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AP<sup>®</sup>

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# AP<sup>®</sup> Psychology

## Scoring Guidelines

### Set 2

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**Question 1: Concept Application****7 points****General Considerations**

1. Answers must be cogent enough for the meaning to come through. Spelling and grammatical mistakes do not reduce a score, but spelling must be close enough so that the reader is convinced of the word.
2. A response can earn points only if the student clearly conveys what part of the question is being answered. It is possible to infer the part of the question being answered if it is consistent with the order of the question.
3. The response must apply the concept to the prompt. A definition alone will not earn the point, but a clear definition can support the application.
4. Examples provided in the Scoring Guidelines for each of the points are not to be considered exhaustive.
5. Within a point, a response will not be penalized for incorrect information unless it *directly contradicts* correct information that would have otherwise earned the point. For example, if a response applies a concept in two contradictory ways (such as identifying both the measured variables as the independent variable or describing proactive interference as interference from both older and newer information), the point is not earned. Additionally, a response will not score if it includes a correct answer among multiple incorrect answers related to the same general concept/theory (e.g., a response that describes the Big Five trait of conscientiousness as being diligent, trusting, highly emotional, outgoing, and intellectually curious).
6. Within a bulleted question part, if the response addresses details from a scenario other than the one in the prompt, the point is not earned.

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**Part A** Ruth is bored at home alone, so she decides to watch a scary movie. At the most tense part of the movie, when a large, scary-looking creature is being chased through the village by an angry mob, Ruth’s roommate Lynn comes home unexpectedly and flips on the lights. Ruth is startled and spills her hot chocolate on herself.

Explain how each of the following relates to the scenario above.

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**Optimal arousal theory****1 point**

The response must indicate that Ruth is motivated to watch the scary movie in order to increase her level of arousal.

**OR**

The response must indicate that after her roommate startles her, Ruth does something to lower her level of arousal to a desired level.

**Acceptable explanations include:**

- *Ruth is at a lower arousal than she would like (hence the boredom). So, she decides to watch the scary movie to bring up her arousal level to a more desirable level for her.*

**Unacceptable explanations include:**

Responses that refer to the Yerkes-Dodson law without describing a change in arousal.

- *The optimal arousal theory says that people perform best when their arousal level is neither too high nor too low.*
- *Ruth's arousal increases when she is startled by her roommate.*

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**Motor neurons****1 point**

The response must indicate that motor neurons are enabling a specific physical movement in the scenario.

**Acceptable explanations include:**

- *Motor neurons allow Ruth to reach for a towel to clean up the spilled hot chocolate.*
- *The creature's motor neurons allow him to run through the village.*
- *Ruth reflexively jumps when Lynn startles her.*

**Unacceptable explanations include:**

Responses that include multiple functions.

- *Ruth's motor neurons allow Lynn to flip on the lights and allow Ruth to watch the movie, taste the hot chocolate, and feel burned when she spills the hot chocolate on herself.*
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**Somatosensory cortex****1 point**

The response must indicate the contribution of the somatosensory cortex to Ruth's sense of touch (e.g., temperature, body position, pressure, texture, pain) in the context of the scenario.

**Acceptable explanations include:**

- *Ruth's somatosensory cortex allows her to feel pain after she spilled the hot chocolate all over herself.*

**Unacceptable explanations include:**

Responses that refer to other senses (e.g., taste, smell, etc.) as being governed by the somatosensory cortex.

Responses that refer to "feel" as an emotion rather than a touch sensation.

- *Ruth's somatosensory cortex allows her to taste her delicious hot chocolate.*
- 

**Part B** As they are cleaning up, Ruth tells Lynn the plot of the movie she was watching. While the creature was large and scary-looking, he was actually quite gentle and friendly. The villagers discussed the situation and concluded that the creature was going to hurt them, so they grabbed their torches and pitchforks and chased him out of town. As the creature tried to escape, he tripped over a rock and knocked down a villager.

Explain how each of the following concepts relates to the villagers' perceptions during this scene in the movie.

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**Out-group homogeneity bias****1 point**

The response must indicate that the villagers have the perception that creatures all share the same characteristics OR that creatures are all the same.

**Acceptable explanations include:**

*The villagers in the movies think that all creatures are mean and evil.*

**Unacceptable explanations include:**

Responses that refer to the villagers and the creature as being within the same group.

- *The creatures and the villagers live in an area that has a lot of bias towards others.*
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**Fundamental attribution error****1 point**

The response must indicate that the villagers perceive the creature's behavior as due to some dispositional quality rather than the situation.

**Acceptable explanations include:**

Responses must contrast dispositional and situational attributions to score.

- *The villagers assume that the creature knocked the villager over because he is evil rather than because he was being chased.*

**Unacceptable explanations include:**

- *The villagers think the creature is mean.*
- 

**Group polarization****1 point**

The response must indicate that the villagers, individually, are already threatened or scared of the creature.

**AND**

The response must indicate that these feelings become more extreme when they meet to discuss what to do about the creature.

**Acceptable explanations include:**

- *Before the meeting, the villagers thought that the creature was terrible, and after the meeting they thought that the creature was even more terrible.*

**Unacceptable explanations include:**

- *Some villagers actually thought the creature was probably okay, and they should leave him alone, but they didn't say anything because they wanted to maintain group harmony.*
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**Part C** The next morning, Lynn tells Ruth that she saw her sleepwalking and she must have been acting out a dream of being chased by the creature.

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**Explain why Lynn’s assumption is likely incorrect.**

**1 point**

The response must indicate that the assumption is likely incorrect because during REM sleep the body is paralyzed, immobile, etc.

**OR**

The response must indicate that sleepwalking and dreaming typically occur in different stages of sleep.

