



Published in final edited form as:

Popul Res Policy Rev. 2023 August ; 42(4): . doi:10.1007/s11113-023-09799-7.

National Couples' Health and Time Study: Sample, Design, and Weighting

**Claire M. Kamp Dush^{1,2}, Wendy D. Manning³, Miranda N. Berrigan², Jenny Marlar⁴,
Alexandra VanBergen², Angelina Theodorou⁵, Dato Tsubutashvili⁴, Manas Chattopadhyay⁴**

¹Department of Sociology, The University of Minnesota Twin Cities

²Minnesota Population Center, The University of Minnesota Twin Cities

³Department of Sociology and Center for Family and Demographic Research, Bowling Green State University

⁴The Gallup Organization

⁵Remitly

Abstract

The National Couples' Health and Time Study (NCHAT) is the first fully powered, population-representative study of couples in America containing large samples of sexual, gender, and racial and ethnic diverse individuals. Drawn from the Gallup Panel and the Gallup Recontact Sample, when weighted, the data are population representative of individuals in the United States who (1) are married or cohabiting, (2) are between 20 and 60, (3) speak English or Spanish, and (4) have internet access. The data were collected between September 2020 and April 2021 in the midst of a global pandemic as well as racial and political upheaval. NCHAT includes surveys of 3,642 main respondents and 1,515 partners along with time diaries. We describe the sampling process, challenges weighting a diverse population-representative samples, and sociodemographic characteristics of the NCHAT study. These data will provide opportunities for new research on the health and well-being of American families.

Keywords

survey; population-representative; married; cohabiting; LGBTQ2S+

Eliminating health disparities for persons who are not cisgender, heterosexual, and/or White in the U.S. is critically important – literally a matter of life or death, of thriving or languishing. It is a stated priority of the National Institutes of Health (Health, 2021). Despite this, population data for examining the potential mechanisms underlying health disparities has been sorely lacking and under-powered. Our objective is to share the value of new, novel data from the National Couples' Health and Time Study (NCHAT) by contextualizing the data collection and providing an overview of the data; for further detail see NCHAT's

longer methodology report (Marlar et al., 2022). This paper describes the study's research design and data collection and documents the sociodemographic characteristics of NCHAT respondents.

2020 was unprecedented. The COVID-19 pandemic shut down the world in March, and the visual accounting of anti-Black violence in the murders of George Floyd, Ahmaud Arbery, and others led to a global civil rights uprising. The COVID-19 pandemic effects were not shared equally, and the pandemic exacerbated the health inequities experienced by sexual and gender, and racial and ethnic diverse, populations in the U.S. (Andrasfay & Goldman, 2021; Manning & Kamp Dush, 2022). In the midst of this extraordinary time, our team was just preparing to launch the National Couples' Health and Time Study (NCHAT; Kamp Dush & Manning, 2022). Inspired by another landmark study, the National Survey of Families and Households (NSFH; Sweet & Bumpass, 2002), which was fielded in 1988, we were in the midst of an ambitious effort to capture contemporary American families including fully powered samples of cohabiting and married families led by cis-heterosexual individuals, and those led by lesbian, gay, bisexual, transgender, queer or questioning, two-spirit, and additional sexual orientations and gender identities (LGBTQ2S+) individuals. By fully powered we mean that there would be a large enough sample size to observe significant variation among individuals and across groups to detect significant sources of inequality and health disparities. Further, we included a racially and ethnically diverse sample of families led by Asian, Black, Latina/o/x/e/Hispanic, Indigenous, and White persons in the U.S.

The primary goal of our Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) supported data collection was to provide the research community with a new data source to understand the health and well-being of sexual and gender diverse families. Most population representative datasets included too few sexual and gender diverse respondents for rigorous analyses of a broad age range at a single point in time. We selected Gallup as our survey partner because they could provide a large and representative sample of sexual and gender diverse respondents, and have been collecting high-quality, population-representative data for over 80 years. This was demonstrated in Meyer et al. (2020) partnership with Gallup to design a national probability sample of sexual minority adults. Our goal was to build on this effort and generate a main respondent and partner survey along with a time diary of cis-gender heterosexual and sexual and gender diverse adults. In 2018 our NCHAT team began work with Gallup to develop the research design for NCHAT and we worked with our advisory board members who are leaders in the field. The NCHAT team was diverse in terms of sexual and race/ethnicity identity, and the perspective of team members from underrepresented groups was prioritized from the earliest stages of study design to avoid "instrumental diversity" that enlists underrepresented researchers for instrumental goals such as recruitment, but does not involve them in study design and scientific decision making (Jeske et al., 2022). It took several months to design the survey because of the extensive set of measures tapping health and well-being and discrimination. Moreover, the survey needed to move beyond traditional family surveys by being gender-neutral and *not* cis-heteronormative. The entire team worked together to achieve this goal. Our initial survey was finished in May 2019. The initial plan was to draw on the Gallup Panel and collect the data over the course of two years. The Gallup Panel is a nationally representative probability-based sample of U.S. adults who have been contacted

by Gallup, a research consulting company, and have agreed to participate in survey research. Currently, 100,000 adults can be contacted through the web and mail, and another 500,000 can be contacted for a one-time study.

In addition to the main survey, we designed a self-report time diary that would be completed on a smartphone or the web, similar to the American Time Use Survey (Bureau of Labor Statistics, 2014). Respondents were assigned a specific day to complete the 24-hour time diary, including multitasking, and could use an IOS/Android mobile-phone platform application or computers to complete the time diary in real time. The time diary included experiencing sampling methods that asked respondents to report how happy, stressed, and engaged they felt during each activity. At the end of the time diary, respondents also reported if they experienced any discrimination during their day, how fatigued they felt during their time diary day, how well they slept, and what time they woke up the following day.

Crowdsourcing.

We collected feedback on this version of the survey by distributing it on listservs and tweeting requests for feedback. Feedback questions included “The current draft of the NCHAT survey will need to be cut by approximately 50%. What are the most important questions/questionnaires/concepts that we should keep and why?; Next, what should we cut and why?”; “Should any constructs in the current draft be measured differently? If so, why?”; “What constructive feedback do you have regarding the structure of the survey (e.g., order of questions, types of responses, etc.)?”; “What constructive feedback do you have regarding content not included in the survey? What important constructs are missing and why are they important? How should they be measured? Please provide references and additional measurement information.”; and “Do you have any other feedback?”

We received 53 responses from scholars in demography, human development and family science, higher education, public policy, social psychology, sociology, neuroscience, and research methodology. Feedback covered a wide range from “I think you should add transgender people to the attraction scale to help gauge transphobia” to changing the skip pattern so that everyone born a woman, regardless of their gender identity, is asked about pregnancy. Scholars who gave us feedback found instances where cis-heteronormativity was built into the survey. The crowdsourced feedback was incredibly helpful and assisted us as we revised and cut items from the survey to get it to a more manageable 40 minutes. Most Gallup Panel members fill out surveys no longer than 10 to 15 minutes, thus getting the survey to a shorter 40-minute length was critical. The initial survey was finalized in January 2020 and main respondents and their partners/spouses would receive identical versions of the survey.

COVID-19 Pandemic and Racial Trauma.

Prior to the expected launch of fieldwork in March 2020, the COVID-19 Pandemic forced lockdowns and momentous, historic changes to everyday life. Further, anti-Black violence, as evidenced by the murders of Black Americans by police in the Spring of 2020, George Floyd on May 25, 2020, and Ahmaud Arbery on May 7, 2020, led to a global civil

rights uprising. During the pandemic, anti-Asian bias escalated, resulting in violence and murders perpetrated against Asians, and Asians reported more discrimination than before the pandemic (Jeung et al., 2021; OCA-Asian Pacific American Advocates, 2020; Ruiz et al., 2020). Due to the COVID-19 pandemic and the civil rights uprising, the timeline for data collection was accelerated from two years to less than 9 months with the intent of collecting all data during the COVID-19 pandemic. See Figure 1 for a timeline of the NCHAT field work period.

The research team pivoted by reworking the study aims, shifting content, changing sampling strategies, and including oversamples to reflect unfolding societal-level changes that were occurring. We developed, and in some cases in conjunction with leaders in the field (Drs. Karen Benjamin Guzzo and Rachel Hardeman), new indicators and integrated established items (see Kamp Dush & Manning, 2020, for the survey). The pandemic-based measures included stress associated with the pandemic, coping and health behaviors, healthcare discrimination, work-family issues and topics (e.g., job loss/furlough, essential worker status, distance education and working from home; Gallup, 2019), shifting fertility plans, changes in the couple relationship, and COVID-19 status and testing. In addition, four questions measuring how the murders of Black Americans by police have influenced their stress, parenting, relationship with their spouse/partner, and attitudes about race in America as well as how stressed they are about how seven different people/groups of people (e.g., my children, people who are Black, people who are LGBTQ2S+) might be treated by police and the criminal justice system. As a result, some of the original survey items had to be removed to make space for the new items. The ensuing pilot testing was important given many of the measures had been newly developed. Further, additional sample of Asian Americans were added to the sample in March 2021.

Pilot testing.

Our team, in collaboration with Gallup, conducted cognitive interviews and two pilot tests of the survey and time diary with (1) Gallup Panel members who were in different-gender relationships and did not identify as LGBTQ2S+, and (2) individuals who identified as LGBTQ2S+ and were members of the personal networks of the study team. Gallup Panel members who were in same-gender relationships and/or identified as LGBT were reserved for the actual data collection. In May 2020, Gallup conducted ten cognitive interviews (six LGBTQ2S+ and four non-LGBTQ2S+ identifying respondents) to gain a better understanding of how survey questions were being interpreted and to identify questions that may be confusing or misleading.

Additionally, 100 Gallup Panel members and 208 individuals identified through an email recruit of individuals in personal networks were invited to pilot NCHAT. The respondents completed the survey and open-ended questions at the end of the survey were included to garner feedback about the overall survey experience. Questions included “What parts of this survey did you like or not like?” “Were there any questions or sections of the survey that were confusing or that you had a hard time answering?” “Please feel free to share any additional thoughts here.” Respondents were also asked to invite their partners.

