

COMMUNITY-LEVEL BEHAVIORAL HEALTH SURVEYS: A PRIMER

Courtney Cuthbertson

Scott Loveridge



Abstract

This document is designed to help community leaders assess the best strategies for obtaining data on local and regional behavioral health conditions. It provides resources for finding data, information on how to conduct a survey when available data sources are insufficient, and strategies for publicizing results to maximize the odds of the survey findings having an impact on reducing the incidence of substance abuse or mental health issues in a community.

The CAPE Project was made possible by funding from the Substance Abuse and Mental Health Services Administration (SAMHSA), the United States Department of Agriculture's National Institute of Food and Agriculture (USDA NIFA, 2013-48765-21544), and the Regional Rural Development Centers (RRDC).

This report was released in April 2015.



About the Authors

Dr. Courtney Cuthbertson is a sociologist and Co-PI for the Community Assessment and Education to Promote Behavioral Health Planning and Evaluation project.

Dr. Scott Loveridge is Director of the North Central Regional Center for Rural Development and Professor in the Department of Agricultural, Food, and Resource Economics at Michigan State University.

For more information about the CAPE Project,
visit us online at healthbench.info.

TABLE OF CONTENTS

INTRODUCTION	1
WHAT DATA EXIST? WHAT DATA DO WE NEED?	2
SURVEYS	3
What is a Survey?	3
What Can Surveys Do?	3
Is a Survey Right for My Community?	5
Basic Approaches to Administering a Survey	6
SURVEY SAMPLING ISSUES	8
Informed Consent and Vulnerable or Compromised Populations	9
Key Informant Approach	10
CONSIDERATIONS IN SURVEY INSTRUMENT DESIGN	12
Survey Questions and Answers	12
Survey Length and Complexity	13
Timing of the Survey and Follow-Ups	14
AFTER THE RESPONSES COME IN	14
Data Analysis	14
Getting the Word Out	15
BIBLIOGRAPHY	17

INTRODUCTION

Behavioral health refers to mental health, substance abuse, and similar issues related to emotional, mental, and physical wellbeing. Behavioral health includes health conditions resulting from individual choices and actions while also leaving room for explanation from contextual factors such as biology and the environment. The incidence of different behavioral health conditions varies by place. For example, in 2012, Wyoming had an age-adjusted suicide rate of nearly thirty per hundred thousand while the rate for New Jersey was under eight per hundred thousand (AFSP, 2014). The economic and social conditions of a place, its history, governance, medical practice, the weather, built environment, and proximity to other places may all contribute to variation in incidence of behavioral health conditions. It is thus important to explore local data in making decisions about priorities in addressing behavioral health.

This document will first help the reader decide whether a data collection effort is the right path, and then provides an overview of how to conduct such an effort. This document is intended to provide a set of basic guidelines to help communities sort out how to approach their data needs in community behavioral health. This short piece is an overview some of the main considerations in survey research, with examples of how surveys might contribute to community-level behavioral health policy dialogue¹.

¹ There is a wealth of much more extensive resources available for individuals who wish to become deeply versed in survey methods. Within the field of survey research, probably the best known are a series of books by sociologist Don Dillman and colleagues (Dillman, 1978; 2000; 2007; Salant and Dillman, 1994; Groves et al., 2002; Dillman, Smyth, and Christian, 2009). A more recent work by Blair et al. (2014) could also be helpful. There is an academic journal with regular updates on the latest innovations in methods for surveying and sampling, called *Public Opinion Quarterly*. Survey research is a well-developed field and many have spent their careers developing and understanding the science of conducting surveys. See the bibliography of this document for these and other methodological resources.

WHAT DATA EXIST? WHAT DATA DO WE NEED?

Before you begin looking for data, it is important to determine which behavioral health issues are of interest and what geographic scale is necessary (such as state, county, metropolitan area, census block). Other characteristics of interest should also be determined (such as race, socioeconomic background, age, rural or urban status). Knowing what characteristics you seek in a dataset will help you to select the one that is most appropriate.

