988 Suicide & Crisis Lifeline

Research Protocol

Messaging and Communications to People at Higher Risk for or Disproportionately Impacted by Suicide Research Study

Introduction

In July 2022, the U.S. transitioned the 10-digit National Suicide Prevention Lifeline to 988, an easy-to-remember three-digit number for 24/7 crisis care.

In its first year (using data from July 2022 to July 2023), reports show 988 "has received almost 5 million contacts, of which nearly 1 million are from the Veterans Crisis Line—a part of 988—with the rest consisting of 2.6 million calls, over 740,000 chats, and more than 600,000 texts."[1]

Suicide is rarely caused by a single event or circumstance. Many individual, relationship, community, and societal conditions or factors contribute to suicide risk. Some groups experience more negative social conditions and factors related to suicide, such as racism and discrimination, economic hardship, poverty, limited affordable housing, lack of education opportunities, and barriers to physical and mental healthcare access.[2] In addition, some groups may have higher or recently increased rates of suicide, suicide attempt, or suicidal ideation than the general U.S. population. These groups may be considered higher risk or disproportionately impacted by suicide.

With the nationwide transition to 988, a need arose for 988-specific formative research among groups at higher risk for or disproportionately impacted by suicide to help support culturally sensitive, responsive, effective, and successful 988 communications: First, to make more people aware of 988 across the country, and then to instill trust and confidence in the service so people will contact 988 when struggling with mental health or in a moment of crisis.

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[1] https://www.kff.org/other/issue-brief/taking-a-look-at-988-suicide-crisis-lifeline-implementation-one-year-after-launch/

[2] https://www.cdc.gov/suicide/facts/disparities-in-suicide.html#:~:text=The%20excess%20burden%20of%20suicide%20in%20some%20populations%20are%20called%20health%20disparities.&text=Examples%20of%20groups%20experiencing%20suicide,of%20color%2C%20and%20tribal%20populations.

In Summer 2022, the 988 Formative Research Project began, a collaborative effort led by the National Action Alliance for Suicide Prevention (Action Alliance), the Suicide Prevention Resource Center (SPRC), and the Ad Council Research Institute (ACRI), and supported by the Substance Abuse and Mental Health Services Administration (SAMHSA). The project fills a critical research gap and supports more informed 988 messaging and implementation efforts.

The formative research detailed in this report included qualitative and quantitative methods to uncover the attitudes, beliefs, perceptions, barriers, and motivations related to 988 and identifying help-seeking behaviors among populations with a higher risk for or disproportionately impacted by suicide as a first step in better understanding how to reach and engage them. The research also uncovered important findings about trusted messengers from the study's population groups.

The populations in this study are not an exhaustive list of groups that have higher risk for or are disproportionately impacted by suicide. Additional research efforts among other populations at high risk for suicide—such as marginalized groups like people experiencing homelessness, recently incarcerated people, and people living with serious mental illness—will be critical.

Purpose

ACRI conducted qualitative and quantitative research to:

- **Uncover knowledge, attitudes, beliefs, and perceptions** about accessing crisis services among populations at higher risk for or disproportionately impacted by suicide.
- **Identify and explore barriers and motivators** to accessing crisis services among these populations.
- **Inform culturally sensitive, responsive, and effective messaging development** to help individuals access 988 in times of crisis.
- **Identify "trusted messengers"** that population groups turn to when facing difficult mental health challenges.

The 988 Formative Research project is an important starting point for 988 messaging efforts, intended to produce insights that can be used by the field to make research-informed decisions about how to encourage use and/or access to 988. The research also generated evidence-based message frames that can be tested, validated, and enhanced through additional message testing and research.

The findings reflected in the report provide a deeper look into how populations at higher risk for or disproportionately impacted by suicide view and/or access mental health resources and crisis services, and how to best develop messaging to encourage use and/or access to 988.

Sample Background

The project is focused on filling gaps in knowledge among populations that have a higher risk of or are disproportionately impacted by suicide, and where messaging efforts could have the most impact to connect people to support.

