

AP[®] PSYCHOLOGY

2013 SCORING GUIDELINES

Question 1

General Considerations

1. Answers must be presented in sentences, and sentences must be cogent enough for the student's meaning to come through. Spelling and grammatical mistakes do not reduce a student's score, but spelling must be close enough so that the reader is convinced of the word.
2. A student will not be penalized for misinformation unless it *directly contradicts* correct information that would otherwise have scored a point. In that case, the point is not awarded.
3. Information must be presented in the context of the question. Context can be established by mentioning John, pizza coupons, readers, etc.

Part A: Refute John's Argument (refuting can be indicated by *reduced* reading)

Point 1: Correlational research

- A. To earn this point, the student must *refute* John's argument by saying correlation does not prove causation, OR
- B. The student must *refute* John's argument by saying that he has not established the directionality of the correlation or that the relationship might be due to a third variable, OR
- C. The student can earn this point with a discussion of correlational findings that *refute* John's claim (an example of correlational research that results in an outcome that differs from John's).

Example:

Do not score "Correlation does not prove causation" alone because the student did not establish context.

Point 2: Overjustification effect

- A. The student must discuss *refuting* John's approach because extrinsic motivators can reduce intrinsic motivation.

Note:

Specific vocabulary, such as "intrinsic," is not needed; the student can indicate understanding without specific terms.

Examples:

Score "John's proposal would reduce desire to read" because "John's proposal" describes extrinsic motivators, "desire" indicates intrinsic motivation, and desire is reduced.

Do not score "John's approach would not be good because removing extrinsic motivation would stop the behavior" because the student does not address reducing intrinsic motivation.

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Question 1 (continued)

Part B: Strengthen John's Plan

Point 3: Schedules of reinforcement

- A. The student must identify a schedule of reinforcement (e.g., variable-interval, fixed-schedule, intermittent, or partial reinforcement) that enhances reading, strengthens John's plan, or supports John's plan, OR
- B. The student must describe a schedule of reinforcement that enhances reading, strengthens John's plan, or supports John's plan.

Notes:

- Mere mention of reinforcement is not sufficient; the student must name or describe *schedules* of reinforcement.
- The student can earn the point by describing a schedule and mislabeling it, as long as the student says it enhances reading.

Examples:

Score "John should use a fixed-interval schedule" because "should" implies an alternative for improvement of John's plan.

Score "Using a schedule of reinforcement that varies when a student receives a reward strengthens John's argument" because the student describes a schedule of reinforcement that varies and has indicated strengthening of John's plan.

Do not score "A schedule of reinforcement would help students know when to do their reading and strengthen John's plan" because no schedule of reinforcement is identified or described.

Part C: Influence Reader's View

Point 4: Belief perseverance

- A. The student must indicate that readers have an existing opinion and refuse to change their minds to match John's argument, OR
- B. The student must discuss that readers may agree with John even if others offer contradictory evidence, OR
- C. The student must argue that John maintains his beliefs in spite of contradictory evidence, and his belief perseverance influences the reader's view in some way.

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Question 1 (continued)

Point 5: Central route to persuasion

- A. The point scores if the student indicates that the reader actively processes John's proposal (e.g., considers facts, weighs evidence, draws conclusions) based on ideas in John's proposal, OR
- B. The student must say that John's research (e.g., logic, facts, statistics) influenced the reader's view in some way, OR
- C. The student must say that John was persuaded by logical arguments, which influenced the reader's view in some way.

Note:

- It is not sufficient for the student to discuss only the *peripheral* route to persuasion.

Examples:

Score "The reader considers John's proposal" because the student indicates that the reader thinks about John's proposal, which includes logical arguments.

Score "Readers accept John's argument that reading and rewards are correlated" because the student mentioned a piece of evidence offered by John and indicated that readers were influenced.

Do not score "John uses the central route of persuasion by making an argument based on facts" because there is no mention of influencing the reader.

Point 6: Retroactive interference

- A. The point is scored with a response that indicates recent information interferes with older memories, as long as the answer is in the context of the question.

Note:

It is not sufficient for the student to discuss only proactive interference.

Point 7: Source amnesia

- A. The student must indicate that a reader of John's argument recalls the information but does not remember it came from John, OR
- B. The student must discuss a reader recalling information related to the issue but not remembering where it came from or how they learned it, OR
- C. The student must argue that John can have source amnesia, and this memory loss influences the reader's view in some way.

ANSWER PAGE FOR QUESTION 1

A Correlational Research: A relationship between two different things is shown, both either increase in relation to one another, or one decreases in relation to the others increase. However, correlation does not imply causation. In this case, the research ~~is~~ John based his research upon showed correlation between incentives and student reading. John assumed incentives caused an increase in reading, ignoring that correlation doesn't necessarily imply causation.

