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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

The big picture

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? Subtopic question(s)



Notebook



Glossary

Reading
assistance

During this subtopic, you will be working towards answering the following subtopic question:

- What role can a survey play in understanding human relationships?

Consider the following question:

- On a scale of 1–5, how brilliant is IB DP Psychology?

Can you identify any problems with this question?

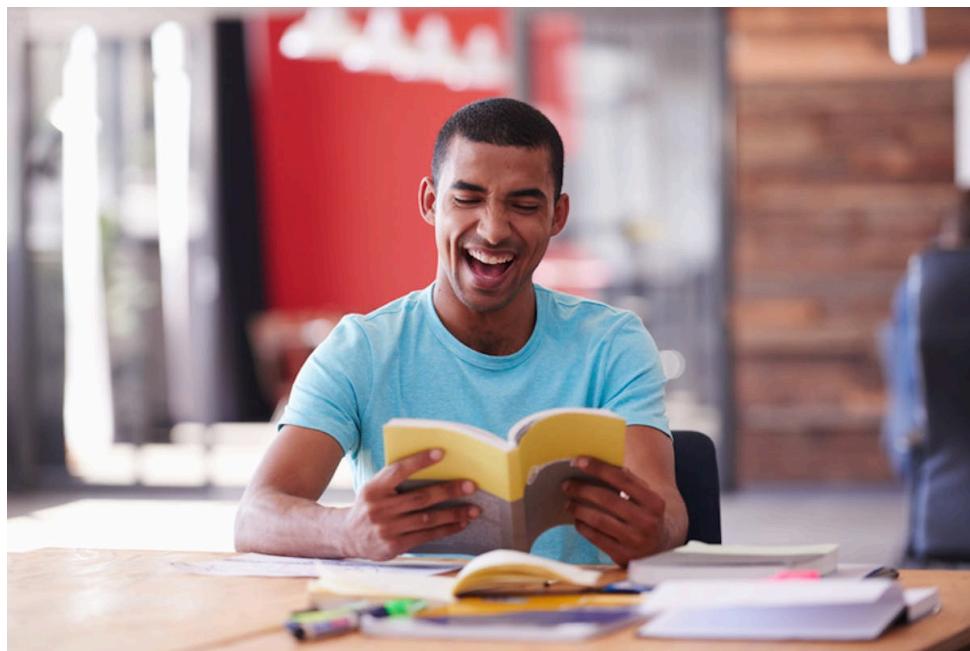


Figure 1. Just how brilliant is psychology?

Credit: laflor, Getty Images

There are several issues with this question, but one of the first things that you may have wondered is – how does the scoring work? If you provide a score of 1, does this mean that you agree and believe that IB DP Psychology is brilliant? Or does a score of 5 mean that IB DP Psychology is brilliant?

Psychologists want to ensure that when they pose a question, people can interpret the question correctly. The same is also true if there is an accompanying scoring system.

Another issue with this question is that it is a classic example of a leading question. Notice that the question is written in a way that *assumes* that you already believe that IB DP Psychology is brilliant. Psychologists are keen to avoid leading questions when constructing surveys, as they can lead to bias in the results.

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In this subtopic, you will learn about how surveys are constructed and what makes a 'good' question, and consider how surveys are used to understand human behaviour.

Making connections

Surveys are used extensively in both experimental and non-experimental psychological research.

It is important that you are able to reflect on how survey data can be presented, and of the strengths and limitations of surveys in research.

Remember that you can find **more information** about surveys and other research methods in the foundational unit **subtopic 1.1**  (</study/app/psychology-new/sid-540-cid-763690/book/big-picture-id-49350/>).

3 section questions ^

Question 1

SL HL Difficulty:

What term refers to a testable prediction that is often implied by theory?

 Hypothesis



Accepted answers

Hypothesis

Explanation

A hypothesis is a possible explanation for an observation or scientific problem that can be tested.

Question 2

SL HL Difficulty:

Which of the following definitions describes the measure of central tendency of the 'mean'?

1 This is the most frequent score in a data set.

2 This is where you add up all of the scores for a set of data and then divide this total by the total number of scores.



3 This is when you arrange a set of numbers from the highest to the lowest.

4 This is the value that is sequentially in the middle of a set of data.

Explanation

Mean, mode and median are all types of central tendency that can help inform a researcher about the 'average' of a set of data. The mean is the sum of values in a data set divided by the total number of values in the data set. The range is a measure of dispersion/spread.

Question 3

SL HL Difficulty:

When an increase or a decrease in one variable has no impact on the other variable, this means there is no

correlation between the co-variables.



Student view

Accepted answers and explanation



#1 correlation

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General explanation

Unlike a positive or negative correlation, no correlation indicates that there is no relationship between two co-variables.

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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

How are surveys used in psychological research?

C-4-2: Identify the appropriate selection of research methodology to investigate a psychological question.

C-4-3: Describe the advantages and disadvantages of different research methodologies. C-4-11: Identify the steps to ensuring credibility in research.

C-4-13: Discuss factors that should be considered when transferring findings of a study to another population or context.



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Notebook



Glossary



Reading
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Teacher instructions

Learning outcomes

- Identify the appropriate selection of research methodology to investigate a psychological question.
- Describe the advantages and disadvantages of different research methodologies.
- Identify the steps to ensuring credibility in research.
- Discuss factors that should be considered when transferring findings of a study to another population or context.

Facilitation guidance

In this section, students have the chance to review their knowledge and understanding of the purpose of surveys, and how they are constructed. Students are provided with examples and the opportunity to apply their knowledge in the activities. There is also a theory of knowledge connection, where students can consider how researchers 'know' when they have collected data that answers the questions that they seek from research.

? Subtopic question(s)

During this subtopic, you will be working towards answering the following subtopic question:

- What role can a survey play in understanding human relationships?

The use of surveys in research

Surveys are a commonly used research method in psychological research. Surveys consist of a standardised set of questions that collect self-reported data, from which researchers can gather large amounts of quantitative data. Surveys can have both structured and semi-structured formats.

Making connections

You will have covered surveys in subtopic 1.1 ([/study/app/psychology-new/sid-540-cid-763690/book/big-picture-id-49350/](#)), learning specifically about their strengths and limitations in section 1.1.2 ([/study/app/psychology-new/sid-540-cid-763690/book/what-are-the-tools-of-the-psychologist-id-49352/](#)). Ensure that you refer to this section as you work your way through this practical activity.

Surveys can consist of open-ended questions or closed-ended questions:

- Open-ended questions are where respondents can provide a long-form answer to a question. They produce qualitative data.



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- Closed-ended questions limit respondents to a choice from a list of options, such as yes/no or multiple choice.

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Closed-ended questions also include likert scales. These are used when researchers want participants to rate their feelings about a particular topic or behaviour. For example, the following question is an example of a likert scale:

— Respond to the following statements about IB DP Psychology, based on this scale – 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), 5 (strongly agree).

1. I would recommend IB DP Psychology to other students.
2. I have had a positive experience of IB DP Psychology.

Concept

Causality

Establishing causality is a fundamental challenge in psychological research, particularly when using surveys. Reflecting on the strengths and limitations of this method highlights the complexities of identifying cause-and-effect relationships.

Reflection question

1. Is it possible to establish **causality** when using surveys in psychological research?

Surveys can be used in non-experimental research, where they can describe single variables (such as opinions about IB DP Psychology), and experimental research. Here, a researcher may manipulate an independent variable to measure the effects on a dependent variable.

Surveys are used in experimental research in order to gather data from the participants about their decisions during the experiment. For example, a survey could be used to ask individuals participating in an Asch paradigm conformity experiment questions about why they decided to conform or not. In this way, surveys can help researchers move beyond simple description of observed behaviour towards an attempt to link individual motivational factors to that behaviour.

Teacher instructions

Goal

- To provide students with the opportunity to review their knowledge and understanding of research methods.

Facilitation guidance

This activity provides students with a refresher about the different types of research methodology used within psychology. It could take the form of a class brainstorming or data-gathering session, or small groups using mini-whiteboards or giant paper. A little competition doesn't hurt either, so a timer could be used!

