

## AP<sup>®</sup> Psychology 2013 Scoring Guidelines

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#### Question 1

#### **General Considerations**

- 1. Answers must be presented in sentences, and sentences must be cogent enough for the student's meaning to come through. Spelling and grammatical mistakes do not reduce a student's score, but spelling must be close enough so that the reader is convinced of the word.
- 2. A student will not be penalized for misinformation unless it *directly contradicts* correct information that would otherwise have scored a point. In that case, the point is not awarded.
- 3. Information must be presented in the context of the question. Context can be established by mentioning John, pizza coupons, readers, etc.

#### Part A: Refute John's Argument (refuting can be indicated by reduced reading)

#### **Point 1: Correlational research**

- A. To earn this point, the student must *refute* John's argument by saying correlation does not prove causation, OR
- B. The student must *refute* John's argument by saying that he has not established the directionality of the correlation or that the relationship might be due to a third variable, OR
- C. The student can earn this point with a discussion of correlational findings that *refute* John's claim (an example of correlational research that results in an outcome that differs from John's).

#### Example:

<u>Do not score</u> "Correlation does not prove causation" alone because the student did not establish context.

#### Point 2: Overjustification effect

A. The student must discuss *refuting* John's approach because extrinsic motivators can reduce intrinsic motivation.

#### Note:

Specific vocabulary, such as "intrinsic," is not needed; the student can indicate understanding without specific terms.

#### Examples:

<u>Score</u> "John's proposal would reduce desire to read" because "John's proposal" describes extrinsic motivators, "desire" indicates intrinsic motivation, and desire is reduced.

<u>Do not score</u> "John's approach would not be good because removing extrinsic motivation would stop the behavior" because the student does not address reducing intrinsic motivation.

#### Question 1 (continued)

#### Part B: Strengthen John's Plan

#### Point 3: Schedules of reinforcement

- A. The student must identify a schedule of reinforcement (e.g., variable-interval, fixed-schedule, intermittent, or partial reinforcement) that enhances reading, strengthens John's plan, or supports John's plan, OR
- B. The student must describe a schedule of reinforcement that enhances reading, strengthens John's plan, or supports John's plan.

#### Notes:

- Mere mention of reinforcement is not sufficient; the student must name or describe schedules
  of reinforcement.
- The student can earn the point by describing a schedule and mislabeling it, as long as the student says it enhances reading.

#### Examples:

<u>Score</u> "John should use a fixed-interval schedule" because "should" implies an alternative for improvement of John's plan.

<u>Score</u> "Using a schedule of reinforcement that varies when a student receives a reward strengthens John's argument" because the student describes a schedule of reinforcement that varies and has indicated strengthening of John's plan.

<u>Do not score</u> "A schedule of reinforcement would help students know when to do their reading and strengthen John's plan" because no schedule of reinforcement is identified or described.

#### Part C: Influence Reader's View

#### Point 4: Belief perseverance

- A. The student must indicate that readers have an existing opinion and refuse to change their minds to match John's argument, OR
- B. The student must discuss that readers may agree with John even if others offer contradictory evidence. OR
- C. The student must argue that John maintains his beliefs in spite of contradictory evidence, and his belief perseverance influences the reader's view in some way.

#### Question 1 (continued)

#### Point 5: Central route to persuasion

- A. The point scores if the student indicates that the reader actively processes John's proposal (e.g., considers facts, weighs evidence, draws conclusions) based on ideas in John's proposal, OR
- B. The student must say that John's research (e.g., logic, facts, statistics) influenced the reader's view in some way, OR
- C. The student must say that John was persuaded by logical arguments, which influenced the reader's view in some way.

#### Note:

• It is not sufficient for the student to discuss only the *peripheral* route to persuasion.

#### Examples:

<u>Score</u> "The reader considers John's proposal" because the student indicates that the reader thinks about John's proposal, which includes logical arguments.

<u>Score</u> "Readers accept John's argument that reading and rewards are correlated" because the student mentioned a piece of evidence offered by John and indicated that readers were influenced.

