

Chief Reader Report on Student Responses: 2018 AP[®] Psychology Free-Response Questions

• Number of Students Scored	311,759		
• Number of Readers	595		
• Score Distribution	Exam Score	N	%At
	5	66,121	21.2
	4	82,006	26.3
	3	56,476	18.1
	2	45,156	14.5
	1	62,000	19.9
• Global Mean	3.14		

The following comments on the 2018 free-response questions for AP[®] Psychology were written by the Chief Reader, Richard Seefeldt/Professor of Psychology, University of Wisconsin-River Falls. 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 preparation 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**Max. Points: 7****Mean Score: 3.28*****What were the responses to this question expected to demonstrate?***

The responses were expected to demonstrate an understanding of various cognitive, biological, and sensory concepts in the context of helping or hindering the performance of Jackie, a student who has been chosen for the lead in a play. The responses needed to illustrate the relationship between physiological processes and behavior. The responses needed to demonstrate an understanding of the principles that underlie the construction of memory, as well as the role of other cognitive processes on behavior. Specifically, the responses needed to explain how context-dependent memory, acetylcholine, the kinesthetic sense, and selective attention play a role in helping Jackie practice for or perform in the play. In addition, the responses needed to explain how proactive interference, the Yerkes-Dodson law of arousal, and an external locus of control might hinder Jackie's experience in the play.

How well did the response address the course content related to this question? How well did the responses integrate the skills required on this question?

Responses demonstrated a wide range of understanding of the concepts and an ability to apply the concepts to this particular situation. Responses that scored points were able to clearly explain how each of the concepts: context-dependent memory, acetylcholine, the kinesthetic sense, selective attention, proactive interference, the Yerkes-Dodson law, and external locus of control might have influenced Jackie's behavior in this situation.

What common student misconceptions or gaps in knowledge were seen in the responses to this question?

In Part 1, the points regarding neural processing and the kinesthetic sense were most often not scored. Responses that did not score point two often misidentified acetylcholine, for example, as a hormone. Responses that did not score point three often confused kinesthetic with the vestibular sense or were too general in describing how this sense of knowing where our body parts are, operates in helping us move our bodies. In Part 2, responses that did not score point 5 often confused proactive with retroactive interference. Responses that did not score point 7 often neglected to explain that an external locus of control is a belief that fate, or some outside force, determines destiny.

<i>Common Misconceptions/Knowledge Gaps</i>	<i>Responses that Demonstrate Understanding</i>
Acetylcholine is a hormone that allows Jackie to move her body on stage.	Acetylcholine is a neurotransmitter responsible for movement that would help Jackie move her body on stage.
Jackie can sing the songs from the new play she is in, but can't remember any of the songs from the play she was in last year.	Because of proactive interference, when Jackie performs she might start remembering lines from a play she was in last year and forget the lines from this new play.

Based on your experience at the AP[®] Reading with student responses, what advice would you offer to teachers to help them improve the student performance on the exam?

Simply having students memorize definitions of terms is not enough to know whether they will be able to apply the concepts correctly. Thus, students should be made to contrast related terms to each other, and (most importantly) should be given practice applying all concepts to situations in everyday life. In addition, students should practice finding ways terms would apply to their own life situations.

Question #2**Max. Points: 7****Mean Score: 2.88*****What were the responses to this question expected to demonstrate?***

This free-response question focuses on three different aspects of psychology: the ability to understand research methodology, knowledge of social processes, and how cognition and behavior are related.

How well did the response address the course content related to this question? How well did the responses integrate the skills required on this question?

Responses demonstrated a wide range of understanding of the concepts and an ability to apply the concepts to this particular situation. Responses that scored points were able to clearly explain aspects of research methodology, knowledge of social processes, and an understanding of how cognition and behavior are related.

The question appropriately required students to apply psychological concepts to actual behavior. Simply knowing the definition of the concepts involved is necessary but not sufficient to addressing the issues raised by the question.

- The first part of the question assessed student knowledge and ability in three areas of research: interpreting a graph representing a correlation, applying research results to a psychological phenomenon, and understanding ethics in research.
- The second part of the question assessed the student’s ability to show how social processes of deindividuation and normative social influence affect one’s behavior.
- The third part of the question involved how cognitive and social process interact to influence behavior, requiring the student to differentiate between two related phenomena.

What common student misconceptions or gaps in knowledge were seen in the responses to this question?

<i>Common Misconceptions/Knowledge Gaps</i>	<i>Responses that Demonstrate Understanding</i>
<ul style="list-style-type: none"> • Correlation versus causation • Ability to use research results to draw inferences about psychological outcomes • Identifying the role of the IRB in considering ethics in research 	<ul style="list-style-type: none"> • Graphed correlational data: Responses demonstrating understanding indicate that there is a positive correlation between variables but that it does not represent a causal relation. • Students would succeed in applying the research if they could connect the results of the research to the functioning of the immune system or susceptibility to disease. • Students would demonstrate understanding of ethics by noting that research can be unethical if experiments induce stress which can lead to illness.

<ul style="list-style-type: none"> The different psychological mechanisms associated with group behavior; deindividuation and normative social influence. 	<ul style="list-style-type: none"> A successful answer indicates that a person may feel anonymous in a group or may lose a sense of self-awareness in engaging in risky group behavior. A successful response to the issue of normative social influence would involve recognition that people engage in behaviors in which others are engaged in order to be accepted by the group or to avoid social disapproval. A successful response about cognitive restructuring would indicate that a person's physical or psychological health could be improved if a negative state is reinterpreted as having positive components. A successful response about incentive motivation would describe how an external reward could induce a person to engage in behavior that would ultimately have a positive impact on physical or psychological health.
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Based on your experience at the AP[®] Reading with student responses, what advice would you offer to teachers to help them improve the student performance on the exam?

Students should be given practice at interpreting charts and graphs of data. They need to be able to identify what sort of research methods are being used when given a description of a study and know what sorts of conclusions are appropriate given the research method used. Simply having students memorize definitions of methods and other terms is not enough to know whether they will be able to apply them correctly. Thus, students should be made to contrast related research methods with each other, different psychological concepts with each other, and (most importantly) should be given practice applying all concepts to situations in everyday life. In addition, students should practice finding ways psychological concepts would apply to their own life situations.

What resources would you recommend to teachers to better prepare their students for the content and skill(s) required on this question?

AP Central: A Lesson on Correlation; apcentral.collegeboard.org/pdf/ap-curricmodpsych.pdf

Resources on social psychology and social cognition would prove useful for this question. In addition, resources dealing with the correlation/causation issue would be appropriate.