Many individual, relationship, community and societal conditions or factors contribute to suicide risk, so the project considered populations that disproportionately experience negative social conditions and factors related to suicide, such as racism and discrimination, economic hardship, poverty, limited affordable housing, lack of education opportunities and barriers to physical and mental healthcare access. In addition, the project also considered groups with higher or recently increased rates of suicide, suicide attempt, or suicidal ideation compared to the general U.S. population. Producing research insights that could help advance health equity and reduce disparities was also an important consideration for the project.

After a careful review of the most recent U.S. suicide data, project partners identified eight populations for inclusion in the formative research, including:

- American Indian/Alaska Native youth and young adults (ages 13-34)
- Asian American, Native Hawaiian, and Pacific Islander (AANHPI) youth and young adults (ages 13-34)
- Black youth and young adults (ages 13-34)
- Hispanic youth and young adults (ages 13-34)
- Individuals who have attempted suicide or experienced serious thoughts of suicide during their lifetime (ages 13+)
- LGBTQIA+ youth and adults (ages 13-49)
- People with disabilities (ages 13+) ● Rural older men (ages 49+)

Qualitative Phase

Sample Recruitment and Fielding Principles

ACRI and research partner C+R Research (referred collectively as the research team) partnered with four trusted sample providers for the qualitative research phase: Echo Research, Market Ease, PRC Global Research, and GC Research. The following is an overview of the fielding and recruitment research principles deployed during the study:

1. Prioritize Ethical Considerations and Sensitivity

Understanding the heightened vulnerability of participants dealing with mental health disorders, the research team's primary focus was to prioritize their well-being, informed consent, and privacy within the scope of our research. The research team approached this endeavor with a profound recognition of the challenges participants face, striving to create an environment that nurtured their safety and comfort throughout the research process.

To uphold the principles of informed consent, the research team took deliberate steps to ensure that participants fully understood the purpose, potential benefits, and inherent risks of their participation. Clear and comprehensive explanations were provided, empowering individuals to make decisions aligned with their best interests. The research team's commitment to transparency aimed not only to inform participants but also to empower them to make choices that respected their own well-being.

Furthermore, the research team diligently safeguarded the privacy of our participants, acknowledging the sensitive nature of mental health discussions. Stringent measures were implemented to protect personal information, including advanced encryption and secure data storage. Confidentiality language used during the recruiting and data gathering process can be accessed here. This was to assure participants that their trust in sharing their experiences was met with an unwavering commitment to preserving their anonymity and personal details. This approach, rooted in empathy and ethical considerations, underscores the research team's dedication to conducting responsible and respectful mental health research.

2. Ensure Informed Consent

When embarking on the recruitment of participants struggling with mental health, the research team placed paramount importance on delivering comprehensive insights into the research journey and the experiences participants can anticipate. The team's dedication to clarity and openness underscores our commitment to ensuring that those considering participation possess a clear understanding of every facet of the process. Recruitment scripts as part of the participant screener can be accessed here.

Transparency stands as a cornerstone of the research team's recruitment approach. We firmly believe that individuals must be equipped with detailed information to make informed decisions. As such, the research team meticulously laid out the research procedure, objectives, and potential outcomes, allowing prospective participants to grasp the context and significance of their involvement. This informed perspective empowered them to gauge how their personal journey intersects with the research goals, fostering a sense of agency and understanding.

Beyond mere disclosure, the research team held unwaveringly to the principle of autonomy. We recognize that individuals have the prerogative to make choices that best align with their well-being. Thus, the team not only provided information but also emphasized the freedom to withdraw from the research at any point without facing any consequences or repercussions. This assurance is rooted in the team's deep respect for the individual's right to control their participation, reaffirming our commitment to ethical practices and consideration of their mental and emotional needs.