The US has several very strong data sets upon which much local decision making can be built. Often these data can be accessed down to the county level. For example, County Health Rankings (www.countyhealthrankings.org) shows data from different sources by county for a number of health-related indicators, such as poor physical health, poor mental health, smoking, and obesity. A number of federal data sources are detailed on the Substance Abuse and Mental Health Services Administration-funded and USDA-National Institute of Food and Agriculture (NIFA) Community Assessment and Education to Promote Behavioral Health Planning and Evaluation (CAPE) Project website at <http://www.healthbench.info/capedataresources.html>.

It is also possible that state, regional, or local data sources exist. Many government agencies at these levels collect data. You may be able to find data from the state police, state departments of health and human services, state departments of education, county or city public health and/or mental health departments, county clerks offices, local school districts, community health centers, local veterans services centers, local parks and recreation offices, and mental health and substance abuse treatment providers and organizations.

At times, the available data are not sufficient to enable local behavioral health decision makers to accomplish their goals. If you are unable to find data that will help you with your questions about behavioral health issues, you may decide that you would like to undertake your own survey data collection and analysis plan. The remainder of this document will provide a brief overview of how to approach survey research within your community.

SURVEYS

What is a Survey?

A survey is one method through which community members can systematically gather information specific to their area or region. Surveys can be completed online, by paper and pencil, over the phone, or face-to-face. Questions on a survey are standardized and uniform for all who respond, and can include specific choices from which people can select, or can be open for free responses from participants. Surveys are a good way for community leaders to get a general overview of behavioral health. They can also be tailored to be very specific to the community's behavioral health needs and priorities.

What Can Surveys Do?

A survey can...

- Ask community members about behavioral health practices or perceptions
- Generate large amounts of data in short amounts of time
- Be easily administered to many people

A survey cannot...

- Provide its own interpretation and analysis
- Make decisions about behavioral health
- Provide an in-depth narrative about behavioral health experiences

The pros of a survey:

- Provide information from community members
- A tool to gather information of interest
- Usually takes a short amount of time for participants to complete
- Usually takes a short amount of time to collect data
- Can be administered easily

The cons of a survey:

- Costly to implement
- Require time and money to construct, collect data, and analyze
- Must be worded carefully

In addition to costs, another potential drawback of a community survey approach is that the results may not be easily comparable to other areas. Even slight changes in wording of a survey can change the results. For example, Loftus and Palmer (1974) showed respondents a video of an automobile accident and asked them to assess the car's speed using differently-worded questions for groups of respondents, finding that the wording of the question influenced the

responses. Wording suggesting a more severe accident (“collided,” “smashed”) generated estimates that the vehicles were traveling faster than words suggesting a less severe accident (“bumped,” “contacted”), even though all participants viewed the same video (Loftus and Palmer, 1974).

Copying the exact wording of a prior survey does not guarantee that the two surveys can be compared. Considerations of the design of how people are identified to participate and how they participate can also influence results. For example, one survey might use email while another might use the postal service. Since older people use computers less than young people, older people might be more likely to answer postal surveys while younger people might be more inclined to answer the web-based survey (Kongved, et al., 2007). Thus the method of approaching the respondents can skew the results. For example, if a web-based survey finds 2% of people with suicidal thoughts and a mail survey finds 5% of people with suicidal thoughts, one cannot say with certainty that the mail survey community is the same or different from the web survey community.

Time might be another factor. While the community may be frustrated with the lag between the time when federal data are collected and when they are published, the reality is that conducting and analyzing a survey takes time. Building and testing a survey, especially if it is a one-time effort, may mean that the final report from the data arrives at about the same time as federal data.

Another potential problem associated with surveys is that of non-response bias. Behavioral health includes conditions that can be stigmatized in our society (such as suicide or substance abuse), so people may be reluctant to complete a survey directly asking them about these issues. Related is the problem that many people who exhibit severe behavioral health problems may be homeless or transient, such that they become difficult to reach with standard survey approaches. Thus certain problems may be under-reported if a survey approach is used.

Is a Survey Right for My Community?

