Generations Quantitative Survey Methods v14



**Methodology and Technical Notes**

**Gallup Quantitative Survey**

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Evan A. Krueger

Andy Lin

Krystal R. Kittle

Ilan H. Meyer

# About the Generations Study

The Generations study[[1]](#footnote-1) is a five-year study designed to examine health and well being across three generations of lesbians, gay men, and bisexuals (LGB). The study explores identity, stress, health outcomes, and health care and services utilization among LGBs in three generations of adults who came of age during different historical contexts. Minority stress theory has provided an effective model for the study of health disparities in LGB individuals. However, today’s LGB youth have come of age in a society that is more accepting of sexual diversity than ever in the past. Because of its focus on the social environment, minority stress theory leads us to predict that with improvement in the social conditions of LGB people, the character of stress processes, and associated health outcomes affecting LGBs has also changed. The study aims to assess whether younger cohorts of LGBs differ from older cohorts in how they experience stress related to prejudice and everyday forms of discrimination, and whether patterns of resilience differ between different LGB cohorts. Additionally, the study aims to examine how differences in stress experience affect mental health and well being, including depressive and anxiety symptoms, substance and alcohol use, and suicide ideation and behavior, and how younger LGBs utilize LGB-oriented social and health services, relative to older cohorts.

# Generations Recruitment

Generations participants were recruited by Gallup, Inc., a survey research consulting company (http://www.gallup.com/) using the Gallup Daily Tracking Survey as initial contact. Generations participants were screened and enrolled in the study between March 28, 2016 – March 30, 2017. An enhancement oversample, recruiting Back and Latino respondents was screened and enrolled between April 1, 2017 – March 30, 2018. Research participants provided oral consent to be screened, due to minimal risk.

The Daily Tracking Survey is a telephone interview of a national probability sample of 1,000 adults ages 18 and older daily (350 days a year) to inquire about topics including the respondents’ politics, economics and general well-being. Respondents include English and Spanish-speaking individuals from all 50 U.S. states and the District of Columbia.

Gallup uses a dual-frame sampling procedure, which includes random-digit dialing (RDD) to reach both landline and cellphone users, as well as an additional random selection method for choosing respondents with landlines. Gallup stratifies the RDD list to ensure that the unweighted samples are proportionate by U.S. Census region and time zone. Gallup weights the data daily to compensate for disproportionalities in non-response and selection probabilities.

The Generations study used a 2-step recruitment procedure. In the first step, utilizing a question asked of all Gallup respondents, all LGBT individuals were identified. The Gallup question to assess sexual orientation and gender identity asked by the phone interviewer is “I have one final question we are asking only for statistical purposes. Do you, personally, identify as lesbian, gay, bisexual, or transgender?”

In the second step, respondents who were thus identified as LGBT were assessed for eligibility for participation in the Generations study and those eligible were invited to participate in Generations.

Respondents were eligible if they identified as LGB (and not transgender) in response to a question that asked if they were lesbian, gay, bisexual, queer, or same- gender loving, if they were in the age and race/ethnicity groups targeted for the 3 cohorts under investigation in Generations: ages 18 - 25, 34 – 41, or 52 – 59; Black, Latino, or White; completed 6th grade at least, and if they spoke English well enough to conduct the phone interview in English. (Respondents who identified as transgender, regardless of their sexual orientation, were screened for participation in a sister TransPop study.)

Respondents who were eligible for participation in Generations were invited to participate in the study. If they agreed, they were emailed or mailed a survey questionnaire to complete by self-administration (via a web link or printed questionnaire, respectively). Respondents were sent $25 gift certificate.

Participants responded to the survey by self-administering the study questionnaire either online via a link provided in an email or on paper via a mailed questionnaire returned in a pre-stamped preaddressed envelop.

Participants read an information sheet (See Appendix 1) prior to beginning the survey and consented by filling out the questions and submitting it to the researchers. No signed consent forms were collected because of the self-administered nature of the data collection and because it was determined that a signed consent form, it if were collected, would impose an unnecessary risk to the respondents' confidentiality.

The study protocol was reviewed by the Gallup IRB, the UCLA IRB and the IRBs of collaborating institutions through reliance on UCLA IRB. Collaborating institutions have included Columbia University, the University of Texas at Austin, the University of California, Santa Cruz, the University of California, San Francisco, the University of Arizona, the University College London, UK, and the University of Surrey, UK.

In total, 366,644 participants were screened by Gallup for inclusion in the Generations study. Of them, 3.5% were identified as LGBT and 27.5% of them were eligible for Generations based on the eligibility criteria. Of those eligible, 80% agreed to participate in the survey and of those, 48% completed the survey. The final Generations baseline sample size was 1,345 (For more information see Table 3).[[2]](#footnote-2)

Following this baseline interview, respondents are scheduled to complete two follow up surveys, using the same modality (mail or web) and the same compensation of $25 per interview, one year apart, at Year 2 and Year 3.

# Data sources

1. Gallup survey—Gallup survey administered to all respondents as part of the Gallup Daily phone survey.
2. Gallup screen—A screen conducted by Gallup on phone to determine eligibility for the Generations survey.
3. Generations survey—A self-administered survey (three waves) completed online via link sent by email or on paper via mailed questionnaire to all eligible Generations respondents.

While the dataset consists mostly of data obtained from the Generations survey (variables affixed with “w1” prefix), key variables are also included from the Gallup survey (affixed with “g” prefix) and Gallup screen (affixed with “screen\_” prefix”).

# Generations eligibility

Eligibility for the Generations study was assessed in two stages through items that already existed on the Gallup Daily Tracking Survey, as well as additional screener questions that the Generations Study team included. First, respondents were identified as potentially eligible using responses to 5 items from the Gallup Daily Tracking Survey:

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| ***Table 1. Preliminary eligibility criteria*** |
| ***Measure*** | ***Question Text*** | ***Response Options*** | ***Generations Eligibility*** |
| *Age*  | *Please tell me your age* | *Open Ended* | *18-25* |
| *34-41* |
| *52-59* |
| *Education* | *What is the highest level of school you have completed or the highest degree you have received?* | *Less than a high school diploma (Grades 1 through 11 or no schooling* | *Eligible* |
| *High school graduate (Grade 12 with diploma or GED certificate)* | *Eligible* |
| *Technical, trade, vocational or business school or program after high school* | *Eligible* |
| *Some college – college, university, or community college -- but no degree* | *Eligible* |

Second, those meeting eligibility requirements based on the five items above were then informed they were potentially eligible for participation in the Generations study. If interested in participation, they were then asked the following 2 questions from the Generations study team to determine final eligibility:

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| ***Table 2. Additional eligibility criteria*** |
| ***Measure*** | ***Question Text*** | ***Response Options*** | ***Generations Eligibility*** |
| *Education, 6th grade or higher* | *What is the highest level of school you have completed? (Only asked of those selecting "Less than a high school diploma (Grades 1 through 11 or no schooling" on**education* | *5th grade or lower* | *Not eligible* |
| *6th grade or higher* | *Eligible* |
| *Sexual identity* | *Do you consider yourself to be…?* | *Straight or heterosexual* | *Not eligible* |
| *Lesbian* | *Eligible* |
| *Gay* | *Eligible* |
| *Bisexual* | *Eligible* |
| *Queer* | *Eligible* |
| *Same-gender loving* | *Eligible* |
| *Don't know* | *Eligible* |
| *Refuse* | *Eligible* |

# Generations Sample

The Generations baseline sample was recruited between March 28, 2016 and March 30, 2017. To increase the number of racial/ethnic minority respondents we oversampled Black and Latino respondents, recruited between April 1, 2017 and March 30, 2018. The final dataset for the Generations baseline survey included 1,563 respondents: 1,369 were recruited into the original sample (2016-2017) and 194 were recruited into the enhancement oversample (2017-2018). Of the total baseline respondents who were enrolled, 27 respondents were identified as transgender and they were removed from the Generations dataset and added to the TransPop dataset, a parallel population study of transgender individuals, which was conducted concurrently with Generations. The final Generations baseline sample size was 1,536 (1,345 from original sample, 191 from extended sample).

The variable **w1sample** can be used to identify whether respondents were recruited into the original baseline sample or the enhancement (oversample) baseline sample.

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| ***Table 3. Recruitment statistics*** |  |  |
|  | *N* | *%* |
| *Total screened* | *366,644* |  |
| *LGBT Total (“…Do you, personally, identify as lesbian, gay, bisexual, or transgender?” = “yes”)* | *12,837* | ***3.5%*** |

\* 27 respondents were removed from the final Generations sample and were added to the TransPop dataset (final N=1,536).

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| **Table 4a. Generations respondents by gender, race/ethnicity, and age cohort (N = 1,536)** |
|  | **White** | **Black** | **Latino** | **Total** |
|  | N (Baseline, Enhancement) | N (Baseline, Enhancement) | N (Baseline, Enhancement) | N (Baseline, Enhancement) |
|  | **Cohort 1 (18-25 years)** |
| **Male** | 153 (153, 0) | 36 (21, 15) | 84 (63, 21) | **273 (237**, **36)** |
| **Female** | 213 (213, 0) | 91 (55, 36) | 95 (65, 30) | **399 (333**, **66)** |
|  | **Cohort 2 (34-41 years)** |
| **Male** | 93 (93, 0) | 30 (22, 8) | 44 (27, 17) | **167 (142**, **25)** |
| **Female** | 141 (141, 0) | 40 (23, 17) | 24 (11, 13) | **205 (175**, **30)** |
|  | **Cohort 3 (52-59 years)** |
| **Male** | 212 (212, 0) | 28 (19, 9) | 27 (14, 13) | **267 (245**, **22)** |
| **Female** | 169 (169, 0) | 16 (13, 3) | 24 (17, 7) | **209 (199**, **10)** |
|  | **Missing cohort assignment** |
| **Male** | 7 (7, 0) | 3 (2, 1) | 1 (1, 0) | **11 (10**, **1)** |
| **Female** | 2 (2, 0) | 1 (1, 0) | 2 (1, 1) | **5 (4**, **1)** |
| **Total** | **990 (990**, **0)** | **245 (156**, **89)** | **301 (199**, **102)** | **1536 (1345**, **199)** |

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| **Table 4b. Generations respondents, by recruitment and interview wave** |
|  | Baseline (Wave 1) | Wave 2 | Wave 3 |
| Original sample | 1,345 | 900 |  |
| Enhancement (oversample) | 191 |  |  |
| Completed Wave 2 only |  | 30 |  |
| **Total** | 1,536 | 930 |  |

# Data Processing and Transformation

## New variable creation

Several variables were created using items from the Generations survey. The calculated variables are included in the final dataset. Each newly created variable is described below.