3. Authentic and Transparent Recruitment

In anticipation of the unique challenges that may arise when recruiting individuals dealing with mental health disorders, the research team undertook thorough preparations to ensure their comfort and well-being throughout the process. Moderators were selected based upon their past experiences with sensitive topics such as mental health, crisis and suicide with various populations such as racial/ethnic, LGBTQIA+ and people with dissabilities cohorts. Training and meetings took place prior to and throughout the research process covering:

- Interview tone, approach and sensitivities due to subject matter
- Managing participant expectations and sensitivities
- Demonstrating empathy
- Guidance on tone of voice and pacing of questions and responses
- Specific language inclusions and exclusions (e.g., physical/mental health diagnoses, identity/demographics, etc.)
- Use of active listening, building confidence and allowing participants to tell their stories
- Using purposeful pausing to allow participants to fill in gaps
- Expressing gratitude throughout interviews and especially when difficult/sensitive experiences/topics are shared/covered
- Offering resources for immediate or later care, reinforcing availability of resources if participants request them or if interviews caused participants to become upset

Recognizing the pervasive stigma that often shrouds mental health discussions, the team took deliberate steps to address potential reluctance among participants. To counteract this, the research team placed a strong emphasis on confidentiality as a cornerstone of our recruitment approach. The team assured participants that their personal information would be handled with the utmost care, utilizing advanced encryption and secure data management systems to protect their identity. Additionally, the team underscored the potential positive impact of their involvement, highlighting how their valuable insights could contribute to a broader understanding of mental health experiences and subsequently help combat societal misconceptions.

Understanding the dynamic nature of mental health conditions and their potential to fluctuate, we adopted a flexible approach when it came to interview scheduling. The research team recognized that participants might experience varying levels of comfort and readiness at different times. To accommodate this, the team allowed for adaptable scheduling, ensuring that individuals could engage with the research at a time that aligned with their current mental well-being. This flexibility aimed to minimize any unnecessary stress or pressure, enabling participants to engage in the research when they felt most equipped to do so.

Furthermore, we acknowledged the emotional intensity that interviews about personal experiences could evoke. To address this, we provided a comprehensive support system. Prior to interviews, participants were offered resources that they could reach out to if they felt the need for emotional assistance. This included access to mental health professionals, helplines, and support groups. Moreover, the research team encouraged participants to prioritize self-care after the interview, recognizing the potential emotional impact of discussing sensitive topics. This emphasis on post-interview self-care aimed to provide individuals with strategies to navigate and manage any emotions that might arise during or after the interview process, underscoring our commitment to their holistic well-being.

Participant Qualification

Participants went through the following process to qualify through our fielding partners. This process helps fielding partners identify and secure quality respondents who are articulate and willing to participate.

- Online screener (approved by research partners and accessible here)
- ID verification
- Automated rescreen (re-asking key screener questions via a Google form, where they also uploaded an articulation video)
- Articulation video collection

Sensitive Topic Addressed/Opportunity to Stop Recruiting Survey

Prior to starting and at various points throughout the survey, the research team let people know/reminded them about the sensitive nature of the survey and provided them with the opportunity to close out the survey at any time. At the appropriate point during the survey, the potential participants were presented with the following statement:

> *The following questions may be of a sensitive nature and will be about your perceptions of some statements related to mental health. We would like to remind you that your participation is strictly voluntary and that your responses are used for research purposes only. Everything that participants share will be confidential and none of their personal information will be shared publicly.*

At the completion of the survey, recruits were presented with the following statement:

> *The researchers of this study understand that some of the questions in this survey may have triggered uncomfortable and difficult feelings. If you are interested in finding support to help you process any emotions that might have arisen, here are some resources that may help: We want to make sure you are safe. In the event that you begin to develop suicidal thoughts, please call 988 or 1-800-273-talk. If, for whatever reason, you are unable to access help, or, if you feel that things just won't wait, call 9-1-1 or go to the ER.*

Participant Consent

Participants were required to consent to participate in the research two times:

- Written approval during the recruiting process, when answering a recruiting survey
- Verbal approval prior to beginning their online in-depth interview

Consent by Parents for Teen Participation

Since qualified respondents in this study could be as young as 13 years of age, recruiters gained permission from parents for their teen to participate in the project. As part of the recruitment script and screener, parents were asked to provide consent. This script and screener can be accessed here. If the parent consented, they were instructed to have their teen complete the recruiting survey. Recruiters used the same language cautioning of the subject matter and the opportunity to leave the survey at any time. No personal identifiable information (name, address, phone #) was obtained from any respondent in this survey.