Begin by asking students to review the different types of research methodology (for example, experiments, case studies and surveys). Then, ask students to consider what data are likely to be gathered from different types of methodology. Encourage them to look back at the foundational unit subtopic 1.1 [\(/study/app/psychology-new/sid-540-cid-763690/book/big-picture-id-49350/\)](#). Advise students to evaluate the methods, as well as consider the ethical considerations associated with them.

The activity should take around 15 minutes to complete, but this can vary based on how much time you wish to dedicate to the brainstorming/data-gathering activity and the feedback.



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Activity

IB learner profile attribute: Knowledgeable/Reflective/Communicator

Approaches to learning: Thinking/Social/Communication

Time required to complete activity: 15 minutes (this may vary)

Activity type: Group

Application of knowledge: Research methods review

By now, you will be familiar with the different research methods used within psychology. This activity asks you to reflect on your knowledge, as well as consider how each method might record and measure behaviour during research.

Do you know a case study from a true experiment? And how about the differences between a quasi-experiment and a field experiment? Because it's competition time!

In this activity, you are going to review the various research methods that are used within psychology. Get into groups and complete the following tasks:

1. Identify as many types of research method as you can.
2. Identify at least two strengths and limitations for each research method.
3. Identify one ethical consideration that might be associated with the different research methods.
4. (Concept application: measurement) What type of data (nominal, ordinal, discrete or continuous) are gathered from the methodologies that you have identified?

HL Extension

Q Culture

Reflection question

1. How might psychologists consider culture in choosing the type of research method used to investigate a given aim?

The construction of surveys

You can conduct surveys in several ways: in person, over the internet, on the phone or through the post. They can be used to investigate almost all forms of human behaviour (hence, why they are commonly used in psychological research!), including mental health, happiness, voting behaviour, food preferences and many more.

⌚ Paper 2 criteria

Knowledge and understanding

- The response demonstrates detailed knowledge and understanding of the research methodology relevant to the class practical.
- Psychological terminology is used accurately.

Design



- The procedure of the research method is explained with accuracy and detail.
- Psychological terminology relevant to the research method is used effectively.

Researchers have to decide whether to conduct the survey themselves or ask respondents to complete it. Their decision depends on several factors, such as the population being investigated, the costs involved, literacy levels of respondents, use of technology, and whether confidentiality and/or privacy is required.

Theory of knowledge

The knower

One way to think about surveys is that a researcher (the psychologist) and a respondent (the participant) are entering a 'social relationship,' which goes beyond the task of simply gathering data for a piece of research. When a research method is viewed in this light, it can raise epistemological questions.

Reflection question

1. What are the necessary conditions for a psychologist under which they 'know' something? That is, how will they know when they have gathered the information that supports their research?

Making connections

You learned about sampling techniques in [section 1.1.8](#) (/study/app/psychology-new/sid-540-cid-763690/book/what-is-sampling-and-why-does-it-matter-id-49358/). Random sampling methods are often preferred for surveys over other sampling techniques, as researchers want to use their findings to generalise to a wider population. Additionally, the survey research method usually allows for larger sample sizes, as it is relatively straightforward to collect data.

When a researcher has decided to use a survey in their research, they should undertake the following stages:

Stage 1: Review existing research

This usually takes the form of a literature review. This is where a researcher will explore research that is already published and look at surveys carried out in a similar topic area.

Stage 2: Create questions

This can take a long time. Researchers need to be sure that they make the survey as easy as possible for the respondents to complete. Researchers need to pay attention to language and wording. Here are some things to remember when constructing your questions to ensure valid responses:

- Respondents must be able to understand the questions.
- They should be able to provide answers to the questions.
- They should be willing to provide answers to the questions.

When constructing your survey, you may wish to include an introductory statement where you 'set the scene' for your research. This should include a summary of what you intend to carry out with your project, details about the research team, and any necessary instructions for the survey. You may also wish to include a closing statement that thanks your respondents for their time.



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Importantly, have fun with your survey. This is a great opportunity for you to use the knowledge and skills that you have learned from IB DP Psychology and think creatively!

Teacher instructions

Goal

- To consider how questions are used in research.

Facilitation guidance

In this activity, students can review some examples of questions that could be used in a research survey. The questions are mostly phrased poorly. Students should identify any possible issues with each question and then rephrase them. An example is provided.

This activity will also help to prepare students for the next section, which focuses on the strengths and limitations of the use of surveys in research.

Activity

IB learner profile attribute: Open-minded/Reflective/Principled

Approaches to learning: Thinking/Self-management/Research

Time required to complete activity: 30 minutes

Activity type: Individual

Application of knowledge: How can questions be improved?

Study **Table 1**, showing examples of questions from a fictional survey, and complete the following tasks:

1. Identify any problems with the questions. Here are some suggestions of what to look out for:
 - Leading question
 - Double-barrelled question (where two requests are made in one question)
 - Double negatives that can confuse a respondent (for example, ‘not’ and ‘none’ might be used in the same question)
 - Unclear scoring attached to a question
2. Rephrase the question and give possible answers (if necessary).

Table 1. Examples of questions from a fictional survey.

Question	Problems (if any)	Rephrase the question/scoring
Example: Do you like IB DP Psychology and IB DP Economics?	Double-barrelled question (the question makes two requests)	Split into two questions: Do you like IB DP Psychology? Do you like IB DP Economics?
How regularly do you eat cheese?		

Question	Problems (if any)	Rephrase the question/scoring
I like reading about sports: • Agree • Disagree • Not sure		
Over the past year, how many hours have you spent studying for IB DP Psychology?		
How often do you eat your lunch in the school canteen • Every day • Most days • Never		
Do you agree that not drinking alcohol is not associated with a risk to health?		

3. (Concept application: bias) How can the language of a survey question remove or insert bias into a research investigation?

Once a psychologist has completed some research into the background literature and the type of questions required for their survey, they may also consider the following factors:

- Avoid technical words or slang.
- Ensure the layout is easy to understand.
- Be aware of any questions that will collect sensitive information.
- Decide whether filler questions are required. These are not analysed as part of the survey, but they can help hide the real purpose of the research.

🌐 International mindedness

Surveys are a common research method for psychologists. However, researchers need to be aware that they should adapt some questions for different cultures. Questions related to diet, health, reproduction and relationships can be more sensitive in some cultures than in others.

Reflection question

1. Why is it important for researchers to be culturally sensitive to some of the topics covered when using surveys?

☰ Learning outcomes

By the end of this section, you should be able to:

- Identify the appropriate selection of research methodology to investigate a psychological question.
- Describe the advantages and disadvantages of different research methodologies.
- Identify the steps to ensuring credibility in research.

- Discuss factors that should be considered when transferring findings of a study to another population or context.

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3 section questions ^

Question 1

SL HL Difficulty:

Which type of question is used when respondents are asked to rate their opinion or feeling about something?

- 1 Multiple choice
- 2 Likert scale
- 3 Yes/No
- 4 Fill in the blank



Explanation

A Likert scale is a type of psychometric scale that measures a person's opinion and attitudes. For example, rate your knowledge of IB DP Psychology using the following scale: 1 (very poor) to 5 (very good)

Question 2

SL HL Difficulty:

Surveys only produce quantitative data. True or false?

- 1 True
- 2 False



Explanation

Surveys are mostly used to produce quantitative data, but they can include some questions that produce qualitative data.

Question 3

SL HL Difficulty:

When a researcher advertises for participants, they are using 1 volunteer ✓ sampling. This could be done through a poster or an advert online.

Accepted answers and explanation

#1 volunteer

General explanation

Volunteer sampling is used when researchers advertise for participants. Researchers who work at a university may adopt this method and recruit for students.

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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

How can you evaluate surveys?

C-4-2: Identify the appropriate selection of research methodology to investigate a psychological question.

C-4-3: Describe the advantages and disadvantages of different research methodologies. C-4-11: Identify the steps to ensuring credibility in research.



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Assign

Learning outcomes

- Identify the appropriate selection of research methodology to investigate a psychological question.
- Describe the advantages and disadvantages of different research methodologies.
- Identify the steps to ensuring credibility in research.

Facilitation guidance

In this section, students will consider the relative merits and drawbacks of using surveys in psychological research. To do this, they will review the validity and reliability of surveys, including face validity and test-retest reliability. It is important to remind students that there are other types of validity and reliability beyond those covered in this section.