After the pilot, additional interviews were conducted with eight invited persons to gauge the experience of those who participated and the reasons why some refused. Feedback from the pilot included that the survey felt too long, and some were bored by the end. Others said they enjoyed the survey, topic, and time diary. On why they did not send the invitation to their partner, the most common answer was that they thought their partner would not be interested or that the survey was too long, and their partner would not want to complete it. Comments were also made about the pre- and post-paid incentives and their motivation. Revisions to incentives and invitations were made as a result. A final pilot was conducted in July 2020 with 50 White and 50 Black Panel members in different-gender relationships to test revisions due to the COVID-19 Pandemic and racial trauma. Based on this process changes were made to survey items, communications, and incentive structure.

Sample

NCHAT entered the field on September 1, 2020, and data collection was completed on April 25, 2021. The sample includes 3,642 main respondents. The sample frame included adults in the U.S. who ranged in age from 20 to 60 years old, who were married or cohabiting, who were able to read English or Spanish, and who had internet access, either through a smartphone or computer. Ninety-five percent of 20 to 60 year olds in the U.S. have internet access (Martin, 2021). Respondents were selected into the sample if they reported currently living with a spouse/husband/wife or partner/girlfriend/boyfriend most of the time. At the completion of their survey, respondents were asked to forward an email to their partner so that their partner could provide their email address to Gallup and receive an invitation to participate. We collected data from 1,515 partners. Respondents were allowed to report up to three household romantic partners in NCHAT and less than 1% did so. If more than one partner was reported, respondents were asked to “Please select your spouse or partner that you spend the most time with,” with the option to select “I spend an equal amount of time with both/all.” If a specific partner was not selected, respondents answered the survey about their spouses/partners overall. If respondents selected a partner, that partner was invited to participate in the NCHAT sample. Respondents completed a 40-minute survey (which we will refer to as the “main survey”) and one 24-hour time diary (which we will refer to as the “time diary”). All invitations, consents, and survey materials were translated into English and Spanish.

The main survey invitation included a \$5 pre-paid incentive. Respondents who completed the main survey received a \$20 post-paid incentive. Due to lower than expected response rates, the incentive was increased to \$50 on November 16, 2020. Respondents who did not respond to the initial invitation were sent new reminders with the updated incentive. The post-paid incentive for the time diary was \$15 and was never changed. All study procedures, communications, and surveys were approved by the Ohio State University Institutional Review Board and the Gallup IRB. Consent was established at the beginning of both the main survey and the time diary. Respondents were shown and reviewed the fully informed consent, and the surveys only continued if positive consent was obtained by selecting “I consent.”

Sampling

Respondents were sampled from the Gallup Panel and the Gallup Recontact sample (see Methodology report; Marlar et al., 2022). Gallup conducts a large number of nationally representative surveys using random digit dial (RDD) dual landline and cellphone frame and address based sample (ABS) methodologies. From 2008 to 2017, Gallup fielded the Gallup Daily Tracking survey via RDD, and collected 1,000 interviews per night, 350 days per year (Gallup, 2022b). Due to declining telephone response rates, the Gallup Daily Tracking survey moved to a mail-push-to-web ABS design with monthly data collection with approximately 10,000 completed surveys per month (Gallup, 2022a). Gallup also maintains a monthly Gallup Poll Social Series (GPSS), which is a monthly RDD survey of approximately 1,500 completes. Surveys are conducted in English and Spanish. Gallup also recruits new members to the Panel using a recruitment packet sent to households randomly selected from an ABS frame. In addition, approximately four times per year, Gallup sends recruitment materials to randomly selected households via the mail. Respondents are sent a brochure explaining the request and the Panel, a small incentive, and are invited to complete a Panel enrollment survey. The ABS recruitment efforts typically oversample households predicted to have demographics needed to replace groups that tend to attrit from the Panel at higher rates, including individuals with lower education levels, who are younger, and who are Black or Hispanic. At the end of these, and other national survey efforts, Gallup asks respondents if they would be willing to be recontacted for a future survey. Approximately 80% of respondents agree to be recontacted for a future survey. Gallup refers to this as the “recontact sample.” Some individuals from the recontact sample are selected for recruitment into the Gallup Panel, are contacted by Gallup, and asked to join the Panel.

The Gallup Panel is a probability-based panel of U.S. adults and was used as the main sample source. Approximately 90,000 Panel members can be reached for web, mail, or telephone surveys. Another 20,000 Panel members do not have email access but have provided a mailing address and can be reached for mail or telephone surveys. Members who have consented to receive text messages can also receive survey invitations or related communications via text. Members may remain in the Panel for as long as they would like, given they continue to participate. Members who continue to be non-responders are removed from the Panel. As with most surveys, adults between the ages of 18 and 34, individuals with lower education levels, and individuals who are Black or Hispanic tend to have lower participation rates in the Gallup Panel than other demographic groups. Gallup’s additional recruiting efforts oversample these groups to maintain a demographically balanced sample. Unequal selection probabilities at the selection stage are taken into account in the Panel weight assigned to each member. Gallup maintains a database of demographic attributes on all Panel members, which was used for efficient and cost-effective sampling of very low incidence populations that would otherwise be extremely costly, if not impossible, to reach. The variables that were of key interest to NCHAT included age, gender, race/ethnicity, relationship status, and if the respondent identifies as LGBT. Indeed, this made it possible to cost-effectively collect the LGBTQ2S+ oversample in NCHAT.

Throughout the recruitment process, regular email reminders were sent. Further, to personalize the reminders, Gallup’s Director of the Gallup Panel even sent personalized

reminders from their personal work email address in January 2021. Text message reminders were also sent. To increase participation from those under the age of 30, additional texts and personal reminders were sent in March and April 2021.

Initial Sample.—For the initial survey launch on September 1, 2020, Gallup drew a sample of 7,691 English and Spanish speaking respondents who could be reached via a web survey from the Panel and the Recontact sample. All individuals sampled from the Recontact sample had originally completed an ABS survey during 2017 or 2018 and had provided an email address. Gallup Panel members were stratified into two groups based on their response to the question “Do you, personally, identify as lesbian, gay, bisexual, or transgender?” This question was asked on the Panel’s New Member Survey, which is completed shortly after joining the Panel. The question is also asked of Panel members at least annually, and the Panel database is updated based on the most recent response. It was not possible to pre-identify respondents in same-gender and different-gender couples because the Panel Database does not include the gender identity of partners. A number ($n = 518$) of individuals who did not identify as exclusively heterosexual were in a different-gender couple, pointing to the importance of selecting on sexual identity and gender composition of the couple. While most lesbian and gay respondents are in same-gender couples and heterosexual identifying respondents are in different-gender couples, many individuals with bisexual or ‘another’ sexual identities are found in both same-gender and different-gender couples.

A sample of 3,509 Panel members who said “no” to the LGBT question, were between the ages of 20 and 60 and were married or cohabiting (living with a partner/domestic partnership) at the last contact they had with Gallup were selected and stratified by age, gender, education level, race, and ethnicity. All Gallup Panel respondents who said “yes” to the LGBT question and who were between the ages of 20 and 60 were selected into the sample ($N = 3,146$). Relationship status (i.e., marital and cohabitation status) was not a criterion for initial contact for the LGBTQ2S+ sample to ensure we maximized the sample but was a criterion for survey administration. The initial survey screen confirmed that all respondents (LGBTQ2S+ and non- LGBTQ2S+) were living with a spouse/husband/wife or partner/girlfriend/boyfriend.

Same-Gender Couples.—The Panel alone did not have enough LGBTQ2S+ respondents to reach the desired number of same-gender couple completes. An additional sample of 1,036 respondents from the Recontact sample who had completed the Gallup Daily tracking survey, were between the ages of 20 and 60, provided an email address, and who said they were LGBT, were also invited to participate. Again, marital or cohabitation status was not considered for the recontact sample, as the surveys had been completed over two years prior to the recontact and marital or cohabitation status may not have been current. Importantly, Gallup also collected data for the Generations Study, a study of three generations of lesbian, gay, and bisexual adults in the U.S., but no Generations respondents were included in the NCHAT sampling frame. That is, there is no overlap in respondents between NCHAT and Generations.

In October 2020, the NCHAT team determined an additional sample would need to be added to achieve the desired number of same-gender couple completes. However, no additional

web-based sample was available as both the Panel and the Recontact sample with email addresses had been exhausted. Due to the accelerated timetable, Gallup leveraged the Gallup Recontact sample that could be contacted via phone. LGBT individuals between the ages of 20 to 60 in the recontact sample with phone numbers were called by a Gallup interviewer, given a short explanation of the study, asked three screener questions (currently living with a partner, their partner's gender, and their own gender), and were asked if they would be willing to participate. Those who said yes were asked to provide an email address so that the survey invitation could be sent. All who agreed were sent their survey invitation shortly after the recruitment phone call. A total of 925 respondents completed the telephone screening survey and were sent an invitation to participate in NCHAT, of whom 431 completed. Individuals who were known to have been in a same-gender couple were given priority in the sample and were dialed first. Additionally, LGBT respondents with a high school education or less and individuals who were Black or Hispanic were also part of the first samples to be dialed.

Low Education, Black, and Latina/o/x Oversamples.—After the start of fieldwork, the NCHAT team determined an additional sample would be needed to achieve fully powered samples from respondents who were Black, Latina/o/e, and/or have lower education levels. On November 24, 2020, Gallup sampled an additional 3,156 respondents who fit these criteria. All respondents sampled were between the ages of 20 and 60 and were married or living with a partner (every eligible LGBT respondent had already been invited). A second oversample of 5,149 who met the sample criteria and were Black, Latina/o/x, and/or low education respondents were invited on January 13, 2021.

Asian American Sample.—As a result of the rise in discrimination and hate crimes against Asian Americans, the NCHAT team determined it would be important to ensure that the sample included a fully powered Asian American subsample. On March 19, 2021, Gallup invited additional respondents to the study who were Asian American. All sampled individuals were Asian, between the ages of 20 and 60, and married or living with a partner. Everyone in the Gallup Panel who met the criteria were selected ($N = 724$) and 34% completed the main survey ($n = 243$).

