

Who Wants To Be A Millionaire?



Research Methods Edition

Revision Topics

- Types of design
- Statistical tests
- One- and two-tailed hypotheses
- Categorical and continuous data
- Descriptive stats
- Types of variables
- Qualitative research



Round One!

Question 1

1. The variable that is manipulated by a researcher during a study is the:

A Dependent variable

B Extraneous variable

C Independent variable

D None of the above

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A Dependent variable

B Extraneous variable

C Independent variable

D None of the above

Question 2

2. How many levels of an IV should there be in an experiment?

A One

B At least two

C More than two

D More than five

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A One

B At least two

C More than two

D More than five



Question 3

3. Room temperature, lighting, age/gender of the researcher, the weather during the experiment, etc. are all examples of:

A Independent variables

B Dependent variables

C Extraneous variables

D None of the above

3. Room temperature, lighting, age/gender of the researcher, the weather during the experiment, etc. are all examples of:

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B Dependent variables

C Extraneous variables

D None of the above



Question 4

4. A group of researchers are looking to determine the difference in narcissism scores between males and females. The IV in this experiment is:

A Narcissism scores

B There is no IV

C The number of participants

D Gender

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A Narcissism scores

B There is no IV

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D Gender



Question 5

5. A group of researchers are looking to determine the difference in narcissism scores between males and females. The DV in this experiment is:

A Narcissism scores

B There is no IV

C The number of participants

D Gender

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Question 6

6. An experiment involving two groups of participants who are each exposed to one levels of the IV is an example of:

A Between-subjects design

B Within-subjects design

C Quasi-experimental design

D None of the above

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D None of the above



Question 7

7. A disadvantage of a between-subjects design is:

- A** Pre-existing individual differences in participants
- B** Requires a larger amount of participants
- C** Fatigue effects
- D** Both A and B

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A Pre-existing individual differences in participants

B Requires a larger amount of participants

C Fatigue effects

D Both A and B



Question 8

8. Within-subjects designs involve _____ group(s) of participants being exposed to _____ levels of the IV.

A 2 1

B 2 all

C 1 all

D 1 1

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A 2 1

B 2 all

C 1 all

D 1 1

Question 9

9. One advantage of a within-subjects design is:

A Easier to run an experiment with one group of people

B Eliminates individual differences

C Minimises harm

D None of the above

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A Easier to run an experiment with one group of people

B Eliminates individual differences

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D None of the above



Question 10

10. You are interested in looking at the relationship between driving ability and number of crashes. What is the design of this study?