There is also a creativity, activity, service (CAS) opportunity presented in this section. Here, students can devise a pilot study to learn more about the CAS provision in their school. Students could ask their school administration to give this out to students.

? Subtopic question(s)

During this subtopic, you will be working towards answering the following subtopic question:

- What role can a survey play in understanding human relationships?

The strengths and limitations of surveys

Surveys have several benefits over other methods. For example, you can distribute surveys to a large number of people and standardise both questions and scoring. However, there are drawbacks. For example, response rates to surveys can be low because people may not take them seriously and fail to complete them.

HL Extension

Q Motivation

Bandura's (<https://psycnet.apa.org/doiLanding?doi=10.1037%2F0033-295X.84.2.191>) theory of self-efficacy states that individuals are more likely to engage in a task if they believe that they can accomplish the task. In short, high feelings of self-efficacy increase effort and motivation.

Reflection question



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view



1. Explain how the construction of a survey could increase feelings of self-efficacy and therefore increase participant motivation.

When constructing and administering surveys, it is important to consider the concepts of measurement and bias.

Researchers must take the time to ensure that their survey measures what it is intended to measure (construct validity), while simultaneously taking steps to remove their own bias from question construction.

In regard to data collection, researchers must take care to create questions that minimise cultural bias on the part of their respondents. There are, however, some issues of data validity that are hard to remove from surveys due to the nature of the tool. For example, respondents may not be honest when they complete surveys because they are unsure of how to respond, or they may perhaps want their responses to be more acceptable. This is known as social desirability bias.

Teacher instructions

Goal

- To provide students with the opportunity to practise their application skills and consider how they can devise questions for a range of research areas.

Facilitation guidance

This activity will utilise students' critical thinking skills. It requires them to evaluate the use of surveys in research.

To begin, ask students when surveys might be used in psychology. For example, to investigate mental health disorders and the effectiveness of interventions used to treat them.

Then, present students with a list of topics. For each topic, ask them to decide which type of questions would be appropriate to use for a survey and to explain their decision. The key is that they need to justify their response. This will involve them considering the relative strengths and limitations, plus the practicalities and ethical issues, of the topic they are researching.

Consider presenting the topics to students either on giant sheets of paper placed around the room or on a collaborative online document. Encourage students to consider the topics individually before sharing their ideas with the rest of the class.

Activity

IB learner profile attribute: Knowledgeable/Open-minded/Communicator

Approaches to learning: Thinking/Social/Communication

Time required to complete activity: 15 minutes

Activity type: Group

Application of knowledge: Applying knowledge to research

Concept application: Measurement

Surveys are one method that psychologists use when investigating human behaviour. For each of the following topics, identify TWO closed-ended questions that you believe would be appropriate to use to investigate it, and justify your choice.

Carefully consider how the behaviour would be **measured** by the questions you create.

- Levels of happiness

- Rates of depression
- The amount of time people spend exercising each week
- Exposure to violent films/computer games
- Experiences of bullying

Be prepared to share your thoughts with the rest of the class.

The goal for all research is that it is valid and reliable. Another way to increase both is to use a pilot study that is tested on a small sample who are representative of the larger population. Pilot studies are useful because they allow the researcher to assess whether their questions are suitable. In particular, if the wording of the questions is misleading.

Creativity, activity, service

Strand

Activity

Learning outcome

- Show commitment to, and perseverance in CAS experiences.

Create a pilot study about the range of creativity, activity, service (CAS) activities available in your school. Ask your school administration to distribute your survey for students to complete. The aim of the survey is to learn more about students' opinions. Therefore, you should include a range of closed questions, including likert scales.

When evaluating a survey, researchers may consider the following types of validity and reliability:

- **Face validity** – this is based on the appearance and layout of the survey. It assesses the extent that a survey is presented in a way that will provide researchers with what they require.
- **Construct validity** – this determines the extent to which a research tool measures the intended concept in a piece of research.
- **Test retest reliability** – this is when the same test is completed by respondents within a set time interval. Researchers assess the extent to which responses correlate with one another.

There are other types of validity and reliability that you will come across in the IB DP Psychology course, many of which are covered in [section 1.1.3 \(/study/app/psychology-new/sid-540-cid-763690/book/how-can-we-know-if-a-psychological-theory-or-claim-is-valid-id-49353/\)](#).

Teacher instructions

Goal

- To provide students with the opportunity to apply their learning to a scenario involving a survey.

Facilitation guidance

In this activity, students will consider a scenario that involves the use of a survey. Here, they are required to extend the survey and evaluate the potential validity and reliability of the results.

Encourage students to return to the content in [section 4.3.1 \(/study/app/psychology-new/sid-540-cid-763690/book/how-are-surveys-used-in-psychological-research-id-49148/\)](#) for additional guidance about the purpose of surveys and how these are constructed.



Activity

IB learner profile attribute: Inquirer/Knowledgeable/Thinker

Approaches to learning: Thinking/Communication/Self-management

Time required to complete activity: 30 minutes

Activity type: Group

Application of knowledge: Applying knowledge to a survey

Read the following scenario, complete the tasks, and then answer the reflection questions.

Scenario

Your psychology teacher wants to know how you are all progressing with the IBDP Psychology course. They distribute an online survey to the entire class, and then analyse the results.

The following are some of the questions from the survey:

1. How often is homework set in IB DP Psychology?

Always — Sometimes — Never

2. 'IB DP Psychology is an easy subject'. How much do you agree with this statement?

Strongly agree — Agree — Not sure — Disagree — Strongly disagree

3. Rate from 0—5 how well you understand the topic: 'Human relationships.'

1 = I don't understand at all

5 = I completely understand

Tasks

1. Assess the face and construct validity of the survey (based on the three questions given).

2. Create TWO additional closed-questions that could be used in this survey.

Reflection questions

1. (Concept application: measurement) Imagine that your teacher tells you that only 45% of the class completed the survey. With a 45% response rate, how valid is this survey as a measurement tool?

2. How would this response rate inform your views about the validity and reliability of the survey results?

Paper 2 criteria

Knowledge and understanding

- The response demonstrates detailed knowledge and understanding of the research methodology relevant to the class practical.
- Psychological terminology is used accurately.

Application

- The knowledge and understanding of the concept is well developed.
- There are clear and detailed links between the concept and the class practical.

Compare and contrast



- Similarities and differences are discussed in detail.
- Psychological terminology relevant to the research methods is used effectively.

Learning outcomes

By the end of this section, you should be able to:

- Identify the appropriate selection of research methodology to investigate a psychological question.
- Describe the advantages and disadvantages of different research methodologies.
- Identify the steps to ensuring credibility in research.

3 section questions ^

Question 1

SL HL Difficulty:

Social desirability ✓ is where someone tries to present themselves in the best possible light in a piece of research

Accepted answers and explanation

#1 desirability

General explanation

Social desirability is a type of bias that can affect the validity of the findings from research.

Question 2

SL HL Difficulty:

In psychological research, the term 'representative' refers to:

- 1 Situations or findings that are typical of another setting ✓
- 2 A small-scale trial to test the design of a study
- 3 A way to measure the consistency of a test used in a piece of research
- 4 The group of people who have been selected to represent the population for a piece of research

Explanation

Representativeness in a situation or from research findings is advantageous because it means that a researcher can generalise the results from the sample to the population.

Question 3

SL HL Difficulty:

The extent to which a research tool such as a survey measures the intended concept is referred to as 1 construct validity. ✓



Accepted answers and explanation



#1 construct

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General explanation

Construct validity refers to the extent to which a research tool measures the intended concept.

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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

How are surveys used to investigate human behaviour?

C-4-2: Identify the appropriate selection of research methodology to investigate a psychological question.

C-4-3: Describe the advantages and disadvantages of different research methodologies.

C-4-7a: Identify and discuss how data is represented and analysed in different forms based on the design of the study and the nature of the data.

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Learning outcomes

- Identify the appropriate selection of research methodology to investigate a psychological question.
- Describe the advantages and disadvantages of different research methodologies.
- Identify and discuss how data is represented and analysed in different forms based on the design of the study and the nature of the data.