Surveys

Main and Partner Survey.—The NCHAT survey instrument is located online (Kamp Dush & Manning, 2022) and included *demographic* questions, including age, sex assigned at birth, racial/ethnic identity, nativity, length of residence in the U.S., gender identity, sexual identity, identity centrality (Mohr & Kendra, 2012), street race (López et al., 2018), religious identity and attendance, as well as nativity status and length of time in the U.S., and their health insurance coverage. *Socioeconomic status* related variables included measures of income, occupation, home ownership, residential mobility, crowding, education, work hours before the pandemic and currently, job type, work shift type, job satisfaction, work-family conflict (Haslam et al., 2015), satisfaction with the division of household labor, how money is handled, and financial hardships. We collected the following *health measures*: body mass index, *PROMIS* global health measure (2019), stress stemming from overall respondent health and partner/spouse health, *PROMIS*

Sleep Disturbance (2019), occurrence of 20 health conditions, current and prospective Cantril Scale of current life evaluation (Cantril, 1965), the Center for Epidemiological Studies Short Depression Scale (Andresen et al., 1994), Generalized Anxiety Disorder (Spitzer et al., 2006), Stress Overload (Amirkhan, 2018), R-UCLA 3-item Loneliness Scale (Hughes, 2004), Difficulties in Emotion Regulation Scale (Kaufman et al., 2015), suicidal ideation (Ursano et al., 2020), drinking, smoking, vaping, and drug use (Hughes et al., 2017; Meyer et al., 2016), HIV prevention and occurrence (Meyer et al., 2016; Sales et al., 2008), PrEP use (Meyer et al., 2016), and birth control use. *Family-related* variables included duration of relationship, relationship milestones, marital status, legal and informal recognitions of the couple relationship, likelihood of marriage if not currently married, pregnancy intentions, and perceived social support (Procidano & Heller, 1983). Regarding *couple relationships*, we collected the Couples Satisfaction Index (Funk & Rogge, 2007), Relationship Constraint (Stanley, 1997), the Marital Risk Scale (MIDUS, 2004), the Dyadic Coping Inventory (Bodenmann, 2018), a measure of argument frequency, family acceptance (Balsam et al., 2011), the Negative Interaction Scale (Stanley, 2002), and marriage and cohabitation histories. We also collected intimate partner violence victimization and perpetration (Ford-Gilboe et al., 2016; Gillum, 2012; Stephenson, 2013). *Family background* included the Adverse Childhood Experiences Questionnaire (Sacks et al., 2014), and relationship closeness and stressfulness for two parental figures that the respondent felt raised them were measured. The instrument also included a *household roster*, including age, race/ethnicity, gender identity, sex assigned at birth, educational attainment, employment (partner only), and relationship to the respondent and the respondent's spouse/partner for each household member. For all household children, we collected parent-child closeness and stress. For non-resident children, we also asked age, relationship to the respondent and the respondent's spouse/partner, gender, parent-child closeness and stress, as well as frequency of communication. *Sexuality-related* measures included sexual identity and attraction (Meyer et al., 2016), outness, and first sexual experiences. Measures of internalized homonegativity (Mohr & Kendra, 2012), concealment motivation (Mohr & Kendra, 2012), bi-erasure (Dyar et al., 2019), and sexual concurrency, frequency, and satisfaction were included. *Discrimination* was measured in everyday life (Meyer et al., 2016; D. R. Williams, Yu, Y., Jackson, J.S. & Anderson, N.B 1997) and in healthcare (Abdou & Fingerhut, 2014) and at the intersection of race/ethnicity and sexual and gender minority status by the LGBT-POC Microaggressions Scale (Balsam et al., 2011). The Perceived Community Climate items (Meyer et al., 2016; Poll, 2008) assessed if the city or area where the respondent lived was a good place for marginalized individuals in several domains of identity. Specific to the *COVID-19 pandemic*, job loss/furlough, unemployment length, essential worker status, concerns about COVID-19 exposure at work, and work-family conflict since the COVID-19 pandemic were asked. We collected respondent, spouse/partner, and household members' COVID-19 status. We also asked whether COVID-19 had impacted fertility intentions. We measured COVID-19 specific stress levels and stressors, coping, and the extent to which they were socially distancing. *Racial trauma* was measured by "How has the recent movement for racial equity sparked by the killing of George Floyd influenced (a) your stress, (b) parenting, (c) relationship with your partner/spouse, or (d) your attitudes about race in America?" and "How stressed are you about the way the following people might be treated by police and the criminal justice system?" with options

including my family and friends, my children, myself, and people who are Black, Hispanic or Latino/a/x/e, immigrants, and LGBTQ2S+. Political identity was measured as “In politics, as of today, with which political party do you most closely affiliate?” with response options of Democrat, Republican, Independent, and Other party.

Although most items were shown to all respondents, there were skip patterns throughout the survey. Skip patterns were informed by a variety of items including the household roster, items related to identity (race, sexual, gender), and employment. Items assessing stressors pertaining to specific identities were only asked of those who reported identifying with that identity. For example, only those who did not identify as heterosexual, gay, or lesbian were asked questions regarding bi-erasure, and only those who identified as LGBTQ2S+ and a non-White race were asked questions regarding microaggressions at the intersection of race and LGBTQ2S+ identity.

Time Diary and Experience Sample Method Data.—Immediately after the survey, respondents were assigned a specific day within two weeks to complete the time diary to minimize variation due to the day reported on (i.e., Monday vs. Friday). Additionally, this two-week timeframe allowed time to increase the chances of being able to assign the main and partner respondents to the same time diary day. If partners completed the survey in time, respondents and partners were assigned to complete their time diaries on the same day. Push notifications and email reminders with detailed instructions and a tutorial for completion were sent to the respondents. Respondents could use an IOS/Android mobile-phone platform application or computers to complete the time diary in real time. The time diary and experience sampling method was modeled after the American Time Use Survey (US Bureau of Labor Statistics, 2020). On the time diary day, respondents reported their activities beginning at 4 AM and concluding 24 hours later. At 8 AM, noon, 4 PM, and 8 PM on the diary day, and at 8 AM the following day, respondents were prompted to enter their activities. They reported what they were doing, if they were doing anything else, who they were with, who was directly involved in the activity(ies), and their location. After each activity, respondents were asked if they were using a smartphone or other device, and how happy, stressed, and engaged they felt. Time diary categories included but were not limited to sleeping, personal care, food/drink, working, childcare activities, household/repair, pet/animal care, traveling, socializing, relaxing and leisure, shopping/running errands, smoking/vaping/drugs, education, providing care for an adult, exercising/other physical activity, and volunteering. If a respondent reported that they were drinking alcohol, they were asked how many drinks they consumed. The time diary also included a brief household roster to confirm who was currently in the household and their ages, a sleep questionnaire (PROMIS, 2019), and if they experienced any discriminatory experiences during their time diary day (Meyer et al., 2016; D. R. Williams, Yu, Yan, Jackson, James S. & Anderson, Norman B 1997). Main participants ($n = 1975$) and partners ($n = 839$) completed the time diary, providing time use data. About 1 in 4 main respondents (26%) and 1 in 5 (20%) partners completed their time diary during a weekend day.

Geospatial Data.—The state of residence is available for all respondents. More refined geospatial data will be available to researchers in a secure data enclave through Data Sharing for Demographic Research (Kamp Dush & Manning, 2022).

Weighting.—We strongly urge NCHAT users to weight their data for all analyses. Virtually all survey data have sampling designs that result in the unequal probability sampling of population units. Datasets are weighted so that they more adequately represent the study's target population. Weights correct for the over- or under-sampling of specific cases in the target population. For NCHAT, of the target population of individuals aged 20 to 60 who were cohabiting or married, respondents in same-gender unions were oversampled. Additional oversamples included Black, Latina/o/x/e/Hispanic, and Asian Americans, and respondents who were not heterosexual who were in a different-gender union. Importantly, weights also correct for non-response bias. Thus, we highly recommend all users weight the data.

Weighting the NCHAT data was uniquely difficult due to the lack of high-quality, population-representative data in the U.S. that measures sexual identity, marital and cohabitation status, and gender identity of spouses or partners. The 2019 American Community Survey (ACS; United States Census Bureau, 2019) was used to construct the same-gender and different-gender weighting targets, and the National Health Interview Survey (NHIS; Center for Disease Control and Prevention, 2019) was used to construct the non-heterosexual weighting targets – specifically to correct for the oversample of individuals who were not heterosexual but were in different-gender relationships. Weights were constructed for the target partner if more than one household romantic partner was reported.

The weights adjust the demographic distributions within same-gender and different-gender couples, and within heterosexual and non-heterosexual persons. The 2019 ACS population that fit the NCHAT target population (20 to 60 years old; cohabiting or married to same or different-gender partner) was used to subset the NCHAT data based on age, gender, sex, race, ethnicity, education, and marital status within same-gender and different-gender couples. Individuals in NCHAT who did not report a man or woman gender identity were set to missing and were imputed through multiple imputation to avoid very small groups, and because the ACS does not fully capture gender identity. Because the ACS does not measure sexual identity, the 2019 NHIS was used to construct the weights by sexual identity for cohabiting and married couples aged 20 to 60. LGB in the 2019 NHIS was an identity-based measure about whether the respondent identified as lesbian, gay, bisexual, or something else. These data were used to construct weights to correct for the overrepresentation of bisexual individuals in different-gender couples. Again, the data were used to subset the NCHAT data based on age, gender, sex, race, ethnicity, education, and marital status within heterosexual and non-heterosexual persons.

