Chief Reader Report on Student Responses:

2022 AP® Psychology Set 1 Free-Response Questions

• Number of Students Scored	292,501		
• Number of Readers	582		
• Score Distribution	Exam Score	N	%At
	5	49,768	17.0
	4	65,041	22.2
	3	55,857	19.1
	2	38,384	13.1
	1	83,451	28.5
• Global Mean	2.86		

The following comments on the 2022 free-response questions for AP® Psychology were written by the Chief Reader, Elliott Hammer, Xavier University. 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

Topic: Concept Application
Max Score: 7
Mean Score: 3.06

What were the responses to this question expected to demonstrate?

The responses to this question were expected to demonstrate the skill of concept understanding by applying psychological concepts from several units of psychology to a real-world scenario. The responses needed to show understanding of the concepts and to clearly differentiate them from similar concepts. The responses needed to apply the concepts of vestibular sense, social facilitation, incentive theory, divergent thinking, peripheral route to persuasion, reciprocity norm, and mere-exposure effect to the scenario.

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

The responses needed to demonstrate knowledge of specific psychological concepts within Unit 3: Sensation and Perception, Unit 5: Cognitive Psychology, Unit 7: Motivation, Emotion, and Personality, and Unit 9: Social Psychology. The responses demonstrated the skill of concept understanding across various units when students applied these concepts to the scenario. Responses needed to apply the concepts to the scenario and go beyond providing an accurate definition.

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

Common Misconceptions/Knowledge Gaps	*Responses that Demonstrate Understanding*
• Some responses for vestibular sense referred to being aware of the location of one's body parts alone or hearing.	• Students demonstrated understanding by indicating that Rayce's vestibular sense helped him balance while skateboarding or when the vestibular sense was disrupted and caused dizziness.
• Some responses for social facilitation failed to specify that there was a change in performance due to the presence of the audience.	• Students demonstrated understanding by indicating that Rayce improved at skateboarding because there was an audience present. Students also demonstrated understanding by indicating that Rayce had a poor performance for an unfamiliar trick because the audience was present.
• Some responses for incentive theory referred to internal or intrinsic motivation.	• Students demonstrated understanding by indicating the incentive Rayce received to perform was some type of external reward.

• Some responses for divergent thinking failed to indicate a creative approach or explicitly state that more than one approach was used in the campaign.	• Students demonstrated understanding by indicating that Rayce's campaign used divergent thinking by using or considering more than one approach or by being creative.
• Some responses for peripheral route to persuasion referred to central route to persuasion.	• Students demonstrated understanding by indicating that Rayce's campaign used an attention-grabbing element.
• Responses for reciprocity norm often referred to Rayce doing a behavior and then expecting something in return. The responses failed to explain the customer feeling the obligation or need to return the favor.	• Students demonstrated understanding by indicating Rayce did a behavior and then the customer felt obligated to return the favor by making a purchase or promoting the product.
• Responses for mere-exposure effect often failed to specify a repeated experience for one person or a group of the same people. Some responses referred to the product being exposed to lots of people.	• Students demonstrated understanding by indicating that customers viewed the video multiple times leading to an increased liking of the skateboard.

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

Encourage students to apply the terms to novel situations and go beyond simply defining terms. In every unit, assign students work that provides them with practice of this skill. In addition, give students many opportunities to practice free-response questions. When doing so, use AP style questions, such as those found on AP Classroom, and give students a time limit so they can prepare for the AP testing environment. To help clarify which concept the students are referring to, have students practice identifying the concept they are addressing and completing their response in the order of the prompt.

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

- Teachers can help prepare students for this question by giving students opportunities to practice with free-response questions found in AP Classroom that require concept application. Teachers should remind students repeatedly that definitions alone do not earn points. Rather, students need to provide the relevant application of the concept to the scenario. AP Daily videos often highlight these types of questions to model the skill for students.
- Teachers can also use past AP Exam student samples and scoring guidelines to show students how actual free-response questions are scored. Teachers may have students use a scoring guideline to score a sample on their own, and then work with a partner to compare their scoring decisions and come to a consensus. Teachers can then lead a class discussion about what wording scored and what did not to help students learn how to write more successful responses to free-response questions.

Question 2

Topic: Research Question
Max Score: 7
Mean Score: 2.45

What were the responses to this question expected to demonstrate?

