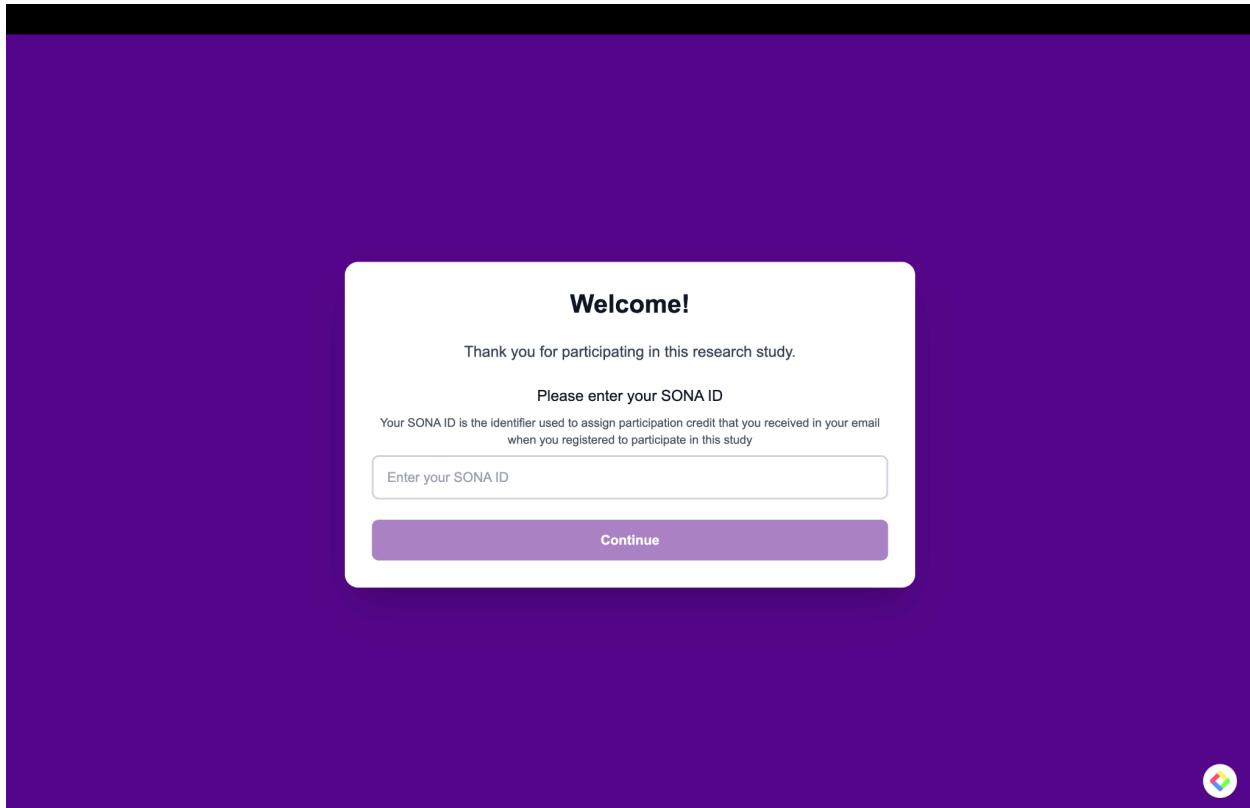