After the base weights were constructed, they were adjusted using a multiple iterative raking procedure (Battaglia et al., 2009; Dal Grande et al., 2015) to post-stratify by age, sex, education, race, ethnicity, and marital status. For cases with missing data on raking variables, multiple imputation was used to impute missing values. Ten datasets were raked,

and weights were averaged across the ten datasets to produce a single weight value for each case. The poststratification weighting was conducted in two stages. In the first stage, the heterosexual and non-heterosexual groups were weighted to the NHIS targets. In the second stage, the weights from the first stage were adjusted by same-gender and different-gender couple type using the ACS targets. The NHIS was used for the first stage and the ACS for the second stage because the NHIS had a small sample size of non-heterosexual individuals (< 400). The weights were trimmed. A similar procedure was used for couple weights and was generated for respondents in which the main respondent and the partner both completed the main survey. The time diary data was also weighted, again using a similar procedure.

Response Rates and Non-response

The survey achieved an overall response rate of 28% for the main respondents (see the American Association for Public Opinion Research's Standard Definitions 2016 for more detailed information on AAPOR3 and other response rates; Research, 2016). There was systematic variation in the response rates for various groups. Gallup Panel members expected to qualify for the different-gender group had an AAPOR3 response rate of 22%, while LGBT Panel members who were expected to qualify for the same-gender group had a response rate of 50%. For the ABS recontact sample, the AAPOR3 response rate was 17%, and the phone recontact sample had an AAPOR3 response rate of 47%. To situate NCHAT's response rate in the literature, web-based surveys tend to have a 12% lower response rate on average compared to telephone or in-person surveys (Daikeler et al., 2019). Importantly, non-probability panels have been found to produce biased estimates and have serious data quality issues even when strategies like propensity score matching and post-stratification weighting are used to attempt to correct for that bias (Dutwin & Buskirk, 2017; Yeager et al., 2011); the Gallup Panel is a probability panel and thus yields data that are more accurate (Yeager et al., 2011).

The COVID-19 pandemic depressed response rates in federal surveys. The U.S. Census Bureau fielded the Household Pulse Survey to gauge responses to the pandemic and our field period overlapped with Weeks 13 through 28 of the Household Pulse field period. During this period the average response rate was 7.6%, with a high of 10.3% and a low of 5.3% (Pandemic, 2021a, 2021b, 2021c). The General Social Survey's response rate during 2020 was 17.4% (Davern et al., 2021).

Importantly, response rates are poor indicators of non-response bias (Davern, 2013; Groves, 2006; Groves & Peytcheva, 2008; Keeter et al., 2006; Yeager et al., 2011). Yeager et al. (2011) and MacInnis et al. (2018) examined the accuracy of estimates from probability and non-probability samples, and found that probability-based panels such as the Gallup Panel produced highly accurate estimates and that there was no relationship between response rates and accuracy. Even more, the MacInnis et al. (2018) study was a follow-up to Yeager et al. (2011), and even though response rates declined from the 2011 to the 2018 study, quality did not erode with response rates, a finding consistent with other research (Davern, 2013; Keeter et al., 2006). For non-response bias to be present, non-responders must be systematically different from respondents on substantive variables of interest. To assess the potential for bias, the National Academy of Sciences and the

U.S. Office of Management and Budget (OMB; 2016) have outlined several methods, including comparing weighted and unweighted sample and results, benchmarking survey estimates and respondent characteristics with gold standard estimates, conducting a non-response follow-up survey, comparing early and late responders with the assumption that late responders are more similar to non-responders, and examining response rates across subgroups.

Our non-response bias analyses are detailed in the National Couples' Health and Time Study Methodology Report (Marlar et al., 2022). Given that the NCHAT sample was drawn from the Gallup Panel and Recontact samples, and given that Gallup has data on these samples, we were able to compare responders and non-responders. Further, in some cases both non-responders and responders had completed substantive variables of interest in other surveys, allowing for a comparison of responders and non-responders on substantive variables of interest. Because response rates are viewed as critically important to validity in the scientific community even without strong evidence that they are the best indicator of reliability and validity (Pickett et al., 2018), our team also went to considerable efforts to convert non-respondents as detailed above. These efforts, and the fact that we were in the field over eight months, allowed us to compare early and late responders.

First, response rates differed along demographic characteristics (see Marlar et al., 2022, for details). By gender, men had an 18% response rate compared to 22% for women. Respondents in their twenties, thirties, forties, and fifties had response rates of 12%, 20%, 24%, and 23% respectively. Respondents with a high school education or less had a 10% response rate, those with some college had a 19% response rate, and those with at least a bachelor's degree had a 33% response rate. Latino/a/x/e/Hispanic individuals had a 16% response rate while Non-Latino/a/x/e/Hispanic individuals had a 21% response rate. Non-Latino/a/x/e/Hispanic White individuals had a 24% response rate, and Non-Latino/a/x/e/Hispanic Black respondents had a 11% response rate. Individuals in the South had an 18% response rate, whereas in the West they had a 24% response rate. The response rate was 22% among individuals in different-gender couples and 50% among those in same-gender couples. These sources of bias were corrected during the weighting procedure.

Second, large differences between weighted and unweighted estimates usually suggest that a model is misspecified, a key omitted variable is strongly associated with the weights, or that sampling was associated with the outcome variable of interest (Korn & Graubard, 1995). In our analyses of relationship quality, depression, health, and stress indicators, there was little difference between the weighted and unweighted estimates, suggesting that sampling had little association with the outcomes of interest.

Third, we compared early (within 14 days of invitation) and late (post 14 days of invitation) respondents, both weighted and unweighted. For relationship satisfaction, the Cantril scale of current life evaluation, eight of the ten items in the CES-D, and seven of eight measures of experiential wellbeing, there were no significant differences between early and late responders. For self-rated health, the CESD items "I could not get going" and "Trouble keeping my mind on what I was doing," and the experiential wellbeing item of boredom, early responders reported significantly better outcomes (i.e., higher health, more ability

to get going, less trouble keeping mind on what they were doing, less boredom) than late responders. Even though these differences were statistically significant, the substantive differences were small, and the magnitude of the differences was small. That said, it is possible that NCHAT may underestimate some health and wellbeing problems. The time-of-return analyses suggest few meaningful differences between early and late responders on key outcome variables. On the whole, our non-response bias analysis suggests there is little evidence of non-response bias.

Sample Descriptive Statistics

Descriptive statistics for main respondents focusing on identities are reported in Tables 1 through 4 and described below. Importantly, note that the oversamples of specific groups, such as main respondents in same-gender couples, are reflected in larger than expected sample sizes for that group. The descriptive statistics presented below are weighted (those unweighted are marked as such), but we pair them with unweighted sample sizes. Tables 1, 2, and 3 present the frequency of endorsement of race, sexual, and gender identity categories based on “select all that apply” items for each. Table 4 shows these categories collapsed into single, mutually exclusive variables and includes additional demographic and COVID-19 descriptive statistics. When reviewing the tables, readers should keep in mind that there may be substantial differences between weighted and unweighted percentages for some variables due to the oversampling of LGBTQ2S+ persons.

Race and ethnicity.—Race and ethnicity are typically asked as mutually exclusive options or collapsed into mutually exclusive categories to make statistical analysis and comparisons easier. Collapsing data to make mutually exclusive categories masks richness in data when the number of respondents reporting one racial identity only is small and erases some racial/ethnic identities, particularly Indigenous identities. Following the call of Small-Rodriguez (2022) to stop the systematic masking of Indigenous racial identities, we report in Table 1 the proportion of the sample endorsing each of our rich racial and ethnic identity categories. Race was measured as “What is your race? (you may select more than one)” with 15 possible options: “White;” “Black or African American;” “American Indian or Alaska Native;” “Asian Indian;” “Chinese;” “Filipino/a/x;” “Japanese;” “Korean;” “Vietnamese;” “Native Hawaiian;” “Guamanian or Chamorro;” “Samoan;” “Other Asian;” “Other Pacific Islander;” and “Some other race.” Based on weighted estimates among main respondents, 81% identified as White, 10% as Black or African American, 3% as American Indian or Alaska Native, 3% as Chinese, 2% as Asian Indian, 1% as Korean, Japanese, Vietnamese, or Other Asian, and less than 1% as Native Hawaiian, Guamanian or Chamorro, Samoan, or other Pacific Islander, and 3% as some other race. In terms of the intersection of racial and ethnic identity, Indigenous/American Indian/Alaskan Native respondents were the most likely to report Latina/o/x/e/Hispanic ethnicity at 44% followed by Filipina/o/x/e at 25%. Eighty-five percent of Indigenous/American Indian/Alaskan Native respondents reported they were more than one race, as did over 60% of Japanese and Filipina/o/x respondents. Three percent of the sample selected “Some other race”, and of those respondents, 59% identified as Latina/o/x/e/Hispanic. For those respondents who reported “White” or “some other race,” we asked “Are you South West Asian/Middle Eastern or North African? (Please select all that apply.)” with response options of “South West Asian/Middle Eastern;” “North

African;” and “Neither.” In results not shown in the table, 1% (weighted/unweighted) were South West Asian/Middle Eastern or North African.

The ethnicity item was “Are you Hispanic, Latino/a/x, or Spanish or Spanish origin?” with five response options: “No, not of Hispanic, Latino/a/x, or Spanish origin;” “Yes, Mexican, Mexican Am., Chicano/a/x;” “Yes, Puerto Rican;” “Yes, Cuban;” and “Yes, another Hispanic, Latino/a/x, or Spanish origin (Enter origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadorian, Spaniard, and so on).” The ethnicity question did not allow a “select all that apply” option, and we recommend providing that in future data collections. That said, based on weighted estimates, 22% of our respondents identified as Hispanic, Latino/a/x/e, or Spanish origin. Specifically, 11% identified as Mexican, Mexican American, or Chicano/a/x/e, 2% identified as Puerto Rican, 1% identified as Cuban, and 7% identified as Another Hispanic, Latino/a/x/e, or Spanish Origin Ethnicity.

Open-ended race and ethnicity.: The first race and ethnicity question was “How would you describe your race and/or ethnicity?” There were over 600 unique answers written in, and 109 had more than one respondent write the same response. The most frequently written were White, Caucasian, Black, Asian, Hispanic, African American, American, and “mixed.” Other answers included “human,” Jewish, Native American, and Latina, Latino, and Latinx. For the 7% that identified as “Another Hispanic, Latino/a/x, or Spanish Origin Ethnicity,” they were prompted “Enter origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salvadorian, Spaniard, and so on.” There were over 60 unique answers written in. The most frequently written were Spaniard, Colombian/Colombia, and several wrote in combinations of Puerto Rican, Cuban, and Mexican with other Latino/a/x/e/Hispanic identities. Hence our suggestion that ethnicity be measured as “select all that apply.”