Facilitation guidance

Before students begin the practical activity, it is important for them to review an existing piece of research that utilised a survey. In this section, students can apply their knowledge and understanding to Hazan and Shaver's (1987) research into childhood attachment and adult romantic/social relationships.

This section demonstrates the importance of background research that supports psychological research. However, students will cover this in more detail in [section 4.3.4](#) (/study/app/psychology-new/sid-540-cid-763690/book/practical-activity-introduction-id-49151/).

? Subtopic question(s)

During this subtopic, you will be working towards answering the following subtopic question:

- What role can a survey play in understanding human relationships?

So far in this subtopic, you have reviewed a wide range of information about the use of surveys and how to evaluate them. Before you begin the practical activity and start designing a survey of your own, it is worthwhile considering a specific example of how a survey has been used in psychological research.

Perspective lens

Cognitive, biological and social approaches

A major benefit of framing psychological investigations within the different approaches is that doing so can inform your choice of research method.

The survey is a widely used research method in psychology, however its utility could vary depending on the perspective lens with which a researcher is viewing a given behaviour.

Reflection questions

- For which approach towards analysis of behaviour do you think a survey would be least useful? A biological approach, a cognitive approach or a social approach? Why?

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2. Which approach or approaches towards analysis of behaviour do you think could benefit from utilising a survey as a research method? Why?

In this section, you will learn more about how a survey was used to investigate childhood attachment style and adult social relationships, including those of the romantic variety (**Figure 1**).



Figure 1. Can childhood attachment affect romantic relationships?

Credit: skynesh, Getty Images

HL Extension

Q Motivation

Attachment theories, such as that developed by [Ainsworth and Bell \(1970\)](https://doi.org/10.2307/1127388) ↗ (<https://doi.org/10.2307/1127388>), are described as 'drive theories'.

Reflection question

- What are drive theories, and how can these help to describe human behaviour?

[Hazan and Shaver \(1987\)](https://doi.org/10.1037/0022-3514.52.3.511) ↗ (<https://doi.org/10.1037/0022-3514.52.3.511>) used a survey to explore childhood attachment and adult relationships. They distributed their survey in a newspaper.

They found that those respondents who were securely attached as children were more likely to have lasting and satisfying relationships as an adult. Conversely, those respondents who identified as insecurely attached were more likely to find relationships challenging, and more were found to be divorced. Hazan and Shaver (1987) concluded that your experiences in childhood influenced attitudes to love and social relationships in adulthood.

In this section, you are going to have the chance to see a version of this survey and apply your learning from the previous sections to assess how it was used.



Student
view

Teacher instructions

Goal

- To provide students with a grounding in how a survey is constructed.

Facilitation guidance

For this activity, students will review and then adapt the survey used by Hazan and Shaver (1987) where they investigated the relationship between attachment style and adult romantic relationships.

Ask students to work in their practical groups to complete the following tasks.

1. Ask students to review the different attachment styles developed by Ainsworth and Bell (1970). They may wish to make notes about these and consider further applications beyond childhood attachment.

(Note: Ainsworth identified three attachment styles — secure, insecure/avoidant, anxious/resistant. Now, a fourth is recognised (disorganised).)

2. Provide students with a copy of the short version of Hazan and Shaver's (1987) survey, known as the 'love quiz,' and the scoring grid. Discuss with students the aim of the research and ask students for their thoughts on the questions and how the quiz is scored. For example, what are the benefits of collecting quantitative data for this topic? What might be missed/overlooked by not including questions that would gather qualitative data?

During this activity, some students may wish to complete the quiz themselves and obtain a score. Remind students that this is a short version of a much longer survey, and it does not definitively assess attachment style or how this affects views of romantic relationships! Also, there could be cultural/social sensitivities about the questions themselves.

Students may wish to collaborate on a shared document for this activity.

Activity

IB learner profile attribute: Inquirer/Open-minded/Balanced

Approaches to learning: Thinking/Self-management/Research

Time required to complete activity: 45 minutes

Activity type: Group

Application of knowledge: Analysis of a survey used to investigate childhood attachment and romantic/social relationships

Hazan and Shaver (1987) found that childhood attachment style was related to a sense of self in adulthood and this impacted social relationships, including the romantic variety.

Work with your practical group to carry out the following tasks.

1. Complete some research about the different attachment styles focusing on:

a) What were the different attachment styles identified by Ainsworth and Bell (1970) 
 (<https://doi.org/10.2307/1127388>)?

b) How might these attachment styles apply to romantic/social relationships? You may want to review the abstract for Hazan and Shaver's (1987) 
 (<https://doi.org/10.1037/0022-3514.52.3.511>) research.

2. Then read through the short version of the 'love quiz' survey and evaluate the survey in terms of the questions and scoring grid. For example:

a) **(Concept application: measurement)** What data was gathered from the quiz? What are the strengths and limitations of this?



b) (Concept application: perspective) What language was used in the questions? How might this affect people's responses?

Share your findings with the rest of the class.

Learning outcomes

By the end of this section, you should be able to:

- Identify the appropriate selection of research methodology to investigate a psychological question.
- Describe the advantages and disadvantages of different research methodologies.
- Identify and discuss how data is represented and analysed in different forms based on the design of the study and the nature of the data.

3 section questions ^

Question 1

SL HL Difficulty:

Who conducted research into childhood attachment styles?

- 1 Ainsworth and Bell
- 2 Bandura
- 3 Sherif
- 4 Tajfel

Explanation

Ainsworth and Bell (1970) conducted research into childhood attachment styles: secure, insecure (avoidant, ambivalent)

Question 2

SL HL Difficulty:

A 1 secure attachment in childhood is when a child feels safe and connected, and comfortably interacts with others. They will seek out their caregiver over strangers.

Accepted answers and explanation

#1 secure

General explanation

Secure attachments are described as when a child uses their caregiver as a secure base. They feel safe and connected, but can comfortably interact with others.

Question 3

SL HL Difficulty:

Which of the following is a disadvantage of using quantitative methods in research?



- 1 It does not allow for people to expand on their answers to provide more detail or context



- 2 It collects numerical data that can be replicated
- 3 A hypothesis might be tested when using quantitative methods
- 4 It produces more objective data that can be interpreted using statistical analysis

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Explanation

Quantitative data does not allow people to expand on their answers, unlike qualitative research methods such as interviews.

[◀ Previous section\(/study/app/psychology-new/sid-540-cid-763690/book/how-can-you-evaluate-surveys-id-49149/review/\)](#)

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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

Practical activity: Introduction



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Reading assistance

Goal

- To provide students with an introduction to the practical activity.

Facilitation guidance

In this section, students are asked to reflect on their knowledge of surveys. For instance, what makes a ‘good’ survey? Encourage them to consider how their learning experiences from this subtopic and also from the foundational unit ([\(subtopic 1.1\) \(/study/app/psychology-new/sid-540-cid-763690/book/big-picture-id-49350/\)\)](#) help with this practical activity.

For this practical, put students into groups.

? Subtopic question(s)

During this subtopic, you will be working towards answering the following subtopic question:

- What role can a survey play in understanding human relationships?

Return to the previous sections in this subtopic and consider the following:

- What makes a ‘good’ survey?
- What types of human behaviour are better suited to investigation using a survey?



Figure 1. How could you investigate friendship using a survey?

Credit: LeoPatrizi, Getty Images



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As you have learned, surveys can be incredibly useful in investigating human behaviour. For example, how could you investigate friendship using a survey (**Figure 1**)?

🔗 Making connections

You worked with a group to construct a survey in [section 4.2.5](#) (/study/app/psychology-new/sid-540-cid-763690/book/activity-sheet-how-can-technology-be-used-to-investigate-human-relationships-id-49141/) to investigate the effect of social media usage on human relationships.

Reflect on your experiences from that activity: What went well? What worked less well? Can you use some of these experiences for this practical activity?

During this practical, you will work in a group to devise your own research question, construct your own survey and collect data for analysis. Throughout this practical, you should return to the subtopic question:

- **What role can a survey play in understanding human relationships?**

🔗 Concept

Measurement

[Hazan and Shaver \(1987\)](#) (/https://doi.org/10.1037/0022-3514.52.3.511) constructed a survey to investigate childhood attachment styles and adult romantic/social relationships. They concluded that different attachment styles influenced later relationships. For example, people with secure attachments as a child were more likely to experience satisfying and lasting relationships than those with an insecure attachment style.