### Cohort.

Respondents were asked “in what year were you born?” (variable: w1q165), and a numeric age (variable: **w1age**) was calculated by subtracting birth year from the year in which the respondent completed the baseline survey (2016, 2017, or 2018).

Respondents were then assigned to one of three Generational cohorts, below (variable: **cohort**). Since age was assessed at multiple time points (at screening, as well as on the survey), consistency across the two measures was assessed. Small variations of 2 years or fewer were allowed to account for changes in age between screening and survey, and also for possible errors in reporting. As such, the age ranges of each cohort were expanded by ± 2 years, as indicated in Table 5. 16 respondents provided an eligible age at screening (screen age variable not included in the dataset), but subsequently provided an ineligible year of birth on the survey (three or more years discrepancy). These respondents were retained in the Generations sample, but have a missing value for the “cohort” variable. Thus, the valid n for the variable “cohort” is 1,331. An additional 19 respondents did not provide a response to item w1q165, and their age reported at screening was assigned to w1age.

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| ***Table 5. Generations names*** |
| **Target Age Range** | **Expanded Age Range** | **Cohort name and supporting word** |
| *18-25* | *16-27* | *Cohort name: "cultural inclusion"* |
| *Support word: equality* |
| *34-41* | *32-43* | *Cohort name: “institutional advancement"* |
| *Supporting word: visibility* |
| *52-59* | *50-61* | *Cohort name: "identity formation"* |
| *Supporting word: pride* |

### Race.

A 3-category race variable (variable: **screen\_race**) was calculated based on respondents’ reported races and ethnicities at screening (see Table 1 for specific questions). Based on the Gallup screen phone interview, eligible were only Black, Latino and White respondents but that included respondents who indicated multiple race/ethnic identities that included these three. We used the following algorithm in this order for classification: Anyone who indicated Hispanic/Latino was categorized as Latino regardless of any other entries; then, anyone who indicated Black/African American was categorized as Black regardless of other races selected except Latino, which took priority; then, anyone who indicated White including any other race, except Latino and Black, was categorized as White. All other response combinations were not eligible[[3]](#footnote-3), and so the variable screen\_race has only the three response options listed.

A less restrictive race/ethnicity (variable: **w1race**) was also calculated using responses from the Generations survey (variables: w1q20\_1 – w1q20\_7). This variable was included to provide context to the questions on identification with one’s race/ethnic group. Respondents selecting more than one race/ethnicity on items w1q20\_1 – w1q20\_7 were categorized as “multiracial.” 18 respondents did not provide a race response on the survey (w1q20\_1 – w1q20\_7), and so their race reported on the Gallup screen (variable: screen\_race) was assigned.

### Sex assigned at birth.

Respondents’ sex assigned at birth (variable: **w1sex**) was based on their reported sex at birth on the survey (variable: w1q27). However, 22 respondents who had missing data on variable w1q27 were assigned a value based on their sex reported on the Gallup survey. The Gallup survey asked respondents, “I am required to ask, are you male or female?” Response options were: male, female.

### Gender identity.

Respondents were assigned a current gender identity (variable: **w1gender**) based on their reported current gender identity on the survey (variable: w1q28).

However, 15 respondents did not provide a gender identity on the survey. Of them, 10 were assigned the gender identity reported on the Gallup screen[[4]](#footnote-4). The remaining 5 were also missing a gender identity on the Gallup screen, and so their values were imputed using Predictive Mean Matching (process described in detail in a later section).

A third calculated variable (**w1sex\_gender**) is included in the dataset, in which responses from “w1sex” and “w1gender” were combined into a single analytic variable with 4 response categories: women, non-transgender; men, non- transgender; genderqueer/non-binary (GQNB), female; GQNB, male.

### Sexual identity.

Two calculated sexual identity variables are included in the dataset. The first variable (**w1sexualid**) is equivalent to respondents’ self-reported sexual identity on the survey (variable: w1q29). However, 71 respondents provided a write-in response (variable: w1q29\_t\_verb). These 71 responses were placed into existing categories when possible (e.g., "DYKE" write-in response was placed into the "Lesbian" identity category), and new categories were created for common write-in responses (e.g., pansexual). The resulting categorizations are shown in Table 6. As such, the final variable (w1sexualid) contains more response categories than the original survey item (w1q29). 13 respondents did not provide a sexual identity on the survey, and their sexual identity reported on the Gallup screen was assigned in this variable.

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| **Table 6. Sexual identity write-in responses and resulting categorizations** |
| **Resulting categorization (w1sexualid)** | **Write-in response (w1q29\_t\_verb)** |
| Lesbian | DYKE |
| Lesbian | Lesbian and Same Gender Loving |
| Gay | GAY/BICURIOUS |
| Asexual spectrum | demi sexual |
| Asexual spectrum | Bi-romantic Asexual |
| Asexual spectrum | NON-SEXUAL |
| Asexual spectrum | Asexual |
| Asexual spectrum | Asexual |
| Asexual spectrum | ASEXUAL |
| Asexual spectrum | Asexual; panromantic (No sexual attraction, close romantic emotional attachment to any gender) |
| Asexual spectrum | Asexual |
| Asexual spectrum | Asexual, Pan-romantic. |
| Asexual spectrum | demisexual |
| Asexual spectrum | Panromantic asexual |
| Asexual spectrum | asexual |
| Asexual spectrum | Demisexual towards women but likes men |
| Asexual spectrum | Asexual |
| Asexual spectrum | Asexual |
| Asexual spectrum | Asexual |
| Asexual spectrum | Demisexual |
| Asexual spectrum | Asexual |
| Asexual spectrum | asexual |
| Asexual spectrum | Demisexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexaul |
| Pansexual | pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | pansexual |
| Pansexual | Fluid |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Lover of All |
| Pansexual | pansexual |
| Pansexual | PANSEXUAL |
| Pansexual | Pansexual |
| Pansexual | PANSEXUAL |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual (loving without gender bias) |
| Pansexual | Pansexual |
| Pansexual | PANSEXUAL; DEMISEXUAL |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Pansexual | Pansexual |
| Anti-label | just me |
| Anti-label | Neutral |
| Anti-label | DON'T LIKE LABELS ORIENTATION |
| Other |  |
| Other |  |
| Other |  |
| Other |  |

\* Note: When a respondent provided two identity labels in their write-in response, the first label chosen was used for categorization purposes (e.g., “Lesbian and Same Gender Loving coded” as “Lesbian”). Four respondents selected “other,” but did not provide a write in response. These respondents remain categorized as “other.”

A second calculated variable (**w1sexminid**) was also included, in which respondents reporting a sexual minority identity were categorized into 1 of 3 categories: lesbian/gay (lesbian, gay), bisexual (bisexual), and other sexual minority identity (queer, pansexual, same-gender loving, asexual spectrum, anti-label, other). 11 respondents identified as straight/heterosexual, and were recoded as missing for the w1sexminid variable.

### Education.

Responses from the Gallup Daily Tracking Survey variable (**geducation**) were re- categorized into two additional variables with fewer response options: **educ1** (high school or less, some college, college completed, more than college completed) and **educ2** (high school or less, more than high school).

### Geography.

#### Urbanicity

Using respondents’ zip codes, urbanicity scores were calculated using the USDA Rural-Urban Commuting Area coding system (USDA, 2013). RUCA scores are included in the dataset (variable: **gruca**). 2010 RUCA codes were used, and scores of 1-3 represent urban zip codes, while scores of greater than 3 represent non-urban zip codes. The variable, **gurban** was created using this scoring system.

23 respondents’ zip codes did not have a corresponding RUCA code or corresponding urbanicity score. These 23 values were imputed using Predictive Mean Matching, described in detail in a later section. Both un-imputed (gruca, gurban) and imputed (**gruca\_i, gurban\_i**) versions of the variables are included in the dataset.

#### Census region and division

Using respondents’ states of residence (gzipstate), respondents were assigned to their corresponding Census regions (gcenreg) and divisions (gcendiv) (US Census Bureau, 2015). There are 9 Census divisions:

1. New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)
2. Middle Atlantic (New Jersey, New York, Pennsylvania)
3. East North Central (Indiana, Illinois, Michigan, Ohio, Wisconsin)
4. West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota)
5. South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia)
6. East South Central (Alabama, Kentucky, Mississippi, Tennessee)
7. West South Central (Arkansas, Louisiana, Oklahoma, Texas)
8. Mountain (Arizona, Colorado, Idaho, New Mexico, Montana, Utah, Nevada, Wyoming)
9. Pacific (Alaska, California, Hawaii, Oregon, Washington)

There are 4 corresponding Census regions:

1. Northeast (New England, Middle Atlantic regions)
2. Midwest (East North Central, West North Central regions)
3. South (South Atlantic, East South Central, West South Central regions)
4. West (Mountain, Pacific regions)

#### Distance from an LGBT community health center

Distance from the respondents’ residence to the nearest LGBT community health center (**gmilesaway**). This distance was calculated using geocoded health center data and respondents’ zip codes (**gzipcode**), as described by Martos et al. (2017). A dichotomous variable (**gmilesaway2**) was created to differentiate between respondents living less than 60 miles away from the nearest LGBT health center and those living 60 or more miles away. A 60-mile distance was chosen arbitrarily to represent a practical travel distance of about 1-hour drive.

### Poverty.

Using weighted Census estimates for poverty thresholds in 2016 and 2017 (US Census Bureau, 2018), respondents were categorized as either living in poverty (below 100% FPL) or not, based on the year they completed the Generations survey (2016 or 2017), their reported household income (w1hinc), and the reported number of people living on that household income (w1q173) (constructed variable: **w1poverty**)[[5]](#footnote-5). 32 respondents did not indicate the number of people living on their household income. Of them, 5 reported household incomes <$11,999, and could be categorized as living below the 100% federal poverty line. The remaining 27 could not be categorized, and were recoded as missing.

Another variable was created (**w1povertycat**) using the same thresholds above, which categorized respondents into the following income ratio categories: <100% FPL, 100-199% FPL, 200-299% FPL, 300%+ FPL. 32 respondents did not indicate the number of people living on their household income. Of them, 5 reported household incomes >$11,999, and could be categorized as living below the 100% federal poverty line. The remaining 27 could not be categorized, and were recoded as missing.

