

Not for Publication

Experiment Overview

Introduction

In this experiment we hope to investigate how people make choices between lotteries. We are also interested in how easy or difficult people find it to make a choice.

For the purposes of this experiment a lottery is defined as a set of possible monetary rewards, each with a given probability of being realised. For example, a specific lottery might be: *\$0 with a 25% probability, \$30 with 55% probability, and \$50 with the remaining 20% probability.*

You will be required to indicate your preference between many different pairs of lotteries. Your reward for participating in this experiment is that, at the end, one of your choices between a pair of lotteries will be retrieved and your preferred lottery will be played out using real money. You will get to keep any cash you might win from that lottery (once it has been resolved using a random device).

The lottery you get to play is chosen in the following way. You will pick a folded ticket from a container. The ticket has a number on it which will determine which of your past choices will be retrieved. Each lottery pair is equally likely to be selected so you should treat each decision during the experiment as if it were the one on which your entire payment depends. Once your lottery has been selected you will then draw another folded ticket from a box and the number on the ticket (from 1-100) will identify which outcome on your chosen lottery will be paid out. In our earlier example, you would get \$0 if the ticket contains a number between 1 and 25, \$30 if it has a number between 26 and 80, and if the number on the ticket is between 81 and 100 you would get \$50.

Ticket#	Probability	Payment
1 to 25	25%	\$0
26 to 80	55%	\$30
81 to 100	20%	\$50

Because your reward will depend on just one choice you have made during the experiment it is in your interest to make each choice in a way that most accurately reflects your true preferences... because you do not know which one will eventually be played for real.

The Experiment

This experiment consists of three stages.

In stage 1 you will be presented with 9 sequences of lottery-pairs and for each pair in each sequence you must express a general preference as to which lottery (of that pair) you would play if you were only allowed to play one of them.

In stage 2 you will be presented with a single random sequence of lottery-pairs and this time you must specify an absolute rather than a general preference for each pair.

In stage 3 a single lottery-pair will be chosen from among the pairs previously presented to you and you will then actually play the lottery of that pair for which you previously specified a preference. The result of that lottery will provide you with your payment for participating in the experiment.

Continue

Introduction to Stage 1

Method

In the first stage you will be presented with a sequence of lottery pairs. You must express a preference as to which lottery (A or B) in each pair you would prefer to play if you were only able to play one of them. After expressing your preference, lottery A will stay the same but lottery B will be changed slightly and you will be asked to decide which one you now prefer.

In total, stage one will present you with 9 separate sequences of lottery pairs. Lottery A will remain unchanged in each sequence while lottery B will sweep through a range of different possibilities, changing after each choice you make. On each occasion please think carefully about which lottery you prefer and how sure you are about your choice. At the start of each sequence one lottery will be obviously superior to the other but this will gradually change as the sequence progresses, until the other lottery is obviously superior by the end of the sequence.

You will indicate your preference for lottery A or lottery B with the following choices:

- I definitely prefer lottery A
- I think I prefer lottery A but I'm not sure
- I think I prefer lottery B but I'm not sure
- I definitely prefer lottery B

When your preference matches that of the preference indicator on the screen press the "Accept" button. This records your preference and moves you to the next lottery pair in the sequence (or to the next sequence if the current sequence has ended). If your preference does not match that displayed on the preference indicator press the "Change" button, which will move the indicator to the next value. You should then press "Accept" until you once again need to press the "Change" button. Note that, as lottery B changes in a uniform fashion, the preference indicator may only be shifted in one direction.

Example

On the next page are 4 sample sequences of lottery pairs that illustrate stage one of the experiment. Press the "Accept" and "Change" buttons to see how they behave. If you make a mistake, use the back button on the web browser to undo the error.

Once you have proceeded through all the practice sequences you will move on to the stage two introduction.

Example of Stage 1

Practice Question
1 of 4

LOTTERIES			
A	35%		65%
	\$120		\$0
B	\$200	\$0	
	1%	99%	

Accept

PREFERENCE

I definitely prefer lottery A	I think I prefer lottery A but I'm not sure	I think I prefer lottery B but I'm not sure	I definitely prefer lottery B
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Change

Continue

Example of Stage 1

Practice Question
2 of 4

LOTTERIES			
A	15%	60%	25%
	\$100	\$50	\$0
B	\$100	\$50	
	15%	85%	

Accept

PREFERENCE

I definitely prefer
lottery A

I think I prefer lottery A but
I'm not sure

I think I prefer lottery B but
I'm not sure

I definitely prefer
lottery B

Change

Continue

Example of Stage 1

Practice Question
3 of 4

LOTTERIES		
A	85%	15%
	\$36	\$0
B	\$1	
	100%	

Accept

PREFERENCE

I definitely prefer lottery A	I think I prefer lottery A but I'm not sure	I think I prefer lottery B but I'm not sure	I definitely prefer lottery B
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Change

Continue

Example of Stage 1

Practice Question
4 of 4

LOTTERIES		
A	45%	55%
	\$70	\$0
B	\$70	
	100%	

Accept

PREFERENCE

I definitely prefer
lottery A

I think I prefer lottery A but
I'm not sure

I think I prefer lottery B but
I'm not sure

I definitely prefer
lottery B

Change

Continue

Introduction to Stage 2

Method

Having completed stage one, you will move to stage two. Stage two is essentially the same as stage one except for two differences:

- Only 43 choices between lottery pairs are involved. These choices follow no sequence or pattern, and both lotteries often change between choices.
- You now make a straight choice for lottery A or lottery B, rather than indicating a strong/weak preference for A/B.

Example

On the next page is an example of some stage two questions. Press the "A" and "B" buttons to familiarise yourself with this stage. If you make a mistake, use the back button on the web browser to undo the error.

Once you are confident with the operation of stage two you should press the "Continue" button to move to the stage three introduction.



Example of Stage 2

LOTTERIES		
A	60%	40%
	\$40	\$0
B	\$20	\$0
	96%	4%

A

B

Continue

Introduction to Stage 3

Method

Once you have answered all the questions from stages 1 and 2, the display will tell you that the experiment is over. You must then call the supervisor to begin the final stage of the experiment which will determine your payment for real money in the way described earlier. The experiment should take around 1 hour. Good luck, and thank you for participating in this experiment!

Press "Continue" when you are ready to begin the experiment proper.

Continue
