Data Collection Best Practices

Data collection is a key element of evaluation and research projects. The process is often placed in the hands of program staff because they interact with program participants more often and can monitor the data collection process. But program staff, especially those with limited exposure to data collection processes, may not understand why evaluators and research scientists spend so much time discussing data collection protocols. Basically, evaluators and researchers want to ensure that program staff use consistent data collection processes (to reduce bias) and that instances of missing data have been minimized. Why? When data is collected in a consistent fashion *and* missing data[1] has been minimized, the data is of a higher quality; and high quality data allow the evaluators or researchers to make conclusions about the current program participants and make predictions about future participants. Below are 9 data collection best practices that can be beneficial to agencies of all sizes.

Before Collecting Data

Make expectations clear. Before data collection starts, all personnel at all levels should know what is expected of them when handling or collecting data. For example, should the instrument be completed by staff or the client? Once completed, where does the finished instrument go? Or, if instruments are completed online, how is the process initiated and by whom? Having a protocol or plan in place will limit confusion over how and when instruments are administered *and* how to handle the completed instruments. In addition, the more staff know about the importance of the data collection and the goals of the agency, the more staff will feel empowered to make good choices when handling data. Depending on the number and type of instruments, the protocol may need to be formally written down. Furthermore, depending on the number of staff, agencies may require staff to sign a statement indicating their understanding of the protocols and responsibilities when handling data.

Clearly identify instruments. When several instruments are used, they can look similar or be titled similarly, which can cause confusion for staff distributing the instruments. During instrument development individual instruments should be clearly titled with unique names so that staff can distinguish them. In addition, for paper copies of instruments, it may be helpful to use a different color paper for each. When different colors are used staff can quickly and easily identify which instruments have been completed and if any are filed out of place.

While Collecting Data

Record completion dates. One of the most overlooked and important elements of data collection is recording the date when instruments were completed. Knowing the date of instrument completion allows program staff and evaluators to correctly identify how long respondents have been receiving services, how long it has been since a form was completed, and when services were received. When possible, instruments should include a *date completed* field. If one is not available or present, staff can write the date of completion at the top of a paper form. If instruments are completed electronically, completion date may be recorded automatically. If not, completion date may need to be added by program staff.

Explain data collection, when needed. On occasion respondents may want to know why they are being asked a question. If that happens, staff should explain the goal of the question to the best of their ability. It is important to be transparent with program participants. They are more likely to fully complete an instrument if they understand why they are being asked individual questions *and* if they understand the importance of the instruments to the program.

Be consistent! Consistency during data collection is key! There are three different ways staff should be consistent while collecting data. First, staff should be consistent when reading items aloud: item wording should not be changed or modified. Changing item wording for some respondents may affect how they interpret or understand an item, which can lead to

[1] To learn more about the impact of missing data on evaluation results, please see: ACET, Inc. (2013). *Missing data: What's the big deal?* Minneapolis, MN.

biased data.

Second, staff should be consistent in the way that items are read aloud. This would include tone of voice, inflection, and emphasis. The way in which items are read could include subtle cues that might cause respondents to answer in a way they *think* you want them to, rather than how they actually feel. All staff who will be reading items to respondents should practice reading the instrument(s) together to ensure there is consistency by all staff in the way items are being read.

Last, staff should be consistent in the way that instruments are administered. If an intake instrument should be read to respondents, make sure the instrument is read to *all* respondents. On the other hand, if an exit instrument should be read and completed by respondents, staff should not read the instrument (unless they are accommodating someone with visual challenges). Any differences in the way that instruments are administered could introduce biased data.

After Collecting Data

Monitor the data entry process. If paper instruments are used, responses will eventually need to be made electronic for data analysis. During the data entry process program staff will need to monitor those instruments that have already been entered and those instruments that still need to be entered. This monitoring process is crucial because missing or duplicated data can result in program staff and the evaluators investing time to resolve the issue, time and energy that could be better spent delivering a program or analyzing data. One simple way to monitor data entry is to record the date that data was electronically entered, and by whom, on the instrument. Two dates might then be used on each instrument: date of administration and date of entry and the initials of the program staff responsible for each step.

Organize files. Don't underestimate the importance of a good filing system! If there are questions about a respondent's data during the analysis process, a good filing system will allow program staff to quickly locate a respondent's instrument to answer a question. Some programs choose to organize instruments by the respondent: Each respondent has a folder and all instruments completed by the respondent are kept in the folder. Other programs organize by the instrument: Each instrument has a folder and all of the completed instruments are retained in that folder. Each system is effective, but only one should be consistently used for a project.

Other Considerations

Develop and implement a comprehensive security plan. Any program data, including evaluation data, should be kept securely to protect respondent privacy. A comprehensive security plan would include:

- who has access to different levels of data;
- how the security plan would adapt when personnel change;
- how to use, store, and transport computers and data;
- acceptable and unacceptable remote connection policies;
- creation, use, and maintenance of passwords and a schedule for changing passwords;
- appropriate use and maintenance of software, antivirus applications, virtual and private network managers, web browsers, etc.; and
- who should be contacted with questions about or concerns for security.

And the comprehensive security plan should be shared with all staff for their reference.

Have a contingency plan. If data is compromised, staff should be able to act quickly and decisively in order to limit the potential harm that a data breach may cause. Therefore, all staff handling data should know who to contact should a workstation or data being stolen, lost, damaged, or otherwise compromised. And, in the event that primary contacts are unavailable or unreachable, back-up security staff should be identified.

Resources

ACET, Inc. (2013). *Missing data: What's the big deal?* Minneapolis, MN.

Lake, S. (2012, July). *Best practices: Creating research data.* Presented at the University of Florida Data Management Workshop.

For additional information about this or other ACET, Inc. resources, or for evaluation assistance, please contact:

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