Sexual and gender identity.—Sexual identity was measured as “Which of the following do you consider yourself to be? (select all that apply)” with 11 response options: “Heterosexual or ‘straight;” “Gay or lesbian;” “Bisexual;” “Same-gender loving;” “Queer;” “Pansexual;” “Omnisexual;” “Asexual;” “Don’t know;” “Questioning;” “Something else (specify).” If something else was chosen, there was an open-ended text box for “specify.” The unweighted distributions reflect the oversampling: 58% selected Heterosexual or “straight,” 25% selected Gay or Lesbian, 16% selected Bisexual, 2% select Same-gender loving, 6% selected Queer, 4% selected Pansexual, 1% selected Asexual, Questioning, or Something else, and less than 1% selected Omnisexual or Don’t know. Given the purposeful oversample of LGBTQ2S+ participants, when weighted, 97% of the NCHAT sample selected Heterosexual or “straight,” 1% selected Gay or Lesbian, 1% selected Bisexual, Queer, or Pansexual, <1% selected Same-gender loving, Omnisexual, Asexual, Don’t know, Questioning, or Something else. Over 79% of respondents who chose Asexual, Omnisexual, Questioning, Same Gender Loving, and Queer reported at least one additional sexual identity. About 60% of respondents who reported Pansexual, Don't Know, and Something Else reported at least one additional sexual identity, and 40% of Bisexual respondents reported at least one other sexual identity. About 20% and 5% of lesbian/gay and heterosexual, respectively, chose at least one additional sexual identity.

Gender identity was measured by three variables. First, respondents were asked “What sex appears on your original birth certificate?” with three response options: “Male;” “Female;” “Don’t know/does not apply.” Table 3 shows the sample was nearly evenly split between male and female and less than 10 replied don’t know or does not apply. Next, respondents were asked “Which of the following best describes your gender? (select one)” with five response options: “Man,” “Woman,” “Trans man,” “Trans woman,” and, “Do not identify as any of the above (there is an option to specify at the next question).” Finally, if “Do not identify as any of the above” was chosen, respondents were asked “Do any of the following terms describe your gender? Please select all that apply.” with eight response options: “Nonbinary,” “Two-spirit,” “Agender,” “Gender fluid,” “Gender neutral,” “Genderqueer,” “Don’t know,” and “Other (Please specify).” Approximately half of the sample identified as a Man and half as a Woman. Less than 1% ($n = 29$) of the sample identified as a Trans Man or Trans Woman. About 1% ($n = 98$) after adjustments for weighting, identified as some other gender identity. Of these respondents, 49% identified as Nonbinary, 33% as Two-spirit, 5% as Agender, 15% as Gender Fluid, 6% as Gender Neutral, 15% as Genderqueer, and 8% as Other. When examining Gender Identity by Sex Assigned at Birth, there was a small percentage of respondents whose sex assigned at birth did not match their reported gender identity which was reported as Man or Woman. Less than 1% of the sample was assigned Female at birth and identified as a Man, and less than 1% of the sample were assigned Male at birth and identified as a Woman.

Open-ended sexual and gender identity. In response to the “Something else” option for sexual identity, 39 responses were recorded, and demisexual alone, or in combination with another sexual identity, was most commonly reported. Future research should consider adding demisexual to measures of sexual identity. In response to the “Something else” option for gender identity, 16 responses were recorded, and only transmasculine and queer received more than one endorsement.

Demographic and COVID-19 characteristics.—Table 4 provides an overview of the race/ethnic, sexual, and gender identities described above collapsed into mutually exclusive groups and additional demographic and COVID-19 details. The distribution of individuals across categories differs slightly depending on the coding of identities (race/ethnicity, sexual, and gender). Based on the weights, most respondents were in different-gender couples, two percent of couples were same-gender ($n = 994$), and 1% included a member who identified as non-binary ($n = 141$). Weighted analyses indicate that 81% were married and about one-fifth were cohabiting. The average age was 43 ($SD = 10.42$). Thirty-three percent of the sample was in an interracial couple (defined as participants who differed in race or ethnicity from their partner; e.g., main respondent is Non-Hispanic/Latino/a/x/e White and partner is Non-Hispanic/Latino/a/x/e Multiracial). Nearly half (46%) of the sample had at least one child under the age of 18 living in the household. Forty percent of the sample had earned a Bachelor’s degree (or higher degree), 29% had some college or technical education, and 31% reported a high school education or less. Most respondents (64%) worked full-time, 10% part-time, and 25% were unemployed or not currently working. One percent ($n = 63$) reported that they had more than one partner living in their household. Twenty-one percent of the sample reported that they currently have or suspected

they have or have had COVID-19. Data collection spanned eight months, with the highest proportion (30%) completing in January 2021, followed by September 2020 (22%), 18% in March 2021, and 14% in November 2020. We recommend including the month of survey in analyses.

Discussion

As of March 21, 2023, over 400 anti-LGBTQ2S+ bills have been introduced in states across the US in just the 2023 legislative session that began in January (ACLU, 2023). These bills include laws that focus 1) on blocking non-cis Americans from obtaining legal documentation such as birth certificates or driver licenses, allowing employers and hospitals to refuse treatment to LGBTQ2S+ persons, 2) restricting how LGBTQ2S+ persons appear in the world, blocking them from having access to books about themselves or what they wear, 3) obstructing access to medically-necessary healthcare or insurance coverage particularly for trans youth, 4) prohibiting LGBTQ2S+ persons, particularly non-cis persons, from using preferred public bathrooms or locker rooms, and 5) preventing discussions of LGBTQ2S+ persons and issues in schools, limiting resources to schools for LGBTQ2S+ support, and preventing non-cis students from participating in school activities. The human rights of LGBTQ2S+ persons are under an extraordinary attack in many states in the US with profound implications for the health and wellbeing of LGBTQ2S+ families – data like NCHAT are more important than perhaps ever before. NCHAT provides a unique opportunity to examine strengths and vulnerabilities among the LGBTQ2S+ population that has not been possible with other population data that are limited in their sample of LGBTQ2S+ identifying individuals or are limited to specific birth cohorts of individuals. Our work includes samples of individuals who do not identify as LGBTQ2S+ so we can answer questions about health disparities. We are able to assess issues related to parenting, social and physical health, relationship quality, health behaviors, pandemic stressors, and plans to have children.

Thus, in designing NCHAT with our diverse team and extraordinary support from our advisory board, the Population Dynamics Branch at NICHD, and the larger research community, we sought to create a resource that crosses disciplinary boundaries including population health, family studies, gender and sexuality studies, sociology, epidemiology, and psychology, so scientists could study health equity and understand the full range of families that exist in the United States. While these data provide new insights into family life during the pandemic, it is important to note that these do not reflect experiences prior to the onset of the pandemic. These data may be especially relevant to researchers interested in how individuals fared during the pandemic era and suggest potential directions for policies to cope with a major public health crisis. We urge those who use NCHAT to embed their research in the current literature to acknowledge health disparity pioneers in which our future research is built upon (Lett et al., 2022). We are grateful for the work of those who came before us, and we are eager for the next generation of scholars, including authors on this paper (Berrigan; VanBergen), who will help us shape future waves of NCHAT and show us novel ways of thinking and advancing justice for those who are marginalized and mistreated in the United States.

Acknowledgments

This research was supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD; 1R01HD094081-01A1). This project also benefited from support provided by the University of Minnesota's Minnesota Population Center (P2CHD041023), the Bowling Green State University's Center for Family and Demographic Research (P2CHD050959) and The Ohio State University's Institute for Population Research (P2CHD058484), all supported by NICHD. We would like to thank Gary Gates, Patricia Pittman, Meghna Mahambrey, Autumn Bermea, Maya Dennis, Julia Applegate, Lawrence Stacey, Luther Young, Jessica Horan, Joanne Patterson, JaNelle Ricks, Miles Taylor, Carla Pfeffer, Benjamin Karney, Elizabeth Cooksey, Sarah Flood, Liana Sayer, Rin Reczek, Hui Zheng, John Pachinkos, Tonda Hughes, Aaron Dush, Rachel Hardeman, Karen Guzzo, James Wagner, and James Lepkowski for their contributions to NCHAT and this paper. We would also like to thank NCHAT respondents who made this project possible. This paper and its contents are solely our responsibility and do not necessarily represent the official views of NICHD.

