AS and A LEVEL
Teaching Research Methods
H167/H567

PSYCHOLOGY
A handbook of practical investigations
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INTRODUCTION

Students really enjoy carrying out practical research and by designing and conducting psychological investigations they build skills, knowledge and understanding of how ‘real’ psychologists conduct research. Also, as students carry out research they develop a critical understanding of the advantages and disadvantages of research methods, research designs, sampling techniques, data collection, types of data and data analysis. A further benefit of encouraging students to carry out practical investigations is that, by doing so, they develop the independent and practical skills they will need in HE, by working in groups they develop social and communication skills, and, as they collect and analyse data, they develop numeracy skills.

That said, for most of us, teaching time is limited and sometimes it feels that if we are not ‘teaching from the front’ we are short changing our students. This often results in us teaching students how ‘real psychologists carry out research’ but giving students few, if any, opportunities to engage in practical research for themselves.

The purpose of this handbook is to offer you a selection of ‘student friendly’ practical research investigations. The practical investigations are:

- Experimental methods – 4 practical experiments
- Self-Report Methods – 4 investigations using questionnaires or interviews
- Observational Methods – 2 practical investigations
- Correlational Methods – 3 practical investigations.

Each of the practical investigations is presented as a ‘photocopyable’ worksheet. Each worksheet comprises a research brief, instructions for students and list of required resources. Each worksheet also contains questions to assess the knowledge and understanding developed by students during the research process. At the bottom of each of the worksheets is a suggested topic for discussion, related to the research, which should help students develop their understanding of psychological terminology. Included at the end of the handbook is a glossary of research terms.

There are several ways these practical investigations can be incorporated into a scheme of work. Each research project could be conducted as a whole class practical investigation, or could be given to students to design and carry out as an independent study/homework project. An alternative approach is to suggest that students design the practical research as a research team, where, following the design process, each student ‘finds one or two participants’ and the data is pooled. The most appropriate approach may depend on the characteristics of your 6th form / psychology class, the nature of the investigation, and the other psychological topics being studied.

We hope you find this handbook useful, that your students enjoy conducting the research investigations, and that you find they are so enthused and inspired by ‘doing research’ that they work hard to gain the grades they need in examinations.
A LABORATORY EXPERIMENT (1)

You are asked to design a practical project to investigate whether chewing gum improves concentration. Your project must use an experimental method, must have an independent measures design and must collect quantitative data.

Hint: your project could measure concentration by giving participants a page of text to read, and asking them to cross out every letter ‘e’ they read in a fixed time of 30 seconds.

You will need: Several packs of chewing gum, photocopied page of any text/book.

1. Write the research question you will investigate.

2. Write an operationalised alternative hypothesis for your investigation.

3. Describe the Method and the Procedure of your investigation:

   Include details on….

   • The research method and design
   • The operationalised IV
   • The operationalised DV
   • The sampling method and the sample
   • The materials you used
   • The procedure: Where, when, how was the investigation carried out - how you allocated participants to the research conditions, how you applied the BPS ethical guidelines
   • Task timings and any controls used
   • How the scores (data) are obtained
   • How you analysed your data.

4. Draw a bar chart showing the differences in the means and ranges of the scores and explain why a bar chart was an appropriate graphical representation of data.

5. Explain what the data (findings) suggest in terms of whether chewing gum aids concentration.

6. Suggest one advantage of using an experimental method in this project.

7. Discuss the validity of the way you measured your dependent variable.

8. Identify one ethical issue arising in this research and say what you did to ensure your project was ethical.

Discussion point: How might uncontrolled participant variables (individual differences) have an effect of the results?
A LABORATORY EXPERIMENT (2)

Some psychologists suggest that eating chocolate cheers people up.

Design and carry out an experiment to test the theory that people who eat a small square of chocolate will report feeling more cheerful than people who have not eaten chocolate. You must use an independent measures design and use a rating scale to measure mood.

You will need: one plate of small cubes of chocolate (or chocolate buttons) and a rating scale to measure cheerfulness (example in Appendix 1, page 21).

