

Science Education Collection

Ethics in Psychology Research

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Overview

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When a researcher finds an interesting topic to study such as aggression, the goal is often to study it in a way that is as true to life as possible. However, researchers must act in an ethical manner. To do this, they must balance their research goals with the best interests of the participants. Ethics often enter into the planning process when researchers identify all of the ways they can manipulate or measure a variable, but then make their final decision based on how they should manipulate or measure a variable.

After receiving a poor grade on a test or paper, a college student may appear to take it out on (*i.e.*, act in an aggressive manner toward) their roommates by being mean or nasty, screaming, throwing things, or even becoming physically violent. Aggression is an important human behavior to study and understand due to the implications it has for interpersonal violence. However, for safety reasons, a study cannot expose participants to the risk that serious types of violence presents. As a result, researchers must identify similar but benign behaviors that can help us understand more aggressive behaviors without harming participants.

This video uses a two-group experiment to see if people really take out their anger on others even though the others are not responsible for the original problem. Specifically, it examines whether negative feedback leads to aggression while considering key ethical issues such as harm to participants, costs vs. benefits, informed consent, and debriefing.

Psychological studies often use higher sample sizes than studies in other sciences. A large number of participants helps to better ensure that the population under study is better represented, *i.e.*, the margin of error accompanied by studying human behavior is sufficiently accounted for. In this video we demonstrate this experiment using just two participants, one being the evaluator. However, as represented in the results, we used a total of 245 participants to reach the experiment's conclusions.

Procedure

1. Define ethical behavior in research.

1. Ethics are a collection of moral standards and principles that guide the decisions we make. They essentially tell us what we should do. What the researcher could do is different from what they should do.
2. Cost-Benefit Analysis: To know if the research should be conducted, the researcher needs to make sure the benefits outweigh the costs or risks of harm. This can be accomplished by increasing participants' benefits and/or lowering the costs.

2. Define key variables.

1. Create an operational definition (*i.e.*, a clear description of exactly what a researcher means by a concept) of negative feedback.
 1. For the purposes of this experiment, negative feedback could entail a number of different forms, *e.g.*, medical results that indicate the participants have a disease, a diagnostic test that indicates they have low IQs, harsh commentary on their physical appearance, or severe criticism on their written work.
 2. Applying cost-benefit analysis, providing severe criticism on written work is the least harmful type of negative feedback to give to the experiment participants. Therefore, ethical behavior dictates that this is the type of negative feedback that should be used.
2. Create an operational definition (*i.e.*, a clear description of exactly what a researcher means by a concept) of aggression.
 1. For purposes of this experiment, aggression could involve a number of different behaviors, *e.g.*, being verbally abrasive to the participant, physically pushing the participant, administering an electrical shock to the participant, or giving the participant a foul-tasting drink.
 2. Applying cost-benefit analysis, the noxious beverage incurs the least amount of harm to the participant (and is something that has been used in previous research). Therefore, ethical behavior dictates that this is the type of aggression that should be used.

3. Conducting the Study

1. Provide participants with informed consent, a brief description of the research, a sense of the procedure, an indication of potential risks/benefits, the right to withdrawal at any time, and a manner to get help if they experience discomfort.
2. Direct participant to write a paragraph that describes a day at the beach.
3. Once complete, inform participant that the paragraph will be delivered to another researcher (the evaluator) in the next room for evaluation that should take about 5 min.
4. Once in the other room, the researcher randomly determines which of the two types of feedback the participant receives by rolling dice. For an even number, give negative feedback and for an odd number, give neutral feedback.

1. For negative feedback, mark the paragraph, in red ink, with several negative comments, e.g., "This is ridiculous!"; "Are you sure this even makes sense?"; "very awkwardly phrased"; "too obvious!"; "really????"; "not very imaginative"; and "needs a complete rewrite."
2. For neutral feedback, return an unmarked paragraph to the participant and explain that the other researcher was too busy to comment.
5. Return the paragraph, with feedback from the evaluator, to the participant. Suggest they read it over while part 2 of the study is prepared.
6. Prepare 5 beverages (highly sugared water, lemon water, plain water, vinegar in water, and hot sauce in water) that provide a range of pleasant to unpleasant tastes.
7. Prepare index cards with a number on one side and description on the other (1 = sugar water, 2 = lemon water, 3 = water, 4 = vinegar water; 5 = hot sauce water).
8. Return to participant with the 5 beverages, with labels, arrayed on a platter.
 1. Explain to the participant what each beverage contains.
 2. Tell the participant to choose one beverage for the evaluator's friend, in the other room, to consume.
 3. Record the number associated with the chosen beverage. This number correlates to the level of aggression displayed by the participant.

