AP® Psychology 2012 SCORING GUIDELINES INTERNATIONAL OPERATIONAL

Question 1

Psychological research methodologies and statistics are characterized by strengths and weaknesses in investigating behavior. Each method or statistic is best suited for certain research questions. For each pair below, describe a condition under which one is more appropriate than the other.

- Mean, median
- Descriptive statistics, inferential statistics
- Longitudinal study, cross-sectional study
- Single-blind technique, double-blind technique
- Random assignment, random selection
- Survey, case study
- Correlational study, experiment

General Considerations

- 1. The student's answer MUST establish the context of the question in order to score. For example, definitions alone will not score. There must be a direct or implied comparison (e.g., "better") between the two terms in order to establish "more appropriate."
- 2. If the student answers both terms of the pair and gets only one correct, score the point **UNLESS** the second answer directly contradicts the first.

Point 1: Mean, median

The *mean* is more appropriate when data are not skewed OR are normally distributed.

The *median* is more appropriate when data are skewed OR there are extreme scores.

Point 2: Descriptive statistics, inferential statistics

Descriptive statistics are more appropriate for summarizing, organizing, characterizing data/sample. Students can list/imply a relevant statistic (e.g., mean, variability, correlation). (**DO NOT** score "describe" or "describing" without additional clarification).

Inferential statistics are more appropriate for comparing differences OR finding statistical significance OR drawing conclusions OR interpreting OR finding if events happened by chance. (**DO NOT** score "infer" or "inferring" without additional clarification).

Point 3: Longitudinal study, cross-sectional study

Longitudinal study is more appropriate for following the same people/cohort **over time** OR avoiding confounding variable(s) from cross-sectional research. Can refer to an individual if the focus is **over time**.

Cross-sectional study is more appropriate to look at differences among different age groups at the same time OR more appropriate if there are time or money limitations (easier than longitudinal because ...) OR to avoid the problem of all research participants having grown up in the same era OR to avoid attrition problem of longitudinal studies.

Point 4: Single-blind technique, double-blind technique

Single-blind technique is more appropriate when the experimenter is using a variable that makes blinding impossible (e.g., race, sex).

Double-blind technique is more appropriate to eliminate experimenter bias OR both experimenter and participant bias.

DO NOT SCORE: Both techniques can eliminate placebo/expectation effect ... neither is more appropriate for this reason.

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Point 5: Random assignment, random selection

Random assignment is more appropriate if a researcher is more concerned with creating equal/equivalent samples OR ensuring subjects have equal likelihood of being put in either group.

Random selection is more appropriate when a researcher wants a representative/generalizable sample.

Point 6: Survey, case study

Survey is more appropriate when a researcher has many participants/people OR wants information from many people OR wants to maintain anonymity.

Case study is more appropriate when a researcher has only one participant OR wants **in-depth** information. Do not rule out case studies on groups IF it is clear the data collection comes from individuals. Look for **in-depth** information, not "over time."

Point 7: Correlational study, experiment

Correlational study is more appropriate to measure relationships between/among variables OR when a variable cannot or should not (ethically) be manipulated.

Experiment is more appropriate to find cause-and-effect explanations.

DO NOT SCORE: "Correlation does not equal causation" by itself.