There are several good reasons to conduct a survey.

1. **The problem is new, or not evident elsewhere.** For example, if the local hospital reports a new type of overdose that is otherwise not well understood, it may be very important to assess how many people are experimenting with that drug.
2. **The geography of the problem is not represented within existing data sets.** Most public data about behavioral health is published at the state or, at best, county level of geographic aggregation. A few data basic sets such as the Census provide very limited data at the zip code or tract level. If a narrower geography such as a township or small city is the focus, a survey may be appropriate.
3. **If one is trying to assess an intervention.** If an intervention is planned it may be relevant to conduct surveys before, during, and after the intervention, but bear in mind that the condition may be changing due to other factors so a non-treatment community may also need to be surveyed to produce a valid assessment. The need for a control community might be reduced if standard protocols are borrowed from national surveys. Then, survey results might be benchmarked against national trends.

It is important to consider what data is available before implementing survey collection, especially because it is not easy or cheap to implement a survey correctly. One should first exhaust all available sources of non-survey data before plunging into the effort.

The reader should first to consider the data resources summarized by the Substance Abuse and Mental Health Services (SAMHSA) and USDA-National Institute of Food and Agriculture (USDA-NIFA) project called “Community Assessment and Education to Promote Behavioral Health Planning and Evaluation” or CAPE. The CAPE project website, <http://healthbench.info> provides a tool kit page with a listing of many sources of vital statistics that can be related to various forms of behavioral health. The list is found at:

<http://www.healthbench.info/capedataresources.html>

In addition to the national sources listed at the URL above, government agencies in your state may have excellent data that is more detailed by locality than federal sources. It can also be useful to consider administrative data such as:

- topics of 911 calls;
- crime statistics;
- hospital emergency room intake records;
- rates of use of substance abuse services;

- hospitalization rates for substance abuse or mental illness;
- reports of sexual assault;
- reports of child abuse;
- number of deaths involving substance abuse;
- number of calls to crisis hotlines; or
- use of homeless shelters.

Use of the administrative data sources listed above is likely to be far less costly than conducting your own survey. An additional advantage of using administrative sources is that once the system for assembling them into a report is developed, it is very easy to maintain.

To judge whether a survey is right for your community, it may be useful to conduct a focus group with select community leaders. *Focus groups* are a form of qualitative, semi-structured interviews where you will select only a few questions (10 or fewer) for the participants to discuss together, in person. The ideal number of people for one focus group is 6-8, to allow time and space for each person to voice their opinions. Focus groups typically take place over a 1-3 hour period. You should think of some questions to ask this group ahead of time, and you can use the responses to gauge whether conducting a formal survey about behavioral health would be beneficial. Some questions you might ask a group of community leaders in a focus group could be:

- What are the biggest behavioral health issues the community is currently facing?
- Where do you and others get data or information about those behavioral health issues? What data are currently available?
- What problems are there in accessing data or information about behavioral health in our community?
- What kinds of data or information would be helpful to have about behavioral health in our community, that we do not already have? How would that data be used?
- If we conducted a survey of community leaders or community members, what should be included on that survey?
- Conducting a survey can be costly. What community groups or organizations might be willing to sponsor this project? Who would be willing to contribute their time toward the effort?

Basic Approaches to Administering a Survey

If a decision is made to pursue a survey, there are four basic ways to administer (send) it:

- **Mail.** This is a very traditional method and still in use but declining in popularity due to costs. Surveys are sent to target individuals who complete the survey with pencil and mail it back to the survey administrator. While this is an excellent way to administer

surveys, it includes mailing costs of the survey and any reminders, as well as labor to track respondents and input the data into a software program, such as Excel, for analysis.