References

- Abdou CM, & Fingerhut AW (2014). Stereotype threat among Black and White women in health care settings. *Cultural diversity & ethnic minority psychology*, 20(3), 316–323. 10.1037/a0036946 [PubMed: 25045944]
- ACLU. (2023, March 21, 2023). Mapping Attacks on LGBTQ Rights in U.S. State Legislatures. American Civil Liberties Union. <https://www.aclu.org/legislative-attacks-on-lgbtq-rights>
- Amirkhan JH (2018). A brief stress diagnostic tool: The short stress overload scale. *Assessment*, 25(8), 1001–1013. 10.1177/1073191116673173 [PubMed: 30392415]
- Andrasfay T, & Goldman N (2021). Reductions in 2020 US life expectancy due to COVID-19 and the disproportionate impact on the Black and Latino populations. *Proceedings of the National Academy of Sciences*, 118(5), e2014746118. 10.1073/pnas.2014746118
- Andresen EM, Malmgren JA, Carter WB, & Patrick DL (1994). Screening for depression in well older adults: evaluation of a short form of the CES-D (Center for Epidemiologic Studies Depression Scale). *American journal of preventive medicine*, 10(2), 77–84. [PubMed: 8037935]
- Balsam KF, Molina Y, Beadnell B, Simoni J, & Walters K (2011). Measuring multiple minority stress: The LGBT People of Color Microaggressions Scale. *Cultural Diversity and Ethnic Minority Psychology*, 17(2), 163–174. 10.1037/a0023244 [PubMed: 21604840]
- Battaglia MP, Hoaglin David C, & Frankel MR (2009). Practical Considerations in Raking Survey Data. *Survey Practice*, 2(5), 1–12. 10.29115/SP-2009-0019
- Bodenmann G, Arista LJ, Walsh KJ, & Randall AK . (2018). Dyadic coping inventory. . In *Encyclopedia of couple and family therapy* Springer, Cham.
- Budget, U. S. O. o. M. a. (2016). Questions and answers when designing surveys for information collections. https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/assets/OMB/inforeg/pmc_survey_guidance_2006.pdf
- Bureau of Labor Statistics. (2014). American Time Use Survey User's Guide Bureau of Labor Statistics. <http://www.bls.gov/tus/atususersguide.pdf>
- Cantril H (1965). *The pattern of human concerns*. Rutgers University Press.
- Center for Disease Control and Prevention. (2019). National Health Interview Survey. <https://www.cdc.gov/nchs/nhis/2019nhis.htm>
- Daikeler J, Bošnjak M, & Lozar Manfreda K (2019). Web Versus Other Survey Modes: An Updated and Extended Meta-Analysis Comparing Response Rates. *Journal of Survey Statistics and Methodology*, 8(3), 513–539. 10.1093/jssam/smz008
- Dal Grande E, Chittleborough CR, Campostrini S, Tucker G, & Taylor AW (2015). Health Estimates Using Survey Raked-Weighting Techniques in an Australian Population Health Surveillance System. *American Journal of Epidemiology*, 182(6), 544–556. 10.1093/aje/kwv080 [PubMed: 26306665]
- Davern M (2013). Nonresponse Rates are a Problematic Indicator of Nonresponse Bias in Survey Research. *Health Services Research*, 48(3), 905–912. 10.1111/1475-6773.12070 [PubMed: 23656501]

- Davern M, Bautista R, Freese J, Morgan SL, & Smith TW (2021). General Social Survey 2021 Cross-section [1 datafile (68,846 cases) and 1 codebook (506 pages)]. NORC.
- Dutwin D, & Buskirk TD (2017). Apples to Oranges or Gala versus Golden Delicious?: Comparing Data Quality of Nonprobability Internet Samples to Low Response Rate Probability Samples. *Public Opinion Quarterly*, 81(S1), 213–239. 10.1093/poq/nfw061
- Dyar C, Feinstein BA, & Davila J (2019). Development and Validation of a Brief Version of the Anti-Bisexual Experiences Scale. *Archives of sexual behavior*, 48(1), 175–189. 10.1007/s10508-018-1157-z [PubMed: 29611021]
- Ford-Gilboe M, Wathen CN, Varcoe C, Macmillan HL, Scott-Storey K, Mantler T, Hegarty K, & Perrin N (2016). Development of a brief measure of intimate partner violence experiences: the Composite Abuse Scale (Revised)—Short Form (CAS R -SF). *BMJ Open*, 6(12), e012824. 10.1136/bmjopen-2016-012824
- Funk JL, & Rogge RD (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. *Journal of Family Psychology*, 21(4), 572–583. 10.1037/0893-3200.21.4.572 [PubMed: 18179329]
- Gallup. (2019). Gallup COVID-19 Pulse Survey Questionnaire.
- Gallup. (2022a). How Does the Gallup National Health and Well-being Index Work? <https://news.gallup.com/poll/246200/gallup-national-health-index-work.aspx>
- Gallup. (2022b). How Does the Gallup U.S. Poll Work? <https://www.gallup.com/224855/gallup-poll-work.aspx>
- Gillum TL, & DiFulvio G . (2012). There's so much at stake: Sexual minority youth discuss dating violence. . *Violence Against Women*, 18(7), 725–745. [PubMed: 22831848]
- Groves RM (2006). Nonresponse Rates and Nonresponse Bias in Household Surveys. *Public Opinion Quarterly*, 70(5), 646–675. 10.1093/poq/nfl033
- Groves RM, & Peytcheva E (2008). The Impact of Nonresponse Rates on Nonresponse Bias: A Meta-Analysis. *Public Opinion Quarterly*, 72(2), 167–189. 10.1093/poq/nfn011
- Haslam D, Filus A, Morawska A, Sanders MR, & Fletcher R (2015). The Work–Family Conflict Scale (WAFCS): Development and Initial Validation of a Self-report Measure of Work–Family Conflict for Use with Parents. *Child psychiatry and human development*, 46(3), 346–357. 10.1007/s10578-014-0476-0 [PubMed: 24919779]
- Health, N. I. o. (2021). Minority Health and Health Disparities Strategic Plan 2021–2025 National Institutes of Health. <https://www.nimhd.nih.gov/docs/nimhd-strategic-plan-2021-2025.pdf>
- Hughes ME, Waite LJ, Hawkey LC, & Cacioppo JT . (2004). A short scale for measuring loneliness in large surveys: Results from two population-based studies. *Research on Aging*, 26(6), 655–672. [PubMed: 18504506]
- Hughes TL, Martin K, Nisi R, & Veldhuis C (2017). Chicago Health and Life Experiences of Women Wave 4 Questionnaire.
- Jeske M, Vasquez E, Fullerton SM, Saperstein A, Bentz M, Foti N, Shim JK, & Lee SS-J (2022). Beyond inclusion: Enacting team equity in precision medicine research. *Plos One*, 17(2), e0263750. 10.1371/journal.pone.0263750 [PubMed: 35130331]
- Jeung R, Yellow Horse A, Popovic T, & Lim R (2021). Stop AAPI Hate National Report. <https://secureservercdn.net/104.238.69.231/a1w.90d.myftpupload.com/wp-content/uploads/2021/03/210312-Stop-AAPI-Hate-National-Report-.pdf>
- Kamp Dush CM, & Manning WD (2022). National Couples' Health and Time Study (NCHAT), United States, 2020-2021 Inter-university Consortium for Political and Social Research [distributor]. 10.3886/ICPSR38417.v1
- Kaufman EA, Xia M, Fosco G, Yaptangco M, Skidmore CR, & Crowell SE (2015). The Difficulties in Emotion Regulation Scale Short Form (DERS-SF): Validation and Replication in Adolescent and Adult Samples. *Journal of psychopathology and behavioral assessment*, 38(3), 443–455. 10.1007/s10862-015-9529-3
- Keeter S, Kennedy C, Dimock M, Best J, & Craighill P (2006). Gauging the Impact of Growing Nonresponse on Estimates from a National RDD Telephone Survey. *Public Opinion Quarterly*, 70(5), 759–779. 10.1093/poq/nfl035

- Korn EL, & Graubard BI (1995). Examples of Differing Weighted and Unweighted Estimates from a Sample Survey. *The American Statistician*, 49(3), 291–295. 10.2307/2684203
- Lett E, Adekunle D, McMurray P, Asabor EN, Irie W, Simon MA, Hardeman R, & McLemore MR (2022). Health Equity Tourism: Ravaging the Justice Landscape. *Journal of Medical Systems*, 46(3), 17. 10.1007/s10916-022-01803-5 [PubMed: 35150324]
- López N, Vargas E, Juarez M, Cacari-Stone L, & Bettez S (2018). What’s Your “Street Race”? Leveraging Multidimensional Measures of Race and Intersectionality for Examining Physical and Mental Health Status among Latinxs. *Sociology of Race and Ethnicity*, 4(1), 49–66. 10.1177/2332649217708798 [PubMed: 29423428]
- MacInnis B, Krosnick JA, Ho AS, & Cho M-J (2018). The Accuracy of Measurements with Probability and Nonprobability Survey Samples: Replication and Extension. *Public Opinion Quarterly*, 82(4), 707–744. 10.1093/poq/nfy038
- Manning WD, & Kamp Dush CM (2022). COVID-19 Stress and Sexual Identities. *Socius*, 8, 23780231221105376. 10.1177/23780231221105376
- Marlar J, Kamp Dush CM, Manning WD, Berrigan MN, VanBergen AM, Tsabutashvili D, Chattopadhyay M, & Theodorou A (2022). National Couples' Health and Time Study (NCHAT): Methodology Report. Gallup.
- Martin M (2021). Computer and internet use in the United States: 2018 (American Community Survey Reports, Issue. <https://www.census.gov/content/dam/Census/library/publications/2021/acs/acs-49.pdf>
- Meyer IH, Frost DM, Hammack PL, Lightfoot M, Russell ST, & Wilson BDM (2016). Generations Study Baseline Questionnaire and Measure Sources.
- Meyer IH, Marken S, Russell ST, Frost DM, & Wilson BD (2020). An innovative approach to the design of a national probability sample of sexual minority adults. *LGBT health*, 7(2), 101–108. [PubMed: 32130087]
- MIDUS. (2004). Documentation of scales. . <http://www.midus.wisc.edu/midus1/documentationofscales.pdf>
- Mohr JJ, & Kendra MS (2012). Revision and extension of a multidimensional measure of sexual minority identity: The Lesbian, Gay, and Bisexual Identity Scale. *Journal of Counseling Psychology*, 58(2), 234–245. 10.1037/a0022858
- OCA-Asian Pacific American Advocates. (2020). OCA demands apology for Trump tweets that stoke anti-Asian sentiment <https://www.ocanational.org/oca-demands-apology-for-trump-tweets-that-stoke-anti-asian-sentiment>
- Pandemic, I. F. S. R. R. S. t. M. H. E. d. t. C. C.-. (2021a). Source of the Data and Accuracy of the Estimates for the 2020 Household Pulse Survey – Phase 2. I. F. S. R. R. S. t. M. H. E. d. t. C. C.-. Pandemic. https://www2.census.gov/programs-surveys/demo/technical-documentation/hhp/Phase2_Source_and_Accuracy_Week_17.pdf
- Pandemic, I. F. S. R. R. S. t. M. H. E. d. t. C. C.-. (2021b). Source of the Data and Accuracy of the Estimates for the 2020 Household Pulse Survey – Phase 3. I. F. S. R. R. S. t. M. H. E. d. t. C. C.-. Pandemic. https://www2.census.gov/programs-surveys/demo/technical-documentation/hhp/Phase2_Source_and_Accuracy_Week_17.pdf
- Pandemic, I. F. S. R. R. S. t. M. H. E. d. t. C. C.-. (2021c). Source of the Data and Accuracy of the Estimates for the 2020 Household Pulse Survey – Phase 3.1. I. F. S. R. R. S. t. M. H. E. d. t. C. C.-. Pandemic. https://www2.census.gov/programs-surveys/demo/technical-documentation/hhp/Phase2_Source_and_Accuracy_Week_17.pdf
- Pickett JT, Cullen FT, Bushway SD, Chiricos T, & Alpert G (2018). The Response Rate Test: Nonresponse Bias and the Future of Survey Research in Criminology and Criminal Justice. *The Criminologist*, 43, 7–11. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3103018
- Poll GW (2008). World Poll Survey Data. G. Inc. https://media.gallup.com/dataviz/www/WP_Questions_WHITE.pdf
- Procidano ME, & Heller K (1983). Measures of perceived social support from friends and from family: Three validation studies. *American Journal of Community Psychology*, 11(1), 1–24. 10.1007/BF00898416 [PubMed: 6837532]
- PROMIS. (2019). PROMIS Adult Assessment.