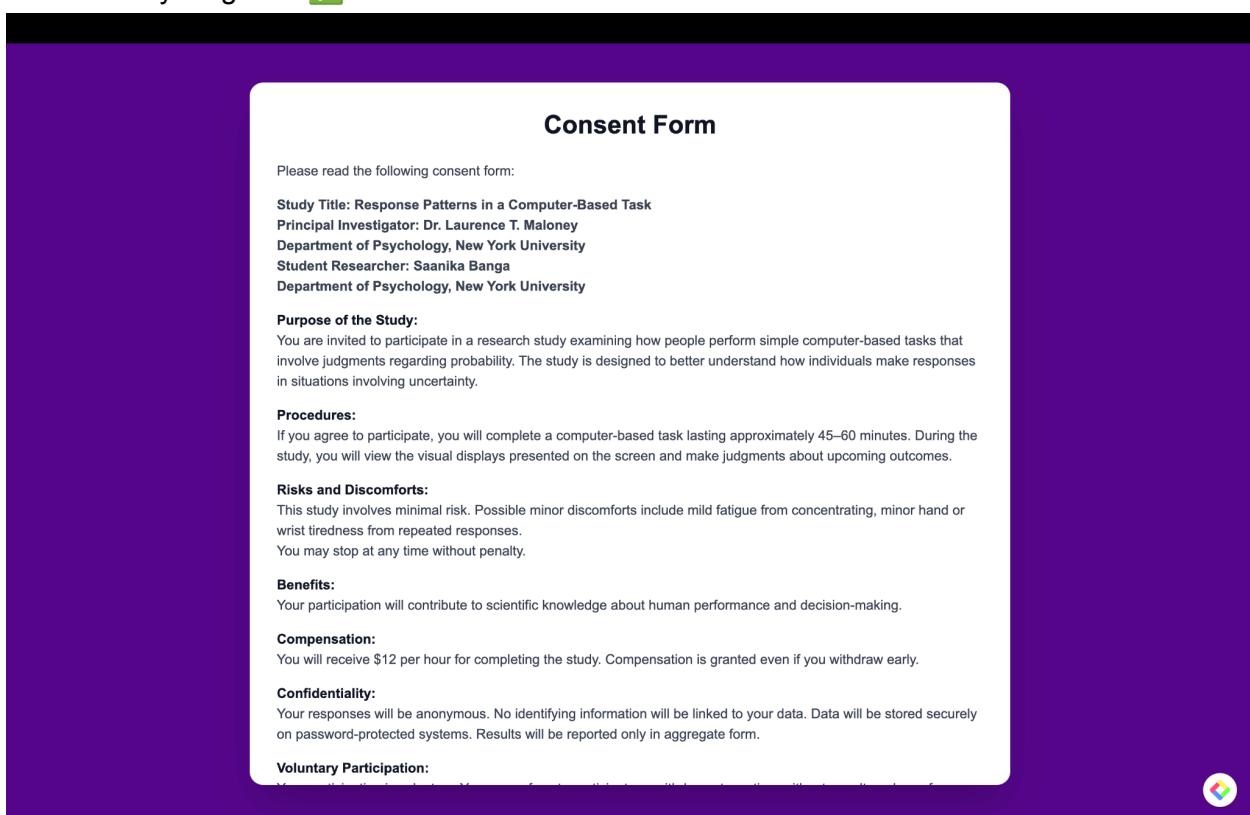