Interviews

The research team conducted webcam interviews via the Recollective platform. Interviews followed the approved interview guide developed by the research team and approved by project partners. The research team set aside up to 75 minutes per interview in case the scheduled 60-minute flexible interview lasted longer than anticipated. All interviews were recorded, and response data (transcribed verbatim responses, comments, and answers) were provided to the project partners on completion of the project. To access the interview guide, please visit here.

Sensitivities – Interview Notes

The research team members serving as moderators (conducting interviews, analyzing interview responses and synthesizing data and lines of thematic commonality/differences for the project team) were instructed to follow a set of guidelines for how to engage with participants, based on the subject matter being discussed. Moderators and researchers set the tone during the introduction by explaining the nature of the interview, the range of topics being discussed, the judgment-free nature of the conversation, and the establishment of a comforting, attentive, and safe space for participants to share their experiences and opinions. The following is a guideline for the moderators and researchers engaging in individual interviews:

- Tone needs to be empathetic.
- Remember to speak slowly and do not rush through topics.
- Be prepared to take a pause or end the interview if the respondent needs to.
- Talk about feelings without labeling/diagnosing a thought/comment.
- Remind respondent that this is a safe space.
- Thank respondent for sharing. (e.g., “Thank you for sharing that, I appreciate what you shared and acknowledge that it was not easy.”)

- If the respondent has questions, respond: “We are doing research that seeks to help the community at large, but we are not qualified to answer questions.”
- Listen for and use respondents’ language regarding discussing their identity, ethnicity, gender, sexual orientation, physical health, mental health, and emotional wellbeing throughout the interview.

Online Platform and In-Home Interview Option

The research team utilized the Recollective platform for conducting online qualitative studies and developing engaged insights especially for message frames and narrative testing. To address online platform accessibility issues, the research team and sample provider, Echo Market Research, gave potential participants in the People with Disabilities phase who lived in the Chicago area (for cost effectiveness purposes based upon moderator geographic location at the time of the project) the opportunity to participate in an in-home interview.

Quantitative Phase

A 20-minute online survey was conducted from May 4 – June 5, 2023 among N=5,451 U.S. teens (N=436) and adults (N=5,015) ages 13-90 (age of the oldest participants) to validate findings in the qualitative phase and to deeply understand people at higher risk for or disproportionately impacted by suicide. The overall sample included the following breakdowns of key cohorts analyzed for this study.

Sample Cohorts

- N=403 American Indian/Alaska Native youth and young adults (N=101 ages 13-17, N=302 ages 18-34)

- N=400 Asian American, Native Hawaiian and Pacific Islander (AANHPI) youth and young adults (N=68 ages 13-17, N=332 ages 18-34)

- N=400 Black youth and young adults (N=88 ages 13-17, N=312 ages 18-34)

- N=402 Hispanic youth and young adults (N=102 ages 13-17, N=300 ages 18-34)

- N=1,969 Individuals who have attempted suicide or experienced serious thoughts of suicide during their lifetime (N=104 ages 13-17, N=1,865 ages 18+)

- N=465 LGBTQIA+ youth and adults (N=65 ages 13-17, N=400 ages 18-49)

- N=1,390 People with disabilities (N=43 ages 13-17, N=1,347 ages 18+)

- N=400 Rural older men (ages 49+)

Although the study focused on populations at higher risk for or disproportionately impacted by suicide, this report includes data that reflects responses by the general population sample as a reference point of context for the reader to understand differences across cohorts and contextual differences to a nationally represented sample of the general public.

- N=5,451 Gen Pop Core (N=436 ages 13-17, N=5,015 ages 18+)
- N=1,639 Gen Pop ages 13-34 (N=436 ages 13-17, N=1,203 ages 18-34)
- N=2,596 Gen Pop ages 49+

Sampling Method: Online Panel Sample

To achieve the robust samples required for this initiative, the research team utilized several preferred online sample partners, namely: MyPoints, InBoxDollars, Make Opinions, and DISQO because they best met the needs of this project.