### Sexual orientation change therapy.

Respondents reported their lifetime experiences receiving treatment to change their sexual orientations (w1q133: for respondents completing the survey by mail; w1q133\_1 - w1q133\_3: for respondents completing the survey by web). Three variables were calculated. First, respondents were coded dichotomously as having ever received such treatment or not (variable: **w1conversion**). Next, respondents were categorized according to the provider of the treatment: from a healthcare professional (variable: **w1conversionhc**) or from a religious leader (variable: **w1conversionrel**).

## Scale creation

Several items from the Generations study are part of validated scales, designed to measure constructs relevant to identity, stress, and health. Each of the scales within the Generations survey have been calculated from individual variables, according to published instructions, detailed below. The reliability of each scale was assessed with Cronbach’s alpha (a), for the entire sample and then by sex at birth, cohort, and race/ethnicity, respectively. The reliability test scores are presented in Appendix 2. Two calculated variables are included in the dataset for each of the scales: an un- imputed version and an imputed version. The unimputed version has missing values

for participants who were missing on one or more items that make up the scale. The imputed variable has no missing values. The steps taken to create each scale are described below.

### Positive Health.

Social Well-Being assessed one’s “appraisal of one’s circumstances and functioning in society,” and serves as a measure of one’s “social wellness” (Keyes, 1998). Keyes (1998) Social Well-Being scale (Cronbach's a = .82) consists of 15 items (w1q04- w1q18; e.g. “I don’t feel I belong to anything I’d call a community,” “My community is a source of comfort,” “I have something valuable to give to the world.”), each rated on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree.” To create a scale variable, 8 of the 15 items (w1q04, w1q08, w1q11, w1q12, w1q14, w1q15, w1q16, w1q17) were reverse-coded then the scale was created as a mean score of each of the items within the scale. Lower values represent lower social well- being and higher values represent greater social well-being. Scale values range from 1 to 7.

There were two resulting variables: “**w1socialwb**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1socialwb\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

Satisfaction with Life (Satisfaction with Life Scale, SWLS) assessed respondents’ global satisfaction with life “as a cognitive-judgmental process” (Diener et al., 1985). The scale (Cronbach's a = .91) consisted of 5 items (w1q186- w1q190; e.g., “In most ways my life is close to ideal,” “The conditions of my life are excellent,” “I am satisfied with life.”), each rated on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree.” The scale variable was created as a mean score of each of the items within the scale. Lower values represent less satisfaction with life and higher values represent greater satisfaction with life. Scale values range from 1 to 7.

There were two resulting variables: “**w1lifesat**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1lifesat\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

### Identity.

Multi-group Ethnic Identity was assessed using Phinney and Ong’s (2007) revised Multi-group Ethnic Identity Measure (MEIM-R). MEIM-R assessed respondents’ “investigation, learning, and commitment” to their race/ethnic identities (Phinney & Ong, 2007). The scale (Cronbach's a = .85) consisted of 6 items (w1q21- w1q26; e.g., “I have spent time trying to find out more about my race/ethnic group, such as its history, traditions, and customs,” and “I have a strong sense of belonging to my own race/ethnic group.” Each item was rated on a 5-point Likert scale ranging from “strongly disagree” to “strongly agree.” The scale variable was created as a mean score of each of the items within the scale. Lower values represent less investigation, learning, and commitment to one’s own race/ethnic identity, and higher values represent greater investigation, learning, and commitment. Scale values range from 1 to 5.

There were two resulting variables: “**w1meim**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1meim\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

Sexual Identity Centrality, a 5-item subscale from Mohr and Kendra’s (2011) 27-item Lesbian, Gay, and Bisexual Identity Scale (LGBIS), assessed the degree to which respondents’ sexual identities were central to their overall identities. Scale (Cronbach's a = .83) items (w1q40- w1q44) included “my sexual orientation is an insignificant part of who I am” and “being an LGB person is a very important aspect of my life.” Responses were recorded on a 6-point Likert scale ranging from “disagree strongly” to “agree strongly.” To create a scale variable, 1 item (w1q40) was first reverse-coded. Next, the scale was created as a mean score of each of the items within the scale. Lower values represent lower centrality and higher values represent greater centrality. Scale values range from 1 to 6.

There were two resulting variables: “**w1idcentral**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1idcentral\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

Community connectedness, a 7-item scale adapted from the 8-item scale described by Frost & Meyer (2012), assessed the desire for and strength of LGBT community affiliation among respondents. Scale (Cronbach's a = .86) items (w1q53- w1q59) included “you feel you’re a part of the LGBT community,” and “you are proud of the LGBT community.” Responses were recorded on a 4-item scale ranging from “agree strongly” to “disagree strongly.” The scale variable was created as a mean score of each of the items within the scale. The final scale was reverse-coded so that lower scores represented lower community connectedness, while higher scores represented greater community connectedness. Scale values range from 1 to 4.

There were two resulting variables: “**w1connectedness**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1connectedness\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

### Healthcare Access & Utilization.

Healthcare Stereotype Threat, a 4-item scale (Cronbach's a = .90) modified from Abdou & Fingerhut’s (2014) measure, assessed the degree to which respondents worried about being negatively judged by or confirming stereotypes about LGBT people with healthcare providers. Scale items (w1q60- w1q63) included “I worry about being negatively judged because of my sexual orientation or gender identity,” and “I worry that evaluations of me may be negatively affected by my sexual orientation or gender identity.” Responses were recorded on a 5-point scale ranging from “strongly disagree” to “strongly agree.” The scale was created as a mean score of each of the items within the scale. Lower values represent less worry about being judged or confirming LGBT stereotypes, and higher values represent greater worry. Scale values range from 1 to 5.

There were two resulting variables: “**w1hcthreat**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1hcthreat\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

### Health Outcomes.

Mental Disability was assessed using the Kessler-6, a 6-item scale from the National Comorbidity Survey (SAMHSA , n.d.). Scale (Cronbach's a = .89) items (w1q77A- w1q77F) asked respondents how often, in the past 30 days, they had felt “nervous,” “hopeless,” “restless or fidgety,” “so depressed that nothing could cheer you up,” “that everything was an effort,” and “worthless.” Responses were recorded on a 5- point scale ranging from “all of the time” to “none of the time.” All items were first reverse-coded so that “none of the time” had a value of 1 and “all of the time” had a value of 5. The scale was then created as the sum of all variables within the scale.

Per scale creation instructions, respondents failing to answer any single item in the scale were recorded as “missing,” on the resulting scale score. In addition, an imputed version of the scale was calculated in which missing individual scale items were imputed, and a final scale score was calculated for each respondent.

The resulting scales, named “**w1kessler6**” and “**w1kessler6\_i**” had values ranging from 0 to 24.

Alcohol use was assessed using the Alcohol Use Disorder Identification Test (AUDIT- C), a 3-item scale (Cronbach's a = .81) designed to identify persons with hazardous drinking behavior, or who have active alcohol use disorders (Bush et al., 1998). The scale items (w1q85- w1q87) and available responses were “how often do you have a drink containing alcohol?” (never [0 points], monthly or less [1 point], 2-4 times a month [2 points], 2-3 times a week [3 points], 4 or more times a week [4 points]), “how many standard drinks containing alcohol do you have on a typical day?” (none [0 points], 1 or 2 [0 points], 3 or 4 [1 point], 5 or 6 [2 points], 7 to 9 [3 points], 10 or more [4 points]), and “how often do you have six or more drinks on one occasion?” (never [0 points], less than monthly [1 points], monthly [2 points], weekly [3 points], daily or almost daily [4 points]). The scale was then created as the sum of all variables in the scale. Per scale creation instructions, respondents failing to answer any single item in the scale were recorded as “missing,” on the resulting scale score. In addition, an imputed version of the scale was calculated in which missing individual scale items were imputed, and a final scale score was calculated for each respondent.

The resulting scales, named “**w1auditc**,” and “**w1auditc \_i**” had values ranging from 0 to 12.

Drug use was assessed using the Drug Use Disorders Identification Test (DUDIT), an 11-item scale (Cronbach's a = .87) designed to identify individuals with drug- related problems (Berman et al., 2003). The scale was created as the sum of all variables (w1q90- w1q100) in the scale (see Table 7). Per scale creation instructions, respondents failing to answer any single item in the scale were recorded as “missing,” on the resulting scale score. In addition, an imputed version of the scale was calculated in which missing individual scale items were imputed, and a final scale score was calculated for each respondent.

The resulting scales, named “**w1dudit**,” and “**w1dudit\_i**” had values ranging from 0 to 44.

|  |
| --- |
| ***Table 7. Generations survey variables used for calculating DUDIT scale*** |
| ***Variable*** | ***Question Text*** | ***Response Options*** | ***Points*** |
| *w1q90* | *How often do you use drugs other than alcohol?* | *Never* | *0* |
| *Once a month or less often* | *1* |
| *2-4 times a month* | *2* |
| *2-3 times a week* | *3* |
| *4 times a week or more often* | *4* |
| *w1q91* | *Do you use more than one type of drug on the same occasion?* | *Never* | *0* |
| *Once a month or less often* | *1* |
| *2-4 times a month* | *2* |
| *2-3 times a week* | *3* |
| *4 times a week or more often* | *4* |
| *w1q92* | *How many times do you take drugs on a typical day when you use drugs?* | *0* | *0* |
| *1-2* | *1* |
| *3-4* | *2* |
| *5-6* | *3* |
| *7 or more* | *4* |
| *w1q93* | *How often are you influenced heavily by drugs?* | *Never* | *0* |
| *Once a month or less often* | *1* |
| *2-4 times a month* | *2* |
| *2-3 times a week* | *3* |
| *4 times a week or more often* | *4* |
| *w1q94* | *Over the past year, have you felt that your longing for drugs was so strong that you could not resist it?* | *Never* | *0* |
| *Once a month or less often* | *1* |
| *2-4 times a month* | *2* |
| *2-3 times a week* | *3* |
| *4 times a week or more often* | *4* |

|  |  |  |  |
| --- | --- | --- | --- |
| *w1q95* | *Has it happened, over the past year, that you have not been able to stop taking drugs once you get started?* | *Never* | *0* |
| *Once a month or less often* | *1* |
| *2-4 times a month* | *2* |
| *2-3 times a week* | *3* |
| *4 times a week or more often* | *4* |
| *w1q96* | *How often over the past year have you taken drugs and then neglected to do something you should have done?* | *Never* | *0* |
| *Once a month or less often* | *1* |
| *2-4 times a month* | *2* |
| *2-3 times a week* | *3* |
| *4 times a week or more often* | *4* |
| *w1q97* | *How often over the past year have you needed to take a drug the morning after heavy drug use the day before?* | *Never* | *0* |
| *Once a month or less often* | *1* |
| *2-4 times a month* | *2* |
| *2-3 times a week* | *3* |
| *4 times a week or more often* | *4* |
| *w1q98* | *How often over the past year have you had guilt feelings or a bad conscience because you used drugs?* | *Never* | *0* |
| *Once a month or less often* | *1* |
| *2-4 times a month* | *2* |
| *2-3 times a week* | *3* |
| *4 times a week or more often* | *4* |
| *w1q99* | *Have you or anyone else been hurt (mentally or physically) because you used drugs?* | *No* | *0* |
| *Yes, but not over the past year* | *2* |
| *Yes, over the past year* | *4* |
| *w1q100* | *Has a relative or a friend, a doctor or a nurse, or anyone else, been worried about your drug use or said to you that**you should stop using drugs?* | *No* | *0* |
| *Yes, but not over the past year* | *2* |
| *Yes, over the past year* | *4* |