PAGE 1: 



PAGE 2:

- Remove bold after ‘:’ in “Study Title: Response Patterns in a Computer-Based Task
- Principal Investigator: Dr. Laurence T. Maloney
- Department of Psychology, New York University
- Student Researcher: Saanika Banga
- Department of Psychology, New York University”
- Everything else 



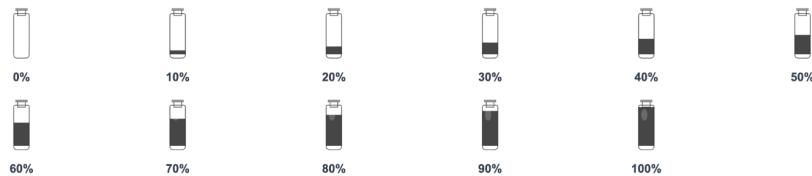
Training Phase

Welcome to the training phase. In this task, you will learn how samples of balls relate to the jar they come from.

You will see 11 jars on the screen. Each jar contains 100 balls that can be either black or white. The percentage below each jar indicates how many black balls are inside it.

For example:

- A jar labeled 30% contains 30 black balls and 70 white balls.
- A jar labeled 70% contains 70 black balls and 30 white balls.



The label represents the **probability of drawing a black ball** from that jar.

[Next](#)



Training Phase

What you will do

On each trial, you will see two jars picked from the array of jars shown earlier. You will then see a sample of 10 balls that was drawn from one of the two urns.

Your task is to decide: **Which urn most likely produced the sample?**

Select the urn that you believe the sample came from by clicking on it.

This phase is only to help you understand the task before the main experiment begins.

[Begin Training](#)



PAGE 5:

- Text below that says “Which urn out of the two shown below most likely produced the sample?”
- A sample of 10 balls slides in from left to right with randomised numbers and order of black and white balls, with the sound of balls bouncing
- 2 jars are shown below the sample of balls. One of them correctly corresponds to the proportion of black balls shown in the sample. One of them is incorrect. Below the jars, put the labels that show the % of black balls in the jar.
- Give a “Next” button
- The above is the description of one trial. I need 10 such trials, each with a sample of 10 balls in randomised ball order and randomised number of black and white balls.
- Ask professor if participants will be given feedback after their response to the training trials (this bullet is a question for research, not relevant for claude)

Training Trials

Training trials will be implemented here (10 trials)

[Continue to Main Experiment](#)



PAGE 6:

- Add text after what is already written: "You will see 101 jars on the screen. Each jar contains 100 balls that can be either black or white. The label below each jar indicates how many black balls are inside it."
- For example:
- A jar labeled 30% contains 30 black balls and 70 white balls. Thus, the probability of black balls in the jar is 30% (30 black balls out of 100 total balls)
- Similarly, a jar labeled 70% contains 70 black balls and 30 white balls. Thus, the probability of black balls in the jar is 70% (70 black balls out of 100 total balls)
- Show 101 jars on the screen with a neutral color, with percentages varying from 0% to 100% increasing in increments of 1%
- Below the jars, the text says, "The label represents the probability of drawing a black ball from that jar."

Main Experiment

You will now begin the main task. In this task, you will observe balls being drawn from a randomly chosen jar.

[Begin Main Experiment](#)

Similar to this slide: but with 101 jars and percentages increasing in increments of 1%

Training Phase

Welcome to the training phase. In this task, you will learn how samples of balls relate to the jar they come from.

You will see 11 jars on the screen. Each jar contains 100 balls that can be either black or white. The percentage below each jar indicates how many black balls are inside it.

For example:

- A jar labeled 30% contains 30 black balls and 70 white balls.
- A jar labeled 70% contains 70 black balls and 30 white balls.

 0%	 10%	 20%	 30%	 40%	 50%
 60%	 70%	 80%	 90%	 100%	

The label represents the probability of drawing a black ball from that jar.

[Next](#)

PAGE 7:

- Remove title ‘Phase 1: Red Jar’ that is only for experimenter to know not the participant
- Change title to ‘Main Study’
- Below the title add text that says: “ **What you will do:**

Press the spacebar to draw a ball. A ball will appear showing whether it is black or white.

