CollegeBoard
Advanced Placement Program

Student Performance Q&A:

2004 AP® Psychology Free-Response Questions

The following comments on the 2004 free-response questions for AP® Psychology were written by the Chief Reader, Jane Halonen of the University of West Florida, with the assistance of Question Leaders Ken Keith, Rob McEntarrfer, Carol Dean, and Chris Hakala. 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: Professor Jackson's Survey Research

What was the intent of this question?

This question emphasized the ability to apply principles of research design regarding the construction and execution of a survey to high school athletes. Students had to read a scenario of faulty research design, recognize fundamental research concepts, and identify ethical challenges caused by not following good protocol. Thus, this question emphasized concept recognition, recall, and application.

How well did the students perform on this question?

The mean score on this question was 4.4 out of a possible eight points. The distribution was fairly symmetrical. The Test Development Committee anticipated that this would be the easier of the two questions because of the level of critical thinking skills it addressed; the mean score and distribution confirm this prediction. The reliability of scoring was greatly enhanced by a well-designed rubric that Readers assigned to this question rapidly accepted and practiced throughout the reading.

What were common student errors?

Students tended to have the greatest difficulty with understanding how statistical analysis and interpretive power relate to research design. Students regularly omitted any discussion of how the research results could be depicted. They seemed least competent at distinguishing the relative power of the survey strategy compared to the experimental design that typically comprises this

kind of question. In fact, many students tried to apply experimental principles to the question that was designed to tap their knowledge of correlation, not causation.

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?

We received little negative response from the community of AP Psychology teachers about the inclusion of this question. The faulty research scenario strategy has been successfully used in the past to promote assessment of higher order thinking skills. We encourage teachers of the AP course to cover the content on statistics in order to round out their curriculum. Providing similar examples that promote recognition of the elements of research design can sharpen students' ability to manage questions oriented to research design.

We are aware that the teaching community persists in thinking that at least one of the two questions each year will deal with methodology. We recommend practicing critical thinking skills using faulty research scenario stimuli or other comparable strategies, but we do not validate the idea that a methods question will routinely be part of the AP Exam.

Question 2: The Effects of Time

What was the intent of this question?

The Test Development Committee designed this question to reflect the breadth of content an AP student will study over the span of the course. In addition, the level of challenge in the question was greater than in Question 1. The student had to recognize eight concepts and analyze the significant role played by the passing of time in each concept. It is unlikely that the students would have thought about each concept from that specific angle before, so the question tapped into their ability to analyze and synthesize knowledge.

How well did the students perform on this exam?

The Test Development Committee anticipated that this question would be harder. In fact, the eight concepts in the question were purposefully selected to represent a range of difficulty. In addition, the level of critical thinking skill targeted by the question was also higher than the kind of skills required for Question 1. The mean score for this question was 2.2 out a possible eight points, with a positive skew in the distribution. As expected, the data confirm that the students found this question to be more difficult.

What were common student errors?

The question prompted students to give examples of the manner in which time played a central feature in selected concepts by offering a solid definition or robust example. Regardless of the concept selected, some students lost focus on the central point of the question and provided either examples or definitions that did not really address the impact of time. Particularly challenging among the examples were group polarization, a concept from social psychology, and sound localization, a term from perception. The development of a precise scoring rubric, which included examples of scorable answers as well as "traps" (common errors students tended to make on each concept), facilitated strong reliability on this question.

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?

Although the format of this question was somewhat different from free-response questions in the past, the AP teaching community responded to it positively. Teachers praised the critical thinking challenge that the question posed because it provided an opportunity for students to synthesize information. Students could not be successful on this question without tapping higher order skills. We encourage teachers to use active learning methods in presenting psychology concepts, because students will fare better in the free-response questions if they have had to grapple with the concepts rather than just memorize concept definitions.