**How-to guide: Creating a mental health survey**

Nasir Almasri, Blair Read, and Clara Vandeweerdt

**Summary**: This “how-to” document describes the process of conducting a mental health survey. It includes the specific steps our team undertook in the development of this project and identifies questions and decision-points we faced prior to, during, and after the creation and fielding of the survey. Although we try to clarify these steps as much as possible, we encourage potential investigators to contact us with questions.

**Pre-survey**

Prior to creating the survey, a few critical steps must be taken to make sure (1) that investigators clearly identify the outcomes they desire in order to tailor the survey to that result and (2) that all important stakeholders are aware of the survey and its contents.

1. *Decide on an end goal*

Although the end goal may change as the project progresses, it is important to know whether the audience of your survey is your department, institution, discipline, or beyond. For example, our group initially considered survey PhD students across MIT, but decided a Political Science-specific survey replicating Barreira et al (2018) was better.

1. *Engage your institution’s legal team and create a consent form*

Our particular survey included a set of questions related to suicide ideation. If you use these questions or others that might carry legal risks, **be sure to consult the legal team** at your institution. Also, be sure to create a consent form that all respondents read. We have included the one we used in our repository. Because our survey was limited to a narrow set of institutions, we were able to include individualized information about where respondents could access support should the survey trigger them in any way or if they simply realized that they needed it.

1. *Engage other relevant mental health related providers*

Consulting staff members working on mental health questions may give useful insights into the appropriate ways to ask and frame questions. It might even make sense to include a mental health specialist as a co-author.

1. *Develop a data storage and safety plan*

Depending on what identifying information you ask (see point #8 below), data storage and safety are critical. Develop a plan that allows you to analyze data based on identity and simultaneously ensure that responses remain anonymized. Check if your university has a computing environment or other system in which information can be secured. For example, we used Qualtrics to collect the data, moved the data to Harvard’s Research Computing Environment, and deleted the information from Qualtrics.

1. *Prepare for selection bias*

Our survey was voluntary. In all likelihood, your project will be, too.[[1]](#footnote-1) This creates important limitations for causal inference because there is, in all likelihood, selection bias. Excluded from the survey are students who dropped out of the program, potentially because their mental health was declining or because they saw the potential for it to decline and left before it affected them in such a way. Also excluded are students who chose not to respond. It is unclear whether this biases the results negatively or positively. Finally, it is unclear if students that struggle or have the potential to struggle with mental health select into PhD programs or if PhD programs themselves are the cause of (furthering) mental health struggles. Either way, our analysis makes a strong case that culture within our discipline are exacerbating these issues. It might be possible to circumvent some of these questions by surveying students before and after they begin their programs.

**Creating the survey**

As you create the survey, be sure to carefully select questions based on the value they add and have an idea of what answers to your questions will contribute to your target audience’s understanding of mental health concerns in your institution or department.

1. *Identify target respondents*

Responses may vary – or, at least, vary for different reasons – depending if the person is an undergraduate, masters, or PhD student, or even a post-doc. As PhD students, we recognized that students often worked on their dissertations alone, that they were particularly dependent on their adviser’s advice and approval, and that job and funding opportunities were quite competitive. Masters and undergraduate students typically have different sets of concerns. Choose carefully the types of respondents you include and be sure to differentiate between their sets of concerns if you include more than one group.

We included in our survey the top ten political science programs according to *US News and World Report* rankings. For distinctive reasons, only seven of the ten participated. We identified liaisons within each department who assisted in disseminating the surveys within their department.

1. *Select baseline measures of mental health*

Luckily, there already exist batteries of questions that are used by practitioners to diagnose depression (PQH-9) and anxiety (GAD-7). It is likely that others exist as well, but these are the most common and we recommend beginning with those. We even included some “subjective” measures (asking how individuals felt about their own mental wellbeing) to compare to our “objective” measures. We also included questions about impostor phenomenon, advising, friendships, alcohol usage, access to mental health treatment, suicide ideation, and sexual harassment, among other topics. In each case, we identified the usefulness of answers to each question.

1. *Carefully select demographic questions*

Demographic questions might include age, gender/sex, year in program, race/ethnicity, religion, and international status, among others. **It is critical to carefully choose these questions**. In some cases, we recognized that year in program, gender, and international status was enough to identify individuals (within a single school). To collect more data while protecting individuals’ anonymity, we adjusted the measurement of variables. For example, we measured year in program by asking whether students were in coursework, working on their dissertation, or on the job market.

1. *Add open-ended responses*

Although we had hoped to gather more data on how identity influenced mental health, we could not do so without losing the anonymity we had achieved. We worked around this by adding a link at the end of our original survey. The link was to a completely disconnected survey that contained three open-ended questions that asked what departments could do (and are doing) to improve mental health and whether individuals felt that their identity influenced them in any way.

**Be sure to warn respondents not to identify themselves in their answers.** If you included open-ended questions, be sure to ask if responses can be quoted directly, paraphrased, or not included at all.

1. *Test run your survey*

It might be useful to have colleagues test the survey for any mistakes or confusing elements. It is also useful to know how long the survey takes to complete.

**Fielding and analyzing the survey**

The process of collecting the data includes setting clear time limits and properly advertising the survey. After you collect the data, it is important to have in mind certain caveats about what the data will show you and how to interpret it.

1. *Setting a timeframe and sending reminders*

Data collection should only span a few weeks. It is important to be intentional with your timeframe depending on your respondents. For example, it is a bad idea to survey students during finals. We settled for early spring semester. We were lucky in fielding the survey in late February and early March 2020 – just before COVID-19 was considered an epidemic that might have further exacerbated mental health concerns and skewed results. It is important to use a reasonable but tight timeframe. Be sure to send out a few (but not too many) reminders. We sent two or three in each department, sometimes from different liaisons within departments, encouraging students to respond.

1. *Early data analysis and identifying information*

As you begin to examine the data, check for irregularities. In fact, it might be good to check on this as results trickle in. Be sure that responses are not sufficient to identify any individuals and, if possible, do demographic analyses on the most important variables as quickly as possible before deleting the information.

1. *Analyze data with caution*

Given the concerns with selection bias addressed above (see point #5), it is critical that your analysis not overstate your results and that it recognizes the inability to causally identify the outcomes. However, as we note in point #5, even if programs are not the *cause* of the mental health issues does not mean that they are not still responsible for taking into consideration that many of their members suffer from them.

1. *Tailor final product to audience*

We initially developed a report that included an executive summary. We also developed school-specific results which, of course, remained anonymized. We sent the report and executive summary to departments around the country that were included in the survey. We then reshaped the report so that it resembled a typical academic journal article and placed the remainder of the information – this how-to guide, an executive summary, and other supplementary materials – in a GitHub repository for others to access.

1. As a side note, our response rate was good because we made connections within the departments we surveyed and asked those individuals to use a more personal touch to encourage students to respond. [↑](#footnote-ref-1)