Over-justification effect: When a behavior is constantly rewarded, ~~the~~ intrinsic motivation decreases, and it is less likely to persist in absence of reward. In this case, the incentive of the coupon will decrease intrinsic motivation for students to read, and as soon as the reward is no longer offered, the wanted behavior will no longer persist.

B. John is suggesting a fixed-ratio schedule of reinforcement for reading behavior. A fixed-ratio schedule has a ~~fast~~ quick rate of extinction after rewards stop. If he wishes ~~to~~ for the behavior to continue, he should recommend a random-interval reinforcement schedule. Students are rewarded at random intervals as behavior persists. Studies have shown a higher correlation between occurrence of behavior and that ~~then~~ in fixed-ratio interval (where ^{subjects} students are rewarded after a specific amount of repetitions of behavior). It also has a longer rate of extinction than what John is doing now.

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Question 1 is reprinted for your convenience.

1. In response to declining reading scores in local schools, John wrote an editorial suggesting that schools need to increase interest in reading books by providing students with incentives. Based on research showing a relation between use of incentives and student reading, he recommended providing a free pizza coupon for every ten books a student reads.
 - A. Explain how each of the following psychological concepts can be used to refute John's argument.
 - Correlational research
 - Overjustification effect
 - B. Explain how schedules of reinforcement can be used to strengthen John's plan.
 - C. Explain how each of the following psychological phenomena could influence a reader's view of John's argument.
 - Belief perseverance
 - Central route to persuasion
 - Retroactive interference
 - Source amnesia

C. Belief perseverance: A person's preexisting opinion is not swayed by new, oftentimes contrary, information. In this case, if a reader believes that ~~John's~~ John's plan is ineffective, any new information will not be likely to persuade him otherwise.

Central route to persuasion: A person's opinion is influenced by facts, rather than superficial benefits such as food being offered. ~~is they~~ agree. In this case, a central route of persuasion would influence a reader to agree with John if he views the facts ^{presented} as reasonable.

Retroactive interference: Information presented after formation of memories interferes with recall of previous memories. In this case, a reader may have trouble remembering John's argument if he reads a dissent

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point of view on the same subject, ~~making him more likely~~ making him more likely to agree ~~with~~ with the second than John.

Source-Amnesia: When a person forgets where he gained information ~~to a person~~ and attributes it to a different source. If the reader forgets that he read John's article in an editorial, and instead attributes it to a more qualified, scholarly source, he will be more likely to agree.

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ANSWER PAGE FOR QUESTION 1

The research that John ^{found concerning} ~~found~~ ~~research~~ incentives and student reading, it is crucial to keep in mind that correlation does not ^{necessarily mean} ~~mean~~ causation. While, yes, student reading rates do increase when there is an incentive to do so, we do not know if reading rates increase because of the ^{thought of} reward or if that schools are simply more apt to reward good readers. Further research would have to be done to either confirm or deny this statement.

The overjustification effect would mean that in this context, John's plan might actually deter reading instead of increase it. In placing a reward for reading, he might inadvertently decrease the intrinsic value of reading for the children, making them even more reluctant to read.

John is on the right track though with the thought of reinforcement ^{for reading} ~~for reading~~, however, it might be more effective if he had a better way of implementing it. By using a random interval reinforcement schedule (where children are rewarded for reading at random intervals), they would be more inclined to read regularly, instead of viewing reading as only a ^{vehicle} ~~way~~ to get what they really want (pizza).

As ~~the~~ readers, there are some psychological phenomena that could influence ^{his} ~~our~~ ^{view} ~~view~~ of his argument:



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o Belief perseverance

- if we already believe that this is not the best way to go about encouraging children to read, then that belief will most likely carry over into our reading of the argument, making us less apt to believe his argument

o Retroactive interference

- similarly, if we have had experiences that lead us to believe otherwise, then we will be less likely to believe him.

o Source amnesia

- the fact that we do not know where he has gotten this information, makes us more hesitant to believe what he says. If he were

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ADDITIONAL ANSWER PAGE FOR QUESTION 1

to include, in his editorial, where he had gotten his information from, we, as readers, would be more likely to believe him.

• Central route to persuasion

- John is very direct in his argument, which makes ~~this~~ the point that he is making more believable

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ANSWER PAGE FOR QUESTION 1

A.- Correlational research needs to be applied to John's argument because it is not sufficient enough to say that reading scores are declining without any real justification. John needs to prove that giving a free pizza coupon will help increase reading scores.

Over justification effect ~~is~~ can be displayed by John's argument in the way he uses incentives as a motivation for reading.

