are you now... Married, Widowed, Divorced, Separated, Never Married, or Living with a partner?

**Spanish:** Actualmente usted es.... Casado(a), Viudo(a), Divorciado(a), Separado(a), Nunca se ha casado, o Viviendo con su pareja?

In explaining their answers, respondents generally thought about their current relationship status and then fit this into one of the available response categories. While this response process generally worked for most respondents, eleven respondents had differing levels of difficulty because they were looking to select single. Some respondents only had minor difficulties and were able to find the response option that best fit them on their own, while others needed assistance from the interviewer or simply selected a random option because single was not an option. A respondent who had more difficulty answering the question ultimately turned to the interviewer and said, “So what would you put if you are single? [pause] They have married, widowed, divorced, separated, never married, and living with a partner. Single should be an option up there.” The interviewer ultimately asked them if they had ever been married and since the respondent had not been married, they ultimately decided to select never married. Another respondent appeared to be confused at first, but ultimately selected never married. This respondent’s interviewer noted, “She said she was single. She did seem slightly confused with the options when first answering the question and scrolled through the options several times before settling on never married.” Ultimately, out of the eleven respondents who had this difficulty, only two respondents marked the incorrect answer.

Additionally, three respondents had varying difficulties selecting the response option that accurately reflected their current living situation. One respondent selected never married, but

during probing he stated that he lived with his girlfriend at a relative's home. When the interviewer asked him about this contradiction he stated that he didn't feel that living with a partner applied to him because it is not his home that he is living in. Another respondent was confused about how she should respond. She turned to the interviewer and said, "I have been with my spouse for 30 years, but am not married." When the interviewer explained that she had to decide how to respond on her own the respondent said, "Okay, I'm going to put married." During probing she said that she felt it "appears prettier" than putting living with a partner. The third respondent indicated that he was married when answering the question, but during probing he said that he was currently in the process of divorcing his wife. When asked about his answer, the respondent simply said that he did not see the option for separated, which led him to select married since the divorce has not been finalized. The respondent ultimately decided that separated was more accurate.

During probing we also found that respondents have differing interpretations of the term "partner". While the vast majority of respondents felt that the term "partner" implies a romantic or sexual relationship, two respondents said that the term partner would encompass roommates or a friend who was living with you. For example, when one respondent was asked what she thought the phrase living with a partner meant she said, "I guess somebody who you live with who is sharing in the bills and helping to take care of the house." Ultimately, this drastic difference in understanding of the terminology used in the question co

### **Employment Status**

**English:** Are you currently... Working for pay at a job or business, working, but not for pay, at a family-owned job or business, with a job or business but not at work, for example, on sick leave, looking for work, or not working and not looking for work?

**Spanish:** Está usted actualmente... trabajando con sueldo en un trabajo o negocio, trabajando, pero sin sueldo, en un trabajo o negocio familiar, con trabajo o negocio, pero no está trabajando, por ejemplo en baja por enfermedad, buscando trabajo, o no está trabajando y no está buscando empleo?

Overall, the majority of respondents were able to answer this question with little difficulty; however, seventeen respondents (12 percent) had some difficulty responding to this question while a total of eleven respondents (8 percent) answered the question incorrectly based on their current work status.

One of the primary areas of difficulty stems from the "not working and not looking for work" response option. A number of respondents with varying work situations fit into this category, which created ambiguity for respondents. For example, a respondent who is retired and receives Social Security said that she was unsure how to answer because she didn't feel that the response options fit her situation. Another respondent took a long time before eventually deciding to select "not working and not looking for work" because she is a stay at home mom. While both of these respondents ultimately selected the response option that best reflected their current situation, their uncertainty is cause from concern. Of the twenty one respondents who

selected “not working and not looking for work”, ten were on disability or had health issues that prevented them from working, three were retired, and four were in school or are enrolled in some other type educational training program. The remainder of the twenty one respondents cited a variety of other reasons for selecting this response option including waiting on immigration paperwork and being a stay at home mom.

