Beyond the Numbers

Compare four ways psychologists study a question

PS.1.5 "Compare quantitative and qualitative research strategies including experiments, surveys, focus groups, and narratives as the foundation of research in psychology."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline numerical evidence, circle descriptions of experiences, and write S or L beside sentences that explain a research strategy's strength or limitation.

Do Late Alerts Affect Sleep?

1. A school psychologist wants to know whether late-night phone alerts affect students' sleep. For an experiment, volunteers are randomly assigned to silence alerts for one week or leave them on as usual. Each student records hours slept each night, and the psychologist compares the groups' average hours. Because the psychologist changes alert settings, a difference between groups could support a cause-and-effect claim about alerts, though other influences still matter. The result applies most directly to students like those who volunteered. The psychologist would not force anyone to stay awake, since research should protect participants.

2. Next, the psychologist sends a survey to more students. It asks how many alerts they receive after 9 p.m. and how many hours they usually sleep. These numerical answers can reveal a pattern across a larger group, but students may misremember, and a pattern cannot show that alerts caused lost sleep. The psychologist also invites eight students to a focus group, a guided conversation about why they check alerts at night. Their comments may explain habits that a survey misses. However, students might hold back or agree with others to fit in.

3. Finally, one volunteer shares a narrative: a detailed account of a week of late messages, worries about missing plans, and changes in bedtime. A narrative offers context about one person's experience, but that person's story cannot represent every student. Experiments and number-based surveys generally emphasize quantitative evidence, such as averages or counts. Focus groups and narratives emphasize qualitative evidence, such as explanations and personal meanings. Together, the four strategies can show both how common a pattern is and what it feels like. Researchers should compare findings carefully rather than treat any single strategy as a complete answer.

2 ANSWER WITH EVIDENCE

Use the passage

1. How do the experiment and survey differ in what the psychologist changes and what conclusions each can support?

2. Compare the evidence collected by the survey and the focus group. What might each reveal?

3. How do the focus group and narrative differ in whose experiences they examine, and what can each add to the study?

4. Why would the experiment alone give a less complete picture than the experiment combined with a focus group or narrative?

3 YOUR TURN

Your own words

Choose a school-related psychology question that is not about phones or sleep. In 5 to 6 sentences, compare one quantitative strategy and one qualitative strategy you would use, stating what each would collect, what each could reveal, and one limitation of either strategy.

Beyond the Numbers

PART 1 · READ AND MARK

Underline numerical evidence, circle descriptions of experiences, and write S or L beside sentences that explain a research strategy's strength or limitation. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How do the experiment and survey differ in what the psychologist changes and what conclusions each can support?	**In the experiment, the psychologist changes alert settings, so group differences could support a cause-and-effect claim. The survey changes nothing and can show a pattern, but not that alerts cause lost sleep.**
2	Compare the evidence collected by the survey and the focus group. What might each reveal?	**The survey collects numbers about alerts and sleep that may reveal a pattern across more students. The focus group collects students' explanations of habits that the survey may miss.**
3	How do the focus group and narrative differ in whose experiences they examine, and what can each add to the study?	**The focus group brings eight students into a guided conversation about their habits. The narrative gives a detailed account of one student's week, including worries and bedtime changes.**
4	Why would the experiment alone give a less complete picture than the experiment combined with a focus group or narrative?	**The experiment compares hours slept between groups but does not explain students' habits or feelings. A focus group or narrative can add those explanations and personal details.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I would ask whether long cafeteria waits relate to students' stress before afternoon classes. A survey would collect each student's wait time in minutes and stress rating from 1 to 5, giving numerical evidence about a possible pattern. A focus group would ask students how waiting affects their thoughts about the next class, revealing concerns the ratings miss. Together, the strategies could show both whether longer waits coincide with higher stress and why students feel stressed. Survey ratings rely on memory and cannot prove that waiting causes stress.

Accept other accurate comparisons grounded in the passage. For Part 3, accept any school-related question with a suitable numerical strategy, an experience-based strategy, a clear contribution from each, and a valid limitation.