Todd needs to visit his pediatrician, Dr. Lazarus, for his annual checkup. Todd is afraid to go to see Dr. Lazarus, because he has received shots in her office before. Todd's mother is ambivalent about bringing Todd to see Dr. Lazarus, because she knows he does not like it, but she brings him anyway. In order to entice Todd to go see the doctor, Todd's mother first asks Todd if he wants to go for a ride in the car. After he says yes, she asks him if he wants to go to the park that is near the doctor's office. Finally, she asks Todd if he would be good while they went to the doctor. Todd reluctantly agrees. Todd is cooperative while in the office, so Dr. Lazarus gives him a lollipop after the visit.

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

- Conditioned response
- Episodic memory
- Positive reinforcement
- Amygdala
- Approach-avoidance conflict
- Secure attachment
- Foot-in-the-door phenomenon
General Scoring Notes

1. Answers should be presented in sentences cogent enough for the meaning of the response to come through. Spelling and grammatical mistakes do not reduce the score of a response, but spelling must be close enough that the reader is convinced of the word.

2. Do not score any notes made on the question section of the booklet. Score only what has been written in the blanks provided in the booklet.

3. Definitions alone are not acceptable, but they may be used to enhance the application.

4. Within a point, a student will not be penalized for misinformation unless it directly contradicts correct information that otherwise would have scored a point. A correct application with an incorrect definition is not considered a direct contradiction and will still earn the point.

5. Rubric examples provided for each point are not exhaustive.

6. Responses that simply repeat the terms from the question are not acceptable.

7. A response can earn a point only if it clearly conveys what part of the question is being answered. It may be possible to infer what part of the question is being answered if it is consistent with the order of the question.
### Scoring Guidelines for Question 1: Concept Application  


| **Conditioned Response** | 1 point | 1.8 |  
| One point for a response that explains how Todd’s fear of Dr. Lazarus is a conditioned response to the shots Todd previously received.  

**Acceptable explanations include:**  
- Todd is scared to see Dr. Lazarus because he associated the pain of the shots with Dr. Lazarus.  
- Todd is exhibiting a conditioned response by being afraid of Dr. Lazarus. When he visited Dr. Lazarus in the past, pain was involved and now Todd thinks of pain whenever he thinks of Dr. Lazarus.  

| **Episodic Memory** | 1 point | 1.8 |  
| One point for a response that explains some aspect of either Todd remembering an autobiographical event OR Todd’s mother remembering an autobiographical event.  

**Acceptable explanations include:**  
- Todd remembers when he visited the doctor last year and he received shots.  
- Todd’s mother knows how to get to the doctor’s office because she remembers going there before.  

| **Positive Reinforcement** | 1 point | 1.8 |  
| One point for a response that indicates a reward being received for a behavior: in this example, Todd receiving a lollipop for cooperating with the doctor.  

**Acceptable explanations include:**  
- Todd received a lollipop from his doctor, which is an example of positive reinforcement.  

| **Amygdala** | 1 point | 1.8 |  
| One point for a response that indicates Todd’s fear being partially a result of the activation of his amygdala.  

**Acceptable explanations include:**  
- Todd’s amygdala (which is largely responsible for fearful emotions) was activated when he thought about going to see the doctor.  

| **Approach-Avoidance Conflict** | 1 point | 1.8 |  
| One point for a response that explains how Todd’s mother was experiencing approach-avoidance conflict with regard to bringing Todd to the doctor.  

**Acceptable explanations include:**  
- Todd’s mother wanted to bring Todd to the doctor because she knew it was good for him, but she also didn’t want to do it because last time he screamed when he got his shots.  
- Todd’s mother feels ambivalent about bringing Todd to the doctor. She feels torn because she knows she should, but, at the same time, she doesn’t want Todd to be upset.  

**Unacceptable explanations include:**  
- avoidance-avoidance conflict  
- approach-approach conflict
### Secure Attachment
One point for a response that explains that Todd is exhibiting secure attachment by being cooperative at the doctor’s office with his mother there.