1. Write the research question you will investigate.
2. Write an operationalised null hypothesis for your investigation.
3. Describe the Method and the Procedure of your investigation:
   - The research method and design
   - The operationalised IV
   - The operationalised DV
   - The sampling method and the sample
   - The materials you used
   - The procedure: Where, when, how was the investigation carried out - how you allocated participants to the research conditions, how you applied the BPS ethical guidelines
   - Task timings and any controls used
   - How the scores (data) are obtained.
4. Calculate the mean, median and range of each set of scores.
5. What does the data tell you about your null hypothesis?
6. Describe one advantage and one disadvantage of using an independent measures design for this research.
7. Outline one way in which you would take ethical issues into account when conducting this research.
8. Discuss the validity of using a rating scale to measure cheerfulness.
9. Which statistical test could be used to analyse the result? Justify your reasons.

Discussion point: The advantages and disadvantages of an independent measures design.
AN EXPERIMENT USING REPEATED MEASURES DESIGN

Psychological research suggests that physical exercise improves mood.

You are asked to design a practical project to investigate whether brief physical exercise has a positive effect on mood. Your project must use an experimental method and use a repeated measures design and use a rating scale to measure mood.

You could use: Skipping ropes, somewhere to ask participants to run or jog or dance. You will need a rating scale to measure mood (example in Appendix 2, page 22).

1. Write the research question you will investigate.
2. Write an operationalised one-tailed hypothesis for your investigation.
3. Describe the Method and the Procedure of your investigation.
   Include details on…
   • The research method and design
   • The operationalised IV
   • The operationalised DV
   • The sampling method and the sample
   • The materials you used
   • The procedure: Where, when, how was the investigation carried out - how you allocated participants to the research conditions, how you applied the BPS ethical guidelines
   • Task timings and any controls used
   • How the scores (data) are obtained.
4. Say how you will analyse your data and explain what the analysis will tell you.
5. Describe one advantage of using repeated measures design for this research.
6. Outline one way in which you would take ethical issues into account in the conduct of this research.
7. Discuss the ecological validity of the way you measured the effect of exercise on mood.
8. Evaluate the sampling technique (method) used in this research.
9. Identify one disadvantage of repeated measures design and outline how this problem may be overcome.

Discussion point: The meaning of ‘ecological validity’ in psychological research.
LABORATORY EXPERIMENT - INDEPENDENT DESIGN

Do we smile because we are happy or are we happy because we smile?

You are asked to design a practical project to investigate whether smiling causes people to feel happier. Your project must use an experimental method having an independent measures design. You will use an opportunity sample of participants randomly allocated to two conditions. In condition ‘Smile’, participants will be asked to hold a pencil between their teeth, not touching their lips (forced smile) for 30 seconds. In condition ‘Frown’, participants will be asked to hold a pencil between their lips, not touching their teeth (forced frown) for 30 seconds. At the end of the 30 seconds you ask participants to rate how happy they feel.

You will need: A clean unused pencil for each participant (or you could ask them to provide their own pencil) and a rating scale to measure happiness (example in Appendix 1, page 21).

1. Write the research question you will investigate.
2. Write an operationalised two tailed hypothesis for your investigation.
3. Describe the Method and the Procedure of your investigation.
   - The research method and design
   - The operationalised IV
   - The operationalised DV
   - The sampling method and the sample
   - The materials you used
   - The procedure: Where, when, how was the investigation carried out … how you allocated participants to the research conditions, how you applied the BPS ethical guidelines
   - Task timings and any controls used
   - How the scores (data) are obtained.
4. Calculate the mean and range of the scores for each condition and explain what these statistics tell you. Are these the most appropriate statistics to use?
5. Describe one advantage and one disadvantage of using an independent measures design for this research.
6. Suggest how you could conduct this research as a field experiment.
7. Suggest how individual differences in participants (participant variables) might have affected the results in this research.
8. Outline one way in which you would take ethical issues into account in the conduct of this research.
9. Identify any potential extraneous variables and how these might be controlled.

Discussion point: Strengths and limitations of field and quasi-experimental methods.
SELF–REPORT METHODS: USING A QUESTIONNAIRE (1)

Does owing a pet affect how people experience stress?