### Stressors.

Felt stigma assessed respondents’ awareness and experiences of sexual minority- related stress (Herek, 2008). Scale (Cronbach's a = .71) items (w1q125- w1q127) were “most people where I live think less of a person who is LGB,” “most employers where I live will hire openly LGB people if they are qualified for the job,” and “most people where I live would not want someone who is openly LGB to take care of their children.” Responses were recorded on a 5-point Likert scale ranging from “strongly disagree” to “strongly agree.” 1/3 items (w1q126) was reverse coded, then the scale was created as a mean score of each of the items within the scale. Lower values represent less felt stigma,and higher values represent greater felt stigma. Scale values range from 1 to 5.

There were two resulting variables: “**w1feltstigma**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1feltstigma\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

Internalized homophobia assessed the degree to which respondents accept stigma as a part of their own value systems (Herek et al., 2009). Scale (Cronbach's a = .78) items (w1q128- w1q132) included “I have tried to stop being attracted to people who are the same sex as me,” “I wish I weren’t LGB,” and “I feel that being LGB is a personal shortcoming for me.” Responses were recorded on a 5-point Likert scale ranging from “strongly disagree” to “strongly agree.” The scale was created as a mean score of each of the items within the scale. Lower values represent less internalized homophobia and higher values represent greater internalized homophobia. Scale values range from 1 to 5.

There were two resulting variables: “**w1internalized**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1internalized\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

Everyday discrimination assessed chronic, relatively minor experiences of discrimination or unfair treatment (Williams et al., 1997). Scale (Cronbach's a = .91) items (w1q144A- w1q144I) asked respondents who often the following things happened to them over the past year, including “you were treated with less courtesy than other people,” “you were treated with less respect than other people,” “and you were called names or insulted.” Responses were recorded on a 4-point Likert scale ranging from “often” to “never.” The scale was created as a mean score of each of the items within the scale. The resulting variable was reverse-coded so that lower values represent less everyday discrimination and higher values represent more everyday discrimination. Scale value range from 1 to 4.

There were two resulting variables: “**w1everyday**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1everyday\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

Chronic strains (Wheaton, 1999, abridged version). Scale (Cronbach's a = .63) items (w1q146A- w1q146L) asked respondents to think about their lives currently, and to determine whether several statements = were not true, somewhat true, or very true. A “does not apply” response option was also provided. Questions included “you’re trying to take on too many things at once,” “your job often leaves you feeling both mentally and physically tired,” “and you are alone too much.” The scale was created as a mean score of each of the items within the scale. Lower values represent lower chronic stress and higher values represent higher chronic stress. Scale values range from 1 to 3.

There were two resulting variables: “**w1chronic**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1chronic\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

Childhood gender conformity (Zucker et al., 2006). Scale (Cronbach's a = .86) items (w1q147- w1q150) included “as a child, my favorite toys and games were…,” and “as a child, the characters on TV or in the movies that I imitated or admired were…” Response were recorded on a 5-point scale, with the wording of response options varying according to the question, but all ranged from “masculine” (e.g., 1= “always ‘masculine,’” “always boys or men”) to “feminine” (e.g., 5= “always ‘feminine,’” “always girls or women”). “Neither” and “not applicable” responses were set as missing. A preliminary score was assigned to each participant, and was calculated the mean score of all the values present within the scale for each individual. A final categorical score was then calculated for each participant, based on their sex at birth (male/female), using cutoff scores described in the table below. The resulting variable for the scale was named “**w1childgnc**.” In addition, an imputed version of the scale was calculated in which missing individual scale items were imputed, and a final scale score was calculated for each respondent in the same manner (**w1childgnc\_i**).

|  |
| --- |
| **Table 8. Cutoff scores used to calculate w1childgnc** |
|  | Lower cutoff | Upper cutoff |
| 90th percentile or greater(most gender non- conforming in childhood) | Females: 1.00Males: 3.66 | Females: 2.00Males: 5.00 |
| Between 50th percentile and 90th percentile | Females: 2.01Males: 2.33 | Females: 3.00Males: 3.65 |
| Less than 50th percentile (least gender non-conforming in childhood) | Females: 3.01Males: 1.00 | Females: 5.00Males: 2.32 |

Adverse childhood experiences (ACE) (CDC-BRFSS, 2010). Scale (Cronbach's a = .76) items (w1q151- w1q161) asked respondents to “look back before you were 18 years of age,” and included items such as “did you live with anyone who was depressed, mentally ill, or suicidal,” and “how often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up?” Available response options ranged from dichotomous (yes/no) to 3-point Likert scales (never to more than once), depending on the question. “Don’t know/not sure” and “refused” answer options were also available to respondents, where appropriate. To create a summary ACE score, all items were dichotomoized (1= yes, event occurred at least once vs. 0=no, event never occurred) if not already dichotomized. Per published instruction (CDC, 2016), 8 subscores were created from the existing 11 items: presence of emotional abuse (**w1ace\_emo**: w1q158), physical abuse (**w1ace\_phy**: w1q157), sexual abuse (**w1ace\_sex**: w1q159, w1q160, w1q161), household intimate partner violence (**w1ace\_ipv**: w1q156), household substance use (**w1ace\_sub**: w1q152, w1q153), household mental illness (**w1ace\_men**: w1q151), parental separation or divorce (**w1ace\_sep**: w1q155), incarcerated household member (**w1ace\_inc**: w1q154). A resulting final score was created as a sum score indicating the number of adverse childhood experiences respondents reported during childhood. Scale values for the resulting ACE measure (**w1ace**) range from 0 to 8. Respondents indicating “don’t know” or “refused” on any single scale item were recorded as missing for that subscore(s), and the subsequent final score.

Missing individual scale items were also imputed using predictive mean matching, and individual subscores and the final scale score was calculated for each respondent (**w1ace, w1ace\_emo\_i, w1ace\_phy\_i, w1ace\_sex\_i, w1ace\_ipv\_i, w1ace\_sub\_i, w1ace\_men\_i, w1ace\_sep\_i, w1ace\_inc\_i**).

### Social support.

Social support was assessed utilizing the Multidimensional Scale of Perceived Social Support (Zimet et al., 1988). Scale (Cronbach's a = .93) items (w1q164A- w1q164L) asked respondents to rate their levels of agreement with several items, including “there is a special person who is around when I am in need,” and “my family really tries to help me.” Responses were recorded on a 7-point scale ranging from “very strongly disagree” to “very strongly agree.” The scale was created as a mean score of each of the items within the scale. Lower values represent less perceived social support and higher values represent more perceived social support. Scale values range from 1 to 7.

There were two resulting variables: “**w1socsupport**” (calculated only from complete cases, in which no individual scale items were missing) and “**w1socsupport\_i**” (missing individual scale items were imputed, and a final scale score was calculated for each respondent).

Additionally, 3 subscales were created, representing perceived social support from significant others (**w1socsupport\_so** and **w1socsupport\_so\_i**, w1q164A, B, E, J), family (**w1socsupport\_fam** and **w1socsupport\_ fam \_i**, w1q164C, D, H, K), and friends (**w1socsupport\_fr** and **w1socsupport\_ fr \_i**, w1q164F, G, I, L). Each subscale was similarly created as a mean score of each of the items within the subscale. Lower values represent less perceived social support and higher values represent more perceived social support. Subscale values range from 1 to 7.

## Missing Data and Imputation

When possible, missing values on demographic characteristics were assigned from other known sources. (See Appendix 3 for missing values in Wave 1 dataset).

* 19 respondents were missing an age on the Generations survey (w1age). All 19 were assigned the age reported to Gallup on the Gallup survey.
* 18 respondents were missing a race on the Generations survey (w1race). All 18 were assigned the age reported on the Gallup screen.
* 22 respondents were missing a sex at birth on the Generations survey (w1sex). All 22 were assigned the age reported to Gallup on the Gallup survey.
* 13 respondents were missing a sexual identity on the Generations survey (w1sexualid). All 13 were assigned the age reported on the Gallup screen.
* 15 respondents were missing a current gender identity on the Generations survey (w1gender). Of them, 10 could be assigned using the gender reported on the Gallup screen.
* 40 respondents were missing a household income. Of them, 23 could be assigned the household income reported to Gallup on the Gallup survey.

For the remaining missing values, we did a single imputation by chained equations (fully conditional specification), using predictive mean matching (Little, 1988) to draw the imputed values. With predictive mean matching, regression is used to predict the missing value, and then a single value is randomly selected from

the k observed values nearest to the predicted missing value from a donor pool of complete observations. We used donor pools of size k=5 according to Heitjan and Little (1991). When doing imputation by chained equations, each of the imputed variables serve as predictors in the imputation regression models for all other imputed variables. Additionally, age, race/ethnicity, and sex at birth, completed through other sources, were included in the imputation models to improve matching.

