



Introduction to Research

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Session overview



WHAT IS
RESEARCH



DOING
RESEARCH



PLANNING
RESEARCH

The background of the slide is composed of large, overlapping, irregular shapes in shades of blue, orange, and red, resembling thick paintbrush strokes. In the center-left, there is a light grey, rounded, shield-like shape with a dotted white border. Inside this shape, the text "What is research?" is written in a dark brown, serif font.

What is
research?

What is research?

‘Research’ means the attempt to derive generalisable new knowledge by addressing clearly defined questions with systematic and rigorous methods.

- Health Research Authority, 2016



What is research?



A form of enquiry



A way of exploring answers to questions we have



A way of testing out theories or conducting experiments



A way of generating new ideas or understanding

Research is...

- ♦ 'Finding out' something we don't know or want to know more about
- ♦ Our methods vary depending on the topic and how much we want to know
- ♦ At this level of study, you are expected to use more than just opinion
 - You must develop informed positions on issues
 - How?
 - Reading, debating, experimenting, critiquing and reflecting on information
- ♦ Research is simply – seeking out information to answer questions



Empirical Research...

Empirical Research

Research based on experimentation or observation (evidence)

Such research is conducted to test an hypothesis

The importance of empirical research in Psychology?

Find effective
treatment

Aid service
providers

Aid policy
makers

To assess
diagnostic
measures

Interventions

Testing
Theory

Approaches to Research.

Scientific Observation: A systematic empirical investigation that is structured to answer questions about the world

Research Method: Systematic approach to answering scientific questions



Goals of Research



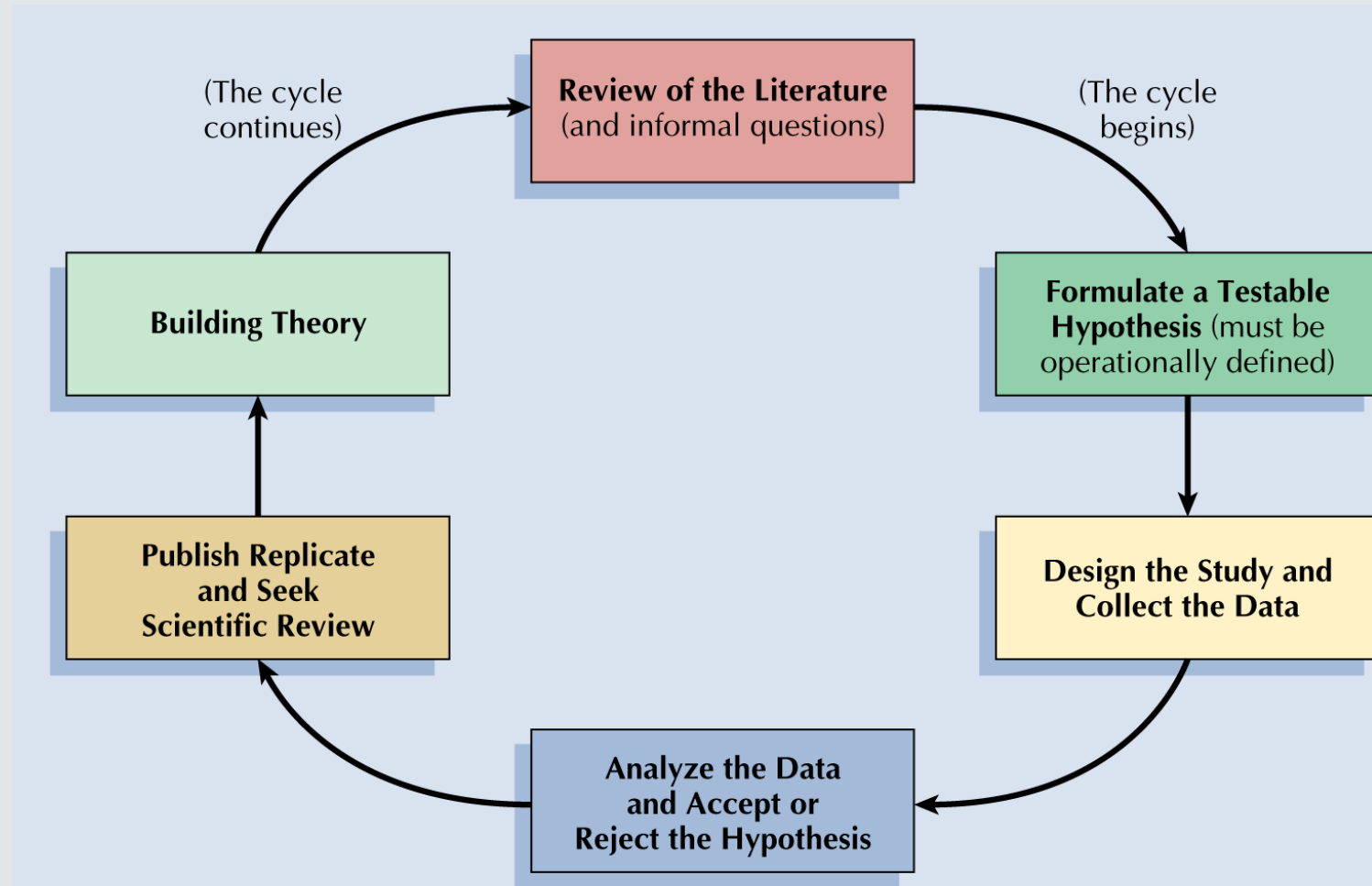
Description of behaviour using careful observations