Reflection question

1. How were the constructs of attachment and romantic/social relationships measured in the 'love quiz'?

Your teacher will guide you through some of this practical, but you are expected to complete most of this with your assigned group. Remember that if you need additional support, refer to the previous sections in this subtopic for help. Also, there are 'Making connections' boxes and links throughout the practical activities to help remind you where to find relevant information in other subtopics.

The completion of the activities in this practical will be helpful when designing your own research proposal for the Internal Assessment. Your knowledge and understanding from the practicals will be assessed in Paper 2.

◀ Previous section(/study/app/psychology-new/sid-540-cid-763690/book/how-are-surveys-used-to-investigate-human-behaviour-id-49150/review/)

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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

Practical activity: Explore and design

B-3-4-3a: (HL) Discuss the impact of technology on interpersonal relationships.

C-4-2: Identify the appropriate selection of research methodology to investigate a psychological question. C-4-8: Understand the stages of thematic analysis.

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Generating the research question

Teacher instructions

Goal

- To explore how background research is necessary to aid the creation of research questions.

Facilitation guidance

In this section, students will begin to understand the important process of background research. When you present students with a practical activity such as this, they often want to start straight away. However, remind them how important it is to follow a step-by-step procedure for any practical. Also, the background research they complete will help inform their research question.

Students will devise a survey to investigate human relationships. They may wish to adapt questions from the 'love quiz' to construct their survey, but encourage them to think about these in their group. Remind students of the importance of understanding the language they use in their questions (for example, no leading questions). Advise them to consider the potential sensitivities associated with investigating human relationships and relevant ethical considerations.

- In this phase, learners need to clearly describe a research question and include background theory of direct relevance.

Subtopic question(s)

During this subtopic, you will be working towards answering the following subtopic question:

- What role can a survey play in understanding human relationships?

Before you begin planning your own research, refer to your notes from the previous section and discuss the following with your group members:

- What was the **research question** for Hazan and Shaver's (1987) investigation?

HL Extension

Technology

Hazan and Shaver's (1987) <https://doi.org/10.1037/0022-3514.52.3.511> 'love quiz' was distributed in newspapers, but researchers now usually distribute surveys online or provide these electronically. You may even be able to find an electronic version of the love quiz online!

 Student view



Reflection question

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1. How can **technology** help improve the distribution and response rates for psychological research?

Research questions are incredibly important. They help guide a project from the initial stages where psychologists identify a gap in the research, right up to when a piece of research is (hopefully!) published.

Selecting a research question can be daunting, but the key is to make it clear and specific. Here are some examples:

- What are the effects of social media on self-esteem in teenagers?
- What are the attitudes towards dating applications among 18–36-year-old single people living in the UK?
- What are the effects of socioeconomic status on education achievement for IB students in Brazil?

Existing literature about the research area should inform research questions. Psychologists will spend a great deal of time learning about a topic area BEFORE gathering their own data. Primarily, this is because psychologists want to identify if there is a gap in the research that is worth exploring.

In your practical group, you need to investigate **one type of human relationship**. Examples of human relationships that you could explore include: friendship, or relationships with siblings, parents or even teachers! However, you need to remember that there must be some existing research that supports your research question.

II Internal assessment criteria

Introduction

- The aim or research question is clearly stated and focused.
- The real-life problem is described and the impact on the population of interest is explained.
- Relevant findings and conclusions of two pieces of research are explained and linked to the investigation.

Research methodology

- The choice of research method is explained.
- The procedure is explained.
- Relevant ethical considerations are described and explicitly linked to the investigation.

Working with your practical group, complete the following tasks:

1. Conduct research into the **background theory** for your investigation. Your background research should involve the use of academic journals that cover your research area.

- What are the concepts that you will explore?
- What existing research has explored this area? What methods were used?
- What were the findings from the research?

2. Once you have completed your background research, you should have an impression of how you want to write your overall **research question**. When devising your research question, ensure that:

- you include explicit links to the concepts that you are going to investigate
- you use clear language



- your question is specific enough to be answered by your investigation.

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🔗 Concept

Responsibility

Balancing research objectives with ethical standards is a crucial responsibility in psychology. Strategies to maintain this balance encourage thoughtful examination of both scientific goals and ethical integrity.

Reflection question

1. How can you ensure that your group balances the needs of your research with ethical standards?

In the next part of *Explore and design*, you need to construct your survey and explore the ethical considerations for your research.

3. Develop a **procedure** for your research:

- Create a step-by-step plan of how you intend to carry out your research.

4. Create **10 closed-ended questions** that can be included in your survey:

- Use a variety of closed-questions.

🔗 Making connections

In [section 4.3.2](#) (/study/app/psychology-new/sid-540-cid-763690/book/how-can-you-evaluate-surveys-id-49149/), you learned about pilot studies. You may wish to complete a pilot study to test that your questions are clear and will collect the information that you need to address your research question.

5. Create a **consent form** for your respondents:

- There is an example of an ethics briefing on the short version of the ‘love quiz.’
- Refer to [section 1.1.9](#) (/study/app/psychology-new/sid-540-cid-763690/book/how-do-ethical-frameworks-guide-human-research-in-psychology-id-49359/) for guidance on the ethical frameworks that guide psychological research.

6. Ensure that you have a minimum of 10 participants who will respond to your survey.

🔗 Paper 2 criteria

Knowledge and understanding

- The response demonstrates detailed knowledge and understanding of the research methodology relevant to the class practical.
- Psychological terminology is used accurately.

Design

- The procedure of the research method is explained with accuracy and detail.

✖
Student
view



- Psychological terminology relevant to the research method is used effectively.

Additional information for this section

- Your research question must be clear and specific.
- You must refer to background theory to support your research question.
- Ensure that you investigate only **one type of human relationship**.
- You can refer to Hazan and Shaver's (1987) short version of the 'love quiz' to help you with the construction of your survey.
- At this point, it may be beneficial for you and your group to write a brief description of your class practical, including the aim, procedure, sampling technique and findings, as well as any ethical considerations, to look back upon while preparing for the exam.

Learning outcomes

By the end of this section, you should be able to:

- Identify the appropriate selection of research methodology to investigate a psychological question.
- Understand the stages of thematic analysis.

HL Extension

- Discuss the impact of technology on interpersonal relationships.

3 section questions ^

Question 1

SL HL Difficulty:

A 1 consent ✓ form is usually signed before a piece of research has begun, where a participant agrees to take part.

Accepted answers and explanation

#1 consent

General explanation

Consent forms are used to educate a participant about what to expect if they decide to take part in the research. It can provide legal protection and clarify the objectives of the research.

Question 2

SL HL Difficulty:

What is one of the most common problems with the use of postal/electronic surveys?

1 They are difficult to administer.

2 There can be a low response rate. ✓

3 They can have researcher bias.



- 4 They might not be replicated easily.

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Explanation

One common problem with using postal/electronic surveys is that there can be a low response rate as compared to other ways of distributing surveys.

Question 3

SL HL Difficulty:

A researcher wishes to investigate the reading ability of 5-year-old children and the amount of television that they watch. From the following list, which would be the most appropriate research question for the researcher to use in their investigation?

- 1 Does the amount of television watched impact a child's reading ability, and why?
- 2 How does the amount of television impact the reading ability of 5-year-old children?
- 3 How can we learn about the amount of television watched and children's reading ability for 5-year-olds?
- 4 The amount of television watched is directly related to children's reading ability for 5-year-olds.

Explanation

Research questions should be clear and specifically address the research area. Of the options provided: 'How does the amount of television impact the reading ability of 5-year-old children?' would be best suited for this research area.

[◀ Previous section](#) [/study/app/psychology-new/sid-540-cid-763690/book/practical-activity-introduction-id-49151/review/](#)

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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

Practical activity: Collect and process

C-4-3: Describe the advantages and disadvantages of different research methodologies.

C-4-7a: Identify and discuss how data is represented and analysed in different forms based on the design of the study and the nature of the data.

C-4-7b: Analyse and interpret different types of data tables, graphs and results.