The responses to this question were expected to demonstrate an understanding of characteristics of both correlation and experimental research designs and to show how specific psychological terminology applies to a portion of the scenario. The responses needed to address a psychologist's research project on the number of people present and the number of people that intervened in an emergency situation. The responses needed to demonstrate an understanding of how graphed data is best utilized to evaluate a provided hypothesis, the statistical measurement test best suited, and the limiting factors of correlational designs. The responses also needed to demonstrate the ability to identify the independent variable in an experimental design. Additionally, the responses needed to demonstrate knowledge of specific concepts within motivation (internal locus of control and approach–avoidance conflict) and behaviorism (modeling).

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

When students applied concepts to the scenario described in the prompt, responses demonstrated understanding of research design, statistics, motivation, and behaviorism. Responses earned points by clearly applying concepts of graph interpretation and correlational study design limitations. Additionally, responses earned points by clearly identifying the statistical test best suited for correlational studies and the independent variable if the study were converted to an experiment. Responses earned points on conceptual content by clearly applying internal locus of control, modeling, and approach-avoidance conflict to helping behavior.

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

Missed points in this question included responses that misinterpreted the results as having supported Dr. Germanotta's hypothesis rather than refuting it, responses that described a value range for the provided graph yet failed to identify a statistical test that would measure the strength of the relationship, and responses that provided only confounding variables rather than providing a single, nonmeasured variable influencing both number of people present and number of people that helped. Additionally, a missed point in this question included the misidentification of the independent variable, as responses often referred to the situation rather than the manipulated variable, the number of people present. Internal locus of control responses often focused on a belief in a responsibility or obligation to help rather than a belief in people's efforts to produce a change in the situation. Responses often missed points in the correct application of modeling as they referred to potential future actions of replicating observed behaviors rather than indicating the replication of observed behaviors. Responses often missed the correct application of approach–avoidance conflict, instead referencing a choice between two options rather than a conflict over the pros and cons of a single option.

Common Misconceptions/Knowledge Gaps	Responses that Demonstrate Understanding
• The graph was sometimes incorrectly interpreted to be supporting the provided hypothesis rather than refuting it.	• "The hypothesis was not supported as the findings suggest a positive relationship between the variables rather than a negative one."
• Responses frequently failed to specify the statistical test that would need to be conducted to assess the strength of the relationship.	• "Dr. Germanotta would need to obtain a correlation coefficient to test the statistical strength of the relationship between the variables."
• Responses often identified one or more confounding variables rather than a third variable impacting both of the other variables.	• "Time of day could affect the results as during the morning hours more people are walking on the sidewalk. During the morning people are also more energized, so they are more likely to intervene to help."
• The independent variable was often incorrectly identified as the staged emergency situation.	• "The independent variable was the number of people present during the staged situation."
• Internal locus of control was frequently stated as a belief in an obligation to provide help or confused with intrinsic motivation.	• "Internal locus is when a person believes that their efforts will help generate a better outcome for the situation, so they decide to help."
• Responses often failed to indicate an action of performing the observed behavior and instead focused on a potential to perform the behavior at some time in the future.	• "Because someone has previously watched their friend give a hug to someone in distress, they now give a hug when they see someone in distress."
• Approach–avoidance conflict was frequently stated as a choice between two options rather than describing the pros and cons of a single situation.	• "Todd knows that he will feel good about himself if he stops to help but is afraid he will be late to work and get written up."

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

To help students respond more completely, teachers could emphasize analysis of research data (graphs and statistical tests utilized for varying design types). Additionally, focusing on describing a third variable problem separate from discussing confounding variables would assist in students differentiating the terms. Teachers could emphasize that modeling is only accomplished when, following an observation of an action, replication of the same action has occurred. Another suggested reiteration to students involves conflict types. While approach–approach and avoidance–avoidance conflicts involve contemplating two options, an approach-avoidance conflict is considering the pros and cons of a single choice.

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

Teachers can utilize several resources to help students prepare for the content and skills required:

- AP Classroom FRQ—FRQs from past exams that have been adapted to work for scaffolded course planning are available in AP Classroom. Using these as practice or with assessments can help students master skills they need for exam day.
- AP Daily Videos—The teachers featured in AP Daily videos are all experienced AP Psychology teachers, and they incorporate tips and practice for FRQs into videos in the series.
- Teachers should focus student practice on content-relevant research scenarios. Students should be expected to apply knowledge of research design and data interpretation to research scenarios in each unit of study. This type of practice builds the skills needed to be successful on this type of FRQ.