



Student Performance Q&A: 2015 AP[®] Psychology Free-Response Questions

The following comments on the 2015 free-response questions for AP[®] Psychology were written by the Chief Reader, Elizabeth Yost Hammer, Xavier University of Louisiana*. 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.

*In consultation with Question Leaders for each question.

Question 1

What was the intent of this question?

The question required students to respond to three aspects of a study that concludes that sugar causes hyperactivity.

The question was composed of three parts: Part A, which required the student to show understanding of confirmation bias, availability heuristic, and misunderstanding of correlational studies by explaining why these concepts might lead people to easily accept the conclusion of the study; Part B, which required the student to discuss a follow-up study by stating a hypothesis, operationally define the dependent variable, and describe the process of random assignment; and Part C, which required the student to draw and correctly label a bar graph that depicts the conclusion of the follow-up study that finds that sugar does not cause any change in hyperactivity. For all points, students were required to demonstrate an understanding of the concept and an ability to apply it to the appropriate context.

How well did students perform on this question?

On Question 1, the mean score was 3.84 (standard deviation 1.91) out of a possible 8 points.

What were common student errors or omissions?

With respect to content knowledge, students had difficulty responding to the point about availability heuristics, one of the commonly taught heuristics in introductory psychology. Students also frequently erred in their construction of the bar graph. Although many students successfully drew a graph, many had problems orienting the graph with vertical bars to represent the data and correctly labeling the axes associated with the independent and dependent variables. When they had such difficulty, students

frequently reversed the x- and y-axes, creating a figure that differs from customary figures in psychology and other sciences.

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?

Teachers would do well to give students practice with graphical representations of data and how to construct the graphs, emphasizing the placement of the independent variable on the x-axis and the dependent variable on the y-axis.

Question 2

What was the intent of this question?

The question required students to apply several psychological concepts to three aspects of moving involving Chandler and Alex.

The question was composed of three parts: Part A, which required the student to apply the concepts of prefrontal cortex and algorithm to Chandler and Alex's decision to buy a home; Part B, which required the student to apply the concepts of social loafing and the alarm stage of the general adaptation syndrome to Chandler and Alex's moving process; and Part C, which required the student to provide examples of the roles of proactive interference, habituation, and normative social influence to Chandler and Alex's life in the new home and neighborhood. For all points, students were required to demonstrate an understanding of the concept and an ability to apply it to the appropriate context.

How well did students perform on this question?

On Question 2, the mean score was 2.64 (standard deviation 1.65) out of a possible 7 points.

What were common student errors or omissions?

In discussing the prefrontal cortex in Part A (point 1), it was important that students specified an active cognitive process ("decision-making," "planning," "evaluating"). However, student answers with the phrase "The prefrontal cortex helps you decide" did not score the point. There are many regions of the brain (such as the occipital lobe) that may "help you decide," so the student's response had to clearly demonstrate the active and deliberative nature of the processing of the prefrontal cortex.

Part B (point 4), alarm stage of the general adaptation syndrome, appeared to be a point many students struggled with. The main issue was that students tended to associate this stage with "panic" ("Chandler and Alex begin to panic and start packing faster.") instead of focusing on the automatic physiological stress response associated with alarm.

The error that students often made on Part C (point 7), normative social influence, was that they focused on discussing conformity without providing the motivation for the change in behavior, that is, the desire to "fit in."

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?

Teachers should emphasize that students should read the question carefully and be certain they understand what the question is asking them to do, underlining key words and concepts, before they begin to write their response.

In Parts A and B of Question 2, students were asked to relate the concept to the given scenario. The application had to clearly demonstrate the student’s understanding of the concept within the specific context of the question. A definition may help a student clarify the concept and enhance the application, but definitions alone did not score. Teachers may continue coaching their students to provide term definitions, but should emphasize that the connection between the concept and the scenario must be clear and accurate in order to score the point.

In Part C students were asked to provide an example that explains how each of the concepts could be related to “life in their new home and new neighborhood.” It was not sufficient to simply define the concept or to give a vague example. The following example does not provide the level of specificity required to earn this point: “Proactive interference is when something you have previously learned inhibits you from learning something new.” This example forces the reader to ask “What is something? A phone number? An address?” Teachers need to train their students to provide specific, concrete examples that illustrate the concepts within the context of the question.