Explanation involves identifying the cause(s) of behaviour

Prediction allows for specification of the conditions under which a behaviour will occur or not

Psychological knowledge can be used to assist changes in behaviour

Overview of the Scientific Method



Where do the ideas come from?

Everyday Life

- What are the most effective ways to teach about mental health?
- What personal characteristics make a favorable impression in a job interview?
- What other questions come to mind?

Practical Issues or Needs

- Why do some employees have very high absenteeism rates.
- Why do more car accidents happen on specific stretches of the road?
- Any others?

Past Research

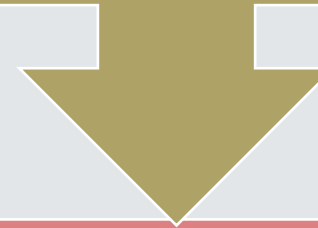
- Knowledge develops in small steps. Rarely does one study answer all the questions to the research topic.

Theory

- Summarize & integrate existing knowledge
- Suggests new relationships between factors
- Helps one make new predictions about a phenomenon based on the theory.

Remember...

Psychology is regarded as a science



Science at a basic level attempts to answer questions through careful observation and collection of data

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Doing
research

Doing research

Throughout the module
we have covered –
searching for and using
literature

This 'doing' research
section will talk about
conducting research
projects

From planning, to
conducting, to analysis

‘Doing’ research

When you begin your research methods module you will be introduced to different types of research that are often described as being either

- Qualitative vs Quantitative
- Experimental vs Non-Experimental
- Exploratory vs Confirmatory

Where do each of these belong?



Interview



Lab-based cognitive
task



Focus Group



Questionnaire with
likert scale answers



Questionnaire with
text answers

‘Doing’ research



Wide range of methods (Qualitative & Quantitative)



Talking to people (interviews, focus groups)



Giving people questionnaires (measuring attitudes, feelings, health etc)



Intervention research (implementing something new and seeing if it works)



Experimental research (testing or manipulating things in a controlled setting)

So, how do we do it?

- ♦ We can't 'just do it'
- ♦ Strict approval processes
 - Research proposals/grants
 - Funding applications
 - Ethical approval processes
- ♦ Scientific and ethical rigour expected – e.g. BPS guidelines
- ♦ You will conduct your own research at level 6, but will also have opportunities throughout level 4 and 5 to plan research, create studies using various methods, collect data, analyse data





There is not one best way of doing research

The best of way of thinking about the different types of research designs and methodologies that exist in psychological research is that a researcher has an overflowing basket of research options to choose from

Your job is to select the best option, or collection of options, that allow you to explore your research question in the most thorough way possible*



**of course... the reality of research is that we are often constrained in our choices by time, money or experience.*

Most importantly, therefore, the research options that we choose must always be appropriate and deliverable within the timescales and scope of a project, and within the researcher's experience/expertise.

Rather than think “*what is THE best – this or that*” think “*what is best for answering this specific research question*”.

The type of research design chosen should never be based on what you think is “easy” or “your favourite” (NOT good research!) but on a sensible consideration of the most appropriate and feasible design for answering the question you want to explore.