- **Telephone.** Target individuals are contacted via telephone and asked a series of questions by an enumerator, who often follows a series of prompts on a computerized script. This is also quite costly due to the need to hire and train staff. A growing problem with phone surveys is that an ever-increasing proportion of the country is no longer using land-line phones, the numbers for which were normally publicly available, along with simultaneous increases in cell phone use where numbers are kept more private.
- **Web-based.** Potential respondents are mailed (or e-mailed) an invitation to visit a web address where they complete the survey. This format is often very fast to complete although it requires some technological finesse to create the survey. There are several online platforms for web-based surveys, such as Qualtrics, Survey Gizmo, and Survey Monkey. An advantage to online surveys is that the responses are collected in a format that allows for faster analysis than more traditional survey formats, such as mail surveys.
- **Face-to-Face.** Enumerators visit individuals and ask the questions. The face-to-face method is by far the most costly in most instances due to the expense of training individual enumerators and the cost of travel to individual households or people to collect survey data. Due to the large expenses of the face-to-face survey data method, it is not discussed further in this document. Face-to-face surveys may be useful in preliminary work to design a survey that can be administered with one of the other methods. One variation of the face-to-face survey is to drop off a paper survey to a targeted area or random sample of households within an area, and then pick up the completed survey later. This can improve response rates over a mail survey and could be effective within a small geography if the population is fairly stable.

Web-based or phone survey administration offers some distinct advantages over mail surveys in that some responses can be easily programmed to be skipped if the question does not apply to that particular respondent. For example, if the respondent has no domestic partner, the survey can be programmed to skip questions about domestic partner abuse. If the respondent admits to non-medical use of prescription drugs, the survey could delve further into which drugs are being used non-medically. The skip pattern can also be integrated into a mail survey, but tends to be a bit harder for the respondent to follow if there are multiple skips or branching of questions that occur based on earlier responses. The advent of user-friendly web-survey software has made programming these skips relatively straightforward for non-computer science types to be able set up.

SURVEY SAMPLING ISSUES

It is usually impossible to survey one hundred percent of people in any given area. A *sample* refers to the smaller group of people who are asked to complete a survey. The results of the survey will tell the most when the sample is representative of the larger population in some way. Much has been written about sampling and sample design. It is a potentially complex topic and there are many pitfalls, mostly having to do with *selection bias*. Selection bias means the person conducting the sampling somehow reduces or increases the chance of obtaining responses from certain groups. For example, a survey conducted in mid-fall might either miss college students or over-represent them, depending on whether the community is host to a residential college. If college students would somehow answer the survey questions differently than the general population, there would be a bias in the results.

The most straightforward sampling method is a simple random sample. Mail or telephone lists are available for purchase from private sector vendors. Some vendors even allow customers to draw a map using software on the vendor site to produce a very tailored geography for the sample they will draw for the customer. It may also be possible to obtain lists from local governments.

A random sample may not always be appropriate. For example, say you are concerned with a city that has a population of one million people. Within that city there is a certain section of town with a population of 20,000 that consistently has high incidence of certain problems or perhaps has a concentration of a minority group. A random draw of 1,000 respondents may not result in enough respondents from the high needs place or group. On average it would produce 20 observations, but with a random draw it could easily be far less. A solution is to divide the city (or region) into districts and draw a certain percentage of people from each district; this is known as *cluster sampling*. One can also oversample districts of particular concern to get enough observations from those districts, and then apply statistical weights to adjust for differences in sampling probability. One can also oversample in districts where conditions may lead to low response rates, but that raises the issue of sample validity, which is summarized next.

Earlier we touched on the issue of non-response bias. Non-response is a large issue within the field of survey design. If too few people answer the survey (say less than 20% of contacted individuals), the results are not scientifically defensible because it becomes less likely that non-respondents are very much like respondents. The percentage of people who do not reply to

surveys has been growing in recent decades (Blair, Czaja, & Blair, 2014). This is probably fueled by several factors including the increasingly common fake survey that is really a sales pitch for some company trying to market its wares or politically motivated surveys that are skewed towards a group's particular agenda. A related issue is the promise that the survey will "only take five minutes" when in fact it is much longer. After this kind of experience, people may become less willing to cooperate with a survey.

One way of gaining trust of people who are asked to reply to your survey is to use a well-respected local entity as a partner in the survey. This might be local government, the community's main hospital, or perhaps a nearby institution of higher education. Many colleges and universities have units of trained survey specialists who, for a fee, can assist with public-service type surveys.

