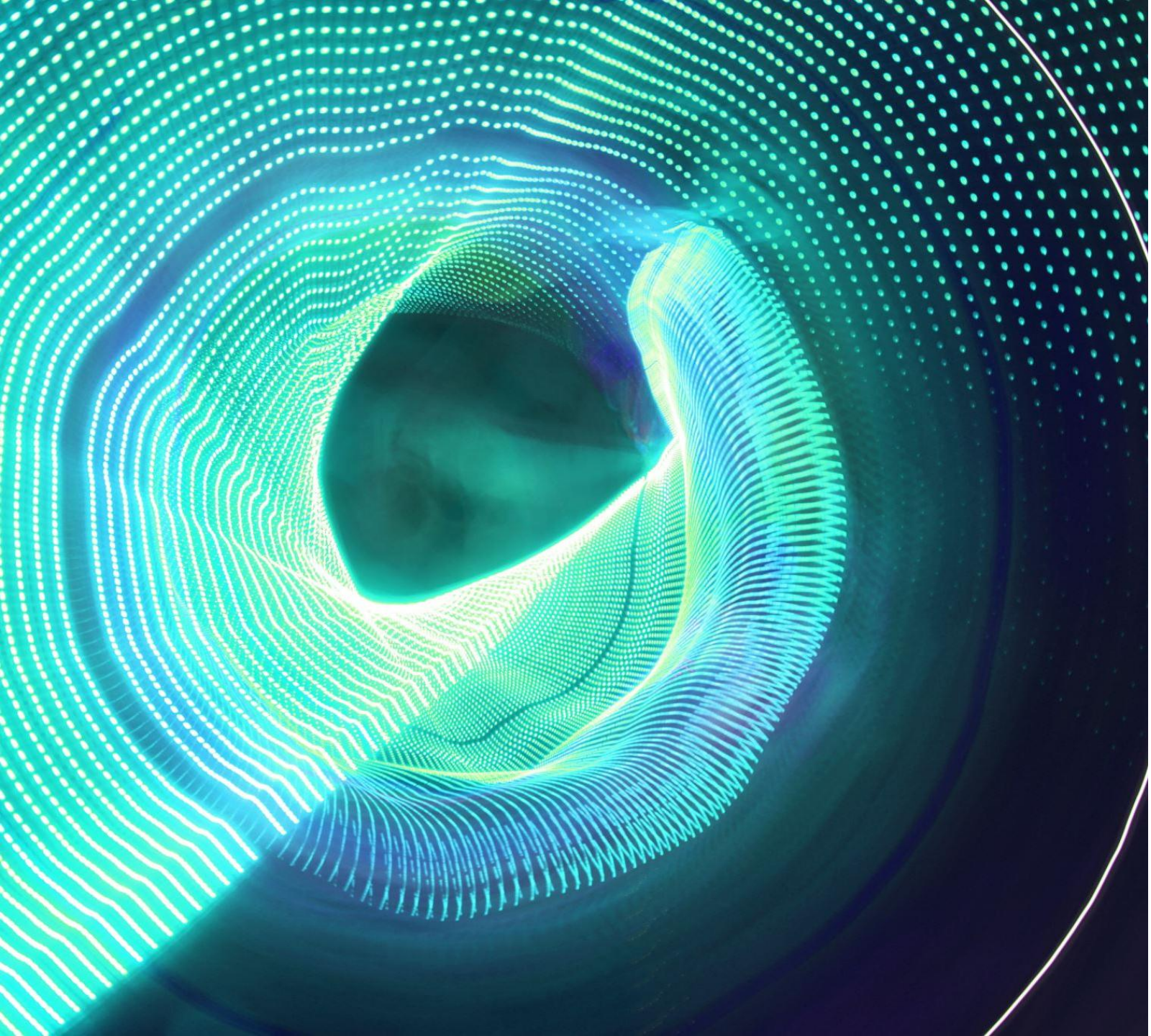




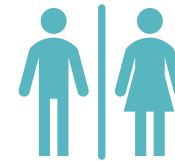
Research Methods I

EXAM REVISION TIPS:
MAY 2026

Types of design

Experimental

- Between subjects
- Within subjects



IV is split into two or more distinct groups – any one participant can only belong to one group



One group of participants take part in all levels of the IV

Non-experimental

- Correlational



Exploring the relationship between two co-occurring variables

Variables



Independent
variables

Dependent
variables

Extraneous
variables

Confounding
variables

Variables

Independent
variables

Dependent
variables

Extraneous
variables

Confounding
variables

Pay particular attention to questions that ask for an explanation of **what** confounding variables there are likely to be AND **how** they can be dealt with.