These online panels ensured a diverse composition of people that represent the population of the U.S. Recruiting participants to panels is typically done through social media, online and offline advertising, member referrals, recommendations from influencers and acquisitions, as well as through long-standing partnerships with various loyalty/reward members.

These panel partners have successfully completed vetting processes for online sample partners, which focuses on panel sourcing, respondent validation, and quality management procedures. The research team ensures each of these partners includes double opt-in registration, digital fingerprinting (using proven technology like RelevantID), identity verification (using Verity and/or TrueSample), and category and past participation exclusion (using ICE™). The research team also confirms the participant matches against third-party databases including the USPS. These vendors also use proprietary weighting systems to continually evaluate their panelists' responses as well as monitor their activity. Based upon this information, they can accurately determine which respondents are providing insightful answers and eliminate those who are suspect.

As mentioned, this project leveraged multiple panel partners and "blended" them to achieve the overall general population sample, as well as our specific cohort quotas. We ensured representation across the study by having each vendor "click balance" the incoming sample. This means that those who start the survey are representative to the U.S. Census on demographic characteristics such as gender, age, race/ethnicity, region, and income for the general population sample. Because this method can be complicated to achieve in a way that delivers unbiased, statistically projectable samples (this project used a probability sample focused on achieving quotas with sample providers through recruitment and participant identification based upon screening requirements), we have also employed a highly skilled and dedicated team to oversee this entire process. The analytic project team worked with our field team daily to monitor progress and the quality of responses. Once the research team started boosting for the various cohorts, we removed click balancing and targeted specific demographic profiles to meet our cohort quotas.

Additionally, the research team's annual SOC2 security certification requires us to review these vendors (and all our preferred vendors) on the ESOMAR 28 standards and verify the use of measurement systems such as RelevantID, TrueSample, Verite, RealAnswer. This review includes system security safeguards to confirm that all personally identifiable information continues to be secure and available to only those required to enable study completion.

Screening Process
Potential respondents were invited to participate in the study via a standardized survey initiation template that communicates that the invitation is for a research activity. The survey invitation included the following:

- Estimated length of interview
- Incentive terms
- Unsubscribe links
- Privacy policy and terms and conditions links

If a respondent clicked on the survey, they went through a screening process to determine if they qualified for the survey. A screener was developed by the research team and approved by project partners. The screener can be accessed here. The research team monitored the general population “fall out” of our specific cohorts and countered those interviews towards the respective cohort quotas.

All field and sample providers collected data for nearly 1,000 demographic and behavioral profiling attributes. The collection of these attributes began at registration and then continued through an ongoing profiling program (outside of specific research activities). This data is used to optimize the panelist’s experience and give researchers the ability to target audience segments of interest. Panelist profiles are updated on a continual basis and panelists can review and update their profile data at any time. Profiling attributes are also used in panel maintenance, integrity, and quality processes.

Once the general population sample was completed, the research team then focused on the cohort quotas and although targeting is available (via respondent profile collected), all respondents still needed to answer specific screening questions to ensure that they qualified for a cohort of interest. The only group that we could not target/pre-profile is the suicidal ideation cohort, which was defined as those who experienced any of the following during their lifetime: “questioning whether my life is ‘worth it’”, “suicidal thoughts or considered suicide”, and/or “thoughts about it being better if I wasn’t here”. In this study, 37% of study participants (18+ years old) had experienced suicidal ideation in their lifetime (36% among 13+ years old).

Sensitive Topic Addressed/Opportunity to Stop Survey
Prior to starting the survey and at various points throughout the survey, the research team let people know/reminded them about the sensitive nature of the survey and provided them with the opportunity to close out the survey at any time:

> *This survey is about topics of a sensitive nature, including mental health-related topics. The questions may require you to think back over your life and dig deeper to share past and present experiences. If you do not wish to continue with this survey, please exit at any point.*
>
> *If you do complete the survey, your responses will contribute to a large-scale effort aimed at improving the health and well-being of people just like you. We ask that you please be open and honest with your responses. Participation is strictly voluntary, and responses are used for research purposes only. Everything you share will be confidential and no personal information will be shared publicly.*