**Acceptable explanations include:**
- Todd has a secure attachment with his mother, so he is comforted by her presence and cooperates at the doctor’s.
- Even though Todd is scared of Doctor Lazarus, his mother being there helps him feel better as he is a securely attached child.

### Foot-in-the-Door Phenomenon
One point for a response that explains how Todd’s mother gets him to agree to going to the doctor by asking him to comply with smaller requests first.

**Acceptable explanations include:**
- Todd’s mother gets Todd to agree to go to the doctor by first asking him if he will travel with her to locations close to the doctor’s office.

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**Total for question 1** 7 points
A researcher was interested in studying whether participants who were angry would become less angry if they had a chance to release their anger. At 10:00 in the morning, 6 students met individually with a confederate named Steve. They were each asked to write an essay, which Steve evaluated. He told each student, “This is the worst essay I ever read.” They were then asked to sit in a room quietly for 10 minutes. At 1:00 in the afternoon, a second group of 6 students each wrote an essay, and Steve once again said the essays were the worst he had ever read. This second group was then asked to punch a punching bag. After either sitting quietly or punching the punching bag, the students were given the opportunity to blast a horn when Steve entered the room. The researcher operationally defined anger as the length of time that the students blasted the horn. The researcher assumed students who were given an opportunity to punch the punching bag would be less likely to blast the horn in Steve’s presence. The table below indicates how long, in seconds, each subject blasted the horn when Steve was present. Assume all differences are significant.

<table>
<thead>
<tr>
<th>Sat Quietly</th>
<th>Punched Punching Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

Part A
Identify each of the following in this study.
- Control group
- Confounding variable
- Independent variable

Part B
Explain how the concept of catharsis applies to this research study.
Explain whether or not the researcher’s hypothesis was supported.
Describe how to correct one ethical flaw in this study.
Calculate the mean length of time the horn was blasted for the group that punched the punching bag.
### Scoring Guidelines for Question 2: Research Design  
**7 points**

<table>
<thead>
<tr>
<th>Part A</th>
<th>Control Group</th>
<th>1 point</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>One point for a response that identifies the control group as the group that sat quietly.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confounding Variable</th>
<th>1 point</th>
</tr>
</thead>
<tbody>
<tr>
<td>One point for a response that identifies the confounding variable as the time of day.</td>
<td></td>
</tr>
</tbody>
</table>

**Acceptable explanations include:**
- The students who participated in the experiment later in the day might have been more angry simply because it was later in the day.*

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>1 point</th>
</tr>
</thead>
<tbody>
<tr>
<td>One point for a response that identifies the independent variable as whether the students punched the punching bag.</td>
<td></td>
</tr>
</tbody>
</table>
### Part B
All responses in Part B must explain, describe, or calculate data in respect to the research study conducted in the question.

#### Catharsis
One point for a response that explains that students were supposed to experience the release of strong negative feelings by punching the punching bag.

**Acceptable explanations include:**
- The researcher thought by punching the bag, the students would experience catharsis and release their negative energy towards Steve.
- The researcher got the students angry at Steve. The researcher thought those students that got to experience catharsis by punching the bag would have less anger towards Steve.

#### Hypothesis
One point for a response that explains that the researcher’s hypothesis was not supported, as those students who punched the bag actually ended up honking the horn at Steve for longer periods of time.

**Acceptable explanations include:**
- The hypothesis was not supported. Those students who were given the opportunity to experience catharsis actually ended up angrier at Steve (which you can see because they blew the horn longer) in the end.
- The researcher was incorrect. Students who got to take out their anger on the bag did the opposite of what the researcher thought and blasted the horn in Steve’s face for a longer period of time than those who sat quietly.

#### Ethical Flaws
One point for a response that describes the need for debriefing the students, because the researcher used deception.

**Acceptable descriptions include:**
- It appears as if the researcher never debriefed the students. He used deception, so ethically he should debrief them.
- This scenario never describes any sort of debriefing. The students were likely upset after Steve told them their essay was horrible. The researcher needs to debrief the students and explain to them the true reason for the study.

#### Mean
One point for calculating the mean to be 35.

Unacceptable response:
Just identification of the median or the mode.

Total for question 2 7 points