Another pattern that emerged during analysis, was that students had a difficult time responding to this question. Given the fact that interviews were conducted in July and August, most students were not taking classes at the time of the interview but still identified themselves as a full time student. Responses from those who identified themselves as full-time students varied greatly. One respondent selected “looking for work” because she said that none of the other options applied to her. This respondent is an unpaid intern with a Washington area advocacy group, so she said that “working for pay at a job or business” did not apply to her. This respondent stated that she thought about selecting “working, but not for pay, at a family owned job or business” but she opted not to because she felt that this option was solely for those at a family owned job or business.

One final source of confusion stemmed from the fact that some respondents’ interpretation that the “working for pay at a job or business” response option was only for respondents who had full time employment. This interpretation led a number of respondents to select other options despite the fact that they were working for pay at a job or business part time. One respondent turned to the interviewer and stated that none of the response options fit her situation because she works part-time between one and three days a week depending on her employer’s needs. Despite her employment at the time of the interview, this respondent ultimately selected that she is “looking for work” because her contract with her employer would end soon.

## **Education**

### *Highest Level Attended*

**English:** What is the highest level of school you have attended?

- I never attended school
- Elementary School
- High School
- College or Technical School

**Spanish:** ¿Cual es el nivel más alto de educación que he asistido?

- Nunca he asistido escuela
- Escuela primaria
- Escuela secundaria
- Universidad o escuela técnica

The majority of respondents were able to select the response option that applied to their education level without difficulty; however, five respondents inaccurately answered this question. Given that this question filtered respondents to the follow-up question, an error in

responding to this question would lead to further error in answering subsequent questions. A number of Spanish speaking respondents incorrectly answered this question due to the differing education systems in their countries of origin. For example one interviewer wrote, “Respondent chose elementary school then 8<sup>th</sup> grade. He said that he actually went through 9<sup>th</sup> grade, but that option was not available under elementary school.” Another source of error resulted from respondents forgetting about higher level degrees or certifications that they have. For example, one respondent reported only having a GED, but during probing she revealed that she also had an associate’s degree from the University of the District of Columbia. When probed about this inconsistency the respondent said that she had gotten this degree thirty years ago but that she should have reported it, which indicates that education may be a more salient topic for some respondents while others might need more time to think about the topic.

In addition to the respondents who erroneously reported, a few respondents ultimately ended up selecting the correct response option but had difficulty answering the question. One respondent came to the question and hesitated for a moment before turning to the interviewer and saying, “I’m a PhD candidate. There is no option for that.” During probing, the respondent explained that she felt the term college “usually applies to a four year degree”, which is why she was hesitant to select it.

#### *Highest Level Completed (Elementary School)*

**English:** What is the highest level of school you have completed?

- 1st grade
- 2nd grade
- 3rd grade
- 4th grade
- 5th grade
- 6th grade
- 7th grade
- 8th grade

**Spanish:** ¿Cual es el nivel más alto de educación que ha completado?

- 1°grado (o equivalente)
- 2°grado (o equivalente)
- 3°grado (o equivalente)
- 4°grado (o equivalente)
- 5°grado (o equivalente)
- 6°grado (o equivalente)
- 7°grado (o equivalente)
- 8°grado (o equivalente)

Respondents who said that the highest level of education that they attended was elementary school were taken to this question. This was a straightforward question given the fact that the highest level of education completed is usually a very salient topic for respondents, but three respondents had errors in reporting. One of these errors were due to computer usability

issues, while the other two were due to the fact that the respondent incorrectly selected the highest level of education that they attended which was discussed previously.

