Source Strengths & Weaknesses
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With the Internet’s ever-expanding repository of information, appraising potential sources has become an increasingly important skill. Evaluating strengths and weaknesses can be a useful tactic to assess potential sources.

**What is the research question?**

**Strength:** The research question defines the population to be investigated, interventions or exposures, and outcomes.

**Weakness:** The population is too broad, too narrow, or specific characteristics are too vague such that possible findings will be inconclusive.

**Was the study design appropriate for the research question?**

**Strength:** The researchers chose to study the data over several years to ensure accuracy of the results for the selected population.

**Weakness:** The researchers collected observational data when experimental data could have produced stronger support for their hypothesis.

**Did the study address potential sources of bias?**

**Strength:** The study asserts that the members of the sample were chosen randomly, ensuring they are representative of the population.

**Weakness:** The study design contains a potential for the above selection bias, but the researchers didn’t address this potential in the study.

**Was the study performed according to the original design?**

**Strength:** The study followed the design and reported this how they followed the design.

**Weakness:** The researchers were unable to recruit the desired number of participants, reducing their ability to produce significant findings or answer the research question.

**Do the data justify the conclusions?**

**Strength:** The study accurately reports the statistical significance of the data without suggesting a cause and effect relationship between exposures and outcomes.

**Weakness:** The researchers misinterpret a statistically significant correlation between the exposures and outcomes as a cause and effect relationship.

**Are there any conflicts of interest?**

**Strength:** While a party that might want to see specific findings funded the study, the researchers disclose that the party had no input into the study.

**Weakness:** The researchers offer no disclosure on what input the funding party did or didn’t have into the study.