When implementing a community behavioral health survey, it is important to clearly explain the purposes of the survey to the respondent. Measures should also be in place to protect the identity of the respondents and these should be explained to the respondent. Colleges and universities conducting surveys must have these measures in place prior to initiating a survey, but it is good practice on any survey, irrespective of who is managing the survey.

Many respondents do not reply on the first contact. To increase the sample response rate, many seasoned survey experts plan on sending multiple inquiries to persons in their sample. Obviously this adds to the costs of doing a survey. In a mail or telephone survey, it is not unusual to contact a person two or three times before obtaining a reply, so before embarking on a survey it is important to consider and plan for this cost.

Informed Consent and Vulnerable or Compromised Populations

With any survey, you need to be sure in soliciting respondents for the survey that any potential respondent is aware of what the survey is about and will be able to voluntarily complete it before asking for participation. For working-aged adults who are not in prison and who do not have mental health or substance abuse issues, this means administering an *informed consent* procedure. In an informed consent procedure you describe the survey, assure the participant they can withdraw at any time, describe the purposes, risks, and benefits of the survey, and who will have access to the data.

For certain groups of individuals, true informed consent is especially difficult. Individuals with severe mental or behavioral health conditions may not be able to adequately complete a survey.

Also there are substantial ethical issues associated with surveying individuals who are in compromised situations, including incapacitated individuals, the prison population, and youth, all of whom may have higher incidence of behavioral health issues than the general population. The primary issue here is that the individual may not be in a position to make an informed decision about sharing his or her personal details, or may feel undue pressure to cooperate as a result of their situation. If you feel the need to target a group of individuals that fit into a compromised population, it is best to be in touch with a university or other seasoned survey professional to learn about appropriate procedures for collecting data from special populations².

Key Informant Approach

Concerns about cost, non-response, or compromised populations are all good reasons to consider sending your survey to *key informants* – people who have an interest in the topic of community behavioral health, and who, by dint of their day-to-day activities, have better information about the topic than the general public. Targeting specific people in the population in this way is also known as a type of *stratified sampling*.

For example, by surveying formal and informal community leaders in ten communities instead of the general population in those communities, the SAMHSA-funded CAPE project was able to obtain response rates far higher than normally experienced in general population surveys. The leaders were recruited by local teams who identified individuals interested in seeing the results and who had a good sense of what was happening in the community. The respondent assessment of conditions in the community was fairly consistent with data drawn from more comprehensive and expensive general population surveys. This key informant approach is far less expensive than a typical survey as fewer people need to be recruited and one can generally obtain a working email address, reducing the costs of re-contacting them. They are likely to be familiar with internet surveys and can input their answers directly, eliminating the need to complete data entry work after replies arrive, as would be the case with a mail survey. Another advantage is that the number of individuals to contact is much smaller. The survey results can be paired with data from other sources as was done in the CAPE project³. The CAPE community snapshots and profiles merge leader survey responses with information from public data sources, providing a rich set of indicators that can lead to community action. In the CAPE project, several of the local teams used the profiles and snapshots to assemble

² For more information about ethical issues in human subjects research, see the Belmont Report (1979), available online at <http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html>.

³ For an example of how draw data from both a local survey and other sources, see the CAPE project output at <http://www.healthbench.info/communities.html>.

community support for action to address local issues. The combination of leader opinion and supporting secondary data can be very powerful in forging energy for community action.

A downside of the key informant approach is that it is not realistic to be able to extract *incidence rates* from the respondents. When a key informant survey is analyzed, it not likely that it could indicate that 8% of the population is suffering from domestic abuse. If you were to ask a key informant about the rate of domestic abuse they may indicate they do not know. It is more realistic to ask about the importance of the issue or whether it is getting better or worse.