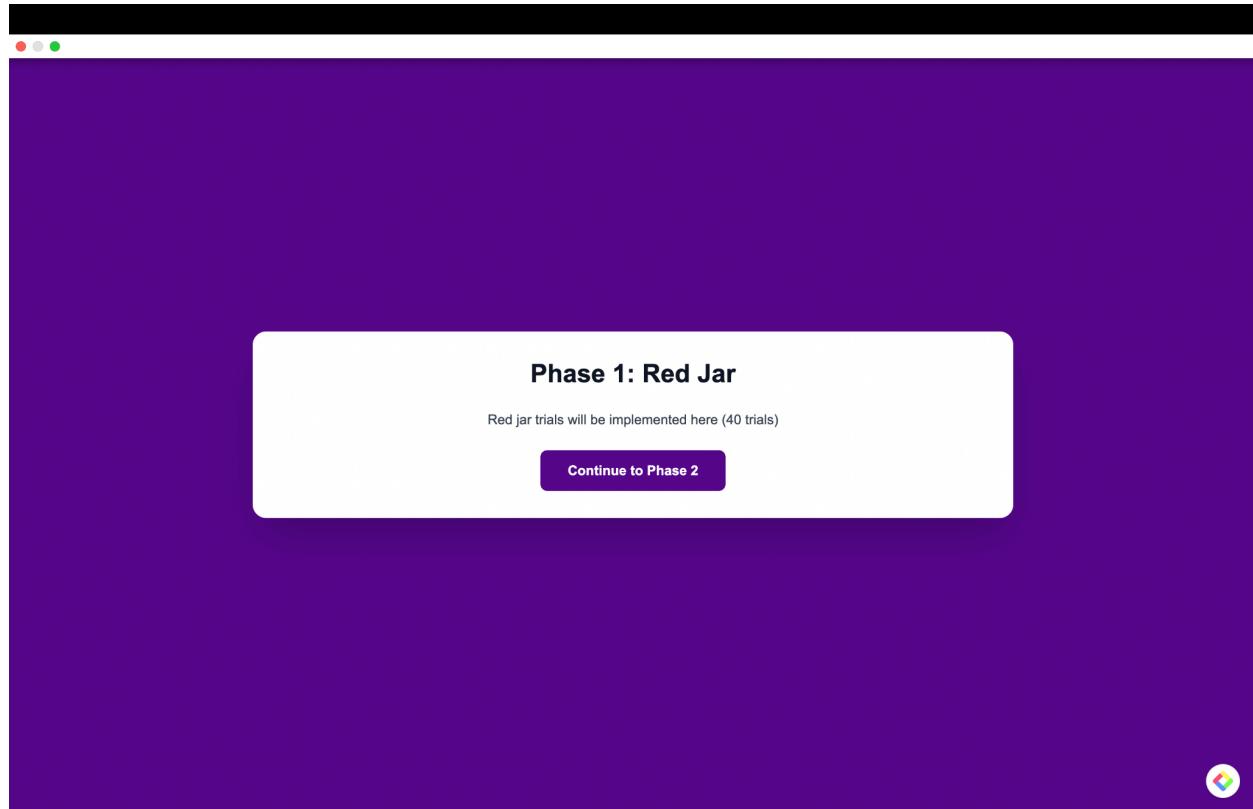
Using all the balls you have seen so far, you will:

(a) Enter your estimate of the probability (0–100%) that the jar produces a black ball

(b) Rate how confident you are in your estimate on a scale of 0 to 10

After each draw, the ball is returned to the jar. You will be able to see the sequence of balls you have drawn after every trial.”

- Add a ‘begin study’ button



ADD A PAGE HERE:

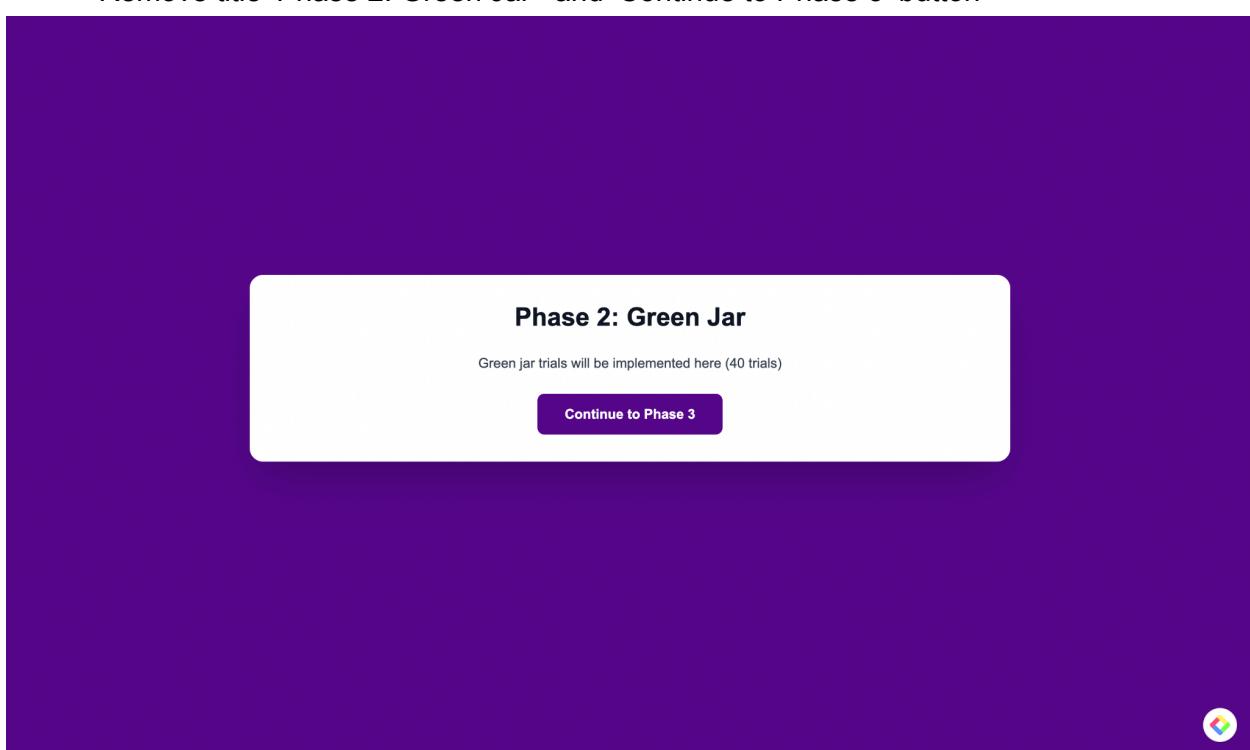
- The screen with 101 jars is brought back and all jars are shaken and jumbled with noise in the background and one jar is randomly selected.
- The chosen jar will be visibly given a red label on it and be placed on the top of the screen.
- The screen will then ask the question “Without drawing a ball, what is your initial estimate of the probability of black balls in this jar?”
- Below the question there will be a slider ranging from 0% to 100% and participants can slide anywhere across the slider and choose the percentage increasing in increments of 1%. While they hover over the slider they can see the percentages on the slider.
- Below the slider there will be another question: “ How confident are you in your estimate?”
- Below the text there will be another slider from 0 to 10 which participants can slide to answer
- Give a ‘Next’ button
- No title on this slide

ADD 40 PAGES LIKE THIS BELOW:

- The chosen jar with the red label shakes and releases a randomised black or white ball with the sound of shaking and the ball being released as if it's bouncing
- Below the ball and jar, there will be text asking "What is your estimate about the probability of black balls in this jar?"
- Below the question there will be a slider ranging from 0% to 100% and participants can slide anywhere across the slider and choose the percentage increasing in increments of 1%. While they hover over the slider they can see the percentages on the slider.
- Below the slider there will be another question "How confident are you in your estimate?"
- Below the text there will be another slider from 0 to 10 which participants can slide to answer
- This is what one trial would look like. There will be 40 trials with this jar with red label where it will shake, release a ball and then the participant will answer the 2 questions. The participants will be able to see the sequence of ball that has been drawn after every trial.
- Give instructions after participants have given their responses through the sliders: "Press the space bar to release the next ball"
- No titles on these slides
- **Would the researcher know the true probability of the jars that are being chosen across both phases? (this bullet is a question for research, not relevant for claude)**

CURRENT PAGE 8 (will be after 40 trials of red jar are done)

- The chosen jar with the red label on it will be kept aside to the left of the screen and another neutral jar with a green label on it will be brought to the centre of the screen.
- On the screen will be a pop up of instructions with the close button on the top right corner. This pop up will contain the instructions: "The red jar has now been kept to the side. A jar has been selected from the array of 101 jars shown before and has a green label attached to it. Similar to the previous trials, you will be asked to estimate the probability of black balls in this jar and your confidence in your estimates. Press the space bar to release a ball from the jar. Once you have read the instructions you can close this pop up by clicking on the cross in the corner"
- Remove title 'Phase 2: Green Jar' and 'Continue to Phase 3' button

