

Instructions to Subjects

Confidence in perceptual decision making

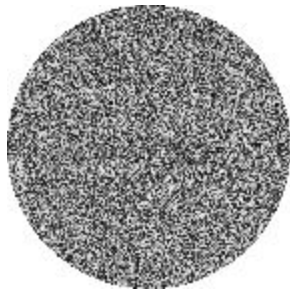
Hi and thanks for taking part in my experiment.

Before we begin, let's start with some terminology:

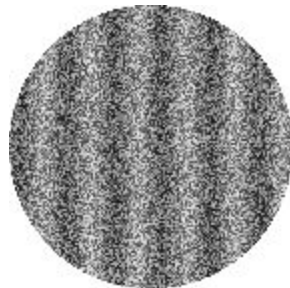
A *grating* is an image of alternating white and black stripes:



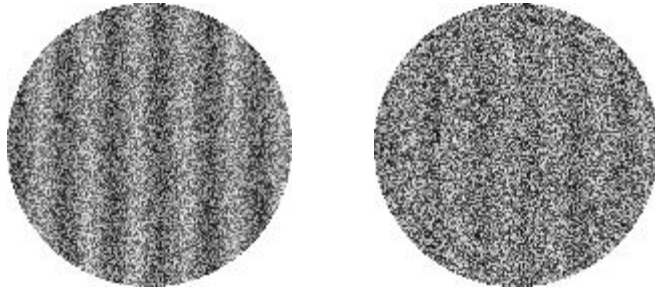
Noise is random patterns of white and black dots:



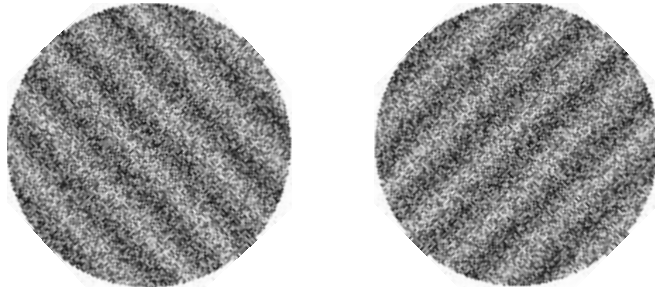
A noisy grating is a grating merged with noise:



Noisy gratings can be difficult or easy to identify, depending on the level of noise in the image:



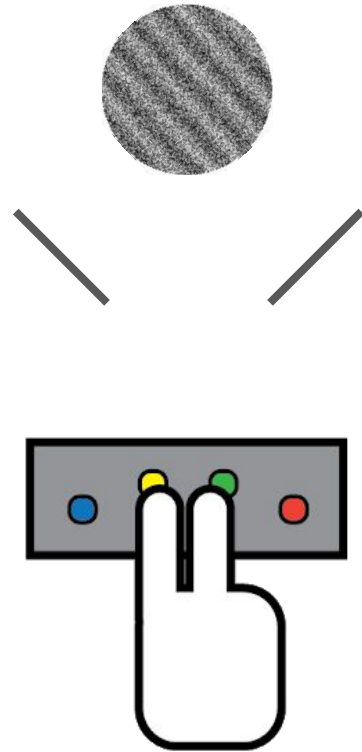
In this experiment, the gratings will be tilted 45 degrees
clockwise or *counterclockwise*:



You will perform two different tasks in this experiment:

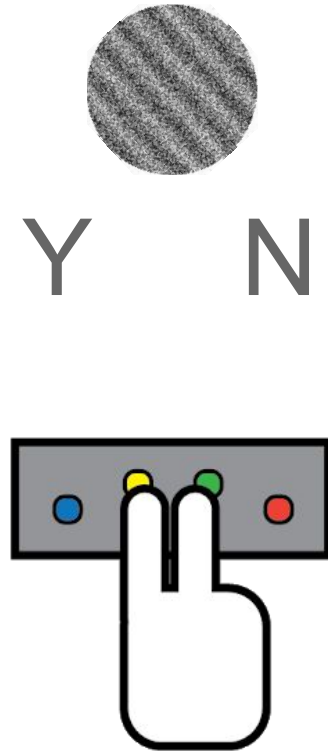
Visual discrimination

1. Fixate your eyes at the dot presented in the centre of the screen.
2. Once in every few seconds, the dot will change to a small cross.
3. Immediately after the cross a *noisy grating* will be flashed on the screen.
4. You will have 1.5 seconds to use your right hand to indicate whether the noisy grating was tilted *clockwise* or *counterclockwise*.



Visual detection

1. Fixate your eyes at the dot presented in the centre of the screen.
2. Once in every few seconds, the dot will change to a small cross.
3. Immediately after the cross either a *noisy grating* or *noise* will be flashed on the screen.
4. You will have 1.5 seconds to use your right hand to indicate whether it was a noisy grating or not (Y for 'yes', N for 'no').

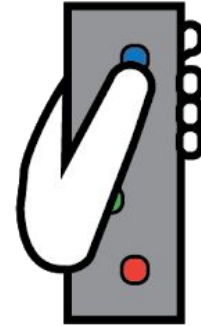
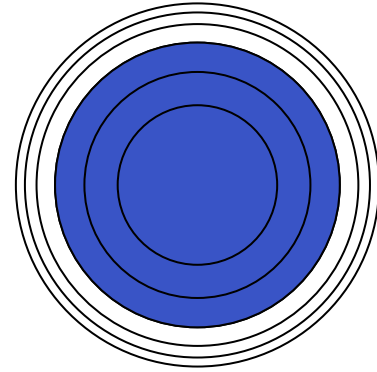


In both tasks you will be asked to rate your confidence in your decisions immediately after responding. You will have 2.5 seconds to do that. The confidence rating is an important part of the task.

Confidence Rating

You will indicate your confidence level by controlling the size of a colored circle. **The bigger the circle is, the more confident you are.**

1. The confidence rating phase will start with a random circle size.
2. By pressing the upper button with your left thumb, you can increase the size of the circle.
3. Pressing the next button down will decrease the size of the circle.



In addition to the baseline payment of £20, you can earn a bonus of up to £10 by performing well on the task and rating your confidence accurately.

Bonus

We know our task can be tiring and repetitive, but we still want you to make an effort to perform well and rate your confidence accurately. To motivate you, we offer a bonus. The bonus will be calculated in the following way:

1. For every *correct* decision, you will *earn* points proportional to your confidence on that trial. For example, you will get 6 points for a trial in which you were correct and very confident, but only 1 point for a trial in which you were correct but not confident.
2. For every *incorrect* decision, you will *lose* points proportional to your confidence on that trial. For example, you will lose 6 points for a trial in which you were incorrect and very confident, but only 1 point for a trial in which you were incorrect but not confident.

Bonus

To maximize your bonus

1. Be correct as much as possible.
2. Rate your confidence higher when you think you are correct.
3. Rate your confidence lower when you think there's a good chance you might be wrong.