*Highest Level Completed (High School)*

**English:** What is the highest level of school you have completed?

- High School Graduate
- GED or equivalent
- 12th grade, no diploma
- 11th grade
- 10th grade
- 9th grade

**Spanish:** ¿Cual es el nivel más alto de educación que he completado?

- Graduado de escuela secundaria
- GED o diploma general de educación
- 12º grado, sin diploma
- 11º grado (o equivalente)
- 10º grado (o equivalente)
- 9º grado (o equivalente)

Respondents who said that the highest level of education that they attended was high school received this question next. Ultimately, five respondents inaccurately reported the highest level of education that they had completed. A number of these errors were a result of the respondent selecting the “12<sup>th</sup> grade, no diploma” option, when they did have a diploma. This was in an early version which listed “high school graduate” at the bottom of the list. Once the ordering of the response options were reversed, there were no errors due to this problem. Additionally, three respondents reported that they had dropped out of high school, but later got their GED and did not report this. Overall, the vast majority of respondents had no problem answering this question.

Additionally, it is important to remember the differing education systems around the world, which become particularly important for the Spanish version of this question. A number of Spanish speaking respondents reported in their home country graduating from high school meant completing thirteen years of education. In all interviews respondents who had completed secondary education indicated this; however, respondents who did not were forced to translate the education system of their country to an American scale. While this difference did not seem to be a source of confusion or difficulty among respondents, it is a potential source of error within this question.

*Highest Level Completed (College)*

**English:** What is the highest level of school you have completed?

Some college, no degree  
Associate degree: occupational, technical or vocational program  
Associate degree: academic program  
Bachelor's degree: BA, AB, BS, BBA  
Master's degree: MA, MS, MEng, Med, MBS  
Professional School degree MD, DDS, DVM, JD  
Doctoral degree: PhD, EdD

**Spanish:** ¿Cual es el nivel más alto de educación que he completado?

Algunos años de universidad, sin título  
Título universitario de dos años: programa ocupacional, técnico, o vocacional  
Título universitario de dos años: programa académica  
Bachillerato: licenciatura en Letras, licenciatura en Ciencias, licenciatura en Administración de Empresas,  
Maestría: MA, MS, MEng, MEd, MBA  
Titulo de una escuela profesional: MD, DDS, DVM, JD  
Doctorado: PhD, EdD

No problems discovered.

### **Ethnicity**

**English:** Do you consider yourself to be Hispanic or Latino?

Yes  
No

**Spanish:** ¿Se considera usted de origen hispano o latino?

Sí  
No

Overall, there appears to be distinct differences between the way that respondents who identify as Hispanic or Latino discuss their ethnicity compared with respondents who do not identify as Hispanic or Latino. Respondents who did not identify as Hispanic or Latino were asked how they would know if someone was Hispanic or Latino. A number of these respondents cited skin color or accent as methods for identifying someone as Hispanic or Latino. Other respondents, including some respondents who identified as Hispanic, explained that a person's country of origin as a determining factor as to who is Hispanic or Latino. These respondents frequently stated that people who were Hispanic or Latino are from Latin America, Central America, or South America. However, Hispanic respondents cited their country of origin in

addition to the broader terms used by all respondents. Additionally, respondents frequently cited speaking Spanish as a method of determining if someone is Hispanic or Latino.

All respondents were able to accurately respond to this question; however there was confusion among respondents about what the terms Hispanic and Latino meant. Thirty two respondents said that the terms Hispanic and Latino were interchangeable terms, while fourteen respondents said that these terms were different and nine respondents were unsure if there was a difference. For example, in explaining the difference between Hispanic and Latino one respondent said, “Hispanic is more like Central and South America and ethnic groups, and Latino is more Latin based languages so it could include people from Europe... from Spain or Italy or Portugal.. I think you know people who speak the language, but Hispanic is more Central and South America.”

### **Race**

**English:** What race or races do you consider yourself to be? Please select 1 or more of these categories.

Indian (American) or Alaska Native  
Asian  
Black/African American  
Native Hawaiian or Other Pacific Islander  
White  
Some other race

**Spanish:** ¿A cuál raza o razas se considera pertenecer? Por favor elija 1 o más de una de estas categorías.

India americana o nativa de Alaska  
Asiática  
Negra o africana Americana  
Nativo de Hawaii o otra de las islas del Pacífico  
Blanca  
Alguna otra raza

Overall, the question performed well with the majority of respondents. Most respondents had minimal problems answering the question.