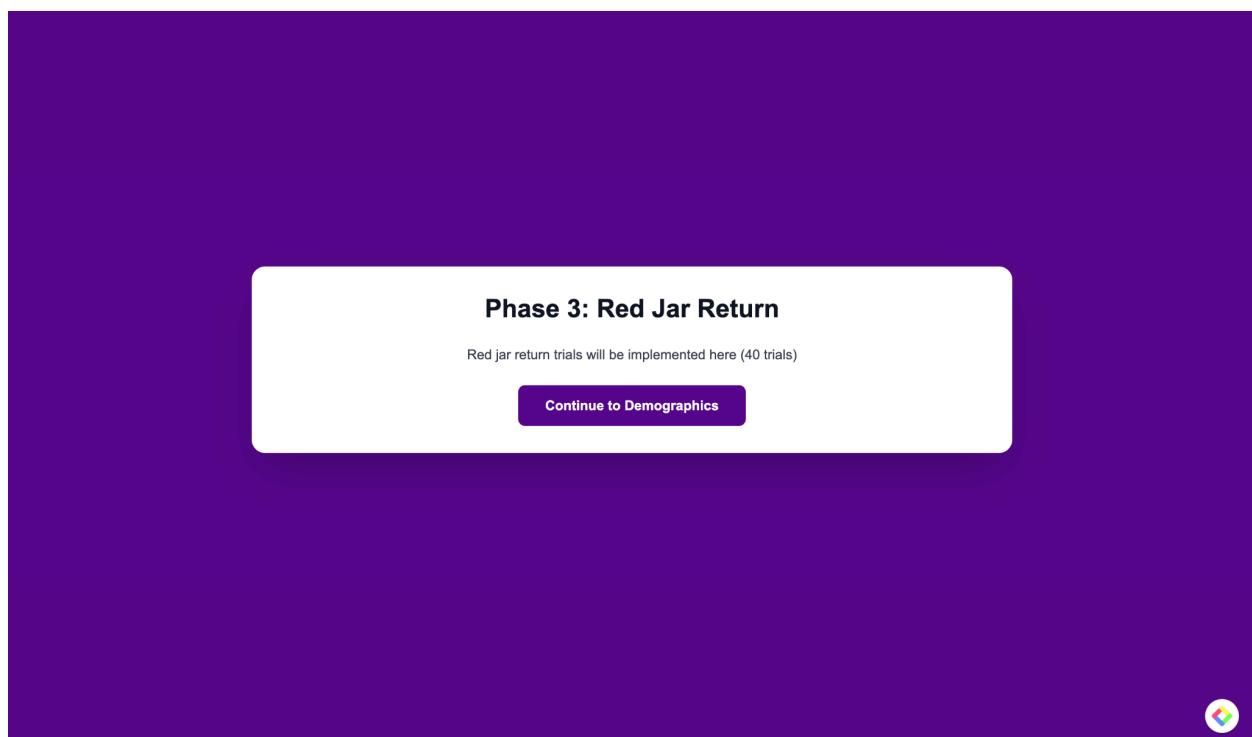


ADD 40 PAGES LIKE THIS BELOW:

- Upon the participant clicking space bar, the jar with green label shakes and releases a randomised black or white ball with the sound of shaking and the ball being released as if it's bouncing
- Below the ball and jar, there will be text asking "What is your estimate about the probability of black balls in this jar?"
- Below the question there will be a slider ranging from 0% to 100% and participants can slide anywhere across the slider and choose the percentage increasing in increments of 1%. While they hover over the slider they can see the percentages on the slider.
- Below the slider there will be another question "How confident are you in your estimate?"
- Below the text there will be another slider from 0 to 10 which participants can slide to answer
- Give instructions after participants have given their responses through the sliders: "Press the space bar to release the next ball"
- No titles on these slides
- This is what one trial would look like. There will be 40 trials with this jar with green label where it will shake, release a ball, and then the participant will answer the 2 questions. The participants will be able to see the sequence of ball that has been drawn after every trial.