Consent of Parents for Teen Participation
The survey opportunity was deployed to adults who are 18 years of age and older and screening questions included the presence of children in the household under 18 years of age. Since qualified respondents in this study could be as young as 13 years of age, the research team gained permission from parents for their teen to participate in the project using this language:

> *The study we are conducting involves the opinions of your teen. We'd like to hear from the [LOGIC: **INSERT AGE/GENDER OF TEEN SELECTED, I.E. 15 year old girl**] in your household.*
>
> *This survey is about different issues that teens may face, including topics of a sensitive nature, such as mental health-related topics. Participation is strictly voluntary, and responses are used for research purposes only. Everything that participants share will be confidential and none of their personal information will be shared publicly. If at any point they do not wish to continue, they may exit the survey.*
>
> *It should take your teen about 15 minutes to complete.*
>
> *Will you allow your [LOGIC: **INSERT AGE/GENDER OF TEEN SELECTED**] to complete the rest of this survey?*

If the parent consented, they were instructed to have their teen complete the survey. The research team used the same language cautioning of the subject matter and the opportunity to leave the survey at any time during parental consent and throughout the research project to the teen participant. No personal identifiable information (name, address, phone #) was obtained from any respondent in this survey.

Survey programming

For this project, the research team used a two-step quality control process during survey programming. First, the team programmatically tested the survey using an exclusive implementation of a third platform called Survey Tester, which functions to stress test logic and quotas (a process that is repeated hundreds of times). The team then evaluated the data generated to verify that skip logic and quota adhesion were executed as specified in the survey instrument.

Once the programming team determined that the survey was performing as expected, a final test survey was checked by the Analyst/Client Service representative. Our analytic team also leveraged Survey Tester in order to improve communication and expedite the survey testing process, using the final, programmed questionnaire; system benchmarking; and Excel. This provided final confirmation of proper logic, including rotations, over-quota triggers, and any other survey level instructions that had been achieved. Any anomalies uncovered were addressed and corrected via our internal survey tester system so that no issue was missed, and all team members were kept apprised of the survey status. The program was checked again after the research team conducted a soft launch of the survey to ensure all data were populating correctly. This survey tracking system is electronically documented and audited as part of the SOC2 certification.

Making the Survey Accessible and Inclusive

The research team employed various strategies to make sure this survey was accessible to a wide range of individuals, including:

- Survey offered in their preferred language: English, Spanish, or Mandarin.
    a. The message frame translations in Spanish and Mandarin can be accessed here.
- For those who preferred to take the survey on a mobile device, the research team created an agnostic survey template that, by default, rendered on both desktop (both Mac and PC) and mobile devices (smartphones and tablets). The research team used survey software platform Unicom Intelligence, which reads the device operating system and renders the survey appropriately by dynamically adjusting to the specific device.
- Ensuring the the survey was ADA compliant, using the following process:
    a. Initial system audit by external compliance experts: Before sanctioning previous surveys the research team engaged in an external audit to educate and evaluate the same survey platform used in this project. These experts provided question-level guidelines, software setting recommendations, and survey specific evaluation.
    b. Leverage built-in technology and programming expertise: The research team employed the use of ARIA tags, special HTML instructions that tell the Nonvisual Desktop Access (NVDA) what to look for so that Text-To-Speech capabilities may

be utilized. The team also added indexing to all objects on a page to ensure that the survey-taker can traverse the page without a mouse.

c. Created internal analytic experts to provide survey design consultation: Most importantly, internal experts eliminated question designs that prove difficult to render effectively and included important accessibility safeguards,such as:

   i. Discouraged use of color as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. ii. Avoided standard matrix questions**,** which can be very overwhelming and cumbersome to the survey-taker who is using “text to speech” tools.

   Attributes can be asked one at a time in a rotated, sequential manner.

   iii. The inclusion of a back-button was recommended so that corrections may be made, if necessary. iv. Using arrow keys and tab on keyboard or other alternative input devices.