Psychological research has suggested that owning a pet helps to reduce stress levels. You are asked to design a practical project to investigate whether this is true. Your project must use self-report methods and will use a questionnaire to collect data. Your questionnaire should include, closed and open questions as well as a rating scale to measure stress levels.

You will need: To design a questionnaire and to think about how you will define 'pet ownership' (see example in Appendix 3, page 23).

1. Write the research question you will investigate.
2. Write an operationalised null hypothesis for your investigation.
3. Describe the Method and the Procedure of your investigation.
   Include details on…
   - The research method and design
   - Whether a rating scale is used, eg a likert scale or a semantic differential scale.
   - The sampling method and the sample
   - The materials you used - describe your questionnaire giving examples of the critical questions
   - The procedure: Where, when, how was the investigation carried out - how you allocated participants to the research conditions, how you applied the BPS ethical guidelines
   - Task timings and any controls used
   - How the scores (data) are obtained.
4. Say how you will analyse your data and explain what the analysis will tell you.
5. Explain one weakness of using a self-report method for this research.
6. Suggest how you could reduce the effects of this weakness.
7. Explain one way in which you would take ethical issues into account in the conduct of this research.
8. Discuss the validity of the way you measured stress levels in this research.
9. What is a pilot study? Why may this be used when planning to carry out a questionnaire?

Discussion point: The advantages and disadvantages of open and closed questions.
SELF−REPORT METHODS: USING A QUESTIONNAIRE (2)

Do males and females have different preferences when choosing the colour of a car?

Recent research has suggested that men prefer red cars but that women prefer silver cars. You are asked to design a practical project to investigate whether gender does have an effect on car colour preference. Your project should use self-report methods, using a questionnaire to gather quantitative and qualitative data.

You will need to design a questionnaire having open and closed questions (or you could use pictures of cars and a rating scale or a Likert Scale – see example in Appendix 5, page 25).

1. State the aim of this research.
2. Write an operationalised null hypothesis for your investigation.
3. Describe the Method and the Procedure of your investigation.
   Include details on…
   • The research method and design
   • Whether a rating scale is used, eg a likert scale or a semantic differential scale.
   • The sampling method and the sample
   • The materials you used - describe your questionnaire giving examples of the critical questions
   • The procedure: Where, when, how was the investigation carried out - how you allocated participants to the research conditions, how you applied the BPS ethical guidelines
   • Task timings and any controls used
   • How the scores (data) are obtained.
4. Say how you will analyse your data and explain what the analysis will tell you.
5. Describe one disadvantage of using a self-report method for this research.
6. Describe one advantage of the sampling techniques (method) used in this research.
7. Outline one way in which you would take ethical issues into account in the conduct of this research.
8. Discuss the validity of the way you measured car colour preference.
9. Outline one strength and one limitation of a) qualitative data and b) quantitative data.

Discussion point: What do psychologists mean when they discuss the ‘validity’ of research?

Discussion point: Types of data – nominal, ordinal, interval.
SELF–REPORT METHODS: USING A QUESTIONNAIRE (3)

Does age affect how much people dream?

Some people say they dream every night and some people say they never dream. Some older people say they don’t dream as much as they used to. Students spend a lot of time learning new material and they may dream more than older people. You are asked to design a practical project to investigate whether age affects how frequently people dream. Your project will use a questionnaire (self-report) and must collect quantitative data on frequency of dreaming.

You will need to design questionnaire asking questions about sleep and dreaming. You should collect quantitative data on frequency of dreaming (see example in Appendix 6, page 26).

1. What was the aim of this research project?
2. Write an operationalised alternative hypothesis for your investigation.
3. Describe the Method and the Procedure of your investigation.
   Include details on…
   • The research method and design
   • Whether a rating scale is used, eg a likert scale or a semantic differential scale
   • The sampling method and the sample
   • The materials you used - describe your questionnaire giving examples of the critical questions
   • The procedure: Where, when, how was the investigation carried out - how you allocated participants to the research conditions, how you applied the BPS ethical guidelines
   • Task timings and any controls used
   • How the scores (data) are obtained.
4. Draw a bar chart showing any difference in frequency of dreaming reported by young and older people.
5. Describe one disadvantage of using a self-report method for this research.
6. Suggest one advantage of collecting quantitative data for this research.
7. Outline one way in which you would take ethical issues into account in the conduct of this research.
8. Suggest how a representative sample of older and younger people could be selected for this research.
9. What type of data do open questions produce and what type of data do closed questions produce?