Furthermore, it is probably not realistic to claim that the respondents of such an approach form a random sample. One way to get around the non-random sample problem in a key informant approach is to simply survey everyone who has a particular type of job function that leads one to believe they may have knowledge about what is happening in terms of local community behavioral health. The survey could go to the entire county commission, all social workers, all local non-profits involved in providing health, all judges, and so on. An example of this method that used mental health providers as the key informants is found at the February 6, 2014 CAPE webinar entitled, "Community Data Roundtable" (<http://www.healthbench.info/webinars.html>).

To learn more visit the Community Data Roundtable project website at <http://www.communitydataroundtable.org/>.

CONSIDERATIONS IN SURVEY INSTRUMENT DESIGN

Survey Questions and Answers

Questions in surveys must be constructed carefully to make sure they are measuring the concepts they are intended to measure. Questions should be specific enough to produce the desired information. Rather than asking “Do you drink alcohol?” to which many people would say “Yes,” it would be better to ask “How often do you consume alcoholic beverages?” which would allow participants to answer how many times per day or week they consume alcohol and thus provides more detailed information for analysis.

Each item in a survey should ask only one question. A good rule of thumb is that if the question includes the word “and,” it is likely asking about more than one thing and dividing the question into two or more items should be considered. For example, the question “how often do you smoke cigarettes and drink alcohol?” is asking two or more questions – how often the participant smokes cigarettes, how often the participant drinks alcohol, and potentially how often the participant does both at the same time. This type of question is *double-barreled*, which complicates interpretations of responses because the frequency of each activity is unclear.

Questions must also be carefully worded to avoid leading participants to a certain response. “Do you agree that your community should spend your tax dollars on costly healthcare programs for smokers?” is a leading question. People responding to this question are likely to say “no” because the question uses the word “costly” and asks “do you agree” – a yes/no question – rather than the degree to which one might agree or disagree. A better question would say: “A proposed healthcare program for smokers would require \$2 million in tax dollars. How much do you agree or disagree that your community should support this program?”

Using negative words like “not” in a survey question may confuse survey participants. It is better to word questions without negatives and to be direct with questions.

Questions can have a pre-set list of possible responses or they can have an open space for participants to write in their own responses. The response categories should match the question with which they are paired. For example, a question asking “How often...” should not have answer categories of “Yes” and “No.” Any provided response categories should cover the range of possible responses – that is, they should be *exhaustive*. Response categories should also be *mutually exclusive*, meaning that it should not be possible to select more than one answer. For

example, if a question asking for the participant's age has the options "10-20," "20-30," "30-40," a 30-year old participant could select two of the categories. Additionally, those options do not include appropriate categories for anyone older than 40.

For some questions, a scale of response options may be appropriate. Options should be balanced; for instance, if there are answer options of "very much agree" and "somewhat agree," there should also be options of "very much disagree" and "somewhat disagree."

It is possible that the behavioral health challenges faced by one group in the community are different from those of another group, and that respondents may be knowledgeable about diverse groups in the community. For those reasons, it would be useful to include some demographic questions in the survey, such as age, gender, race, and role in the community. As you are collecting data, this information may be useful in determining whether there are other groups in the community from which you should collect data.

Survey Length and Complexity

It is important to make sure when constructing a survey that it is the proper length for survey respondents and can be completed without causing fatigue, either because of length or difficulty of the questions. A common problem with surveys is that they are often too long or ask too many questions that the respondent feels unqualified to answer. If the respondent begins to feel frustrated by the questions they may withdraw or begin answering without putting too much thought into their responses. A survey designer should think carefully about each item on the survey along the following lines:

1. Do I really need to know this from the respondent? Is there another way to get the information?
2. How do I plan to analyze the information from this question?
3. Is the respondent likely to know the answer to the question?
4. Is the question clear?

Good survey design involves several iterations of the survey instrument (often called a questionnaire). Colleagues should be asked to review the questions and comment. The survey should be tested on a small population and revised based on feedback/non-response. This is another reason why it is often helpful to simply employ an instrument that someone else has already fielded and analyzed.