Data Quality

Acquiring legitimate, projectable, and a statistically sound sample is key for this project. The research team developed a rigorous and multi-faceted data quality system called Sentinel. This system combines cutting edge technology, advanced analytics, and proven survey design techniques to prevent fraud. Furthermore, the research team leveraged C+R’s internal department, which was dedicated and wholly focused on ensuring and improving our data quality procedures. Following are the data quality steps the research team implemented for this project:

Pre-Survey Completion Automated Process

Every potential survey completion was sent through multiple automated systems that evaluated them on multiple factors, ensuring that duplicates, survey-bots, and click-farms are prevented, in real time, from entering our surveys. By allowing only engaged, sentient respondents, this automated system helped guarantee that we have started with a sound sample base. The following are the steps the research team employed:

- **CleanID:** Third-party software that initiates automatic and immediate removals upon entrance. It flags and scores records, identifying bots, survey farms, and fraud.
- **Survey URL Encryption:** Prevents link tampering.
- **DGID:** Proprietary technology that digitally fingerprints respondent devices, removing duplicates.
- **DataSink:** Records the number of times a respondent has interfaced with a C+R survey, allowing us to flag over-sampled respondents.
- **Purgatory:** A database of respondents who have repeatedly violated our consistency checks, allowing us to flag these respondents on entry.
- **Browser Language:** Provide browser language outside of expected language.

Survey Completion Review and Daily Data Checks

During the interviewing period, as survey is completed, the research team employed the following tactics: **o** **Monitoring Termination Reports:** Daily monitoring and comparison of all termination points. Of the potential participants who clicked on the survey and passed data quality protocol and qualifications, 82% of them completed the survey. o **Interactive DQ dashboard:** All DQ Metrics appear on an interactive dashboard. The dashboard allows the ability to set unique DQ thresholds based on project needs.

- **Custom Survey-based and Length of Interview (LOI) Flags**: We use consistency checks including determining a minimum acceptable interview length, flagging straight-liners on key attribute batteries, identifying contradictory responses within individual surveys, and flagging “red herrings” in the data set.
- **Real Answer:** Third-party software aimed at evaluating open ends. The open end is evaluated, returning a Real Answer score, and is flagged if the score is outside an acceptable value.
- **Manual Daily Open-end Review:** The open ends are reviewed and removed for non-contextual data. Removal of pasted duplicate answers. Additionally, a words per minute (WPM) score is created to validate typed or speech to text data entry. We also removed those respondents who answer an open-ended question in a language not expected for this project.
- **Manual Daily Consistency Checks of Closed End Data:** We conducted consistency checks on select close ended data such as the age of the parent vs. age of child, etc. 4% of respondents were removed from the final data set due to survey based quality and consistency checks.

Post-Project Debrief with Sample Partners

Based on Sentinel data quality processes, the team identified a number of respondents who were flagged for data quality issues and reviewed. Those respondent IDs who have not passed our data quality threshold were sent to our sample partners so that they can be removed from the data set. During the data quality processes, 4% of respondents were removed from the final data set due to survey-based quality issues.

Analysis and Reporting

This study examined and organized findings into five key areas: Mental Health, Suicidal Ideation, 988 Use, 988 Messaging, and Trusted Messengers and Resources. Descriptive statistics were used to summarize responses among each cohort and among the general population. To determine how cohorts were different from their general population counterparts, the research team employed an indexing approach. This approach helped identify whether certain attitudes or behaviors are more or less typical within that cohort.

When a cohort over-indexes for a particular trait, it means that the trait is more prevalent within that specific group and how it differed or reflected similarities among a comparative general population group. Indexing calculation: Divide the percentage of cohort with characteristic by the percentage of the general population with that characteristic. The comparison was limited because samples were not exactly the same and provided contextual understanding of similarities and differences. In other words, that trait is "overrepresented" in the cohort. The research team used a threshold of 120 and above (based upon research objectives, sample sizes and distribution of data and identifying statistically significant differences), which means that we looked at sub populations where the representation of a particular characteristic is 120% or more compared to the average representation in the general population. Conversely, when a cohort under-indexes for a trait, it means that the trait is less prevalent within that specific group compared to the general population. The trait is "underrepresented" in the cohort. The research team used a threshold of 80 or lower, which means that we looked at groups where the representation of a particular attribute is 80% or less compared to the average representation in the general population.