Discussion point: Sampling techniques and representative samples and biased samples.
SELF–REPORT METHODS: USING AN INTERVIEW

Does the weather affect how happy people feel?

Psychological research has suggested that people feel more cheerful when the sun shines. You are asked to design a practical project to investigate whether this is true. Your project should use self-report methods – an interview. Your interview must include open and closed questions and one of your questions must collect at least ordinal level data.

You will need: To design an interview having open and closed questions as well as a rating scale to measure happiness.

1. State the aim of this research.
2. Write an operationalised alternative hypothesis for your investigation.
3. Describe the Method and the Procedure of your investigation.
   Include details on…
   • The research method and design
   • Whether to use a structured, unstructured or semi-structured interview and reasons why
   • The sampling method and the sample
   • The materials you used - describe your questionnaire giving examples of the critical questions
   • The procedure: Where, when, how was the investigation carried out - how you allocated participants to the research conditions, how you applied the BPS ethical guidelines
   • Task timings and any controls used
   • How the scores (data) are obtained.
4. Say how you will analyse your data and explain what the analysis will tell you.
5. Describe one advantage of using an interview for this research.
6. Describe one advantage of the sampling techniques (method) used in this research.
7. Outline one way in which you would take ethical issues into account in the conduct of this research.
8. Discuss the reliability of the way you measured happiness.
9. What are the three different types of interview? Discuss the strengths and limitations of them in relation to this piece of research.

Discussion point: What do psychologists mean when they discuss the ‘reliability’ of research?
OBSERVATIONAL METHODS (1)

How do people use their mobile phones?
You are asked to design a practical project to investigate how people use mobile phones in public places. Your project must use an observational method and you must plan to observe an opportunity sample and collect quantitative data.

You will need to design the criteria for how you will measure mobile phone use and design a tally chart on which to record the data.

1. State the aim of your research project.
2. Write a research question for your investigation.
3. Describe the Method and the Procedure of your investigation.
   Include details on…
   • The research method
   • The sampling method and the sample
   • The criteria for the observation and the materials you use
   • The procedure: For your observation you must describe where, when, how long, how many observers, what behaviours are recorded
   • Design features - behavioural categories or coding frames and time sampling or event sampling
   • Any controls you plan to use
   • How the scores are obtained.
4. Suggest one disadvantage of the sampling method used in your research.
5. Describe one advantage of using an observational method for this research.
6. Outline one way in which you would take ethical issues into account in the conduct of this research.
7. Discuss the potential advantages and disadvantages of participant and non-participant observations in this study.
8. Explain what is meant by inter-rater (inter-observer) reliability.
9. What is the difference between an overt and covert observation? What are the advantages and disadvantages of each of these types of observations?

Discussion point: Inter-rater (inter-observer) reliability.
OBSERVATIONAL METHODS (2)

Are there gender differences in driver behaviour?

Insuring a car for a female driver used to be less expensive than insuring a car for a male driver. Insurance companies suggest that this is because female drivers are less likely to be involved in road accidents. But are there gender differences in driver behaviour?

You are asked to design a practical project to investigate the behaviour of male and female drivers. Your project must use an observational method, you must plan to observe an opportunity sample and collect quantitative data.

You will need to design the criteria for how you will measure driver behaviour. Some criteria you might include could be - using a mobile phone while driving, eating while driving, behaviour at traffic lights and pedestrian crossings, fixing hair while driving etc. You will need to design a tally chart on which to record the data.