Be careful not to confuse extraneous and confounding... confounding variables are those that could influence the IV and the DV and therefore 'confuse' the relationship observed between them



Tails and Hypotheses

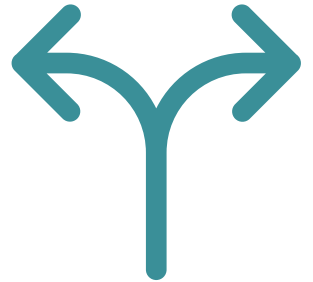
One-tailed = directional

- Makes a prediction about the direction in which results are expected
- *E.g., males are more aggressive than females*



Two-tailed = non-directional

- A statement that something will occur, but no statement of the direction
- *E.g., there will be a difference in aggression scores between males and females*



Significance Testing



Significant

$$p < .05$$



Non-significant

$$p > .05$$

Design and Analysis choices

Knowledge of the appropriateness of designs and associated analyses

Between-subjects design

Independent samples t-test

Within-subjects designs

Paired samples t-test

Correlational design

Pearson's Product Moment Correlation

Correlation Coefficient

Correlation coefficient (r) represents the strength and direction of a relationship between two variables

Can range between -1 (perfect negative correlation) to $+1$ (perfect positive correlation)

The numerical value indicates the strength

The sign ($+/-$) indicates direction

0 means there is no correlation

Interpreting Correlation Coefficients



Positive Correlation

As one variable increases, the other variables tends to increase



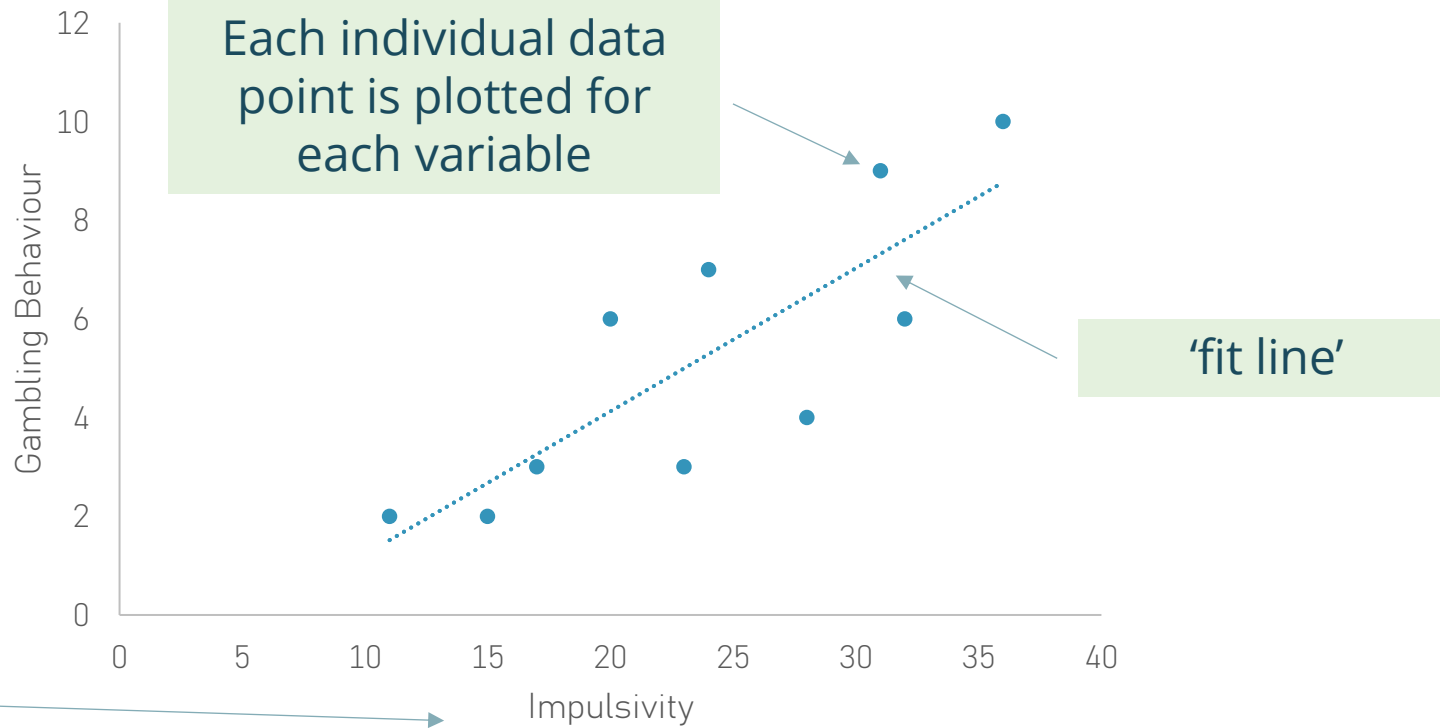
Negative Correlation

As one variable increases, the other variable tends to decrease

Scatterplots

Scatterplot Demonstrating the Relationship Between Levels of Impulsivity and Gambling Behaviour

Explain what the graph is and what it shows with an appropriate title



Both sets of axis must be labelled appropriately and an appropriate scale used

Scatterplots

- Five marks:
 - 1 = appropriate title (word 'relationship' must be present, but both variables explained)