A Correlational

B Between-subjects

C Within-subjects

D Qualitative

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A Correlational

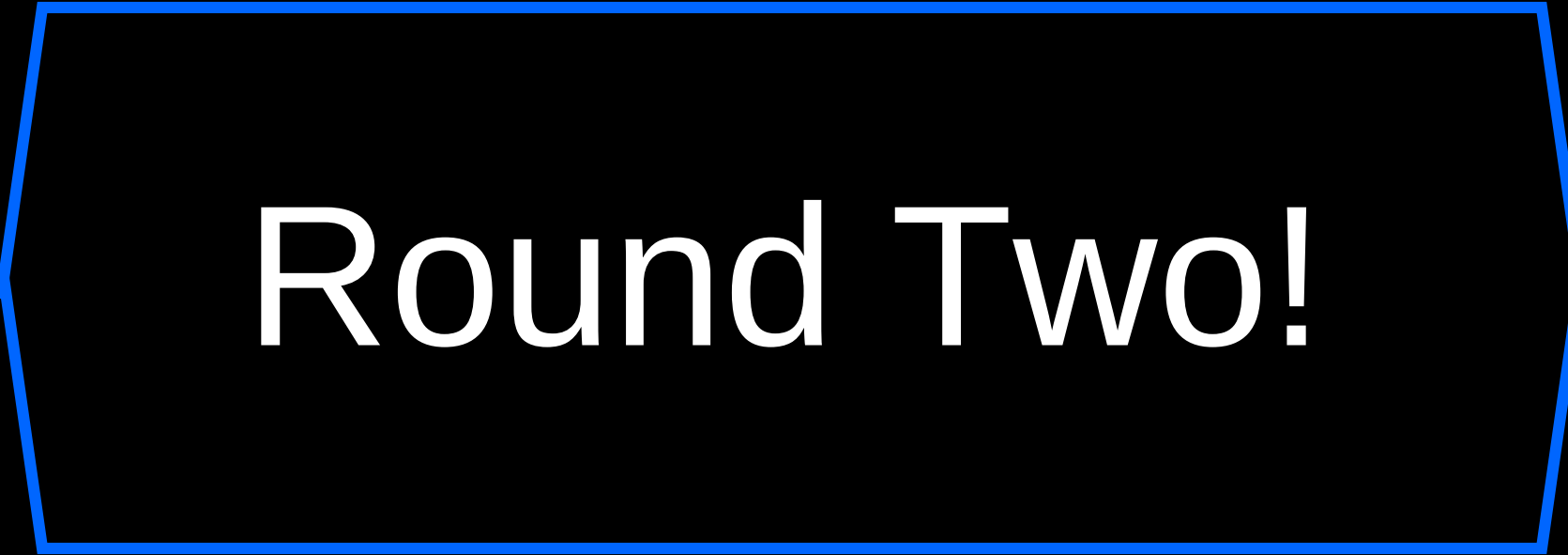
B Between-subjects

C Within-subjects

D Qualitative

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Round Two!

Question 1

1. How do we calculate a mean score?

A Take the most commonly occurring number

B Rank the numbers and take the middle number

C Add all the value and divide by the number of data points

D Add all the values and divide by 10

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Question 2

2. What is the mean score for this set of data?:

7, 16, 4, 12, 3

A 10

B 8.4

C 9

D 7.6

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7, 16, 4, 12, 3

A 10

B 8.4

C 9

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Question 3

3. How do we calculate a median score?

A Take the most commonly occurring number

B Rank the numbers and take the middle number

C Add all the values and divide by the number of data points

D Add all the values and divide by 10

3. How do we calculate a median score?

A Take the most commonly occurring number

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Question 4

4. What is the median for this set of data?:

7, 16, 4, 12, 3

A 12

B 4

C 7

D 16

4. What is the median for this set of data?:

7, 16, 4, 12, 3

A 12

B 4

C 7

D 16



Question 5

5. How do we calculate a mode score?

A Take the most commonly occurring number

B Rank the numbers and take the middle number

C Add all the values and divide by the number of data points

D Add all the values and divide by 10

5. How do we calculate a mode score?

A Take the most commonly occurring number

B Rank the numbers and take the middle number

C Add all the values and divide by the number of data points

D Add all the values and divide by 10



Question 6

6. Why can't we calculate a mode score for this set of data?:

7, 16, 4, 12, 3

A Bi-modal

B There isn't enough data

C The range of scores is too large

D The data set is non-modal

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Round Three!

What levels of measurement would be best for the following types of data/variables?



Question 1

1. Age

A Continuous only

B Categorical only

C Either continuous or categorical

D Age cannot be measured

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A Continuous only

B Categorical only

C Either continuous or categorical

D Age cannot be measured

Question 2

2. If age was measured as a categorical measurement, what level of measurement would this be?

A Nominal

B Ordinal

C Interval

D Ratio

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A Nominal

B Ordinal

C Interval

D Ratio

Bonus question –
WHY?



Question 3

3. Gender

A Categorical - ordinal

B Categorical - nominal

C Continuous

D None of the above

3. Gender

A Categorical - ordinal

B Categorical - nominal

C Continuous

D None of the above



Question 4

4. Personality traits (e.g., extraversion)

A Continuous extraversion score

B Categorical – high and low

C Dependent on design and proposed analysis

D None of the above

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D None of the above



Question 5

5. Scoring on a Likert scale for a questionnaire

A Ratio

B Ordinal

C Interval

D Nominal

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B Ordinal

C Interval

D Nominal

Bonus question –
WHY?

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Round Four!



Question 1

1. Miss Coleman is a researcher exploring grief in a clinical setting. She invites a number of people to engage in a group discussion. What type of method of data collection would be used?

A Experimental

B Unstructured interviews

C Participant observation

D Focus groups

1. Miss Coleman is a researcher exploring grief in a clinical setting. She invites a number of people to engage in a group discussion. What type of method of data collection would be used?

A Experimental

B Unstructured interviews

C Participant observation

D Focus groups

Question 2

2. Why is it important that data collected during this type of research study are stored in a secure and confidential manner?