4. Debrief: For further ethical reasons, it is necessary to debrief the participant carefully as to the nature of the experiment.

1. "Thank you for participating. In this study, I was trying to determine if receiving negative feedback on your paragraph would lead you to scapegoat, or take out your frustration on the evaluator's friend by selecting a more distasteful beverage. We believed that negative evaluations would lead to retaliation toward the friend in terms of more distasteful drink choices. Do you have any questions?"
2. Explain explicitly why deception was necessary for the experiment.
 1. "We want to tell you about the deception we used in this study. We used deception because it is important that we get a natural performance, not one that the participant feels is expected. If participants were to know the true reasoning and hypothesis behind the study they may perform in an unnatural way by trying to live up to the experimenter's perceived expectations. To eliminate this problem it was necessary for us to tell participants a cover story for the experiment. The cover story in this experiment was that your essay was truly being evaluated. However, the feedback we gave had nothing at all to do with what you wrote. We also mislead you to believe that there was an evaluator and his friend in the next room. In reality, the researcher gave you the feedback and there wasn't anyone in the next room. Because of the nature of the deception, it is quite natural for participants to not realize that they were being deceived."

Results

The data were collected from 245 participants. Recall that the aggression scale was calculated on the number assigned to each of the drinks, which varied in levels of distasteful flavor. A t-test for independent means was run to compare the negative and neutral feedback conditions to determine how they influenced aggression. The results indicated that participants who received the negative feedback generally chose more noxious drinks for the innocent person in the other room (the friend of the evaluator), which is an indication of aggression (**Figure 1**).

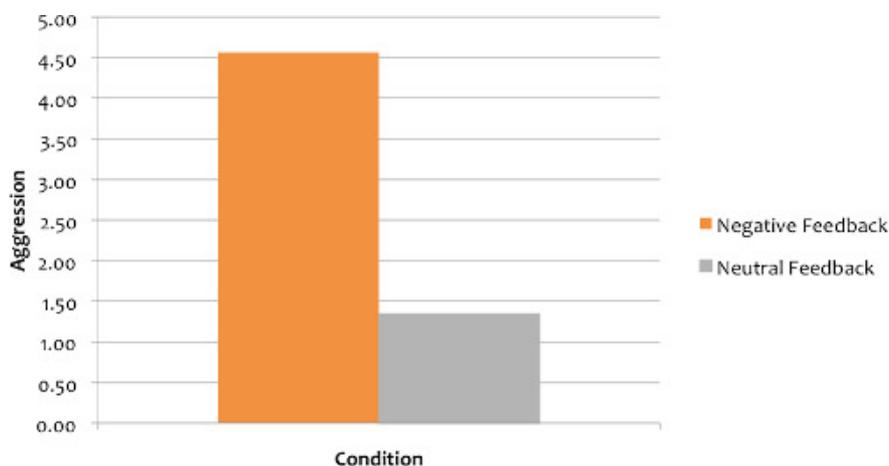


Figure 1. Amount of aggression by feedback condition.

Applications and Summary

This two-group experiment shows how researchers can study sensitive topics in an ethical way that minimizes harm to participants, while still allowing participants to engage in an aggressive behavior.

As they study human behavior, psychologists often seek to analyze undesirable and troubling behavior. For example a recent study in *Psychology of Popular Media Culture* found that when video-game players lost a game, they were more likely to act aggressively by trash-

talking.¹ Though aggressive, this behavior is less risky than physical aggression and is common, which shows the researchers considered the ethical implications of their research.

Ethics apply beyond research. When considering ethical dilemmas in everyday life, there often is not a clear right or wrong answer. Should we test cosmetics on animals? Should Facebook be allowed to change how information appears on a user's page to see if it changes the user's behavior? The issues are complicated, but it is imperative that researchers consider these issues and seek out ways to answer their research questions in ways that protect participants.

References

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2. Breuer, J., Scharrow, M., & Quandt, T. Sore losers? A reexamination of the frustration-aggression hypothesis for collocated video game play. *Psychology of Popular Media Culture*. (2013).