

Dear AP Psychology Student:

Welcome to AP Psychology! I am glad that you have chosen to challenge yourself by taking this class, and I am convinced it may be one of the best classes you will ever take! Please read the following important information regarding your textbook and summer reading assignment.

Check out a blue AP Psychology textbook from the media center (*Myers' Psychology for the AP Course, 3rd Edition*)

The following is your summer reading assignment. It is due on the FIRST day of school.

1. **Read** Units 1 and 2 (pages 1-77) of your textbook, Myers' Psychology for AP by David G. Myers and C. Nathan Dewall, ISBN-13: 978-1-319-07050-2.
2. **Define** all terms on pages 33 and 74. These will be due on the first day of class.
3. Be prepared to discuss this material (above) on Day 1. (35 points)
4. Complete the **Summer Experiment Project** (75 points)
5. Be prepared to take a test over all of the above during the first week of school.

Late summer work will not be accepted. Failure to complete the Summer Experiment Project may result in removal from the course.

Feel free to contact me via email ([tphillippe@caschools.us](mailto:tphillippe@caschools.us)) if you have any questions. Enjoy your summer! I look forward to seeing you in August.

Grace and Peace,

Mr. Troy Phillippe  
AP Psychology

Welcome to AP Psychology! Psychology is the study of mental processes and human behavior. In order to study mental processes and keep track of human behavior, scientists design experiments to test cause and effect relationships between variables. As a requirement for entrance into this course, you are expected to design the experimental procedures of a study, conduct the study according to your experimental design, and present your findings during the AP Psychology Summer Symposium during the first week of school. Please follow the steps outlined below to help you along the way:

## Design an Experiment

1. State the research question and **hypothesis**
2. **Operational definitions** of the **independent** and **dependent variable**
3. State the design of the study (the goal is to be clear enough that another researcher could read your instructions like a cookbook recipe and re-do your whole experiment just from your instructions -- this is known as **replication**)
  - 3.1. Describe how you will find & enroll participants;
  - 3.2. Explain how you will meet the ethics standards outlined on pg. 62 (be specific, especially about **informed consent** and **debriefing**);
  - 3.3. Make a description of the materials you will need/use;
  - 3.4. Provide a description of your step-by-step procedures to do the experiment (how are you going to conduct it? Include things like specific questions/surveys you will use, instructions you will give, what order you will go in, how many days, etc.);
  - 3.5. Explain the difference between your **experimental group** and your **control group**. Be sure to describe your **random assignment** process;
  - 3.6. Cite & Reference 1 academic journal that supports/lends credibility to your hypothesis.

## Conduct the Experiment & Gather Your Data

4. Follow the experimental design that you generated (above) and record all of your data.
5. Calculate the **mean**, **median**, **mode**, and **standard deviation** (you may use an online tool for this if needed).

## Present the Experiment

6. Create a poster to display your findings and be prepared to present your research to the class.
7. Posters are expected to contain:
  - 7.1. An Abstract of no more than 200 words (an abstract is like a movie trailer for your research)
  - 7.2. Printed copy of your experimental design
  - 7.3. Give the citations for and briefly review the 1 academic study that supports your hypothesis
  - 7.4. Provide an analysis of the results (i.e., use graphs/diagrams/photos of the outcome(s), calculate percentages, etc).

- 7.5. Identify if you think your study is best suited to be **basic** or **applied** research and list conclusions that can be drawn from your results. Report how your results link back to the 1 academic study you identified for your hypothesis.
- 7.6. What other vocabulary concepts from Chapter 1 or 2 (Module 1-8) are applicable to your research? What other course topics do you predict this experiment will connect to?

### Example of each step:

1. **Research Question & hypothesis**- Does music distract from cognitive processing?  
Hypothesis: Listening to music with a vocal track will negatively affect a participant's performance on a cognitive performance task.
2. The **independent variable** is song choice ("Old Town Road" by Lil Nas X or a classical piece with no vocals). The **dependent variable** is the participant's score on the Stroop Test. The experimental group will listen to *Old Town Road*, the control group will listen to *Für Elise* by Beethoven.