- Research, T. A. A. f. P. O. (2016). Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys AAPOR. http://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf
- Ruiz NG, Menasce Horowitz J, & Tamir C (2020). Many Black and Asian Americans Say They Have Experienced Discrimination Amid the COVID-19 Outbreak. <https://www.pewresearch.org/social-trends/2020/07/01/many-black-and-asian-americans-say-they-have-experienced-discrimination-amid-the-covid-19-outbreak/>
- Sacks V, Murphey D, & Moore K (2014). Adverse childhood experiences: National and state-level prevalence
- Sales JM, Spitalnick J, Milhausen RR, Wingood GM, Diclemente RJ, Salazar LF, & Crosby RA (2008). Validation of the worry about sexual outcomes scale for use in STI/HIV prevention interventions for adolescent females. *Health Education Research*, 24(1), 140–152. 10.1093/her/cyn006 [PubMed: 18353760]
- Small-Rodriguez D (2022, May 16, 2022). Data for Understudied Populations. National Academy of Sciences Committee on Population.
- Spitzer RL, Kroenke K, Williams JBW, & Löwe B (2006). A Brief Measure for Assessing Generalized Anxiety Disorder. *Archives of Internal Medicine*, 166(10), 1092–1097. 10.1001/archinte.166.10.1092 [PubMed: 16717171]
- Stanley SM, & Markman HJ . (1997). Marriage in the 90s: A nationwide random phone survey. PREP, Inc.
- Stanley SM, Markman HJ, & Whitton SW . (2002). Communication, conflict, and commitment: Insights on the foundations of relationship success from a national survey. *Family Process*, 41(4), 659–675. [PubMed: 12613123]
- Stephenson R, & Finneran C . (2013). The IPV-GBM Scale: A new scale to measure intimate partner violence among gay and bisexual men. *PLOS One*, 8(6), 1–10.
- Sweet JA, & Bumpass LL (2002). The National Survey of Families and Households - Waves 1, 2, and 3: Data Description and Documentation. <http://www.ssc.wisc.edu/nsfh/home.htm>
- United States Census Bureau. (2019). American Community Survey. <https://www.census.gov/programs-surveys/acs>
- Ursano RJ, Stein MB, Kessler RC, Heeringa SG, & Wagner J (2020). Army Study to Assess Risk and Resilience in Servicemembers (STARRS) Inter-university Consortium for Political and Social Research [distributor]. 10.3886/ICPSR35197.v7
- US Bureau of Labor Statistics. (2020). American Time Use Survey Questionnaire 2011-2019. <https://www.bls.gov/tus/tuquestionnaire.pdf>
- Williams DR, Yu Y, Jackson JS & Anderson NB (1997). Racial differences in physical and mental health: Socioeconomic status, stress, and discrimination. . *Journal of Health Psychology*, 2(3).
- Williams DR, Yu Yan, Jackson James S. & Anderson Norman B (1997). Racial differences in physical and mental health: Socioeconomic status, stress, and discrimination. *Journal of Health Psychology*, 2(3).
- Yeager DS, Krosnick JA, Chang L, Javitz HS, Levendusky MS, Simpser A, & Wang R (2011). Comparing the Accuracy of RDD Telephone Surveys and Internet Surveys Conducted with Probability and Non-Probability Samples. *Public Opinion Quarterly*, 75(4), 709–747. 10.1093/poq/nfr020

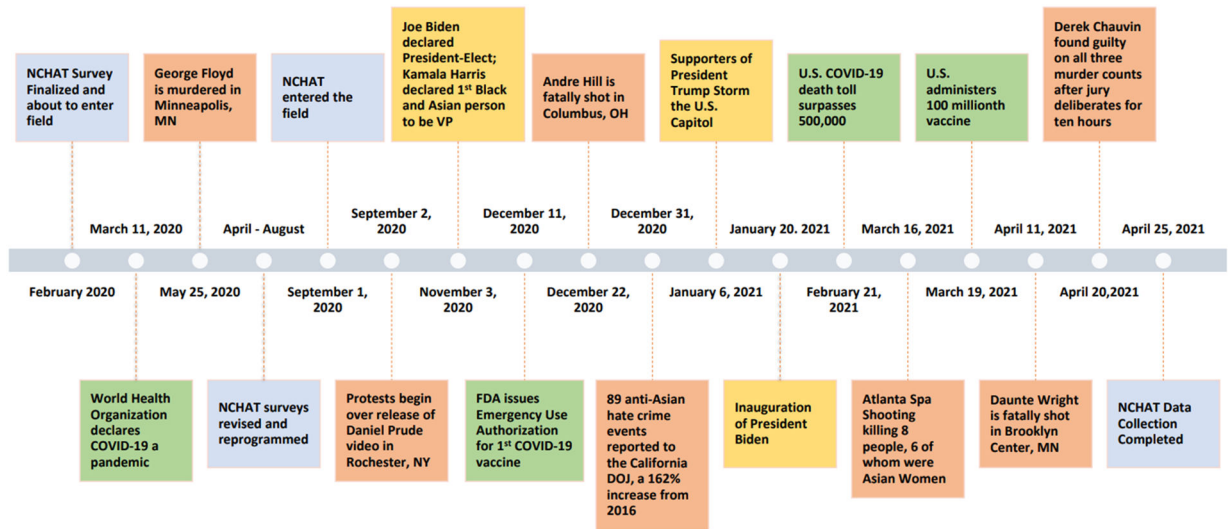


Figure 1. National Couples' Health and Time Study Contextual Timeline
 Note. Contextual Timeline is not exhaustive

Table 1
 Weighted and Unweighted Descriptive Statistics for Race and Ethnicity Based on “Select All that Apply” Responses

	Weighted				Unweighted				n	n that identified as Latina/o/x/e/Hispanic	n that identified as more than one race	n that identified as both Latina/o/x/e/Hispanic and more than one race
	%	SE	CI lower	CI upper	%	SE	CI lower	CI upper				
Race (select all that apply)												
White	80.88	2.00	76.96	84.79	79.74	0.67	78.43	81.04	2900	468	273	89
Black or African American	10.26	1.23	7.86	12.66	12.43	0.55	11.36	13.50	452	46	97	27
American Indian or Alaska Native	2.52	0.41	1.73	3.32	3.85	0.32	3.22	4.47	140	61	119	51
Asian Indian	2.23	0.47	1.31	3.15	1.98	0.23	1.53	2.43	72	<10	13	<10
Chinese	2.51	0.43	1.66	3.36	2.69	0.27	2.17	3.22	98	<10	40	<10
Filipino/a/x	1.32	0.25	0.84	1.80	1.40	0.20	1.02	1.78	51	13	32	10
Japanese	1.04	0.24	0.57	1.51	1.07	0.17	0.74	1.41	39	<10	26	<10
Korean	1.17	0.26	0.67	1.68	1.15	0.18	0.81	1.50	42	<10	21	<10
Vietnamese	0.77	0.20	0.38	1.16	0.55	0.12	0.31	0.79	20	<10	<10	<10
Native Hawaiian	0.24	0.09	0.07	0.41	0.27	0.09	0.10	0.45	10	<10	<10	<10
Guamanian or Chamorro	-	-	-	-	-	-	-	-	<10	-	-	-
Samoan	-	-	-	-	-	-	-	-	<10	-	-	-
Other Asian	1.24	0.29	0.67	1.81	1.04	0.17	0.71	1.38	38	<10	19	<10
Other Pacific Islander	-	-	-	-	-	-	-	-	<10	-	-	-
Some other race	3.11	0.50	2.13	4.10	4.65	0.35	3.96	5.33	169	99	56	32
Ethnicity /												
Not Hispanic, Latino/a/x/e, or Spanish origin	78.25	1.54	75.07	81.13	85.93	0.61	82.70	85.09	3,056	-	-	-
Mexican, Mexican American, or Chicano/a/x/e	11.15	1.17	9.05	13.66	7.64	0.44	6.82	8.54	278	-	-	-
Puerto Rican	2.47	0.39	1.80	3.36	1.76	0.22	1.38	2.24	64	-	-	-
Cuban	1.01	0.25	0.62	1.63	0.71	0.14	0.49	1.05	26	-	-	-
Another Hispanic, Latino/a/x/e, or Spanish origin	7.12	0.65	5.95	8.52	5.96	0.39	5.24	6.78	217	-	-	-

Source: National Couples' Health and Time Study. Authors' Calculations. SE = Standard Error. CI = Confidence Interval. Cell n is masked when n is fewer than 10.