When respondents were probed about why they identify as the race or races that they selected responses generally fell into four categories: cultural, ancestry, nationality, or physical characteristics. The majority of respondents used their knowledge of their ancestry in order to determine their race. For example, a number of respondents said that their parents and grandparents were a particular race, which meant that they were the same race. Another group of respondents used their nationality or country of origin in order to determine their race. This interpretation was particularly prevalent among respondents who identified as Black or African American. One respondent was asked how they knew that they were African American and they responded that because all their close relatives were born in the United States meaning that they

were African American (as opposed to African). Some respondents also used physical characteristics in determining their race. Respondents who fall into this category include respondents who discussed items such as their skin color or hair as factors that determine their race. Finally, a small number of respondents also discussed their racial identity in terms of their culture. For example, one respondent explained that they identify with black culture, which is why they selected the Black or African American option.

Additionally, during probing of respondents who selected “Black/African American” we discovered that a number of respondents preferred the terms black or “Black American” to describe themselves, as opposed to African American. Fifteen of the forty-one respondents who selected “Black/African American” said that they preferred the term black or “Black American” to describe their race, while one respondent said they preferred the term African American, and ten said they had no preference. A number of respondents said that their preference for Black or Black American stems from the fact that they don’t feel that they have a connection to Africa, for example one respondent said, “I hate that word African, I like Black American... I’m born here.... Africa has nothing to do with it for me.” Another respondent explained that on paper forms they cross out African American and replace it with Black American.

Another pattern arose amongst respondents who identified as Hispanic or Latino due to the omission of a Latino response option. In nineteen interviews respondents had some level of difficulty responding to the question because Hispanic or Latino was not available as a response option. Of the seventeen respondents who selected “some other race”, sixteen said that they were of Hispanic or Latino origin. A common pattern was that respondents would select “some other race” and when asked why they selected this option they would explain that none of the options listed applied to them.

## Works Cited

- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 3-21.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. New York: Sage.
- Madans, J., Miller, K., Maitland, A., & Willis, G. (2011). *Question Evaluation Methods: Contributing to the Science of Data Quality*. Indianapolis, IN: Wiley.

English Version  
Cognitive Interviewing Protocol

*Introduction to the Cognitive Interview:*

*Next, we are going to go back through the questionnaire and talk about how you interpreted these questions. I am interested in knowing how you understood certain questions, interpreted certain words, and whether any of them were difficult to answer.*

**1) Do you consider yourself to be...**

Male

Female

It is more complicated (Go to 1a)

**1R) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**1a. [If it's complicated is selected] By answering it's complicated, do you mean that...**

Male, assigned female at birth

Female, assigned male at birth

Masculine, assigned female at birth

Feminine, assigned male at birth

Transgender or genderqueer, assigned female at birth

Transgender or genderqueer, assigned male at birth

Something else

I didn't mean to choose this

**1aR) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**1c. [If something else/Meant something else]- What do you mean by something else?**

Please type your answer \_\_\_\_\_

**2) Are you now...**

Married

Widowed

Divorced  
Separated  
Never Married  
Living with a partner

**2r) You did not enter an answer for the question. That is because you:**  
Made a mistake and would like to have another chance  
Are not sure how to answer  
Do not want to answer

**3) Are you currently...**

Working for pay at a job or business  
Working, but not for pay, at a family-owned job or business  
With a job or business but not at work, for example, on sick leave  
Looking for work  
Not working and not looking for work

**3R) You did not enter an answer for the question. That is because you:**  
Made a mistake and would like to have another chance  
Are not sure how to answer  
Do not want to answer

**4) What is the highest level of school you have attended?**

I never attended school  
Elementary School (Go to 4a)  
High School (Go to 4b)  
College or Technical School (Go to 4c)