### Experimental design

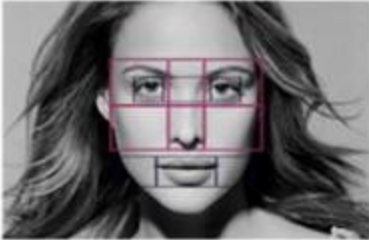
3. I will email/mail invitations to participate to X people who live in the \_\_\_\_\_ neighborhood. Of those who choose to participate, participants will be **randomly assigned** into **experimental** and **control groups** using a coin toss / online scrambler / other method.
4. Before opting in, participants will be told the nature of the experiment (an experiment to test auditory distractions on their ability to think) and will be told they are allowed to exit the study at any point. They will be debriefed (including their personal results) at the conclusion of their participation.
5. This experiment requires an internet-capable device able to run the Stroop Test from this site (<https://faculty.washington.edu/chudler/java/ready.html> ). Participants will also need headphones. The researcher will need a stopwatch and printouts (key) of the answers for the stroop test in order to track the score of the participant.
6. Step 1- The researcher will conduct the experiment on each participant individually in an isolated room in order to minimize **confounding variables**.  
Step 2- The researcher will present instructions to the participants.  
Step 3- Researchers will allow participants to ask questions and clarify.  
Step 4- Participants should put on the headphones and begin the Stroop Test when the researcher gives the start signal. A timer will be used, starting at 0, and ending when the participant successfully completes 1 sheet of the Stroop Test. Their total time will be recorded as their score.  
Step 7- After all participants have completed the experiment, statistics will be used to determine any amount of difference between the experimental group (Old Town Road) and the control group (classical, non-vocal music).

# Science of Attraction

## Do people with a symmetrical face smell more attractive?

### INTRODUCTION

What do you think is the most attractive face?  
 It is not the person with the most beautiful features, but the person with the most symmetrical features. This is because the brain is wired to process information in a way that is most efficient. The brain is wired to process information in a way that is most efficient. The brain is wired to process information in a way that is most efficient.



### SAMPLE

The sample consists of 20 male and 20 female participants, between the ages of 18 and 25. They are a mix of ethnicities and are all students at the University of Maastricht. They are all single and have no children. They are all living in the Netherlands. They are all living in the Netherlands.

### RELEVANCE

The relevance of this study is that it can help us to understand the relationship between facial symmetry and attractiveness. This is because the brain is wired to process information in a way that is most efficient. The brain is wired to process information in a way that is most efficient.

### RESEARCH QUESTION

Is there a positive correlation between facial symmetry and attractiveness of body odour, and is this the same in both males and females?

### HYPOTHESES


The hypothesis is that there is a positive correlation between facial symmetry, attractiveness of body odour, and face perceived by the other sex. This additional hypothesis is that this correlation is the same in both males and females.

### METHODOLOGY

**- Measurement of facial symmetry**  
 The facial symmetry is measured with the use of a computer program. The program is a mix of male and female faces. The program is a mix of male and female faces. The program is a mix of male and female faces.

**- Body odour measurement**  
 The body odour is measured with the use of a computer program. The program is a mix of male and female faces. The program is a mix of male and female faces. The program is a mix of male and female faces.

**- Perceived facial attractiveness**  
 The perceived facial attractiveness is measured with the use of a computer program. The program is a mix of male and female faces. The program is a mix of male and female faces. The program is a mix of male and female faces.



Amy Abelmann (16073489) University College Maastricht

This is 1 example of a possible poster layout/format. You can be creative!  
 It can be made digitally (powerpoint can do it for you) or by hand.

No idea where to start? These websites contain lots of experiment ideas you could try or re-interpret according to your own interests:

<https://www.verywellmind.com/psychology-experiment-ideas-2795669>

<https://www.explorepsychology.com/psychology-experiment-ideas/>

You must obtain permission from Mr. Phillippe at [tphillippe@caschools.us](mailto:tphillippe@caschools.us) before you are allowed to conduct your experiment. Design it, then double-check that you are allowed to do it!