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Method

Teacher instructions

Goal

- For students to consider the most appropriate method for carrying out their practical.

Facilitation guidance

Now that students have completed their background research, created their research question and constructed their surveys, they need to consider how their data will be analysed. It is important that students plan how they will display and analyse their data at this stage, as this will inform what data they need to collect.

They should also consider the types of bias that can affect their survey and aim to reduce this as much as possible.

- In this phase, the learner needs to clearly present data and its processing, using scientific conventions ([subtopic 1.1](#) (/study/app/psychology-new/sid-540-cid-763690/book/big-picture-id-49350/)).
- Demonstrate how data has been processed and how uncertainties in the data have been considered.

Subtopic question(s)

During this subtopic, you will be working towards answering the following subtopic question:

- What role can a survey play in understanding human relationships?

Now that you have constructed your survey, you need to consider your sampling method.

Making connections

Based on your research into the background theory, you will already have an idea of the type of respondents that you would like to sample for your research. However, as you covered in [section 1.1.8](#) (/study/app/psychology-new/sid-540-cid-763690/book/what-is-sampling-and-why-does-it-matter-id-49358/), there are strengths and limitations associated with each sampling technique.

When deciding on a sampling method, you need to first consider the target population. For example, imagine that a psychologist was interested in studying the role of social media on the mental health of teenagers in your school, and they used a survey to do this. They don't have the time or resources to ask everyone in your school. Instead, they will select a sampling method that can help them generalise from the sample to the target population.

Student view



Psychologists will often consider the following when deciding on a sampling method:

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- Access to potential respondents/participants
- Cost
- Time to conduct the research
- How representative the sample is to the target population

In this case, the psychologist decides to use opportunity sampling because they can wait in the school reception and ask students to complete the survey as they enter the school building. However, why might this method be a problem?

Discuss with your practical group:

- Which sampling technique would be most appropriate for your research?

HL Extension

Technology

Technology has made conducting research easier in many ways.

Consider how each of the following technological advancements has made research easier for psychologists. Specifically, identify ways in which the technology could be used to make all aspects of the survey research method easier:

- email
- online advertisements
- social media apps
- online forms, documents and spreadsheets
- artificial intelligence (AI)
- digital image editing

Results, data collection and analysis

Before you collect your data, you need to consider how you will process this data.

Tables

Tables are important in research as they can help summarise data and highlight trends. Raw data tables list the scores or values obtained during a piece of research for a particular variable. The data is described as ‘raw’ because it has not been processed by descriptive or inferential statistics.

When creating tables, you must ensure that these are clear and concise. They should be well-formatted and have appropriate labels so that a reader can interpret the data.

Examine **Table 1**. Can you identify any problems with it?

Table 1. Raw data table example based on fictional data for memory score and height.

Participant	Memory score	Height (cm)
1	10	120
2	80	145
3	2	170
4	5	123
5	6	
6	7	145
7	2	168
8	7	135
9	3	151
10	8	178

You may have noticed several issues with **Table 1**.

Firstly, it is not clear what the **measurement** is for the memory column as this information is missing. An additional area of concern is that participant 2's memory score is a lot higher than everyone else's. Is this a possible recording error or is it an outlier? An outlier refers to data that deviates significantly from the rest of the data and the distribution of data.

Similarly, you will have noticed that there is a missing score in the height column. In cases of outliers and missing data, a researcher could accept these and conduct analysis of the data. Alternatively, they may decide to remove the data (that is, remove the participant from the sample). If a researcher does this, then they reduce their sample. This can affect the statistical power of the data when they come to conduct descriptive and inferential statistics.

Tables are a useful tool to provide a 'visual check' of the data. However, in this case, it would be challenging to present this data in a graph due to the aforementioned issues.

🔗 Concept

Bias

Recording errors in research can introduce bias, compromising the accuracy and reliability of psychological findings. Examining how these errors occur emphasises the importance of precision and vigilance in the research process.

Reflection question

- How might recording errors in research result in **bias** in psychological findings?

Graphs

You will also need to create graphs for the data collected from your research. Graphs are a useful tool to help illustrate data. Similar to tables, they provide researchers with a 'visual check' of the data.



There are several types of graph that could be used to display the results from research. You will already be familiar with:

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- bar graphs
- line graphs
- histograms
- scatterplots.

Making connections

If you need more information about graphs and the situations in which it is appropriate to use them to display data, refer to the foundational unit ([section 1.1.6](#) (/study/app/psychology-new/sid-540-cid-763690/book/how-can-visual-representations-of-data-inform-psychological-understanding-id-49356/)).

For your practical, you will be collecting quantitative data. You should use tables and graphs to present your data. At a minimum, a graph should include:

- a title that accurately describes what the graph represents
- labelled axes, including the units of measurement recorded in the research
- a y-axis that begins at 0 and goes up to the full range of the possible values for the dependent variable.

Assume that the issues in **Table 1** were as a result of initial recording errors by the researcher. These have now been corrected (see **Table 2**).

Table 2. Raw data table example based on fictional data for memory score and height.

Participant	Memory score (scored out of 10)	Height (cm)
1	10	120
2	8	145
3	2	170
4	5	123
5	6	150
6	7	145
7	2	168
8	7	135
9	3	151
10	8	178

The data from **Table 2** have now been presented in a graph (see **Figure 1**).



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In this situation, a scatterplot was chosen to display the data because the individual scores can be arranged as points on the graph. Scatterplots are a common tool for displaying correlations. It is possible to identify patterns by viewing how the data are presented from the scatterplot. You can add a 'line of best fit' to illustrate the trend for the data (a negative correlation or a positive correlation).