Predictive mean matching can be considered a more general form of hot-deck imputation, in which missing values are imputed by matching non-respondents to respondents only through categorical predictors. These matching-imputation methods are attractive because they recreate distributions well by using observed values for imputations and because they are somewhat more robust to misspecification of the imputation model (e.g. normality assumption violation) than parametric imputation methods (Morris et al., 2014). For each of the variables that were imputed, both the original/un-imputed and imputed versions are available in the dataset.

* The remaining 5 (out of 15) respondents with a missing current gender identity on the Generations survey (w1gender) had their gender identities imputed using Predictive Mean Matching.
* The remaining 17 (out of 40) respondents with a missing household income were imputed using Predictive Mean Matching.
* 42 respondents were missing a personal income. All 42 were imputed using Predictive Mean Matching.

## Sample weight

Final sample weights are available for use with the data. When applied, results from analyses are generalizable to the U.S. population of LGB adults ages 18-25, 34-41, and 52-59 during data collection. The two sample weights are: **w1weight\_full** and **w1weight\_orig**. w1weight\_full is to be used for analyses using the full sample (original plus extended sample). w1weight\_orig is only to be used for analyses using the original sample only. Additionally, Gallup created the weights in a step-wise fashion, described below. Interim weights (w1int\_cumulative\_wt\_nr1, w1int\_cumulative\_wt\_nr2, w1int\_cumulative\_wt\_nr3, w1int\_cumulative\_wt\_sampling, w1int\_frame\_wt, w1int\_weighting\_cell\_nr1, w1int\_weighting\_cell\_nr2and3) also available in the dataset, but are not to be used for analysis. There are no stratification or cluster weights.

In Stata, the sample weight can be applied to analyses using the “svy” command. The dataset has already been survey set for use with **w1weight\_full** using the following command: svyset \_n [pweight=w1weight\_full]

*Base Weights:*

The base weights for this study were calculated for the Daily Tracking Frame for the timeframe included in this study in multiple stages. The entire frame, selected as an RDD sample, was initially weighted to represent 18+ US population. The weighting process accounted for multiple stages of selection and non-response.

*Non-Response Stage 1:*

The first stage of non-response accounted for respondents agreeing to be re- contacted by Gallup for follow-up studies. Non-response adjustment cells were created based on demographic characteristics defined as Hispanic x Region x Age x Gender x Education. For nonresponse adjustments, the inverse of weighted response rates (weighted by base weight) for each cell was used as the non- response adjustment factor.

*Non-Response Stage 2:*

The second stage of non-response accounted for respondents who were deemed eligible for the LGB study agreeing to be re-contacted for this study. Non-response adjustment cells were created based on demographic characteristics defined as Age x Gender x Region x Education. For nonresponse adjustments, the inverse of weighted response rates (weighted by cumulative weight) for each cell was used as the non-response adjustment factor. All respondents who agreed to participate in the study at this stage were sampled so every eligible person had an equal selection probability.

*Non-Response Stage 3:*

The third and final stage of non-response accounted for respondents who were sampled and did not complete the survey. Non-response adjustment cells were created based on demographic characteristics defined as Age x Gender x Region x Education. For nonresponse adjustments, the inverse of weighted response rates (weighted by cumulative weight) for each cell was used as the non-response adjustment factor. The Final AAPOR response rate for the study was 4.7%.

*Post Stratification Adjustment:*

The final step was a post-stratification adjustment to targets for the LGBT community obtained from weighted estimates using the Gallup Daily Tracking surveys. Non-Response Adjusted Weights were post-stratified to targets for LGBT population were created for age, gender, education, race/ethnicity and region.

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**Appendix 1: Information Sheet (Beginning with Wave 3 Survey)**

**Identity Stress and Health in Three Cohorts of LGB individuals**

**Consent Information Sheet Generations Study**

The *Generations* survey is the first long-term, five-year study to examine the health and well-being of lesbians, gay men, and bisexuals (LGB) across three generations. The survey explores identity, stress, health outcomes, and health care among LGBs from different age groups.

You were selected as a participant in this survey because you are 18 years or older and because you recently told Gallup you were willing to participate in this study. Your participation in this research survey is completely voluntary and you can skip any question you do not want to answer. Your participation in this survey is completely anonymous.

The information you provide will be kept confidential and will be kept separate from your identifying information including your name, email address, or home address. Information will only be reported in the aggregate.

Information about you is protected by a federal Certificate of Confidentiality.  This means that we can’t be forced to release information about you for any legal proceeding, even if a court of law asks.

The Certificate allows us to use information about you for purposes of this research, or to disclose it for other research when allowed by law.  The Certificate requires other researchers to also protect information we share with them.

There are limits to this protection.  The Certificate does not protect your information when:

* You or your family voluntarily release information about yourselves.
* You consent to release of information (for example, the uses described in this form or if you sign release forms for employment, insurance or medical care).
* A federal agency audits or evaluates research that it funds.

As a token of our appreciation you will receive $25 for your participation in this survey.

If you have any questions about this research, maycontact the survey’s primary investigator, Dr. Ilan Meyer at meyer@law.ucla.edu, call (310) 825-7270, or write to him at The Williams Institute UCLA School of Law, Box 951476, Los Angeles, CA 90095.

**UCLA Office of the Human Research Protection Program (OHRPP):**

If you have questions about your rights as a research subject, or you have concerns or suggestions and you want to talk to someone other than the researchers, you may contact the UCLA OHRPP by phone: (310) 206-2040; by email: participants@research.ucla.edu or by mail: Box 951406, Los Angeles, CA 90095-1406.

**Appendix 2: Scale reliability (Cronbach's a) by total sample, sex at birth, cohort, race/ethnicity**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Scale*** | ***Total Sample*** | ***Sex at Birth*** | ***Cohort*** | ***Race/Ethnicity*** |
|   |   | Female | Male | Younger | Middle | Older | White | Black/ African American | Latino/ Hispanic |
| ***Multi-Group Ethnic Identity*** | 0.86 | 0.85 | 0.86 | 0.87 | 0.85 | 0.82 | 0.82 | 0.83 | 0.89 |
| ***Sexual Identity Centrality*** | 0.81 | 0.83 | 0.80 | 0.80 | 0.80 | 0.84 | 0.84 | 0.75 | 0.75 |
| ***Community Connectedness*** | 0.86 | 0.87 | 0.86 | 0.85 | 0.86 | 0.87 | 0.86 | 0.85 | 0.86 |
| ***Healthcare Stereotype Threat*** | 0.90 | 0.89 | 0.91 | 0.90 | 0.90 | 0.91 | 0.90 | 0.91 | 0.89 |
| ***Mental Disability*** | 0.89 | 0.89 | 0.88 | 0.86 | 0.87 | 0.89 | 0.89 | 0.88 | 0.89 |
| ***Alcohol Use*** | 0.68 | 0.65 | 0.69 | 0.70 | 0.66 | 0.68 | 0.66 | 0.75 | 0.68 |
| ***Drug Use*** | 0.85 | 0.85 | 0.85 | 0.86 | 0.87 | 0.81 | 0.84 | 0.86 | 0.86 |
| ***Felt Stigma*** | 0.70 | 0.69 | 0.71 | 0.71 | 0.73 | 0.67 | 0.74 | 0.64 | 0.64 |
| ***Internalized Homophobia*** | 0.76 | 0.73 | 0.77 | 0.76 | 0.76 | 0.73 | 0.74 | 0.78 | 0.76 |
| ***Everyday Discrimination*** | 0.91 | 0.91 | 0.91 | 0.90 | 0.91 | 0.90 | 0.90 | 0.91 | 0.90 |
| ***Chronic Strains*** | 0.79 | 0.79 | 0.80 | 0.78 | 0.80 | 0.81 | 0.78 | 0.81 | 0.81 |
| ***Childhood Gender Conformity*** | 0.75 | 0.75 | 0.72 | 0.75 | 0.78 | 0.72 | 0.72 | 0.81 | 0.76 |
| ***Adverse Childhood Experiences*** | 0.77 | 0.79 | 0.74 | 0.76 | 0.81 | 0.76 | 0.77 | 0.76 | 0.76 |
| ***Social Support*** | 0.93 | 0.92 | 0.92 | 0.91 | 0.93 | 0.94 | 0.93 | 0.92 | 0.92 |
| ***Social Well-Being*** | 0.81 | 0.81 | 0.81 | 0.80 | 0.80 | 0.83 | 0.83 | 0.77 | 0.79 |
| ***Satisfaction with Life*** | 0.91 | 0.90 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |

**Appendix 3: Missing values for each variable in Wave 1 dataset.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Missing** | **Total** | **Percent Missing** |
| studyid | 0 | 1,536 | 0.00 |
| w1weight\_ext | 0 | 1,536 | 0.00 |
| weight | 0 | 1,345 | 0.00 |
| cohort | 16 | 1,536 | 1.04 |
| geduc1 | 0 | 1,536 | 0.00 |
| geduc2 | 0 | 1,536 | 0.00 |
| geducation | 0 | 1,536 | 0.00 |
| gemploy~2010 | 67 | 1,536 | 4.36 |
| gmethod\_type | 0 | 1,536 | 0.00 |
| gmsaname | 0 | 1,536 | 0.00 |
| gp1 | 99 | 1,536 | 6.45 |
| gruca | 23 | 1,536 | 1.50 |
| gruca\_i | 0 | 1,536 | 0.00 |
| gurban | 23 | 1,536 | 1.50 |
| gurban\_i | 0 | 1,536 | 0.00 |
| gzipcode | 14 | 1,536 | 0.91 |
| gzipstate | 0 | 1,536 | 0.00 |
| gcendiv | 0 | 1,536 | 0.00 |
| gcenreg | 0 | 1,536 | 0.00 |
| gmilesaway | 18 | 1,536 | 1.17 |
| gmilesaway2 | 18 | 1,536 | 1.17 |
| w1survey\_yr | 0 | 1,536 | 0.00 |
| w1q01 | 14 | 1,536 | 0.91 |
| w1q02 | 12 | 1,536 | 0.78 |
| w1q03 | 50 | 1,536 | 3.26 |
| w1q04 | 13 | 1,536 | 0.85 |
| w1q05 | 13 | 1,536 | 0.85 |
| w1q06 | 14 | 1,536 | 0.91 |
| w1q07 | 16 | 1,536 | 1.04 |
| w1q08 | 19 | 1,536 | 1.24 |
| w1q09 | 17 | 1,536 | 1.11 |
| w1q10 | 17 | 1,536 | 1.11 |
| w1q11 | 14 | 1,536 | 0.91 |
| w1q12 | 17 | 1,536 | 1.11 |
| w1q13 | 17 | 1,536 | 1.11 |
| w1q14 | 21 | 1,536 | 1.37 |
| w1q15 | 18 | 1,536 | 1.17 |
| w1q16 | 16 | 1,536 | 1.04 |
| w1q17 | 18 | 1,536 | 1.17 |
| w1q18 | 22 | 1,536 | 1.43 |
| w1q190 | 15 | 1,536 | 0.98 |
| w1q19a | 18 | 1,536 | 1.17 |
| w1q19b | 19 | 1,536 | 1.24 |
| w1q19c | 30 | 1,536 | 1.95 |
| w1q19d | 24 | 1,536 | 1.56 |
| w1q20\_1 | 1,499 | 1,536 | 97.59 |
| w1q20\_2 | 1,276 | 1,536 | 83.07 |
| w1q20\_3 | 1,253 | 1,536 | 81.58 |
| w1q20\_4 | 1,522 | 1,536 | 99.09 |
| w1q20\_5 | 1,527 | 1,536 | 99.41 |
| w1q20\_6 | 400 | 1,536 | 26.04 |
| w1q20\_7 | 1,482 | 1,536 | 96.48 |
| w1q20\_t\_verb | 0 | 1,536 | 0.00 |
| w1q21 | 15 | 1,536 | 0.98 |
| w1q22 | 19 | 1,536 | 1.24 |
| w1q23 | 19 | 1,536 | 1.24 |
| w1q24 | 22 | 1,536 | 1.43 |
| w1q25 | 18 | 1,536 | 1.17 |
| w1q26 | 18 | 1,536 | 1.17 |
| w1q27 | 22 | 1,536 | 1.43 |
| w1q28 | 15 | 1,536 | 0.98 |
| w1q29 | 13 | 1,536 | 0.85 |
| w1q29\_t\_verb | 0 | 1,536 | 0.00 |
| w1q30\_1 | 860 | 1,536 | 55.99 |
| w1q30\_2 | 514 | 1,536 | 33.46 |
| w1q30\_3 | 1,492 | 1,536 | 97.14 |
| w1q30\_4 | 1,487 | 1,536 | 96.81 |
| w1q30\_5 | 1,376 | 1,536 | 89.58 |
| w1q31a | 28 | 1,536 | 1.82 |
| w1q31b | 23 | 1,536 | 1.50 |
| w1q31c | 47 | 1,536 | 3.06 |
| w1q31d | 43 | 1,536 | 2.80 |
| w1q32 | 19 | 1,536 | 1.24 |
| w1q33 | 610 | 1,536 | 39.71 |
| w1q34 | 603 | 1,536 | 39.26 |
| w1q35 | 605 | 1,536 | 39.39 |
| w1q36 | 604 | 1,536 | 39.32 |
| w1q37 | 13 | 1,536 | 0.85 |
| w1q38 | 11 | 1,536 | 0.72 |
| w1q39\_1 | 1,356 | 1,536 | 88.28 |
| w1q39\_10 | 1,118 | 1,536 | 72.79 |
| w1q39\_11 | 937 | 1,536 | 61.00 |
| w1q39\_12 | 1,466 | 1,536 | 95.44 |
| w1q39\_2 | 1,382 | 1,536 | 89.97 |
| w1q39\_3 | 1,357 | 1,536 | 88.35 |
| w1q39\_4 | 1,363 | 1,536 | 88.74 |
| w1q39\_5 | 1,393 | 1,536 | 90.69 |
| w1q39\_6 | 1,437 | 1,536 | 93.55 |
| w1q39\_7 | 1,471 | 1,536 | 95.77 |
| w1q39\_8 | 1,290 | 1,536 | 83.98 |
| w1q39\_9 | 1,290 | 1,536 | 83.98 |
| w1q39\_t\_verb | 0 | 1,536 | 0.00 |
| w1q40 | 15 | 1,536 | 0.98 |
| w1q41 | 15 | 1,536 | 0.98 |
| w1q42 | 12 | 1,536 | 0.78 |
| w1q43 | 17 | 1,536 | 1.11 |
| w1q44 | 14 | 1,536 | 0.91 |
| w1q45 | 21 | 1,536 | 1.37 |
| w1q46 | 22 | 1,536 | 1.43 |
| w1q47 | 30 | 1,536 | 1.95 |
| w1q48 | 38 | 1,536 | 2.47 |
| w1q49 | 30 | 1,536 | 1.95 |
| w1q50 | 41 | 1,536 | 2.67 |
| w1q51 | 34 | 1,536 | 2.21 |
| w1q52 | 24 | 1,536 | 1.56 |
| w1q53 | 14 | 1,536 | 0.91 |
| w1q54 | 31 | 1,536 | 2.02 |
| w1q55 | 20 | 1,536 | 1.30 |
| w1q56 | 20 | 1,536 | 1.30 |
| w1q57 | 22 | 1,536 | 1.43 |
| w1q58 | 18 | 1,536 | 1.17 |
| w1q59 | 15 | 1,536 | 0.98 |
| w1q60 | 15 | 1,536 | 0.98 |
| w1q61 | 21 | 1,536 | 1.37 |
| w1q62 | 20 | 1,536 | 1.30 |
| w1q63 | 20 | 1,536 | 1.30 |
| w1q64\_1 | 1,413 | 1,536 | 91.99 |
| w1q64\_2 | 994 | 1,536 | 64.71 |
| w1q64\_3 | 1,435 | 1,536 | 93.42 |
| w1q64\_4 | 1,147 | 1,536 | 74.67 |
| w1q64\_5 | 1,525 | 1,536 | 99.28 |
| w1q64\_6 | 1,446 | 1,536 | 94.14 |
| w1q64\_7 | 1,489 | 1,536 | 96.94 |
| w1q64\_8 | 1,462 | 1,536 | 95.18 |
| w1q64\_9 | 1,340 | 1,536 | 87.24 |
| w1q64\_10 | 1,512 | 1,536 | 98.44 |
| w1q64\_11 | 1,516 | 1,536 | 98.70 |
| w1q64\_12 | 1,536 | 1,536 | 100.00 |
| w1q64\_13 | 1,491 | 1,536 | 97.07 |
| w1q64\_t\_verb | 0 | 1,536 | 0.00 |
| w1q65 | 24 | 1,536 | 1.56 |
| w1q66\_1 | 955 | 1,536 | 62.17 |
| w1q66\_2 | 590 | 1,536 | 38.41 |
| w1q66\_3 | 1,309 | 1,536 | 85.22 |
| w1q66\_4 | 1,434 | 1,536 | 93.36 |
| w1q66\_5 | 1,459 | 1,536 | 94.99 |
| w1q66\_t\_verb | 0 | 1,536 | 0.00 |
| w1q67 | 30 | 1,536 | 1.95 |
| w1q68\_1 | 1,135 | 1,536 | 73.89 |
| w1q68\_2 | 1,363 | 1,536 | 88.74 |
| w1q68\_3 | 453 | 1,536 | 29.49 |
| w1q69 | 21 | 1,536 | 1.37 |
| w1q70 | 20 | 1,536 | 1.30 |
| w1q71 | 41 | 1,536 | 2.67 |
| w1q72 | 31 | 1,536 | 2.02 |
| w1q73 | 37 | 1,536 | 2.41 |
| w1q74\_1 | 1,196 | 1,536 | 77.86 |
| w1q74\_2 | 1,232 | 1,536 | 80.21 |
| w1q74\_3 | 1,465 | 1,536 | 95.38 |
| w1q74\_4 | 1,529 | 1,536 | 99.54 |
| w1q74\_5 | 1,522 | 1,536 | 99.09 |
| w1q74\_6 | 1,521 | 1,536 | 99.02 |
| w1q74\_7 | 1,526 | 1,536 | 99.35 |
| w1q74\_8 | 1,273 | 1,536 | 82.88 |
| w1q74\_9 | 1,454 | 1,536 | 94.66 |
| w1q74\_10 | 1,461 | 1,536 | 95.12 |
| w1q74\_11 | 1,444 | 1,536 | 94.01 |
| w1q74\_12 | 1,415 | 1,536 | 92.12 |
| w1q74\_13 | 1,337 | 1,536 | 87.04 |
| w1q74\_14 | 1,504 | 1,536 | 97.92 |
| w1q74\_15 | 1,500 | 1,536 | 97.66 |
| w1q74\_16 | 1,406 | 1,536 | 91.54 |
| w1q74\_17 | 1,502 | 1,536 | 97.79 |
| w1q74\_18 | 1,507 | 1,536 | 98.11 |
| w1q74\_19 | 1,516 | 1,536 | 98.70 |
| w1q74\_20 | 1,517 | 1,536 | 98.76 |
| w1q74\_21 | 1,457 | 1,536 | 94.86 |
| w1q74\_22 | 1,349 | 1,536 | 87.83 |
| w1q74\_23 | 1,191 | 1,536 | 77.54 |
| w1q75 | 23 | 1,536 | 1.50 |
| w1q76 | 18 | 1,536 | 1.17 |
| w1q77a | 10 | 1,536 | 0.65 |
| w1q77b | 19 | 1,536 | 1.24 |
| w1q77c | 14 | 1,536 | 0.91 |
| w1q77d | 13 | 1,536 | 0.85 |
| w1q77e | 17 | 1,536 | 1.11 |
| w1q77f | 13 | 1,536 | 0.85 |
| w1q78 | 22 | 1,536 | 1.43 |
| w1q79 | 19 | 1,536 | 1.24 |
| w1q80 | 93 | 1,536 | 6.05 |
| w1q81 | 90 | 1,536 | 5.86 |
| w1q82 | 85 | 1,536 | 5.53 |
| w1q83 | 17 | 1,536 | 1.11 |
| w1q84 | 15 | 1,536 | 0.98 |
| w1q85 | 14 | 1,536 | 0.91 |
| w1q86 | 11 | 1,536 | 0.72 |
| w1q87 | 12 | 1,536 | 0.78 |
| w1q88 | 16 | 1,536 | 1.04 |
| w1q89 | 852 | 1,536 | 55.47 |
| w1q90 | 19 | 1,536 | 1.24 |
| w1q91 | 20 | 1,536 | 1.30 |
| w1q92 | 23 | 1,536 | 1.50 |
| w1q93 | 24 | 1,536 | 1.56 |
| w1q94 | 15 | 1,536 | 0.98 |
| w1q95 | 17 | 1,536 | 1.11 |
| w1q96 | 24 | 1,536 | 1.56 |
| w1q97 | 21 | 1,536 | 1.37 |
| w1q98 | 22 | 1,536 | 1.43 |
| w1q99 | 22 | 1,536 | 1.43 |
| w1q100 | 19 | 1,536 | 1.24 |
| w1q101 | 18 | 1,536 | 1.17 |
| w1q102 | 1,234 | 1,536 | 80.34 |
| w1q103 | 773 | 1,536 | 50.33 |
| w1q104 | 773 | 1,536 | 50.33 |
| w1q105 | 20 | 1,536 | 1.30 |
| w1q106 | 1,234 | 1,536 | 80.34 |
| w1q107 | 1,227 | 1,536 | 79.88 |
| w1q108 | 1,233 | 1,536 | 80.27 |
| w1q109 | 28 | 1,536 | 1.82 |
| w1q110 | 1,181 | 1,536 | 76.89 |
| w1q111 | 1,048 | 1,536 | 68.23 |
| w1q112 | 1,050 | 1,536 | 68.36 |
| w1q113 | 20 | 1,536 | 1.30 |
| w1q114 | 1,205 | 1,536 | 78.45 |
| w1q115 | 1,281 | 1,536 | 83.40 |
| w1q116 | 1,418 | 1,536 | 92.32 |
| w1q117 | 1,418 | 1,536 | 92.32 |
| w1q118 | 1,164 | 1,536 | 75.78 |
| w1q119 | 26 | 1,536 | 1.69 |
| w1q120 | 1,386 | 1,536 | 90.23 |
| w1q121 | 1,114 | 1,536 | 72.53 |
| w1q122 | 1,111 | 1,536 | 72.33 |
| w1q123a | 15 | 1,536 | 0.98 |
| w1q123b | 14 | 1,536 | 0.91 |
| w1q123c | 19 | 1,536 | 1.24 |
| w1q123d | 19 | 1,536 | 1.24 |
| w1q124 | 14 | 1,536 | 0.91 |
| w1q125 | 14 | 1,536 | 0.91 |
| w1q126 | 14 | 1,536 | 0.91 |
| w1q127 | 15 | 1,536 | 0.98 |
| w1q128 | 15 | 1,536 | 0.98 |
| w1q129 | 15 | 1,536 | 0.98 |
| w1q130 | 16 | 1,536 | 1.04 |
| w1q131 | 17 | 1,536 | 1.11 |
| w1q132 | 14 | 1,536 | 0.91 |
| w1q133 | 1,216 | 1,536 | 79.17 |
| w1q133\_1 | 428 | 1,536 | 27.86 |
| w1q133\_2 | 1,506 | 1,536 | 98.05 |
| w1q133\_3 | 1,463 | 1,536 | 95.25 |
| w1q134 | 1,426 | 1,536 | 92.84 |
| w1q135a | 15 | 1,536 | 0.98 |
| w1q135b | 18 | 1,536 | 1.17 |
| w1q135c | 18 | 1,536 | 1.17 |
| w1q135d | 21 | 1,536 | 1.37 |
| w1q135e | 18 | 1,536 | 1.17 |
| w1q135f | 16 | 1,536 | 1.04 |
| w1q136\_1 | 1,330 | 1,536 | 86.59 |