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Activity

The virtual reality 'mirror game' that could help diagnose schizophrenia before it's too late

- Mirror game requires patients to copy the movement of a computer avatar
- Test compared volunteers' movements with those of schizophrenia sufferers
- Researchers say it will spot any similarities and provide an early diagnosis
- Observing how people are able to copy or move and interact socially with a 3D image provided more accurate results than clinical interviews

Stop brooding if you want to beat depression: Experts find sufferers mental health improve if they avoid dwelling on negative thoughts

- Study says if sufferers avoid thinking over same problem mental health improves
- Experts found approach was successful in treatment of meta-cognitive therapy
- Many Britons suffer with mental health, with depression affecting one in six

In groups consider:

- ♦ The assumptions people will make based on these headlines
- ♦ What you know about the strength of evidence underpinning this
- ♦ The critical questions a psychological researcher would want to ask about the headlines
- ♦ Question EVERYTHING

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Asking good
research
questions

Asking good research questions

Asking “good” research questions is the key to “good” research. But what do we mean by a “good” research question? It is simple really... good psychological research stems from research questions that:

- Are clear and simple
- Are relevant, necessary and timely
- Introduces appropriate psychological concepts and variables that are clearly defined and can be measured
- Are answerable



Does mindfulness work?

The first questions that reviewers will often ask about a proposed research question are why and how – and yet these are often the questions that novice researchers cannot answer!

The easy bit is often to come up with a potential research question “*why do people do this*”, “*why do people behave in that way*” “*why do some people seem more aggressive/nice/anxious than others*” “*how can we help people feel better about X, Y, or Z*”.

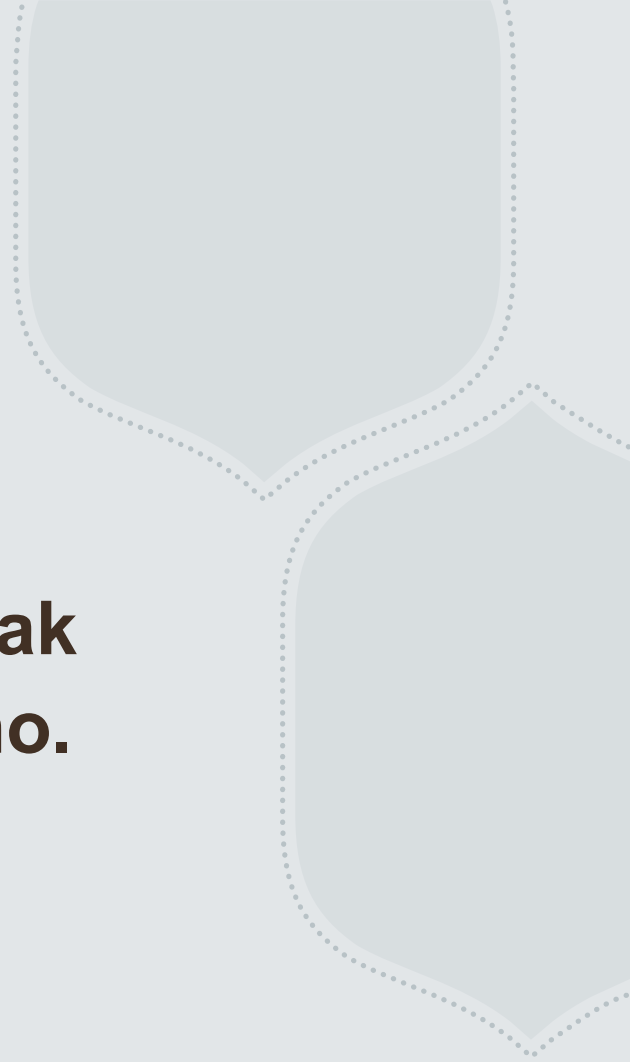
The challenge is then to break that question down in order to be able to answer:

- Why? Why is this needed? Context? Evidence base? Novelty?
- How? How will you actually design a study to enable you to answer this question in the most appropriate way?
- What? What are you measuring and how are you capturing this information
- Who? Who are you interested in and how will you access this group?

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Activity

Identify three different research questions that could explore “does mindfulness work” and break each question down into why, how, what and who.