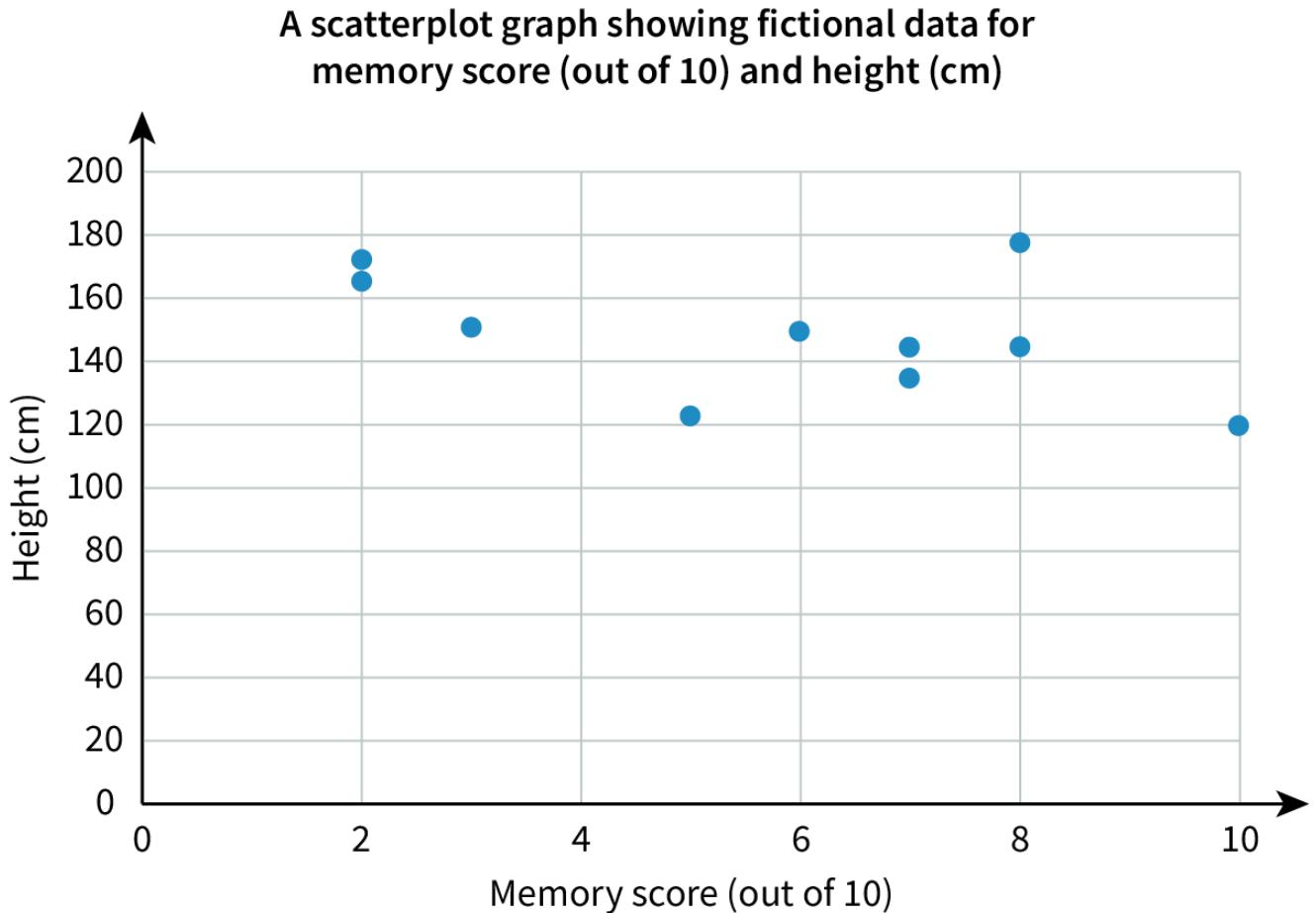


Figure 1. Example of a correctly labelled scatterplot graph for memory score and height (using fictional data).

More information for figure 1

The scatterplot has the title A scatterplot graph showing fictional data for memory score out of 10 and height in centimetres. The vertical axis is labelled Height in centimetres and the horizontal axis is labelled Memory score out of 10. The points are loosely clustered in a horizontal line from left to right.

In **Figure 1**, there does not appear to be a correlation between the memory score and height, which you might have anticipated.

Discuss with your group how you think you should present your data and the types of graph that would be most suitable. When you have discussed this, distribute your survey to **at least 10 people**.

Analysing the data

Well done on collecting your data! Now it is time to analyse your findings. Use the following checklist with your group to help guide you through this process:

1. Review the responses gathered from your survey.
2. Create a table for your results.

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3. Report your data in graph form. Remember that you need to consider what type of graph(s) will best represent your data.
4. Ensure that you add suitable titles and labels to your tables and graphs.
5. Complete a 'visual check' of your data.

Once you have completed these checks, return to your original research question – do your results support this or not?

Paper 2 criteria

Knowledge and understanding

- The response demonstrates detailed knowledge and understanding of the research methodology relevant to the class practical.
- Psychological terminology is used accurately.

Design

- The procedure of the research method is explained with accuracy and detail.
- Psychological terminology relevant to the research method is used effectively.

Application

- The knowledge and understanding of the concept are well developed.
- There are clear and detailed links between the concept and the class practical.

Compare and contrast

- Similarities and differences are discussed in detail.
- Psychological terminology relevant to the research method is used effectively.

Internal assessment criteria

Data collection

- An appropriate and effective data collection tool to measure behaviour has been created.
- Decisions made when creating the data collection tool are explained and relevant to the aim or research question of the investigation.
- Potential challenges when collecting data are explained and relevant to the investigation.

Learning outcomes

By the end of this section, you should be able to:

- Describe the advantages and disadvantages of different research methodologies.
- Identify and discuss how data is represented and analysed in different forms based on the design of the study and the nature of the data.
- Analyse and interpret different types of data tables, graphs and results.

Question 1

- A 1 histogram ✓ displays the frequency of values in a distribution of data.

Accepted answers and explanation

#1 histogram

General explanation

A histogram is one type of graph that can be used to display data. Histograms display the frequency of data, such as how many points students scored.

Question 2

A student decides to investigate their class's favourite colour. The top three colours are red, purple and orange. This data is described as categorical. Which type of graph would be most appropriate to display the data?

- 1 Bar graph ✓
- 2 Scatterplot
- 3 Line graph
- 4 Histogram

Explanation

Bar graphs typically display categorical data. For this scenario, the student would be most likely to use a bar graph to display their data.

Question 3

Correlational data is often presented on:

- 1 A scatterplot ✓
- 2 A histogram
- 3 A bar graph
- 4 A pie chart

Explanation

A scatterplot is used to display correlational data. Each point represents a participant's scores for both variables. A scatterplot may also include a line of best fit.

The other graphs/charts should not be used to display correlational data.

A bar graph displays categorical data (for example, gender or grade at school).

A histogram displays the frequency of values (for example, how many students scored particular grades in a test).



A line graph is used to display quantitative variables and may include a measure of central tendency (for example, means).

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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

Practical activity: Conclude and evaluate

C-4-3: Describe the advantages and disadvantages of different research methodologies.

C-4-7a: Identify and discuss how data is represented and analysed in different forms based on the design of the study and the nature of the data.

C-4-7b: Analyse and interpret different types of data tables, graphs and results. C-4-11: Identify the steps to ensuring credibility in research.

C-4-13: Discuss factors that should be considered when transferring findings of a study to another population or context.



Notebook



Glossary



Reading assistance

Discussion of results

Teacher instructions

Goals

- To evaluate their findings and compare these to their background research and original research question.
- To reflect on why a survey was effective.
- To reflect on what other methods may be appropriate and how those methods would yield different information.
- To discuss factors that should be considered when transferring findings of a study to another population or context.

Facilitation guidance

In this final section of the class practical, students will share their findings and highlight any common themes. Did any of the results surprise them? Did they face any challenges when conducting the survey? Encourage students to reflect on the implications of their findings and return to the themes of the research area: attachment styles and friendship.

Other prompts to guide students: researcher bias, use of closed-ended questions to gather quantitative data, demand characteristics, sensitivity of the topic and so on.

- Learners need to draw a conclusion that is relevant to the research question and is consistent with the data analysis.
- Compare the conclusion with other published sources, such as publications, textbooks and course notes with appropriate referencing.
- Also include possible biases of data. Include practice of analysing data sets.

Subtopic question(s)

During this subtopic, you will be working towards answering the following subtopic question:

- What role can a survey play in understanding human relationships?

How have you found this practical activity so far? Did everything go smoothly, or were there any issues?

If you did experience any issues with the collection of your data or in the analysis, don't worry! This is quite normal in psychological research. Even with the best procedures and plans in the world, there will always be things that could be improved upon after some reflection.

 Student view

Concept

Bias

Exploring how bias arises and influences analysis highlights the importance of critical evaluation in psychological research.

Reflection question

1. Discuss how **bias** can influence the interpretation of data gathered from surveys.

Drawing conclusions

The conclusions from a piece of research are usually included in what is known as the 'Discussion.' This is located towards the end of an academic paper.

When researchers are drawing conclusions from their research, they will usually consider the following aspects:

- Their original research question.
- The background research that they completed before conducting the research. They will compare the similarities and differences with their findings.
- Possible limitations to their study based on the sample, the design and the procedure.
- Implications for their research findings and areas that could be explored in the future.

For example, here is a summary of the conclusion presented by Hazan and Shaver (1987) to their study: 'Romantic love conceptualized as an attachment process.' ↗ (<https://doi.org/10.1037/0022-3514.52.3.511>)

'... love and loneliness are emotional processes that serve biological functions ... For that reason, the attachment approach seems worth pursuing even if future study reveals (as it almost certainly will) that adult romantic love requires additions to or alterations in attachment theory. It would not be surprising to find that adult love is more complex than infant–caregiver attachment, despite fundamental similarities.'¹

Your conclusions do not need to be written in this way! Yet, Hazan and Shaver (1987) do provide a summary of what they found from their research and possible areas for future research.

Working with your practical group, complete the following tasks:

1. Based on the data that your group collected, identify at least **two conclusions** and link these to your research question.

Psychologists also reflect on the research process as well as drawing conclusions about research findings.

Remember that many psychologists will spend months, if not years, working on a particular project. It is important, therefore, to reflect on your research. This includes considering the bias that may have affected the data collection and the interpretation of the results. For example, if your practical group chose to study friendship, was your sample composed of your own group of friends? If so, how might this have affected the results?

2. Now reflect on the research process, using the following questions:

- a. Did the results surprise you?
- b. What challenges did you face? And how did you overcome them? Did you enjoy the process? Be honest!
- c. If you were to carry out the research again, would you change anything? Try to be specific.