B. For John's argument he has many ways to reinforce John's plan to increase reading scores. Schedules of reinforcement should be used to increase the action of reading. Since reinforcement is ~~used~~ used when someone wants to increase behavior the best type of reinforcement John should use is positive ~~reinforcement~~ reinforcement, it's also the one he is indeed using. The type of schedule should be a variable interval schedule. It is the ~~most~~ type of schedule most resistant to extinction. He should use fixed interval, like he is. Handing out a coupon every ten books ~~is~~ is fixed interval. He needs to use variable interval ~~which~~ which is randomly ~~over time, giving out~~ handing out a

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prize or reward that doesn't depend on how many books the kids have read,

Since every reader already has their own belief, as a reader begins to read John's argument the reader may still have their own belief instilled in them. Belief perseverance will cause the reader to keep their own belief even after reading John's argument.

Retroactive interference is the phenomenon that when learning something new, what we have already learned inhibits us from ~~learning~~ learning something new. This

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ADDITIONAL ANSWER PAGE FOR QUESTION 1

could affect the reader by simply
not affecting the reader at all.

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2013 SCORING COMMENTARY

Question 1

Overview

The question required students to respond to John's editorial about increasing reading in schools by using incentives. Within the essay, students were asked to address several concepts in psychology.

In Part A, students had to explain how correlational research and the overjustification effect can be applied to refute John's argument. For correlational research, students could explain that John's assumption is not supported by correlational research because correlation does not imply causation (with related problems, including the presence of a third variable and the inability to determine directionality of causation, if it exists). Students could also refute John's argument by discussing other research or data that finds a relationship different from that offered by John. When discussing the overjustification effect, the student had to explain that extrinsic motivators, such as pizza coupons, actually reduce intrinsic motivation. Thus, John's plan is refuted by the understanding that external rewards may, in fact, be detrimental to reading.

In Part B, students discussed schedules of reinforcement as they relate to increasing reading. Students identified a schedule of reinforcement by name or description and indicate that the outcome is beneficial (for example, enhancing reading or offering support of John's plan).

In Part C, the students discussed influencing a view based on belief perseverance, the central route to persuasion, retroactive interference, and source amnesia. For belief perseverance, students had to indicate that a belief is maintained when contradictory evidence is provided, and the answer needed to be within the context of the question (e.g., refers to John's plan or reading). For the central route to persuasion, students could discuss active processing of information, such as John's proposal or thinking about facts (e.g., data or statistics) that influence a reader. As an alternative, students could explain that John was persuaded by facts, which in turn influenced the reader. For retroactive interference, students had to explain that recent information interferes with older memories, and the answer must be in the context of the question. Finally, for source amnesia, students had to describe remembering information but not recalling the source of information, and the answer had to be tied to the question with contextual terms such as John's plan, pizza coupons, or reading.

Sample: 1A **Score: 7**

Point 1 was awarded because the essay states that correlation does not mean causation, and the answer was in the context of the question. Point 2 was granted because the essay states that intrinsic motivation will decrease when rewards are given. The essay earned point 3 by suggesting a change from a fixed-ratio to an interval schedule, encouraging students to persist in reading. The response earned point 4 by discussing persistent disagreement with John's plan regardless of any new information that John offers. Point 5 was awarded because the essay indicates that the reader will agree with John because he presents reasonable facts. The essay earned point 6 because the student defines retroactive interference and then ties it to the question for context. The response earned point 7 by defining source amnesia and tying the answer to John's article.

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Question 1 (continued)

Sample: 1B
Score: 4

The response earned point 1 by explaining that correlation does not mean causation and mentioning student reading rates to establish context. Point 2 was awarded because the essay indicates that rewards for reading may decrease intrinsic motivation to read. The essay earned point 3 by referring to an interval schedule of reinforcement as a better way to enhance reading than John's plan. The response earned point 4 by explaining that belief perseverance means that people who have an opinion different from John's will not believe his argument. Point 5 did not score because the student describes the central route to persuasion as a direct argument, which is not sufficient to indicate facts, logic, or details. The essay erroneously describes retroactive interference as holding beliefs based on experiences and did not earn point 6. The response did not earn point 7 because source amnesia is explained as people being less likely to believe John because he neglected to include his sources in the editorial.

Sample: 1C
Score: 2

Point 1 was not earned because the essay states that correlation does not justify arguments. The essay did not earn point 2 because the overjustification effect was not explained. The response earned point 3 by explaining that John should use a variable-interval schedule to increase reading because this schedule is resistant to extinction. Point 4 was earned because the essay argues that readers with their own beliefs will keep their beliefs in spite of hearing John's argument. The response did not earn point 5 because belief perseverance is not addressed in this essay. Point 6 was not earned because the essay erroneously explains proactive interference rather than retroactive interference. The response did not earn point 7 because source amnesia was not addressed.