



Student Performance Q&A: 2013 AP® Psychology Free-Response Questions

The following comments on the 2013 free-response questions for AP® Psychology were written by the Chief Reader, Elizabeth Yost Hammer, Xavier University of Louisiana, New Orleans, Louisiana, in consultation with both operational Question Leaders. They give an overview of each free-response question and of how students performed on the question, including typical student errors. General comments regarding the skills and content that students frequently have the most problems with are included. Some suggestions for improving student performance in these areas are also provided. Teachers are encouraged to attend a College Board workshop to learn strategies for improving student performance in specific areas.

Question 1

What was the intent of this question?

The question requires students to respond to John's editorial about increasing reading in schools using incentives. Within the essay, students are asked to address several concepts in psychology.

In Part A, students must explain how correlational research and the overjustification effect can be applied to refute John's argument. For correlational research, students could explain that John's assumption is not supported by correlational research because correlation does not imply causation (with related problems, including the presence of a third variable and the inability to determine directionality of causation, if it exists). Students could also refute John's argument by discussing other research or data that finds a relationship different from that offered by John. When discussing the overjustification effect, the student must explain that extrinsic motivators, such as pizza coupons, actually reduce intrinsic motivation. Thus, John's plan is refuted by the understanding that external rewards may, in fact, be detrimental to reading.

In Part B, the student must discuss schedules of reinforcement as they relate to increasing reading. Students must identify a schedule of reinforcement by name or description and indicate that the outcome is beneficial (for example, enhancing reading or offering support of John's plan).

In Part C, the student must discuss influencing a view based on belief perseverance, the central route to persuasion, retroactive interference, and source amnesia. For belief perseverance, the student must indicate that a belief is maintained when contradictory evidence is provided, and the answer must be within the context of the question (for example, refers to John's plan or reading). For the central route to persuasion, the student could discuss active processing of information such as John's proposal or thinking about facts (data, statistics, etc.) that influence a reader. As an alternative, the student could explain that John was persuaded by facts, which in turn influenced the reader. For retroactive interference, the student must explain that recent information interferes with older memories, and the answer must be in the context of the question. Finally, for source amnesia, the student must describe remembering information but not recalling the source

of information, and the answer must be tied to the question with contextual terms such as John's plan, pizza coupons, or reading.

How well did students perform on this question?

The mean score was 2.47 out of a possible 7 points.

What were common student errors or omissions?

Students had difficulty clearly identifying the overjustification effect. Although they did seem to understand the idea of too much extrinsic reinforcement potentially reducing desired behaviors after rewards ended, they did not consistently point out the importance of a reduction of internal motivation. With belief perseverance, students sometimes made the error of defining this concept as overconfidence and failed to mention the presence of contradictory evidence. The central route to persuasion was often defined as John offering only one argument to allow readers to focus. Retroactive interference was often defined as proactive interference.

Based on your experience of student responses at the AP[®] Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

Students should read the question carefully and begin with notes to themselves that will not score. They can use the notes to help organize their thoughts and focus on the question. Often students lose points by not directly addressing the question. For example, Part A of this question asked readers to refute John's argument, but many students failed to address that goal. Specific to this question, students seemed to have the most trouble with the overjustification effect and retroactive interference (defining instead proactive interference). Finally, in general students can approach an essay by defining a concept and then applying it to the question.

Question 2

What was the intent of this question?

This question assesses student's ability to analyze characteristics of research design and apply specific psychological concepts to the scenario.

In Part A, students are required to provide the precise operational definition of the dependent variable, as described in the question. The question also assesses the students' understanding of ethics and research design by asking them to correct the flaws that are embedded in the question. The question also assesses how well students comprehend statistical significance and its relationship to differences between groups.

Part B asks students to explain two psychological concepts and how they affect the results of the study. Students are asked to explain the relationship between age and fluid intelligence and how this impacts the results of the study. This question also assesses how well students understand the connection between age differences in circadian rhythms and the resulting influence on participants' recall of vocabulary definitions.

How well did students perform on this question?

The mean score was 2.34 out of a possible 6 points.

What were common student errors or omissions?

Common errors included not understanding the precise nature of "operational definition"; not understanding the ethical problem presented in the question that required correction; not understanding the difference between an "ethical" and a "research design" flaw; not understanding the nature of chance and probability as it relates to "statistical significance"; not knowing the developmental differences regarding "fluid intelligence" and/or "circadian rhythms."

Based on your experience of student responses at the AP[®] Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?

Be sure that students have an understanding of confounding variables and ethical concerns in research, and are given plenty of opportunities to identify them. When teaching the meaning of statistical significance, be sure students understand the role of chance and probability. Be sure to discuss developmental differences on variables where they exist.