**4R) You did not enter an answer for the question. That is because you:**  
Made a mistake and would like to have another chance  
Are not sure how to answer  
Do not want to answer

**4a) What is the highest level of school you have completed?**

1<sup>st</sup> grade  
2<sup>nd</sup> grade  
3<sup>rd</sup> grade  
4<sup>th</sup> grade

5<sup>th</sup> grade

6<sup>th</sup> grade

7<sup>th</sup> grade

8<sup>th</sup> grade

**4aR) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**4b) What is the highest level of school you have completed?**

9<sup>th</sup> grade

10<sup>th</sup> grade

11<sup>th</sup> grade

12<sup>th</sup> grade, no diploma

GED or equivalent

High School Graduate

**4bR) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**4c) What is the highest level of school you have completed?**

Some college, no degree

Associate degree: occupational, technical or vocational program

Associate degree: academic program

Bachelor's degree: BA, AB, BS, BBA

Master's degree: MA, MS, MEng, Med, MBS

Professional School degree MD, DDS, DVM, JD

Doctoral degree: PhD, EdD

**4cR) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**[Male version question]**

**5) Do you think of yourself as:**

Gay

Straight, that is, not gay

Bisexual

Something Else (Go to 5a)

Don't Know (Go to 5b)

**5R) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**5a. [If something else is selected] By something else, do you mean that...**

You are not straight, but identify with another label such as queer, trisexual, omnisexual or pan-sexual

You are transgender, transsexual or gender variant

You have not or are in the process of figuring out your sexuality

You do not think of yourself as having sexuality

You do not use labels to identify yourself

You made a mistake and did not mean to pick this answer

You mean something else (Go to 5c)

**5aR) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**5b. [If don't know is selected] By Don't Know, do you mean that you...**

Don't understand the words

Understand the words, but you have not or are in the process of figuring out your sexuality

Mean something else

**5bR) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**5c. [If you mean something else is selected]**

What do you mean by something else?

Please type in your answer \_\_\_\_\_

**[Female Version Question]**

**6) Do you think of yourself as:**

Lesbian or Gay

Straight, that is, not gay

Bisexual

Something Else (Go to 6a)

Don't Know (Go to 6b)

**6a. [If something else is selected] By something else, do you mean that...**

You are not straight, but identify with another label such as queer, trisexual, omnisexual or pan-sexual

You are transgender, transsexual or gender variant

You have not or are in the process of figuring out your sexuality

You do not think of yourself as having sexuality

You do not use labels to identify yourself

You made a mistake and did not mean to pick this answer

You mean something else (Go to 6c)

**6aR) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**6b. [If don't know is selected] By Don't Know, do you mean that...**

You don't understand the words

You understand the words, but you have not or are in the process of figuring out your sexuality

You mean something else

**6bR) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

**6c. [If you mean something else is selected]**

What do you mean by something else?

Please type in your answer \_\_\_\_\_

- 7) **How old are you?** Type your age using the numbers on the computer.  
\_\_\_\_\_ years old.

**7R) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

- 8) **Do you consider yourself to be Hispanic or Latino?**

Yes

No

**8r) You did not enter an answer for the question. That is because you:**

Made a mistake and would like to have another chance

Are not sure how to answer

Do not want to answer

- 9) **Which race or races do you consider yourself? Please choose 1 or more of these categories.**

Indian American or Alaska Native

Asian

Black/African American

Hawaiian Native or other Pacific Islander

White

Some other race

Spanish Version (Versión en español)  
Cognitive Interviewing Protocol

*Introduction to the Cognitive Interview:*

Ahora, vamos a regresar al principio de la encuesta y hablar sobre cómo usted interpreto o entendió estas preguntas. Estoy interesada en saber que entendió usted se le estaba preguntando en las preguntas, como interpreto algunas palabras, y si las preguntas son difíciles de responder.