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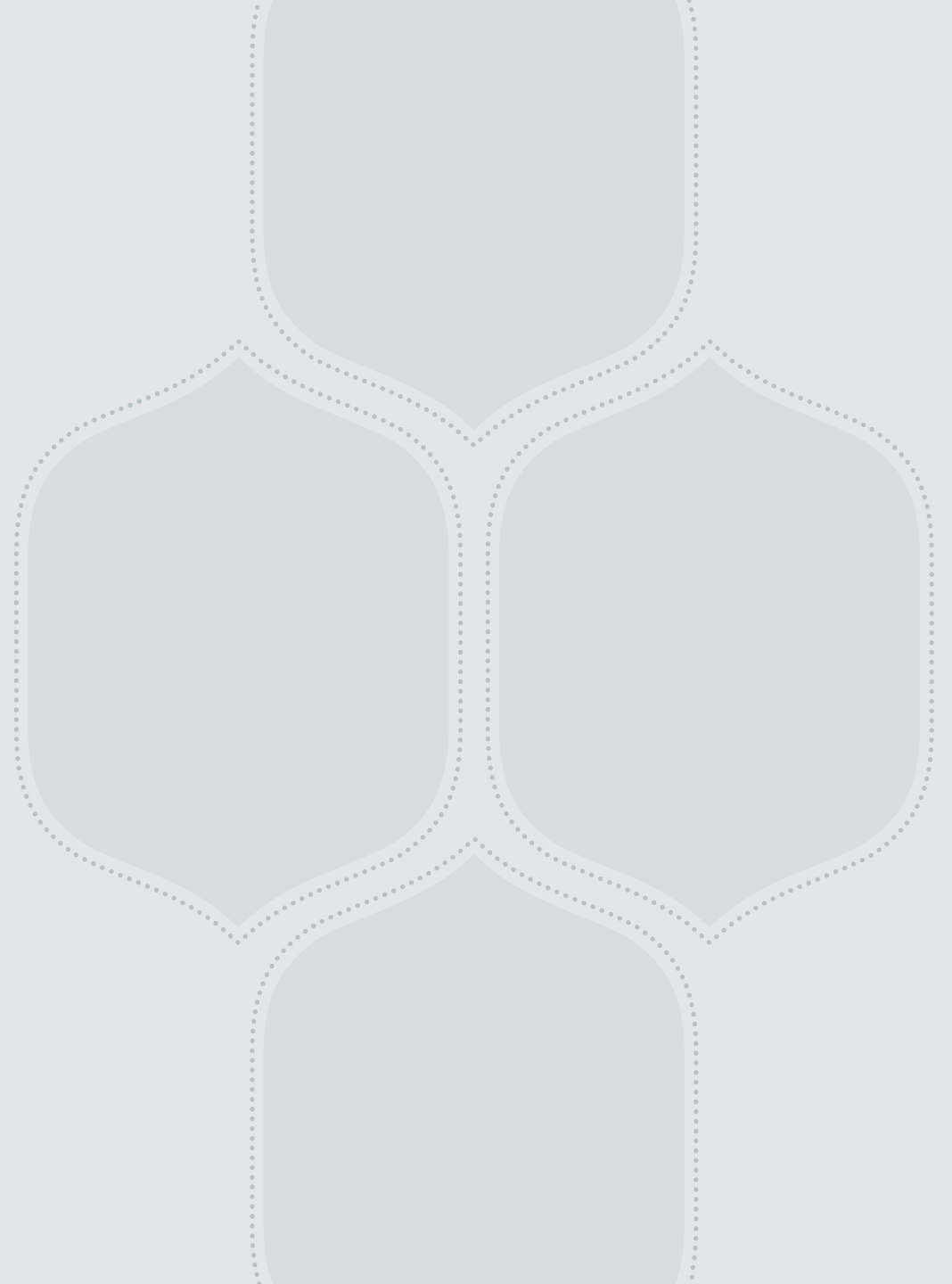
Research proposal



Title (self- explanatory)

LAY SUMMARY

(200 words max)



BACKGROUND
LITERATURE
(400 words max)

- Summary of literature to support your research investigation

SUMMARY
OF
METHODS
(400 words
max)

- WHAT will you do?
- WHO are your participants?
- HOW will you recruit them?



ETHICS

- ♦ Familiarise yourself with the BPS Ethics and have a go at identifying some ethical issues or considerations
- ♦ At least 2 ethical considerations

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Activity

Research Proposal

- ♦ In groups of 2-3 work on a research proposal to answer one of your questions identified in the previous activity

