

## DATA COLLECTION METHODS AND SOURCES: ADVANTAGES AND DISADVANTAGES

Method/Source	Purpose	Basic Information	Advantages	Disadvantages
Existing data, documents, & other records	<ul style="list-style-type: none"> <li>Often includes data that were collected for a purpose different from the original intent</li> </ul>	<ul style="list-style-type: none"> <li>Can include administrative data, documents, &amp; records</li> <li>Usually quantitative</li> </ul>	<ul style="list-style-type: none"> <li>Can be cost-effective because data are often collected by the program &amp; therefore already exist</li> <li>Can add additional contextual information to program outcomes (e.g., backgrounds of participants who achieve expected outcomes)</li> </ul>	<ul style="list-style-type: none"> <li>A data request may be needed to obtain information</li> <li>Data entry errors may decrease accuracy</li> <li>Data may be incomplete</li> <li>Data collection process is out of the control of the evaluation team</li> </ul>

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Interviews	<ul style="list-style-type: none"> <li>Often used to obtain in-depth information about individuals' thoughts, perceptions, &amp; behaviors</li> </ul>	<ul style="list-style-type: none"> <li>Usually qualitative</li> <li>Can be conducted in person, over the phone, or virtually</li> <li>Usually conducted one-on-one</li> </ul>	<ul style="list-style-type: none"> <li>Can be used to explore new ideas or issues</li> <li>Follow-up questions can be used to obtain more detail about interviewees' responses when needed</li> <li>Follow-up probes can be used to determine how interviewees are interpreting questions</li> <li>Nonverbal communication during in-person interviews aids in response interpretation</li> <li>Interviewees might be more comfortable in a one-on-one setting</li> </ul>	<ul style="list-style-type: none"> <li>Time-consuming to conduct</li> <li>Time-consuming to analyze data</li> <li>Limited number of participants</li> </ul>

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Focus groups	<ul style="list-style-type: none"> <li>Often used to obtain in-depth information about individuals' thoughts, perceptions, &amp; behaviors</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative</li> <li>Can be conducted in person or virtually</li> <li>Multiple people are interviewed at the same time</li> </ul>	<ul style="list-style-type: none"> <li>Can be used to explore new ideas or issues</li> <li>Follow-up questions can be used to obtain more detail when needed</li> <li>Follow-up questions can be used to determine how participants are interpreting questions</li> <li>Participants can build on one another's responses</li> <li>Often more cost-effective than interviews</li> <li>Nonverbal communication during in-person focus groups can aid in response interpretation</li> </ul>	<ul style="list-style-type: none"> <li>Group setting may inhibit participants from speaking freely</li> <li>Difficult to coordinate schedules with multiple people</li> <li>Participants may focus on one topic, limiting exploration of other ideas</li> <li>Requires a skilled facilitator(s)</li> <li>Time-consuming to analyze data</li> </ul>

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Observations	<ul style="list-style-type: none"> <li>Often used to observe processes, situations, interactions, or physical environments</li> </ul>	<ul style="list-style-type: none"> <li>Can be quantitative when using a rubric or standardized form to collect data</li> <li>Can be qualitative when using notes or reflections to collect data</li> <li>Can be conducted in-person, via videotape, through one-way glass, or from a distance</li> </ul>	<ul style="list-style-type: none"> <li>Provide a sense of the implementation of a program</li> <li>Allow the evaluation team to gain an understanding of the environment of participants</li> <li>Help to provide a context for interpreting data</li> </ul>	<ul style="list-style-type: none"> <li>Sometimes need multiple observations to gain a realistic sense of a program</li> <li>Time-consuming to observe, &amp; thus can be expensive</li> <li>Time-consuming to analyze data</li> <li>Participant behavior may be affected by the presence of an observer</li> </ul>

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Surveys	<ul style="list-style-type: none"> <li>Often used to gather information about self-reported perceptions of agreement, importance, behavior, quality, or satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>Can be either quantitative (e.g., responses to scaled questions) or qualitative (e.g., responses to open-ended questions)</li> <li>Can be administered in-person, over the phone, online, or through the mail</li> </ul>	<ul style="list-style-type: none"> <li>Can be used to quickly collect information from lots of individuals</li> <li>If conducted in person, response rates can be high</li> <li>Electronic or online surveys can save time &amp; costs with data entry, &amp; they can improve data quality by reducing data entry errors</li> </ul>	<ul style="list-style-type: none"> <li>Cannot ask additional probing questions</li> <li>Response rates of mail &amp; electronic surveys can be low</li> <li>If questions are confusing or unclear, resulting data may be unusable</li> </ul>

Note. Adapted from *Data Sources: Advantages and Disadvantages*, by the Institute of Education Sciences. <https://ies.ed.gov/ncee/rel/regions/central/pdf/CE5.3.2-Data-Sources-Advantages-and-Disadvantages.pdf>.