1. State the aim of your research project.
2. Write a research question for your investigation.
3. Describe the Method and the Procedure of your investigation.
   Include details on…
   • The research method
   • The sampling method and the sample
   • The criteria for the observation and the materials you use
   • The procedure: For your observation you must describe where, when, how long, how many observers, what behaviours are recorded
   • Design features - behavioural categories or coding frames and time sampling or event sampling
   • Any controls you plan to use
   • How the scores are obtained.
4. Suggest one advantage of the sampling method used in your research.
5. Describe one disadvantage of using an observational method for this research.
6. Outline one way in which you would take ethical issues into account in the conduct of this research.
7. Discuss the reliability of the way you measured driver behaviour.
8. Explain the difference between event sampling and time sampling in observational research.
9. What is the difference between a controlled and naturalistic observation? What are the strengths and limitations of each of these methods?

Discussion point: Overt vs Covert observations
CORRELATIONAL METHODS (1)

LOL C U L8a ! Does the use of modern technology affect literacy skills?

You are asked to design a practical project to investigate whether there is a relationship between the amount of text messages people receive/send and their ability to recognise spelling mistakes. Your project must be a correlation, use self-report and you must plan to collect at least ordinal level data.

You will need to use self-report to collect two numeric scores from each participant – (V1) the number of text messages they receive each day or week or month (you decide the frequency), (V2) the ability to recognise spelling mistakes. Hint: you could draw up a list of 30 spellings where 15 are correct and 15 are incorrect and give participants 45 seconds to identify the errors.

1. State the research question you will investigate.
2. Write an operationalised directional hypothesis (one tailed) for your investigation.
3. Describe the Method and the Procedure of your investigation.
   Include details on...
   • The research method
   • The operationalised variable 1
   • The operationalised variable 2
   • The sampling method and the sample
   • The materials you used
   • The procedure: Where, when, how was the investigation carried out - how you applied the BPS ethical guidelines
   • Task timings and any controls used
   • How the scores (data) for each variable are obtained
   • How you analyse the data.
4. Plot the ranked scores on a scattergraph – then explain what the data suggest.
5. Outline one advantage of using correlational methods in this research.
6. Outline one disadvantage of using correlational methods in this research.
7. Discuss the validity of the way you measured the two variables in this research.
8. Outline one way in which you would take ethical issues into account in the conduct of this research.
9. When using correlations, can we make causal conclusions? Explain.

Discussion point: The strengths and limitations of correlational research.
CORRELATIONAL METHODS (2)

Psychologists suggest that ‘what we see as beautiful we also see as good (the halo effect)’ and some psychologists have found that attractive defendants receive more lenient sentences.

You are asked to design a practical project to investigate whether we are more likely to trust people whom we perceive to be attractive. Your project must be a correlation and you must use self-report to collect two quantitative (numeric) scores from about 10 participants.

You will need to think carefully about the materials you create for this project as it is unethical to use ‘identifiable pictures or photographs’ of people without their informed consent.

In one case, students used a picture of King Richard III (National portrait gallery) and asked participants to rate the picture for (a) how attractive and (b) how trustworthy the person in the picture was (participants did not know who the person in the picture was until they were debriefed)(example in Appendix 7, page 27).

1. State the research question you will investigate.

2. Write a non-directional (two tailed) hypothesis for your investigation.

3. Describe the Method and the Procedure of your investigation.
   Include details on…
   • The research method
   • The operationalised variable 1
   • The operationalised variable 2
   • The sampling method and the sample
   • The materials you used
   • The procedure: Where, when, how was the investigation carried out - how you applied the BPS ethical guidelines
   • Task timings and any controls used
   • How the scores (data) for each variable are obtained
   • How you analyse the data.

4. Plot the scores on a scattergraph – then explain what the data suggest.

5. Outline one advantage of using correlational methods in this research.

6. Outline one disadvantage of using correlational methods in this research.

7. Explain the difference between ‘one tailed’ and ‘two tailed’ hypotheses.

8. Outline one way in which you would take ethical issues into account when conducting this research.

9. What are the highest and lowest possible correlation co-efficients?

Discussion point: one tailed and two tailed hypotheses.
Is there a relationship between how many hours we sleep at night and how frequently we dream?

You are asked to design a practical project to investigate whether people who sleep longer at night have more dreams each night (is there a relationship between hours of sleep and number of dreams). Your project must be a correlation and you must plan to use self-report methods to collect two scores from each participant.

