## Mark scheme for level 5

(a) $\mathbf{A O 2}=\mathbf{2}$

1 mark - because it is collected from participants directly/first hand

## Plus

1 mark - rather than gathered from reports of previous research
(b) $\mathrm{AO}=3$

3 marks for clear statement of a strength coherent elaboration
2 marks for statement of a strength some elaboration
1 mark for vague/muddled strength
0 marks for no relevant material

## Possible strengths

- Data gathered is more likely to be focused on the purpose of the research
- Less peripheral/redundant information
- Control issues - first hand data can be controlled whereas secondary data may have been gathered under differing conditions

Credit other relevant strengths.
(c) $\mathrm{AO}=\mathbf{4}$

1 mark Mann Whitney test
Plus
3 marks for justification - $\mathbf{1}$ mark for each of the following:

- Testing for a difference
- Independent design - different participants in each condition
- Data assumed to be ordinal ie not fixed intervals (also credit data is assumed to be non-parametric)

2. $\mathrm{AO}=2$

1 mark for a brief explanation
Plus
1 mark for elaboration

## Possible content:

Control for individual differences so that the researcher can be more certain that the effect is not due to characteristics such as gender, personality etc.

Credit other relevant advantages.
(b) $\mathrm{AO}=2$

1 mark - Value of ' $S$ ' is 2.
Plus
1 mark for explanation - ' S ' is the frequency of the least common difference. There are 8 positive differences, 2 negative differences and 2 ties.
(c) $\mathbf{A O 2 = 2}$

1 mark for identifying the correct value of N ( $\mathrm{N}=10$, total number of differences)
Plus
1 mark for stating that for an N of 10 , a value of ' S ' $=2$ is not significant at the $\mathrm{p} \leq .05$ level.
3. $\mathrm{AO}=\mathbf{2}$

1 mark for a brief explanation
Plus
1 mark for elaboration
Possible content:
Control for individual differences so that the researcher can be more certain that the effect is not due to characteristics such as gender, personality etc.

Credit other relevant advantages.
(b) $\mathrm{AO}=2$

1 mark - Value of ' $S$ ' is 2.
Plus
1 mark for explanation - ' S ' is the frequency of the least common difference. There are 8 positive differences, 2 negative differences and 2 ties.
(c) $\quad \mathrm{AO} 2=\mathbf{2}$

1 mark for identifying the correct value of N ( $\mathrm{N}=10$, total number of differences)
Plus
1 mark for stating that for an $N$ of 10 , a value of ' S ' $=2$ is not significant at the $p \leq .05$ level.
4. $[A O 2=2]$

1 mark for identifying the type of data as quantitative data.

## Plus

1 mark for either of the explanations below:

- the data is numerical.
- the number of participants who completed the questionnaire in each condition.


## OR

1 mark for explaining the type of data as primary data.

## Plus

1 mark for either of the explanations below:

- the data is collected first hand (directly) from the participants.
- data is collected for the purpose of the investigation.

OR
1 mark for explaining the type of data as nominal/categorical data.

## Plus

1 mark for either of the explanations below:

- the data is presented in categories/is discrete.
- the number of participants who did and did not complete the questionnaire in each condition.

If students identify more than one type of data, take the first type as the basis for their answer. If the data is not identified or identified incorrectly, no credit can be given for an explanation.
(b) $[\mathrm{AO2}=3]$

1 mark for the likely outcome: more participants in condition 1 will complete the questionnaire than in condition 2/fewer participants in condition 2 will complete the questionnaire than in condition 1.

## Plus

2 marks for clear and coherent explanation
1 mark for explanations that are limited or muddled or for explanations not linked to outcome
0 marks for an incorrect or irrelevant explanation

## Possible content:

- accept reference to normative social influence - participants will follow the majority to avoid rejection/fit in
- the participants in condition 2 experienced social support/disobedient role models and so were more likely to defy the researchers
- accept reference to diffusion of responsibility/increased confidence to defy orders in condition 2
- accept explanation based on relevant studies, eg Asch variations.

Credit other relevant social influence explanations.
(c) $[\mathrm{AO}=4]$

1 mark for random allocation of participants to each condition.

## Plus

3 marks for explanation of how this could be conducted in this experiment
1 mark for each bullet

- each participant is assigned a number or identified by name
- the numbers/names are placed into a random number generator/hat/lottery method
- the first participant drawn is assigned to condition 1, the second to condition 2, etc. OR the first 15 participants are assigned to condition 1 and the next 15 are assigned to condition 2.


## OR

1 mark for using a matched pairs design.

## Plus

3 marks for explanation of how this could be conducted in this experiment
1 mark for each bullet

- participants should be matched on a variable that is relevant to the experiment
- this could be ascertained through the use of a pre-test e.g. completing a confidence questionnaire
- participants from each matched pair are allocated to different conditions.

Credit other plausible ways of addressing the question. To gain any credit answers based on repeated measures should be appropriately detailed e.g. parallel versions of the questionnaire, time lapse etc.
(d) $\quad[\mathrm{AO2}=2]$

1 mark for the design is unrelated/independent groups/independent data
1 mark for the researcher is looking for a difference (between two conditions/sets of data) or an association/relationship (between two variables).

No credit for answers referring to correlations.
(e) $\quad[\mathrm{AO2}=2]$

1 mark for stating that the value of chi squared is significant (at the $5 \%$ level).
Plus
1 mark for explanation:
the calculated/observed value (3.97) is more than/exceeds the critical/table value of 3.84/at 5\%.