Timing of the Survey and Follow-Ups

The timing of when a survey arrives for the respondent can influence their decision about whether to answer. Dillman (1978) found it is best to avoid having a mail survey arrive on a Monday or Friday. A blogger working for survey software provider SurveyMonkey (Zheng, 2011), on the other hand, using an internal analysis of surveys processed through its service, reported that Monday is the best day for getting a response to an e-mail/web survey. Some times to avoid are periods around major holidays when people are either preparing for guests, travelling, or trying to wrap up work. The survey administrator should think carefully about the target population and when they might be most apt to reply.

As mentioned previously, reminders should go out in one-week intervals. In general, very few responses are generated after the third reminder, but reminders are definitely effective in generating higher response rates.

AFTER THE RESPONSES COME IN

Data Analysis

Vast volumes of material have been written about a great variety of statistical techniques that have been developed to assess survey data⁴. However, for most local community purposes some simple techniques can be employed. A spreadsheet program such as Excel or Google Sheets can help compute basic frequencies (such as counts and means) and measures of variability (such as standard deviation) for each variable. Online survey software can output the data in a variety of formats. The CSV format is easily read by spreadsheets. One can also use a spreadsheet to sort the data by category (e.g., male-female) and compute means for each category. This type of analysis is called a cross-tabulation or “crosstab.” If there is quite a bit of sorting and categorizing to be done, then it is probably best to move the analysis to a more complete data analysis platform such as SPSS or SAS that can easily perform batch jobs of many different crosstabs. Individuals trained in the social sciences frequently have some experience using this software; it is important to identify who will do the analysis before

⁴ For a sample of some resources written about survey analysis, see http://www.isr.umich.edu/src/smp/asda/#Survey_Data_Analysis_Publications

implementing a survey that requires more advanced analytical techniques. More highly trained individuals can also implement a type of analysis generally called econometrics to statistically assess the relationships between several variables and key indicators of policy interest.

It is best to first explore the data by examining averages and standard deviations before moving to anything more sophisticated. Once the most interesting results are discovered, it may be time to convert them to graphical format for consumption by the broader community. For a one-time survey, bar or pie charts are very effective, and easily produced within common spreadsheet computer applications. If results are available by district or zone, then some presentation of regional variability is often helpful in devising interventions or other policy solutions. This could be done with a table, or if the community has access to someone with basic computer mapping skills, a map. Using the right type of visualization for data may facilitate moving from analysis to interpretation and potential next steps. For example, if alcohol abuse is prevalent in the downtown district but not elsewhere as evidenced by displaying the results on a map, earlier bar closings in the downtown district might be considered.

Once the data analysis and graphing is complete, it is time to support the tables and charts with explanatory text. It is important to tell a story! Do not overwhelm the reader with table after table or chart after chart. Pick a few key findings where community action might make a difference, or where community interest is highest. A concise report (with perhaps the less compelling results available separately in an appendix) is likely to make more impact than a daunting 100-page report that few will have time to read. It is often harder to write a concise report than a large report, so it is important to consider who is available to do the writing before gearing up to do a survey. A person with econometric skills to analyze a survey may not have the writing skills for effectively communicating the results of the analysis to the broader community. The report-writing period is also a time to re-examine published data to consider using it to supplement or reinforce the survey results, but if data sources are mixed, then each table or graph should clearly indicate the source.

Getting the Word Out

Once the report and appendix is drafted, it is time to do a limited distribution of the results to key collaborators in the community. The report should be clearly labelled as “preliminary” or “draft not for distribution.” Collect comments and questions and integrate the feedback into a final draft. Include a short acknowledgement for all who contributed. The report might also provide brief descriptions of interventions that other communities have used to address particular

problems. The SAMHSA website provides some interventions. In addition, approximately 300 interventions are catalogued on the CAPE website at:

<http://www.healthbench.info/toolkit.html>

After the final draft is ready, be in touch with policy makers and all who contributed to share the results. Consider issuing a press release. A press release may or may not be appropriate. For example, if key decision makers have implemented high profile interventions that do not appear to have been successful, it may be more productive to share the report in more limited circles initially to allow modifications to program thrusts based on feedback. A strategy in such circumstances might involve getting the right confidant of the program administrator to examine the report and have a discussion in private. A quiet success may be more beneficial to persons suffering from substance abuse or mental health issues than a contentious debate over the merits of the survey versus the merits of a key leader's pet program.