You will need to create a simple questionnaire asking people to self-report how many hours they sleep each night and how many dreams they have each night.

1. State the research question you will investigate.
2. Write a null hypothesis (directional) for your investigation.
3. Describe the Method and the Procedure of your investigation:
   Include details on…
   • The research method
   • The operationalised variable 1
   • The operationalised variable 2
   • The sampling method and the sample
   • The materials you used
   • The procedure: Where, when, how was the investigation carried out - how you applied the BPS ethical guidelines
   • Task timings and any controls used
   • How the scores (data) for each variable are obtained
   • How you analyse the data.
4. Plot the ranked scores on a scattergraph – then explain what the data suggest.
5. Outline one advantage of using correlational methods in this research.
6. Outline one disadvantage of using correlational methods in this research.
7. Discuss the validity of the way you measured one of the variables in this project.
8. Outline the advantages and disadvantages of collecting quantitative data in this project.
9. What would a correlation coefficient of +0.95 suggest?

Discussion point: Advantages and disadvantages of the four different sampling methods.
GLOSSARY OF TERMS

Correlations: a statistical technique used to calculate the correlation coefficient in order to quantify the strength of relationship between two variables.

Counterbalancing: a way of controlling for order effects by having half the participants complete condition A followed by condition B; the other participants complete condition B followed by condition A.

Demand characteristics: aspects of the experiment may act as cues to behaviour that cause the participants (and the experimenter) to change the way they behave.

Dependent Variable (DV): the effect of the IV, or what is measured, in an experiment.

Ethical guidelines: the British Psychological Society (BPS) has issued a set of ethical guidelines for research involving human participants. These ethical guidelines are designed to protect the wellbeing and dignity of research participants.

External (ecological) validity: the validity of a study outside the research situation and the extent to which the findings can be generalised.

Field experiment: a way of conducting research in an everyday environment, eg in a school or hospital, where one or more IVs are manipulated by the experimenter and the effect it may have (the DV) is measured.

Hawthorne effect: when people are aware that they are being studied, they are likely to try harder on tasks and pay more attention.

Hypothesis: this states precisely what the researcher believes to be true about the target population and is a testable statement.

Independent groups design: different participants are used in each of the conditions.

Independent Variable (IV): the variable that is manipulated (changed) between experimental conditions.

Internal (experimental) validity: the extent to which a measurement technique measures what it is supposed to measure, whether the IV really caused the effect on the DV or whether some other factor was responsible.

Inter-observer reliability: whether, in an observational study, if several observers are coding behaviour, their codings or ratings agree with each other.

Laboratory experiment: a method of conducting research in which researchers try to control all the variables except the one that is changed between the experimental conditions.

Matched participants design: separate groups of participants are used who are matched on a one-to-one basis on characteristics such as age or sex, to control for the possible effect of individual differences.

Natural experiment: an experimental method, in which, rather than being manipulated by the researcher, the IV to be studied is naturally occurring. Some examples of naturally occurring variables are gender and age.

Naturalistic observations: a research method in which psychologists watch people's behaviour but remain inconspicuous and do nothing to change or interfere with it.

Null hypothesis: a statement of no difference or of no correlation — the IV does not affect the DV. It is tested by the inferential statistical test.

Operationalisation of variables: being able to define variables in order to manipulate the IV and measure the DV, eg performance on a memory test might be operationalised as ‘the number of words remembered from a list of words’.

Opportunity sampling: asking whoever is available and willing to participate. An opportunity sample is not likely to be representative of any target population because it will probably comprise friends of the researcher, or students, or people in a specific workplace.

Order effects: when a repeated measures design is used, problems may arise from participants doing the same task twice because the second time they carry out the task, they may be better than the first time because they have had practice or worse than the first time because they have lost interest or are tired.
**Pilot studies**: a trial run of research with a small number of participants for researchers to make necessary adjustments and to save wasting valuable resources.