**1) Usted se considera ser...**

Hombre  
Mujer  
Es más complicado (Go to 1a)

**1R) No contestó la pregunta anterior. Es porque...**

Usted se equivocó y quiere contestar la pregunta  
Usted no está seguro como contestar  
Usted no quiere contestar la pregunta

**1a) Cuando dice es más complicado, quiere decir que...**

Hombre, al nacer asignado como mujer  
Mujer, al nacer asignado como hombre  
Masculino, al nacer asignado como mujer  
Femenina, al nacer asignado como hombre  
Transgénero o géneroqueer, al nacer asignado como hombre  
Transgénero o géneroqueer, al nacer asignado como mujer  
Algo diferente  
No quise elegir esta opción

**1aR) No contestó la pregunta anterior. Es porque...**

Usted se equivocó y quiere contestar la pregunta  
Usted no está seguro como contestar  
Usted no quiere contestar la pregunta

**1c) [If something else/Meant something else] ¿Qué quiere decir por otra cosa?**

Por favor escriba su respuesta:

---

**2) Actualmente usted es....**

Casado(a)  
Viudo(a)  
Divorciado(a)  
Separado(a)  
Nunca se ha casado  
Viviendo con su pareja

**2R) No contestó la pregunta anterior. Es porque...**

Usted se equivoco y quiere contestar la pregunta  
Usted no está seguro como contestar  
Usted no quiere contestar la pregunta

**3) Está usted actualmente...**

Trabajando con sueldo en un trabajo o negocio  
Trabajando, pero sin sueldo, en un trabajo o negocio familiar  
Con trabajo o negocio, pero no está trabajando, por ejemplo en baja por enfermedad  
Buscando trabajo  
No está trabajando y no está buscando empleo

**3R) No contestó la pregunta anterior. Es porque...**

Usted se equivoco y quiere contestar la pregunta  
Usted no está seguro como contestar  
Usted no quiere contestar la pregunta

**4) ¿Cual es el nivel más alto de educación que he asistido?**

Nunca he asistido escuela  
Escuela primaria (Go to 4a)  
Escuela secundaria (Go to 4b)  
Universidad o escuela técnica

**4R) No contestó la pregunta anterior. Es porque...**

Usted se equivoco y quiere contestar la pregunta  
Usted no está seguro como contestar  
Usted no quiere contestar la pregunta

**4a) ¿Cual es el nivel más alto de educación que he completado?**

1° grado (o equivalente)  
2° grado (o equivalente)  
3° grado (o equivalente)  
4° grado (o equivalente)  
5° grado (o equivalente)  
6° grado (o equivalente)  
7° grado (o equivalente)  
8° grado (o equivalente)

**4aR) No contestó la pregunta anterior. Es porque...**

Usted se equivoco y quiere contestar la pregunta  
Usted no está seguro como contestar  
Usted no quiere contestar la pregunta

**4b) ¿Cual es el nivel más alto de educación que he completado?**

Graduado de escuela secundaria  
GED o diploma general de educación  
12° grado, sin diploma  
11° grado (o equivalente)  
10° grado (o equivalente)  
9° grado (o equivalente)

**4bR) No contestó la pregunta anterior. Es porque...**

Usted se equivoco y quiere contestar la pregunta  
Usted no está seguro como contestar  
Usted no quiere contestar la pregunta

**4c) ¿Cual es el nivel más alto de educación que he completado?**

Algunos años de universidad, sin título  
Título universitario de dos años: programa ocupacional, técnico, o vocacional  
Título universitario de dos años: programa académica  
Bachillerato: licenciatura en Letras, licenciatura en Ciencias, licenciatura en Administración de Empresas,  
Maestría: MA, MS, MEng, MEd, MBA  
Titulo de una escuela profesional: MD, DDS, DVM, JD  
Doctorado: PhD, EdD

**4cR) No contestó la pregunta anterior. Es porque...**

Usted se equivoco y quiere contestar la pregunta  
Usted no está seguro como contestar  
Usted no quiere contestar la pregunta