| w1q136\_2 | 1,138 | 1,536 | 74.09 |
| w1q136\_3 | 1,531 | 1,536 | 99.67 |
| w1q136\_4 | 1,345 | 1,536 | 87.57 |
| w1q136\_5 | 1,363 | 1,536 | 88.74 |
| w1q136\_6 | 1,404 | 1,536 | 91.41 |
| w1q136\_7 | 1,017 | 1,536 | 66.21 |
| w1q136\_8 | 1,195 | 1,536 | 77.80 |
| w1q136\_9 | 1,473 | 1,536 | 95.90 |
| w1q136\_10 | 1,480 | 1,536 | 96.35 |
| w1q137 | 17 | 1,536 | 1.11 |
| w1q138 | 17 | 1,536 | 1.11 |
| w1q139\_1 | 1,395 | 1,536 | 90.82 |
| w1q139\_2 | 1,399 | 1,536 | 91.08 |
| w1q139\_3 | 1,533 | 1,536 | 99.80 |
| w1q139\_4 | 1,463 | 1,536 | 95.25 |
| w1q139\_5 | 1,463 | 1,536 | 95.25 |
| w1q139\_6 | 1,437 | 1,536 | 93.55 |
| w1q139\_7 | 1,361 | 1,536 | 88.61 |
| w1q139\_8 | 1,438 | 1,536 | 93.62 |
| w1q139\_9 | 1,512 | 1,536 | 98.44 |
| w1q139\_10 | 1,465 | 1,536 | 95.38 |
| w1q140 | 19 | 1,536 | 1.24 |
| w1q141\_1 | 1,530 | 1,536 | 99.61 |
| w1q141\_2 | 1,529 | 1,536 | 99.54 |
| w1q141\_3 | 1,535 | 1,536 | 99.93 |
| w1q141\_4 | 1,532 | 1,536 | 99.74 |
| w1q141\_5 | 1,530 | 1,536 | 99.61 |
| w1q141\_6 | 1,522 | 1,536 | 99.09 |
| w1q141\_7 | 1,525 | 1,536 | 99.28 |
| w1q141\_8 | 1,533 | 1,536 | 99.80 |
| w1q141\_9 | 1,535 | 1,536 | 99.93 |
| w1q141\_10 | 1,533 | 1,536 | 99.80 |
| w1q142a | 17 | 1,536 | 1.11 |
| w1q142b | 18 | 1,536 | 1.17 |
| w1q142c | 15 | 1,536 | 0.98 |
| w1q142d | 24 | 1,536 | 1.56 |
| w1q142e | 18 | 1,536 | 1.17 |
| w1q142f | 18 | 1,536 | 1.17 |
| w1q142g | 21 | 1,536 | 1.37 |
| w1q142h | 20 | 1,536 | 1.30 |
| w1q142i | 22 | 1,536 | 1.43 |
| w1q142j | 19 | 1,536 | 1.24 |
| w1q142k | 17 | 1,536 | 1.11 |
| w1q143\_1 | 1,335 | 1,536 | 86.91 |
| w1q143\_2 | 1,350 | 1,536 | 87.89 |
| w1q143\_3 | 1,532 | 1,536 | 99.74 |
| w1q143\_4 | 1,468 | 1,536 | 95.57 |
| w1q143\_5 | 1,436 | 1,536 | 93.49 |
| w1q143\_6 | 1,326 | 1,536 | 86.33 |
| w1q143\_7 | 1,354 | 1,536 | 88.15 |
| w1q143\_8 | 1,412 | 1,536 | 91.93 |
| w1q143\_9 | 1,499 | 1,536 | 97.59 |
| w1q143\_10 | 1,449 | 1,536 | 94.34 |
| w1q144a | 14 | 1,536 | 0.91 |
| w1q144b | 14 | 1,536 | 0.91 |
| w1q144c | 17 | 1,536 | 1.11 |
| w1q144d | 21 | 1,536 | 1.37 |
| w1q144e | 16 | 1,536 | 1.04 |
| w1q144f | 20 | 1,536 | 1.30 |
| w1q144g | 17 | 1,536 | 1.11 |
| w1q144h | 18 | 1,536 | 1.17 |
| w1q144i | 14 | 1,536 | 0.91 |
| w1q145\_1 | 1,134 | 1,536 | 73.83 |
| w1q145\_2 | 1,068 | 1,536 | 69.53 |
| w1q145\_3 | 1,528 | 1,536 | 99.48 |
| w1q145\_4 | 1,322 | 1,536 | 86.07 |
| w1q145\_5 | 1,238 | 1,536 | 80.60 |
| w1q145\_6 | 1,286 | 1,536 | 83.72 |
| w1q145\_7 | 1,109 | 1,536 | 72.20 |
| w1q145\_8 | 1,149 | 1,536 | 74.80 |
| w1q145\_9 | 1,459 | 1,536 | 94.99 |
| w1q145\_10 | 1,434 | 1,536 | 93.36 |
| w1q146a | 16 | 1,536 | 1.04 |
| w1q146b | 15 | 1,536 | 0.98 |
| w1q146c | 19 | 1,536 | 1.24 |
| w1q146d | 24 | 1,536 | 1.56 |
| w1q146e | 17 | 1,536 | 1.11 |
| w1q146f | 18 | 1,536 | 1.17 |
| w1q146g | 18 | 1,536 | 1.17 |
| w1q146h | 15 | 1,536 | 0.98 |
| w1q146i | 16 | 1,536 | 1.04 |
| w1q146j | 16 | 1,536 | 1.04 |
| w1q146k | 16 | 1,536 | 1.04 |
| w1q146l | 17 | 1,536 | 1.11 |
| w1q147 | 102 | 1,536 | 6.64 |
| w1q148 | 151 | 1,536 | 9.83 |
| w1q149 | 129 | 1,536 | 8.40 |
| w1q150 | 203 | 1,536 | 13.22 |
| w1q151 | 20 | 1,536 | 1.30 |
| w1q152 | 19 | 1,536 | 1.24 |
| w1q153 | 21 | 1,536 | 1.37 |
| w1q154 | 22 | 1,536 | 1.43 |
| w1q155 | 16 | 1,536 | 1.04 |
| w1q156 | 19 | 1,536 | 1.24 |
| w1q157 | 16 | 1,536 | 1.04 |
| w1q158 | 18 | 1,536 | 1.17 |
| w1q159 | 25 | 1,536 | 1.63 |
| w1q160 | 23 | 1,536 | 1.50 |
| w1q161 | 24 | 1,536 | 1.56 |
| w1q162 | 19 | 1,536 | 1.24 |
| w1q163\_1 | 1,295 | 1,536 | 84.31 |
| w1q163\_2 | 1,233 | 1,536 | 80.27 |
| w1q163\_3 | 1,533 | 1,536 | 99.80 |
| w1q163\_4 | 1,228 | 1,536 | 79.95 |
| w1q163\_5 | 1,353 | 1,536 | 88.09 |
| w1q163\_6 | 1,336 | 1,536 | 86.98 |
| w1q163\_7 | 1,134 | 1,536 | 73.83 |
| w1q163\_8 | 770 | 1,536 | 50.13 |
| w1q163\_9 | 1,461 | 1,536 | 95.12 |
| w1q163\_10 | 1,466 | 1,536 | 95.44 |
| w1q164a | 19 | 1,536 | 1.24 |
| w1q164b | 23 | 1,536 | 1.50 |
| w1q164c | 22 | 1,536 | 1.43 |
| w1q164d | 19 | 1,536 | 1.24 |
| w1q164e | 21 | 1,536 | 1.37 |
| w1q164f | 21 | 1,536 | 1.37 |
| w1q164g | 24 | 1,536 | 1.56 |
| w1q164h | 18 | 1,536 | 1.17 |
| w1q164i | 22 | 1,536 | 1.43 |
| w1q164j | 21 | 1,536 | 1.37 |
| w1q164k | 22 | 1,536 | 1.43 |
| w1q164l | 22 | 1,536 | 1.43 |
| w1q165 | 19 | 1,536 | 1.24 |
| w1q166 | 21 | 1,536 | 1.37 |
| w1q167 | 22 | 1,536 | 1.43 |
| w1q168 | 17 | 1,536 | 1.11 |
| w1q169 | 16 | 1,536 | 1.04 |
| w1q170\_1 | 1,380 | 1,536 | 89.84 |
| w1q170\_2 | 1,505 | 1,536 | 97.98 |
| w1q170\_3 | 1,487 | 1,536 | 96.81 |
| w1q170\_4 | 1,428 | 1,536 | 92.97 |
| w1q171\_1 | 828 | 1,536 | 53.91 |
| w1q171\_2 | 1,259 | 1,536 | 81.97 |
| w1q171\_3 | 1,359 | 1,536 | 88.48 |
| w1q171\_4 | 1,479 | 1,536 | 96.29 |
| w1q171\_5 | 1,446 | 1,536 | 94.14 |
| w1q171\_6 | 1,483 | 1,536 | 96.55 |
| w1q171\_7 | 1,203 | 1,536 | 78.32 |
| w1q171\_8 | 1,490 | 1,536 | 97.01 |
| w1q171\_9 | 1,401 | 1,536 | 91.21 |
| w1q172 | 40 | 1,536 | 2.60 |
| w1q173 | 32 | 1,536 | 2.08 |
| w1q174 | 42 | 1,536 | 2.73 |
| w1q175 | 45 | 1,536 | 2.93 |
| w1q176 | 24 | 1,536 | 1.56 |
| w1q177\_1 | 929 | 1,536 | 60.48 |
| w1q177\_2 | 949 | 1,536 | 61.78 |
| w1q177\_3 | 1,379 | 1,536 | 89.78 |
| w1q177\_4 | 1,132 | 1,536 | 73.70 |
| w1q177\_5 | 1,429 | 1,536 | 93.03 |
| w1q177\_6 | 1,515 | 1,536 | 98.63 |
| w1q177\_7 | 1,531 | 1,536 | 99.67 |
| w1q177\_8 | 1,535 | 1,536 | 99.93 |
| w1q177\_9 | 1,534 | 1,536 | 99.87 |
| w1q177\_10 | 1,435 | 1,536 | 93.42 |
| w1q177\_11 | 1,533 | 1,536 | 99.80 |
| w1q177\_12 | 1,505 | 1,536 | 97.98 |
| w1q178 | 17 | 1,536 | 1.11 |
| w1q179 | 24 | 1,536 | 1.56 |
| w1q180 | 21 | 1,536 | 1.37 |
| w1q181 | 19 | 1,536 | 1.24 |
| w1q182 | 24 | 1,536 | 1.56 |
| w1q183 | 1,461 | 1,536 | 95.12 |
| w1q184 | 1,485 | 1,536 | 96.68 |
| w1q185 | 1,484 | 1,536 | 96.61 |
| w1q186 | 14 | 1,536 | 0.91 |
| w1q187 | 14 | 1,536 | 0.91 |
| w1q188 | 16 | 1,536 | 1.04 |
| w1q189 | 17 | 1,536 | 1.11 |
| screen\_race | 0 | 1,536 | 0.00 |
| w1race | 0 | 1,536 | 0.00 |
| w1sample | 0 | 1,536 | 0.00 |
| w1sex | 0 | 1,536 | 0.00 |
| w1gender | 0 | 1,536 | 0.00 |
| w1sex\_gender | 0 | 1,536 | 0.00 |
| w1age | 0 | 1,536 | 0.00 |
| w1sexualid | 0 | 1,536 | 0.00 |
| w1sexminid | 11 | 1,536 | 0.72 |
| w1pinc | 0 | 1,536 | 0.00 |
| w1hinc | 0 | 1,536 | 0.00 |
| w1poverty | 27 | 1,536 | 1.76 |
| w1povertycat | 27 | 1,536 | 1.76 |
| w1conversion | 0 | 1,536 | 0.00 |
| w1conversi~c | 0 | 1,536 | 0.00 |
| w1conversi~l | 0 | 1,536 | 0.00 |
| w1ace | 279 | 1,536 | 18.16 |
| w1ace\_i | 0 | 1,536 | 0.00 |
| w1ace\_emo | 91 | 1,536 | 5.92 |
| w1ace\_emo\_i | 0 | 1,536 | 0.00 |
| w1ace\_inc | 22 | 1,536 | 1.43 |
| w1ace\_inc\_i | 0 | 1,536 | 0.00 |
| w1ace\_ipv | 140 | 1,536 | 9.11 |
| w1ace\_ipv\_i | 0 | 1,536 | 0.00 |
| w1ace\_men | 20 | 1,536 | 1.30 |
| w1ace\_men\_i | 0 | 1,536 | 0.00 |
| w1ace\_phy | 62 | 1,536 | 4.04 |
| w1ace\_phy\_i | 0 | 1,536 | 0.00 |
| w1ace\_sep | 16 | 1,536 | 1.04 |
| w1ace\_sep\_i | 0 | 1,536 | 0.00 |
| w1ace\_sex | 75 | 1,536 | 4.88 |
| w1ace\_sex\_i | 0 | 1,536 | 0.00 |
| w1ace\_sub | 21 | 1,536 | 1.37 |
| w1ace\_sub\_i | 0 | 1,536 | 0.00 |
| w1auditc | 15 | 1,536 | 0.98 |
| w1auditc\_i | 0 | 1,536 | 0.00 |
| w1childgnc | 0 | 1,536 | 0.00 |
| w1childgnc\_i | 0 | 1,536 | 0.00 |
| w1chronic | 50 | 1,536 | 3.26 |
| w1chronic\_i | 0 | 1,536 | 0.00 |
| w1connecte~s | 52 | 1,536 | 3.39 |
| w1connecte~i | 0 | 1,536 | 0.00 |
| w1dudit | 66 | 1,536 | 4.30 |
| w1dudit\_i | 0 | 1,536 | 0.00 |
| w1everyday | 40 | 1,536 | 2.60 |
| w1everyday\_i | 0 | 1,536 | 0.00 |
| w1feltstigma | 17 | 1,536 | 1.11 |
| w1feltstig~i | 0 | 1,536 | 0.00 |
| w1hcthreat | 28 | 1,536 | 1.82 |
| w1hcthreat\_i | 0 | 1,536 | 0.00 |
| w1idcentral | 23 | 1,536 | 1.50 |
| w1idcentra~i | 0 | 1,536 | 0.00 |
| w1internal~d | 29 | 1,536 | 1.89 |
| w1internal~i | 0 | 1,536 | 0.00 |
| w1kessler6 | 27 | 1,536 | 1.76 |
| w1kessler6\_i | 0 | 1,536 | 0.00 |
| w1lifesat | 25 | 1,536 | 1.63 |
| w1lifesat\_i | 0 | 1,536 | 0.00 |
| w1meim | 31 | 1,536 | 2.02 |
| w1meim\_i | 0 | 1,536 | 0.00 |
| w1socialwb | 60 | 1,536 | 3.91 |
| w1socialwb\_i | 0 | 1,536 | 0.00 |
| w1socsupport | 47 | 1,536 | 3.06 |
| w1socsuppo~m | 28 | 1,536 | 1.82 |
| w1socsup~m\_i | 0 | 1,536 | 0.00 |
| w1socsuppo~r | 31 | 1,536 | 2.02 |
| w1socsup~r\_i | 0 | 1,536 | 0.00 |
| w1socsup~t\_i | 0 | 1,536 | 0.00 |
| w1socsuppo~o | 28 | 1,536 | 1.82 |
| w1socsup~o\_i | 0 | 1,536 | 0.00 |

