

# Perceptual processes & experimental methods

## Study 1

A researcher conducted a study of perceptual set using two groups of children. One group came from families with a high financial income and the other came from families with a low financial income. The children were shown a £20 note, which was placed on a table in front of them at a distance of 120cm for a period of 10 seconds. They were then given a sheet of A4 paper and a pair of scissors and asked to cut out a rectangle of paper the same size as the £20 note. The researcher measured the area of each child's cut-out rectangle. She compared the mean area for the two groups.

### Research methods practice

- Identify the IV and DV in this study (2 marks).
- Identify one variable the researcher controlled and explain why this was necessary (2 marks).
- Explain why this is not a true experiment (2 marks).
- Outline one ethical issue raised by this study and explain how the researcher could have dealt with it (2 marks).

### Cognitive psychology practice

- What influence on perceptual set was investigated in this study? (1 mark)
- Using your knowledge of perceptual processes, explain what the researcher might have expected to find (2 marks).

## Study 2

A researcher conducted an experiment in which participants were individually presented with a series of ten letter grids, which were flashed on a screen in front of them. Half of the grids consisted of letters formed from straight lines and half consisted of letters formed from curved lines. Half of the grids contained the letter X and half did not. For each grid, the participant had to decide whether the letter X appeared. They communicated their judgement by pressing a button to indicate either 'yes' or 'no'. The researcher's apparatus recorded the time interval between the grid being displayed and the participant pressing the button.

C	G	Q	G	O
D	U	C	G	Q
G	X	U	Q	O
U	O	Q	D	G
D	O	G	Q	C

Grid with curved letters

Z	N	V	W	K
N	V	W	N	X
K	Y	W	V	Z
V	W	N	K	W
K	V	N	K	V

Grid with straight letters

### Research methods practice

- Identify the IV and DV in this study (2 marks).
- What experimental design did the research use in this study? (1 mark)
- Identify one advantage and one disadvantage of this experimental design (2 marks).
- Explain what the researcher should do to reduce the effect of confounding variables in this study (2 marks).

### Cognitive psychology practice

- Explain which area of perceptual processes was investigated in this study (2 marks).
- Giving reasons, explain what the researcher might expect to find (3 marks).