**Qualitative data**: rich and detailed data collected in real-life settings, for example people’s subjective opinions.

**Quantitative data**: objective, precise, usually numerical, data that can be statistically analysed.

**Random sampling**: having the names of the target population and giving everyone an equal chance of being selected.

**Reliability**: reliability of results means consistency. In other words, if something is measured more than once, the same effect should result.

**Repeated measures design**: the same group of participants is used in each of the conditions.

**Research aim**: a general statement of the purpose of the study. It should make clear what the study intends to investigate.

**Self-report methods**: a way of finding out about people’s behaviour by interviewing them or by asking them to fill out questionnaires.

**Semi-structured interviews**: participants are asked a set of pre-determined questions, with the opportunity to devise new questions based on previous answers.

**Structured interviews**: participants are asked the same questions in the same order.

**Social desirability bias**: when people try to show themselves in the best possible way, so that when answering questions in interviews or questionnaires they give answers that are socially acceptable but are not truthful.

**Unstructured interviews**: participants can discuss anything freely and the interviewer devises new questions on the basis of answers previously given.

**Volunteer sampling**: self selected participants volunteer to participate, eg by responding to advertisements.
**APPENDICES**

For use with practical investigations

Examples of questionnaires, rating scales, and picture resources

**APPENDIX 1**

**Rating cheerfulness**

Please circle the number which best corresponds to how cheerful you feel:

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<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
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<tr>
<td>Not very cheerful</td>
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**Rating Mood**

Please circle the number which best corresponds to how you feel:

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Not in a positive mood</td>
<td>very positive mood</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Rating happiness**

Please circle the number which best corresponds to how happy you feel:

<p>| | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Not very happy</td>
<td>very happy</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>
APPENDIX 2

Please help us with our research into pet ownership

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you have a pet?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>2. Do you feel more cheerful when you are with your pet?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>3. Is your pet a dog or a cat?</td>
<td>DOG</td>
<td>CAT</td>
</tr>
<tr>
<td>4. Why do you have a pet?</td>
<td>……………………………………………………………………………………………………………………………………</td>
<td></td>
</tr>
</tbody>
</table>

Please estimate

5. How stressed you feel on a ‘normal’ day

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not stressed</td>
<td>Stressed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Suggest one benefit of looking after your pet

…………………………………………………………………………………………………………………………………

…………………………………………………………………………………………………………………………………
## APPENDIX 3

<table>
<thead>
<tr>
<th>Question</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you think the weather has an effect on your mood?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>2. Do you feel more cheerful when the sun shines?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>3. Do you feel fed up if it is raining when you wake up?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>4. Are you less likely to go shopping when it is raining?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>5. Do you do less sporting activity when it is raining?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>

### Please estimate

6. How happy you feel when the weather is warm and sunny?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less happy</td>
<td>More happy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. How happy you feel when the weather is cold and rainy?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less happy</td>
<td>More happy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please help us with our research into how people choose cars

1. Are you Male Female

From looking at the pictures of the 3 cars:

2. How much would you like to own the SILVER car?
   
   0 1 2 3 4 5 6 7 8 9 10
   Would not like would like a lot

3. How much would you like to own the RED car?
   
   0 1 2 3 4 5 6 7 8 9 10
   Would not like would like a lot

How much would you like to own the WHITE car?

   0 1 2 3 4 5 6 7 8 9 10
   Would not like would like a lot

4. If you were going to buy a new car which of these colours would you choose?

   Black White Red Yellow Silver Blue Green
# APPENDIX 5

Please help us with our research into sleep and dreaming

<table>
<thead>
<tr>
<th>Circle your age range</th>
<th>16 – 25</th>
<th>26 – 35</th>
<th>36 – 45</th>
<th>46 – 55</th>
<th>56 +</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. On average how many hours do you sleep each night? ————

2. Do you usually dream at night? YES NO

3. Do you usually remember what you dream about? YES NO

4. On average how many dreams do you have each night? ————
APPENDIX 6

Please look carefully at the person in the picture

1. How ATTRACTIVE do you think the person is?

0  1  2  3  4  5  6  7  8  9  10
Not at all attractive  Very attractive

2. How much would you TRUST this person?

0  1  2  3  4  5  6  7  8  9  10
Would not trust at all  Would trust completely
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