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2. To increase the sample size of Black and Latino respondents in the sample, baseline recruitment for these groups was extended until March 30, 2018. Once recruitment has been completed, the additional respondents will be added to the final Generations baseline dataset, and the final dataset will be re- weighted. [↑](#footnote-ref-2)
3. This means, for example, that a respondent identifying as both Latino and American Indian would be recoded as Latino. Similarly, respondents identifying as both Black and White were recoded as Black, and respondents identifying as White and Asian were recoded as White. However, a respondent identifying as both Asian and American Indian would not have been eligible for the study. Eligibility restrictions based on race/ethnicity were implemented to ensure sufficient number of respondents in each category of race/ethnicity so that meaningful statistical analyses could be performed. Thus, for example, our a priori survey estimates, based on prior experience with Gallup respondents, showed that we could not recruit sufficient numbers of LGB Asian participants in each of the age/gender cells. [↑](#footnote-ref-3)
4. Participants were recruited for the parallel TransPop study simultaneously between March 8, 2016 – June 20, 2016 and January 1, 2017 – April 4, 2018. During this time, questions assessing current gender identity were included on the Gallup screen to determine whether respondents were routed either to the Generations (lesbian, gay, bisexual respondents who were not transgender) or TransPop study (transgender respondents, regardless of sexual orientation). Current gender identity on the Gallup screen was assessed with one of two questions. The first questions was “which of the following terms best describes your current gender identity?” Response options were: man, woman, non-binary/genderqueer. The second question was “Do you currently describe yourself as a man, a woman, or transgender?” Response options were: man, woman, transgender. [↑](#footnote-ref-4)
5. At the time the data were cleaned, 2018 poverty thresholds were not available. For the 29 respondents from the extended wave 1 sample who completed the Generations survey in 2018, their poverty statuses were calculated using 2017 poverty thresholds. [↑](#footnote-ref-5)