**Acceptable explanations include:**

- *It is highly unlikely that Ruth was in REM sleep because during REM sleep the muscles of the body are paralyzed, so she wouldn’t be able to walk around.*

**Unacceptable explanations include:**

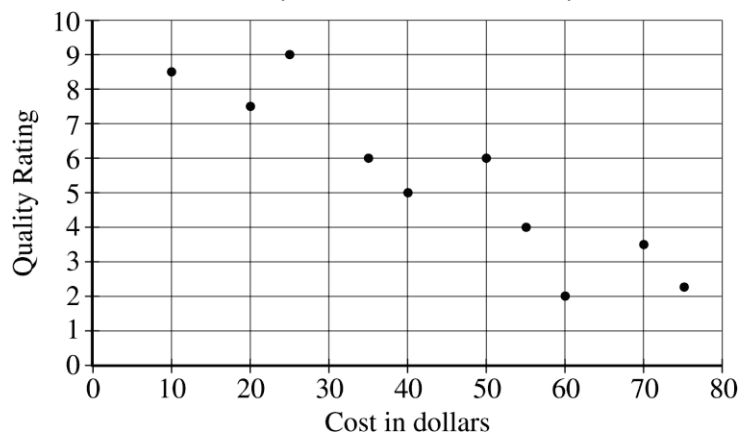
- *Lynn’s assumption is incorrect because if Ruth was acting out a dream of being chased, she would be running around, not walking slowly.*
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**Total for question 1 7 points**

**Question 2: Research Design****7 points****General Considerations**

1. Answers must be cogent enough for the meaning to come through. Spelling and grammatical mistakes do not reduce a score, but spelling must be close enough so that the reader is convinced of the word.
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6. Within a bulleted question part, if the response addresses details from a scenario other than the one in the prompt, the point is not earned.

- Part A** Dr. Knowles is interested in exploring the relationship between garment cost and perceptions of clothing quality. She predicts that higher priced clothing will be perceived as being of higher quality. She creates a Web site that presents floral shirts listed at a variety of prices. Participants are directed to the Web site, where they are asked to rate the quality of each shirt (on a 1 to 10 scale, with higher numbers meaning better quality). The data collected are presented in the scatterplot below.



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**State the hypothesis that Dr. Knowles tested in the study.****1 point**

The response must indicate that Dr. Knowles hypothesized that higher priced clothing would be perceived as being of higher quality.

**OR**

The response must indicate that there would be a positive/direct correlation (e.g., relationship, association, etc.) between price and perceived quality.

**Acceptable explanations include:**

Response must name both variables with the correct direction of the relationship.

- *The perceived quality of the shirts is positively correlated with price.*

**Unacceptable explanations include:**

Responses without an explanation of the correlation.

- *Dr. Knowles hypothesized there would be a correlation between price and quality rating.*
- 

**Identify the operational definition Dr. Knowles used for quality.****1 point**

The response must indicate that Dr. Knowles operationally defined quality as score on the rating scale.

**Acceptable explanations include:**

- *Dr. Knowles operationally defined quality as a score from 1 to 10.*

**Unacceptable explanations include:**

Responses that refer to the rating scale without referring to a score from 1 to 10.

- *The operational definition is the rating of the shirt.*
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**Identify the type of relationship found between the variables of interest in the study.****1 point**

The response must indicate that the relationship between the variables is a negative/inverse correlation/relationship/association.

**Acceptable explanations include:**

- *It is a negative correlation.*

**Unacceptable explanations include:**

Responses that refer to a correlation alone without indicating its direction.

Responses that refer to a description of a negative correlation alone without using the acceptable terms.

- *There is a correlation between cost of shirt and perceived quality.*
  - *As the cost of the shirts goes up, the perceived quality goes down.*
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**Explain why Dr. Knowles cannot generalize the results of her study to the general population.**

**1 point**

The response must indicate that results cannot be generalized because of small sample size.

**OR**

The response must indicate the sample is not representative of the general population.

**Acceptable explanations include:**

- *Dr. Knowles can't generalize because there are only 10 subjects.*
- *This study's results cannot be generalized to the population because it is likely the sample consisted only of people interested in floral shirts, which many people likely don't care about.*
- *Dr. Knowles can't generalize because she did not use a random sample.*

**Unacceptable explanations include:**

- *Dr. Knowles cannot generalize because she did not conduct a true experiment.*

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**Part B** Explain how each of the following could affect participants' perceptions of the floral shirts on the Web site.

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**Mere-exposure effect**

**1 point**

The response must indicate that repeated experience with the shirts or the Web site leads to increased liking of the shirts.

**Acceptable explanations include:**

Responses can indicate more exposure by referencing amount of time or number of exposures to shirts or the Web site.

- *The more often that people look at the Web site the more they like the shirts.*

**Unacceptable explanations include:**

- *Some shirts were so beautiful that people liked them the second they saw them (all it took was mere exposure).*

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**Cones of the retina**

**1 point**

The response must indicate that cones enable the perception of color or fine detail of the floral shirts.

**Acceptable explanations include:**

- *Cones help people see the color of the shirts.*
- *Malfunction of cones hinders people's ability to see the colors of the shirts.*

**Unacceptable explanations include:**

- *Cones help people see the shirts better.*

**Prototype**

**1 point**

The response must indicate that the participants' perceptions of the shirts are influenced by their idea of the best, ideal, or most typical shirt.

**Acceptable explanations include:**

- *Participants compare their ideal of what a floral shirt should look like to the shirts on the Web site.*

**Unacceptable explanations include:**

- *Dr. Knowles made a shirt prototype first, then made all the other shirts based on the prototype.*

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**Total for question 2 7 points**