A So that government officials and those in authority positions can have easy access to the data

B To enable the researcher to track down individuals and find out more about their lives

C So that no individuals or places are harmed through ID or disclosure of personal information

D So that participants cannot find out what has been written about them

2. Why is it important that data collected during this type of research study are stored in a secure and confidential manner?

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B To enable the researcher to track down individuals and find out more about their lives

C So that no individuals or places are harmed through ID or disclosure of personal information

D So that participants cannot find out what has been written about them



Question 3

3. What is one responsibility the researcher would have when using focus groups to collect data?

A Allow the conversation to drift away from the topic in question in order to gain more data

B Express her own personal opinions as a way of directing further discussion

C Use open-ended prompts to help guide discussion when needed but ensure participants can express views freely

D Highlight how bad the issue of stigma surrounding grief is as a way of gaining more discussion

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C Use open-ended prompts to help guide discussion when needed but ensure participants can express views freely

D Highlight how bad the issue of stigma surrounding grief is as a way of gaining more discussion



Question 4

4. One participant expresses a worry that their counselling may be affected as a result of taking part in the study. What must the researcher do to ensure the participant knows what is expected of them in the study?

A Ensure fully informed consent & right to withdraw at any point

B Ensure that Participants are aware that data is confidential and no individual information will be passed on to anyone directly involved in their care

C Confirm in writing that any personally identifiable information will be changed or removed to protect confidentiality

D All of the above

4. One participant expresses a worry that their counselling may be affected as a result of taking part in the study. What must the researcher do to ensure the participant knows what is expected of them in the study?

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D All of the above

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Round Five!



Question 1

1. If you are using a between-subjects design, what statistical test would you use to analyse your data?

A Descriptive statistics

B Correlation

C Paired-samples t-test

D Independent samples t-test

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B Correlation

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D Independent samples t-test

Question 2

2. If you are using a within-subjects design to test for a difference, what statistical test would you use to analyse your data?

A Descriptive statistics

B Correlation

C Paired-samples t-test

D Independent samples t-test

2. If you are using a within-subjects design to test for a difference, what statistical test would you use to analyse your data?

A Descriptive statistics

B Correlation

C Paired-samples t-test

D Independent samples t-test



Question 3

3. If you are looking to assess whether there is a relationship between two variables, which statistical test would you use?

A Descriptive statistics

B Correlation

C Paired-samples t-test

D Independent samples t-test

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A Descriptive statistics

B Correlation

C Paired-samples t-test

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Question 4

4. What p-value is the standard value in deciding whether to reject the null hypothesis?

A .05

B .50

C .01

D .10

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A .05

B .50

C .01

D .10



Question 5

5. The two things that a correlation score/value assesses is:

A Direction and reliability

B Strength and direction

C Reliability and strength

D Validity and direction

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A Direction and reliability

B Strength and direction

C Reliability and strength

D Validity and direction



Question 6

6. Which of the following correlation values is the **strongest**?

A $r = 0.08$

B $r = - 0.04$

C $r = - 0.90$

D $r = 0.60$

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Round Six!

Use the scenario to
answer the following
questions:



Question 1

A researcher is interested in exploring the number of common phobias held by men and women. Participants were presented with a list of ten of the most common/reported phobias and asked to select which ones they also had a phobia of. It was predicted that women would have more phobias than men.

1. The design of the study was:

A Between-subjects

B Correlation

C Within-subjects

D A sign-test

1. The design of the study was:

A Between-subjects

B Correlation

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Question 2

A researcher is interested in exploring the number of common phobias held by men and women. Participants were presented with a list of ten of the most common/reported phobias and asked to select which ones they also had a phobia of. It was predicted that women would have more phobias than men.

2. The dependent variable was:

- A** The number of phobias presented
- B** The gender of the participants
- C** The questionnaire
- D** The number of phobias participants reported having

2. The dependent variable was:

A The number of phobias presented

B The gender of the participants

C The questionnaire

D The number of phobias participants reported having



Question 3

3. The hypothesis of this study was:

A Two tailed because a significant difference was predicted

B One tailed because a significant difference was predicted

C One tailed because it was predicted that women would have more phobias than men

D Two tailed because it was predicted that women would have more phobias than men

3. The hypothesis of this study was:

A Two tailed because a significant difference was predicted

B One tailed because a significant difference was predicted

C One tailed because it was predicted that women would have more phobias than men

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Thank you for playing

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