If community leaders are supportive of the report, good practice in getting the word out might include convening meetings of key agency managers to determine ways in which the community might coordinate efforts to reduce incidence of conditions that are perhaps falling between the cracks. With support of key leaders, community meetings might summarize the findings and seek input about ways to reduce problems in areas of particular concern. Selections from SAMHSA or CAPE interventions catalog might also be presented at such a meeting for input about stakeholder preferences for potential interventions.

BIBLIOGRAPHY

- AFSP, American Foundation for Suicide Prevention. 2014. "Facts and Figures." Accessed 12/23/2014 from <https://www.afsp.org/understanding-suicide/facts-and-figures>.
- Blair, Johnny, Ronald F. Czaja, and Edward A. Blair. 2014. *Designing Surveys: A Guide to Decisions and Procedures*, 3rd Edition. Los Angeles: Sage.
- Dillman, Don A. 1978. *Mail and Telephone Surveys: The Total Design Method*. New York: Wiley-Interscience.
- Dillman, Don A. 2000. *Mail and Internet Surveys: The Tailored Design Method*. 2nd Edition. New York: John Wiley Co.
- Dillman, Don A. 2007. *Mail and Internet Surveys: The Tailored Design, Second Edition—2007 Update*. Hoboken, NJ: John Wiley.
- Dillman, Don A., Jolene D. Smyth and Leah Melani Christian. 2009. *Internet, Mail and Mixed-Mode Surveys: The Tailored Design Method*, 3rd edition. Hoboken, NJ: John Wiley.
- Fink, Arlene. 2013. *How to Conduct Surveys: A Step-by-Step Guide*, 5th edition. Thousand Oaks, CA: Sage Publications, Inc.
- Fowler, Jr., Floyd J. 1995. *Improving Survey Questions: Design and Evaluation*. Thousand Oaks, CA: Sage Publications, Inc.
- Groves, Robert M., Don A. Dillman, John Eltinge, and Roderick J. A. Little (eds.). 2002. *Survey Nonresponse*. New York: Wiley-Interscience.
- Hampton, Chris. 2014. "Section 10. Conducting Concerns Surveys." *Community Tool Box*. Accessed 12/29/2014 from <http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/conduct-concerns-surveys/main>.
- Hampton, Chris and Marcelo Vilela. 2014. "Section 13. Conducting Surveys." *Community Tool Box*. Accessed 12/29/2014 from <http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/conduct-surveys/main>.
- Kongsved, Sissel Marie, Maja Basnov, Kurt Hold-Chrstensen, and Niels Henrik Hjollund. 2007. "Response Rate and Completeness of Questionnaires: A Randomized Study of Internet Versus Paper-and-Pencil Versions." *Journal of Medical Internet Research*. July-September 9(3): e25.
- Krueger, Richard A. and Mary Anne Casey. 2009. *Focus Groups: A Practical Guide for Applied Research*, 4th edition. Thousand Oaks, CA: Sage Publications, Inc.

- Loftus, Elizabeth F. and John C. Palmer. 1974. "Reconstruction of Automobile Destruction: An Example of the Interaction Between Language and Memory." *Journal of Verbal Learning and Verbal Behavior* 13:585-589.
- Rubén, Herbert J. and Irene S. Rubén. 2004. *Qualitative Interviewing: The Art of Hearing Data*. Thousand Oaks, CA: Sage Publications, Inc.
- Salant, Priscilla and Don A. Dillman. 1994. *How to Conduct Your Own Survey*. New York: John Wiley Co.
- Seidman, Irving. 2012. *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*, 4th edition. New York: Teachers College Press.
- Zheng, Jill. 2011. "What Day of the Week Should You Send Your Survey?" *SurveyMonkey Blog*. Posted August 16. Accessed 12/23/2014 from <https://www.surveymonkey.com/blog/en/blog/2011/08/16/day-of-the-week/>.