Ethnicity was asked as mutually exclusive categories.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 2
 Weighted and Unweighted Descriptive Statistics for Sexual Identity Based on “Select All that Apply” Responses

	Weighted					Unweighted				
	%	SE	CI lower	CI upper	%	SE	CI lower	CI upper	n	n that identified as multiple sexual identities
Sexual Identity (select all that apply)	-	-	-	-	-	-	-	-	-	-
Heterosexual or “straight”	96.98	0.37	96.17	97.63	58.15	0.82	56.54	59.75	2118	97
Gay or lesbian	1.35	0.18	1.04	1.74	25.01	0.72	23.63	26.45	911	177
Bisexual	1.42	0.21	1.06	1.91	15.60	0.60	14.45	16.8	568	225
Same-gender loving	0.16	0.03	0.11	0.23	2.28	0.25	1.84	2.82	83	76
Queer	0.50	0.09	0.36	0.70	6.40	0.41	5.65	7.24	233	184
Pansexual	0.54	0.10	0.38	0.78	4.37	0.34	3.75	5.08	159	97
Omnisexual	0.03	0.01	0.01	0.05	0.49	0.12	0.31	0.78	18	16
Asexual	0.09	0.03	0.05	0.18	0.77	0.14	0.53	1.11	28	26
Don't know	0.08	0.03	0.04	0.16	0.52	0.12	0.33	0.82	19	12
Questioning	0.23	0.05	0.15	0.35	1.29	0.19	0.97	1.71	47	40
Something else	0.14	0.04	0.09	0.23	1.07	0.17	0.78	1.46	39	24

Source: National Couples' Health and Time Study. Authors' Calculations. SE = Standard Error. CI = Confidence Interval. Cell n is masked when n is fewer than 10. Substantial differences between weighted and unweighted percentages reflect the oversampling of LGBTQ2S+ persons.

Table 3
 Weighted and Unweighted Descriptive Statistics for Gender at Interview and Sex Assigned at Birth

	Weighted				Unweighted			
	%	SE	CI lower	CI upper	%	SE	CI lower	CI upper
Gender								
Man	48.79	3.35	42.29	55.34	48.76	0.83	47.14	50.39
Woman	50.90	3.35	44.35	57.41	47.75	0.83	46.13	49.37
Trans man	0.04	0.02	0.02	0.09	0.30	0.09	0.17	0.54
Trans woman	0.02	0.01	0.01	0.04	0.49	0.12	0.31	0.78
Do not identify as any of the above ¹	0.24	0.05	0.16	0.36	2.69	0.27	2.21	3.27
Nonbinary	48.62	16.45	20.32	77.82	64.65	4.80	54.65	73.51
Two-spirit	-	-	-	-	-	-	-	-
Agender	-	-	-	-	-	-	-	-
Gender fluid	14.85	6.09	6.27	31.24	24.24	4.31	16.73	33.76
Gender neutral	-	-	-	-	-	-	-	-
Genderqueer	15.03	6.18	6.33	31.66	27.27	4.48	19.33	36.98
Other	7.53	3.34	3.04	17.45	16.16	3.70	10.08	24.89
Don't know	-	-	-	-	-	-	-	-
Sex Assigned at Birth								
Male	48.83	0.03	42.32	55.39	50.23	0.01	48.61	51.86
Female	51.14	0.03	44.59	57.66	49.63	0.01	48.00	51.26
Don't know/Does not apply	-	-	-	-	-	-	-	-
Gender by Sex Assigned at Birth								
Man * Male	48.63	3.35	42.13	55.18	48.58	0.83	46.95	50.21
Man * Female	-	-	-	-	-	-	-	-
Woman * Female	50.87	3.36	44.30	57.42	47.45	0.83	45.82	49.07
Woman * Male	0.11	0.08	0.03	0.44	0.33	0.10	0.19	0.58

Source: National Couples' Health and Time Study. Authors' Calculations. SE = Standard Error. CI = Confidence Interval. Cell *n* is masked when *n* is fewer than 10. Substantial differences between weighted and unweighted percentages reflect the oversampling of LGBTQ2S+ persons.

¹ Based on "Select All that Apply." Reflects the proportion of those who selected "Do not identify as any of the above" who chose each category.

Table 4
Weighted and Unweighted Identity and Sociodemographic Descriptive Statistics of Main Respondents

	Weighted					Unweighted					% Missing
	%/mean	SE	CI lower	CI upper	%/mean	SE	CI lower	CI upper	n		
Race/Ethnicity /											
Non-Latina/o/x/e/Hispanic White	59.06	2.14	54.81	63.18	61.73	0.81	60.14	63.30	2,247	-	0.05%
Latina/o/x/e/Hispanic White	17.29	1.60	14.37	20.65	10.41	0.51	9.46	11.45	379	-	
Non-Latina/o/x/e/Hispanic Black	7.85	1.02	6.07	10.12	9.23	0.48	8.33	10.22	336	-	
Latina/o/x/e/Hispanic Black	0.58	0.17	0.33	1.02	0.52	0.12	0.33	0.82	19	-	
Non-Latina/o/x/e/Hispanic American Indian	0.19	0.09	0.07	0.48	0.30	0.09	0.17	0.54	11	-	
Latina/o/x/e/Hispanic American Indian	0.29	0.12	0.13	0.64	0.27	0.09	0.15	0.51	10	-	
Non-Latina/o/x/e/Hispanic Asian	6.87	1.22	4.82	9.69	5.74	0.39	5.03	6.55	209	-	
Latina/o/x/e/Hispanic Asian	-	-	-	-	-	-	-	-	<10	-	
Non-Latina/o/x/e/Hispanic Another Race	0.74	0.16	0.49	1.13	1.26	0.19	0.95	1.68	46	-	
Latina/o/x/e/Hispanic Another Race	1.51	0.36	0.94	2.40	1.84	0.22	1.45	2.33	67	-	
Non-Latina/o/x/e/Hispanic Multirace	3.54	0.55	2.61	4.79	5.66	0.38	4.95	6.46	206	-	
Latina/o/x/e/Hispanic Multirace	1.64	0.29	1.16	2.32	2.66	0.27	2.19	3.24	97	-	
Sexual Identity /											
Exclusively Heterosexual	96.56	0.41	95.66	97.27	55.49	0.82	53.87	57.10	2,021	-	0.00%
Exclusively Gay or Lesbian	1.02	0.13	0.79	1.31	20.15	0.66	18.88	21.49	734	-	
Bisexual (plus queer, pan, omni)	1.04	0.18	0.75	1.46	11.59	0.53	10.59	12.67	422	-	
Another or multiple identities	1.39	0.18	1.07	1.78	12.77	0.55	11.72	13.89	465	-	
Gender /											
Man/Trans Man	48.84	3.35	42.33	55.38	49.07	0.83	47.44	50.69	1,787	-	
Woman/Trans Woman	50.92	3.35	44.37	57.44	48.24	0.83	46.62	49.87	1,757	-	
Other Gender Identity	0.24	0.05	0.16	0.36	2.69	0.27	2.21	3.27	98	-	
Couple Type											
Different-gender	97.73	0.30	97.07	98.24	68.84	0.77	67.31	70.32	2,507	-	0.00%
Same-gender	1.77	0.25	1.34	2.33	27.29	0.74	25.87	28.76	994	-	
Non-binary	0.51	0.11	0.33	0.77	3.87	0.32	3.29	4.55	141	-	

	Weighted				Unweighted				n	% Missing
	%/mean	SE	CI lower	CI upper	%/mean	SE	CI lower	CI upper		
Marital Status										
Married	80.85	1.49	77.75	83.61	73.72	0.73	72.27	75.13	2,682	0.11%
Cohabiting	19.15	1.49	16.39	22.25	26.28	0.73	24.87	27.73	956	-
Age	43.14	97.38	1.23	45.05	44.26	0.17	43.92	44.60	3,642	0.00%
Interracial Couple	32.94	1.62	29.83	36.20	32.90	0.80	31.35	34.49	1,135	5.27%
Household Children <18	46.23	01.83	42.67	49.82	34.98	00.79	33.45	36.55	1,274	0.00%
Education	-	-	-	-	-	-	-	-	-	0.03%
High school or less	31.28	3.39	25.04	38.29	17.61	0.63	16.40	18.88	641	-
Some College	28.71	2.78	23.57	34.46	26.06	0.73	24.66	27.52	949	-
Bachelor's Degree +	40.01	3.39	33.57	46.80	56.33	0.82	54.71	57.94	2,051	-
Employment	-	-	-	-	-	-	-	-	-	0.11%
Full-time	64.50	1.70	61.11	67.75	67.98	0.77	66.44	69.47	2,473	-
Part-time	10.56	0.77	9.15	12.16	10.14	0.50	9.20	11.17	369	-
Unemployed	24.94	1.40	22.30	27.78	21.88	0.69	20.57	23.25	796	-
Multiple Partners	1.29	0.28	0.84	1.97	1.73	0.22	1.36	2.21	63	0.14%
Currently have or suspected have had COVID-19	21.26	0.94	19.48	23.15	20.50	0.67	19.22	21.85	745	0.22%
Month of Survey	-	-	-	-	-	-	-	-	-	0.00%
September	21.70	1.24	19.36	24.24	33.86	0.78	32.34	35.41	1,233	-
October	3.73	0.45	2.94	4.71	4.94	0.36	4.28	5.70	180	-
November	13.78	0.91	12.10	15.65	10.05	0.50	9.11	11.07	366	-
December	6.97	0.61	5.87	8.25	9.67	0.49	8.75	10.67	352	-
January	29.21	1.33	26.67	31.90	21.11	0.68	19.82	22.47	769	-
February	3.59	0.49	2.73	4.69	4.89	0.36	4.23	5.64	178	-
March	17.59	1.27	15.24	20.22	12.41	0.55	11.38	13.52	452	-
April	3.44	0.50	2.58	4.57	3.08	0.29	2.56	3.69	112	-

Source: National Couples' Health and Time Study, Authors' Calculations. SE = Standard Error. CI = Confidence Interval. Cell n is masked when n is fewer than 10. Substantial differences between weighted and unweighted percentages reflect the oversampling of LGBTQ2S+ persons.

¹ Variable was coded to be mutually exclusive. More detailed breakdown of key demographic characteristics are reported in Tables 1, 2, and 3.