**[Male Version]**

**5) Usted piensa en si mismo como...**

Gay  
Heterosexual, o sea no gay  
Bisexual  
Otra cosa [go to 5a]  
No sabe [go to 5b]

**5R) No contestó la pregunta anterior. Es porque...**

Usted se equivoco y quiere contestar la pregunta  
Usted no está seguro como contestar  
Usted no quiere contestar la pregunta

**5a) Cuando dice, Otra Cosa, quiere decir que...**

Usted es gay, pero se identifica más con otras clasificaciones como queer, multisexual, o trisexual

Usted es transgénero o transexual

Usted no sabe o está en el proceso de descubrir su sexualidad

Usted no piensa en sí mismo como teniendo una sexualidad

Rechaza personalmente todas las etiquetas para describir a su persona

Usted se equivocó y no quiso escoger esta respuesta

Usted quiere decir otra cosa [go to 5c]

**5aR) No contestó la pregunta anterior. Es porque...**

Usted se equivocó y quiere contestar la pregunta

Usted no está seguro como contestar

Usted no quiere contestar la pregunta

**5b) Cuando dice, No Sabe, quiere decir que...**

Usted no entiende las palabras

Usted entiende las palabras, pero no sabe o está en el proceso de descubrir su sexualidad

Quiere decir otra cosa

**5bR) No contestó la pregunta anterior. Es porque...**

Usted se equivocó y quiere contestar la pregunta

Usted no está seguro como contestar

Usted no quiere contestar la pregunta

**5c) ¿Que quiere decir por otra cosa?**

Por favor escriba su respuesta:

---

**Female Version**

**6) Usted piensa en sí mismo como...**

Lesbiana o gay

Heterosexual, o sea no gay o lesbiana

Bisexual

Otra cosa [go to 10a]

No sabe [go to 10b]

**6R) No contestó la pregunta anterior. Es porque...**

Usted se equivocó y quiere contestar la pregunta

Usted no está seguro como contestar

Usted no quiere contestar la pregunta

**6a) Cuando dice Otra Cosa, quiere decir que...**

Usted es gay o lesbiana, pero se identifica más con otras clasificaciones como queer, multisexual, o trisexual

Usted es transgénero o transexual

Usted no sabe o está en el proceso de descubrir su sexualidad

Usted no piensa en sí mismo como teniendo una sexualidad

Rechaza personalmente todas las etiquetas para describir a su persona

Usted se equivocó y no quiso escoger esta respuesta

Usted quiere decir otra cosa [Go to 6c]

**6aR) No contestó la pregunta anterior. Es porque...**

Usted se equivocó y quiere contestar la pregunta

Usted no está seguro como contestar

Usted no quiere contestar la pregunta

**6b) Cuando dice No Sabe, quiere decir que...**

Usted no entiende las palabras

Usted entiende las palabras, pero no sabe o está en el proceso de descubrir su sexualidad

Quiere decir otra cosa

**6bR) No contestó la pregunta anterior. Es porque...**

Usted se equivocó y quiere contestar la pregunta

Usted no está seguro como contestar

Usted no quiere contestar la pregunta

**6c) ¿Que quiere decir por otra cosa?**

Por favor escriba su respuesta:

---

7) **¿Cuántos años tiene usted?** Escriba su edad usando los números en la computadora.

\_\_\_\_\_ años

8) **¿Se considera usted de origen hispano o latino?**

Sí

No

**8R) No contestó la pregunta anterior. Es porque...**

Usted se equivocó y quiere contestar la pregunta

Usted no está seguro como contestar

Usted no quiere contestar la pregunta

9) **¿A cuál raza o razas se considera pertenecer?** Por favor elija 1 o más de una de estas categorías.

Indio (Americano) o Nativo de Alaska

Asiático

Negro/Afro Americano

Nativo de Hawaii u otro Isleño del Pacifico  
Blanco  
Alguna otra raza