Reflecting on the process

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- Reflect back on your process. What challenges did you have when conducting the research? How did you overcome these?
- What challenges did you face when processing the data collected for the survey? How did you overcome these?
- If you were to repeat the process, what steps would you take to ensure credibility in your survey?
- What did you learn about the survey process? Why is the type of survey you used beneficial in psychological research?
- Compare and contrast the survey method with the method of observation you used in your previous practical (in [subtopic 3.3](#) (/study/app/psychology-new/sid-540-cid-763690/book/the-big-picture-id-49672/)).
- How might the skills learned through this process be applied to other research contexts?
- Can you evaluate how the findings from this practical would transfer to other contexts?

Paper 2 criteria

Knowledge and understanding

- The response demonstrates detailed knowledge and understanding of the research methodology relevant to the class practical.
- Psychological terminology is used accurately.

Design

- The procedure of the research method is explained with accuracy and detail.
- Psychological terminology relevant to the research method is used effectively.

Application

- The knowledge and understanding of the concept are well developed.
- There are clear and detailed links between the concept and the class practical.

Compare and contrast

- Similarities and differences are discussed in detail.
- Psychological terminology relevant to the research method is used effectively.

Making connections

Now that you have completed this practical activity, how might the skills and knowledge that you have learned be applied to some of the topics in the IB DP Psychology course, or your other IB subjects?

HL Extension

Culture

Cross-cultural research, often referred to as etic research, poses certain issues around language and culture.

For example, in order for a Mandarin-speaking researcher to conduct a survey-based investigation within an English-speaking culture, they would need to translate the survey into English or use a live interpreter.

Student view

Reflection questions

1. What are the possible disadvantages of translating a survey into another language?

2. What specific steps can be taken by a researcher conducting research in a foreign language, in order to increase the validity of their survey?
3. Which type of validity (face validity, construct validity, etc) would be violated by language interpretation issues?

Congratulations on completing this practical activity! Your learning will help you during the creation of your internal assessment (IA) as well!

Internal assessment criteria

Discussion

- Potential findings of the investigation are described in detail and the implication(s) for policy/practice are explained.
- One or more relevant examples of how researcher bias may affect the investigation are discussed.
- The usefulness of one relevant additional research method is discussed with reference to increasing the understanding of the area of investigation.

Learning outcomes

By the end of this section, you should be able to:

- Identify and discuss how data is represented and analysed in different forms based on the design of the study and the nature of the data.
- Analyse and interpret different types of data tables, graphs and results.
- Identify the steps to ensuring credibility in research.
- Describe the advantages and disadvantages of different research methodologies.
- Discuss factors that should be considered when transferring findings of a study to another population or context.

¹ Hazan and Shaver (1987)  (<https://doi.org/10.1037/0022-3514.52.3.511>) ‘Romantic love conceptualized as an attachment process,’ *Journal of Personality and Social Psychology*, Volume 52, No. 3, Pages 511–524. Copyright © 1987 by the American Psychological Association, Inc. Reproduced with permission.

3 section questions ^

Question 1

SL HL Difficulty:

When reviewing the findings from a study, a psychologist is mindful of researcher bias, which could influence the interpretation of the results.

Accepted answers and explanation

researcher



General explanation

Researcher bias can be intentional or unconscious. Psychologists try to be mindful of their own biases, otherwise it can affect the interpretation of the results.



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Question 2

SL HL Difficulty:

When drawing conclusions from research findings, what might a psychologist NOT consider?

- 1 The original research question
- 2 The types of graph used in their research
- 3 The background research that is relevant to their study
- 4 Possible limitations to their study based on the design, sample and procedure

Explanation

A psychologist is likely to consider the original research question, background research and possible limitations to their study based on design, sample and procedure. Also, they may compare their findings to that of other similar pieces of research.

Question 3

SL HL Difficulty:

Each year your school gathers data about the proportion of students achieving certain IB scores within the following ranges: 45–40, 39–35, 34–30 and so on.

What type of graph would be appropriate to display this data?

- 1 Histogram
- 2 Bar graph
- 3 Line graph
- 4 Scatterplot

Explanation

A histogram displays the frequency of data in a distribution and would be appropriate for use in this scenario for the range of IB scores.

A bar graph would **not** be used as these are typically used for displaying categorical data such as gender and age.

A line graph would **not** be used as these are typically used to display quantitative data, such as scores on an IB test (but not the frequency of the data).

Also, a scatterplot would **not** be used as these display correlational data that illustrate a relationship between variables, such as gender and height.

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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

Checklist

Section

Student... (0/0)

Feedback

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Learning outcomes



Notebook



Glossary

Reading
assistance

By the end of **subtopic 4.3**, you should be able to:

- Identify the appropriate selection of research methodology to investigate a psychological question.
- Describe the advantages and disadvantages of different research methodologies.
- Identify the steps to ensuring credibility in research.
- Identify and discuss how data is represented and analysed in different forms based on the design of the study and the nature of the data.
- Understand the stages of thematic analysis.
- Analyse and interpret different types of data tables, graphs and results.
- Discuss factors that should be considered when transferring findings of a study to another population or context.

HL Extension

- Discuss the impact of technology on interpersonal relationships.

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4. Human relationships / 4.3 Practical: What role can a survey play in understanding human behaviour?

Collected research studies



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Notebook



Glossary



Reading
assistance

Teacher instructions

These are the main research studies mentioned throughout this subtopic. However, this is not an exhaustive list, and you are encouraged to use other research studies that are relevant.

Students are not required to memorise all details of the studies, but may wish to include them to support their explanations.

Summary	Evaluation
<p>Hazan and Shaver (1987)  https://psycnet.apa.org/doiLanding?doi=10.1037%2F0022-3514.52.3.511</p> <p>Location of study USA</p> <p>Aim To investigate childhood attachment styles and adult romantic/social relationships</p> <p>Method Analysis of over 620 responses to a survey distributed in newspapers to measure childhood attachment and views of adult relationships</p> <p>Results Respondents who were securely attached as children were more likely to have lasting and satisfying relationships as an adult. Conversely, those respondents who identified as insecurely attached were more likely to find relationships challenging, and more were likely to be divorced.</p> <p>Conclusion Experiences in childhood influenced attitudes to love and social relationships in adulthood.</p>	<p>Strengths</p> <ul style="list-style-type: none"> Standardised survey and procedure Quantitative data enhances reliability of the study. <p>Limitations</p> <ul style="list-style-type: none"> Sample could have been self-selecting, reducing the validity of the results <p>Ethical considerations</p> <ul style="list-style-type: none"> All researchers conducting studies within psychological research are expected to consider ethical guidelines. <p>Research considerations</p> <ul style="list-style-type: none"> No qualitative data collected in the first study to help explain views of adult relationships (there was a second follow-up study conducted)



Student
view

Summary	Evaluation
<p>Ainsworth and Bell (1970) ↗ (https://doi.org/10.2307/1127388)</p> <p>Location of study USA</p> <p>Aim To investigate childhood attachment styles</p> <p>Method Controlled observation in which a standardised procedure is carried out while observers watch via a one-way mirror. The study uses a real-life mother and baby around the age of 1 year old. The mother leaves and then re-enters the room and the baby's reaction is observed.</p> <p>Results Possible to classify infants into three types of attachment styles: securely attached, insecurely attached/avoidant and insecurely attached/ambivalent.</p> <p>Conclusion Ainsworth concluded that the way infants formed attachments early in life impacted how they build relationships in adulthood.</p>	<p>Strengths</p> <ul style="list-style-type: none"> Controlled observation makes it replicable. Quantitative data enhances the study's reliability. Qualitative observations also add in-depth data. <p>Limitations</p> <ul style="list-style-type: none"> Unpredictable behaviour from babies, which reduces reliability, as the behaviour in the unfamiliar lab setting might not represent their usual responses <p>Ethical considerations</p> <ul style="list-style-type: none"> All researchers conducting studies within psychological research are expected to consider ethical guidelines. <p>Research considerations</p> <ul style="list-style-type: none"> Low ecological validity, as it was a lab setting. However, it may be possible to claim some external validity, as the behaviour of mother and child could be said to reflect patterns from real-life settings.

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Section

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Feedback



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Assign