<u>Do not score</u> "John uses the central route of persuasion by making an argument based on facts" because there is no mention of influencing the reader.

#### Point 6: Retroactive interference

A. The point is scored with a response that indicates recent information interferes with older memories, as long as the answer is in the context of the question.

#### Note:

It is not sufficient for the student to discuss only proactive interference.

#### Point 7: Source amnesia

- A. The student must indicate that a reader of John's argument recalls the information but does not remember it came from John, OR
- B. The student must discuss a reader recalling information related to the issue but not remembering where it came from or how they learned it, OR
- C. The student must argue that John can have source amnesia, and this memory loss influences the reader's view in some way.

#### Question 2

#### **General Considerations**

- 1. Answers must be presented in sentences, and sentences must be cogent enough for the student's meaning to come through. Spelling and grammatical mistakes do not reduce a student's score, but spelling must be close enough so that the reader is convinced of the word.
- 2. Do not score students' notes made on the question section of the booklet. Score only what has been written in the blanks provided in the booklet.
- 3. Within a point, a student will not be penalized for misinformation unless it *directly contradicts* correct information that would otherwise have scored a point.
- 4. A student can score points only if the student clearly conveys what part of the question is being answered. For example, it is possible to infer the part of the question being answered if it is consistent with the order of the question.
- 5. Examples provided for each of the followings point are not to be considered exhaustive.

#### Part A

#### Point 1: What is the operational definition of the dependent variable?

To earn this point the student must identify the operational definition as the speed or time in which participants recall definitions or vocabulary words or both. If a student refers to other variables or aspects of the study, the student must differentiate the dependent variable.

Note:

Reference to "speed and accuracy" will score, but "accuracy" alone will not.

Example:

Do not score "Recall test," "test scores," or "results" alone.

#### Point 2: Explain how the ethical flaw in the study can be corrected.

To earn this point the student must provide a correction to the release of participants' names. This correction can address future studies OR refer to correcting the mistake already made.

Examples:

Score "The researcher should provide a participant's data individually to each person."

Score "The researcher must obtain permission to release the participant's name and score."

Score "The researcher can't provide participants' names and scores to all participants."

#### Point 3: Explain how the research design flaw in the study can be corrected.

Since the independent variable (type of practice) varies with the age group of the participants, the student must discuss some mechanism to equalize these groups. To do this, students must:

- A. state or describe making the ages of the groups the same, OR
- B. name or describe random assignment, OR
- C. make the study technique a within-subjects (repeated measures) variable

#### Question 2 (continued)

#### Note:

Random sampling (random selection) does not score unless it occurs along with a clear description of random assignment.

#### Examples:

Score "The researcher should use random assignment."

Score "The researcher should control for age."

Score "The researcher should only include people under 25 in his study."

<u>Score</u> "Subjects in both age groups should use both massed and distributed study methods to learn the vocabulary."

# <u>Point 4: In a well-designed study, what does it mean to say there is a statistically significant difference between groups?</u>

To earn this point the student must explain that the difference between groups is *less likely* due, OR *not* due, to chance OR is *more likely* due to the manipulation of the independent variable.

#### Examples:

<u>Do not score</u> "very different," "strong effect," or "important"

Do not score "The difference between groups is due to manipulation of the IV."

<u>Do not score</u> p <.05, generalizability, or rejection of the null hypothesis without some additional reference to probability or chance

#### Part B

Responses must address age group (not only individual) differences.

#### Point 5: Fluid intelligence

To earn this point the student must explain that older people have less fluid intelligence, or perform worse on the task in the context of fluid intelligence, which would affect the results of this study OR that younger people have more fluid intelligence, or perform better on the task in the context of fluid intelligence, which would affect the results of the study.

#### Point 6: Circadian rhythm

To earn this point the student must explain that the age differences in circadian rhythms would lead to a difference in task performance of the two groups. The age group, time of day, AND the effect on the results of the study must be addressed.

The student may argue that older/younger participants are at a disadvantage because of the late study time OR that younger/older participants have an advantage because of the early testing time.