 - 1 = X axis labelled and numbered appropriately (related to study)
 - 1 = Y axis labelled and numbered appropriately (related to study)
 - 1 = all data points accurately plotted
 - 1 = attempt at adding an appropriate fit line

Ethics



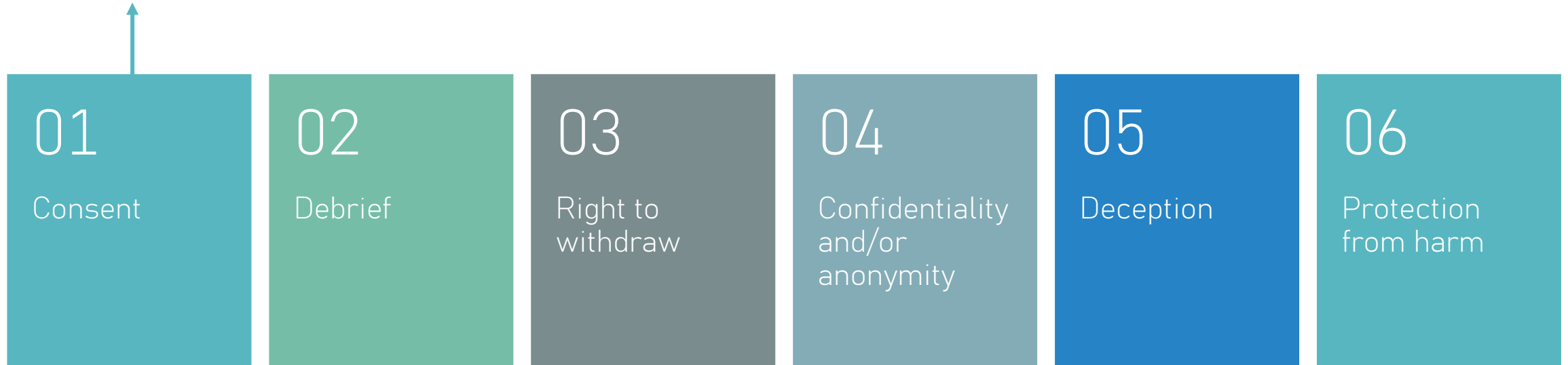
British Psychological Society (BPS) – Human Research Ethics (2021)



British Psychological Society (BPS) – Code of Ethics and Conduct (2021)

Ethics

Consider appropriate levels of consent



Pay attention to questions that ask about confidentiality for particular **designs**. E.g., ensuring confidentiality of quantitative surveys, or qualitative research in applied situations where it is important to maintain confidentiality and not share any information with anyone outside of the research team

Qualitative Data Collection Methods



Difference between Interviews
and Focus Groups



Reasons for choosing one
method over the other



Knowledge of strengths and
limitations of qualitative
research

Qualitative Research

Strengths

- e.g.
Can provide rich and detailed insights which can lead to a deeper understanding of the phenomena / behaviour being discussed

Limitations

- e.g.
Findings are not generalised to any wider population

Qualitative Analysis



Themes...

Patterns or concepts that are considered important
within and across the data

Qualitative Analysis

THEMATIC ANALYSIS

- Flexible method of analysis
- Process of coding to identify themes in data
- Interviews, focus groups, other textual documents
- Can involve small or large samples

IPA

- A type of TA that allows for the exploration of **individual lived experiences**
- IPA is a more specialised form of analysis
- Usually interviews
- Typically used with small samples

Calculating Mean Scores

MEAN =

SUM OF ALL DATA POINTS
DIVIDED BY THE NUMBER OF
DATA POINTS