CURRENT PAGE 9 (will be after 40 trials of green jar are done):

- Remove title 'Phase 3: Red Jar Return'
- The chosen jar with the green label from previous 40 trials will be kept aside to the left of the screen and the jar with red label which was kept aside earlier will be brought to the centre of the screen
- On the screen will be a pop up of instructions with the close button on the top right corner. This pop up will contain the instructions: "The green jar has now been kept to the side. The red jar that was on the left side of the screen has been brought to the centre. Similar to the previous trials, you will be asked to estimate the probability of black balls in this jar and your confidence in your estimates. Press the space bar to release a ball from the jar. Once you have read the instructions you can close this pop up by clicking on the cross in the corner"



ADD 40 PAGES OF THIS BELOW:

- Upon the participant clicking space bar, the jar with red label shakes and releases a randomised black or white ball with the sound of shaking and the ball being released as if it's bouncing
- Below the ball and jar, there will be text asking "What is your estimate about the probability of black balls in this jar?"
- Below the question there will be a slider ranging from 0% to 100% and participants can slide anywhere across the slider and choose the percentage increasing in increments of 1%. While they hover over the slider they can see the percentages on the slider.
- Below the slider there will be another question "How confident are you in your estimate?"
- Below the text there will be another slider from 0 to 10 which participants can slide to answer
- This is what one trial would look like. There will be 40 trials with this jar with red label where it will shake, release a ball, and then the participant will answer the 2 questions. The participants will be able to see the sequence of ball that has been drawn after every trial.
- Remove 'continue to demographics button' just add a 'next button' instead

CURRENT PAGE 10:

- Add a question for, What is your Gender? - Add options for Male, Female, Non-Binary, Prefer not to share
- Remove the question 'Are you an NYU student?'
- Under 'List your major(s)/minor(s) add 2 text boxes one that says Major and Minor and gives examples in Grey like already given

The image shows a survey interface with a light gray background. At the top center, a white rounded rectangle contains the text "We're almost there!". Below this, a smaller text reads "Before we end the study, please take a moment to answer the following questions". The form consists of several input fields:

- A question "Are you an NYU student?" with two radio button options: "Yes" and "No".
- A question "What year are you in of your college degree?" with a dropdown menu labeled "Select...".
- A question "List your major(s)/minor(s)" with a text input field containing placeholder text "e.g., Psychology, Computer Science".
- A large purple rectangular button at the bottom labeled "Submit".

CURRENT PAGE 11:

- Instead of 'download my data' button add a 'End Study' button
- After the participant clicks 'End study' button, prompt 'You may now close the experiment window'
- Everything Else

Thank You!

You have now reached the end of the experiment. Thank you for taking the time to participate in this study.

The purpose of this experiment was to understand how people update beliefs when they receive new evidence and whether previously learned beliefs are stored and reused when a situation returns. During the task, you observed balls drawn from urns and repeatedly estimated the probability of drawing a black ball.

The study was designed to examine how people form beliefs, adjust them when circumstances change, and whether they return to earlier beliefs when a familiar situation reappears. Some aspects of the task were not fully explained beforehand so that your responses would reflect natural judgment rather than following a specific strategy.

In particular, the appearance of different urns allowed us to test whether people treat earlier knowledge as something that can be remembered and reinstated, rather than always starting from scratch. There were no correct answers on individual trials – we were interested only in how your estimates changed over time.

Your responses will remain anonymous and will be used only for research purposes.

If you have any questions about the study, you may contact the researcher (saanika.banga@nyu.edu) or supervising professor (ltm1@nyu.edu).

Thank you again for your time and participation. Your contribution helps us better understand how people reason and make decisions under uncertainty.

[Download My Data](#)

You may now close the experiment window.



Change the jar images across training and main experiment to:

- For the training trials, similar to right now, fill the jars with black color based on the percentage label below the jars showing the probability of black balls

