

BMHP5019_BIRM

Introduction to Research

Week 1

Introduction to the Module

What is research? Why is research Important?

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During this session...

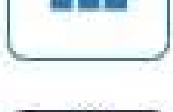
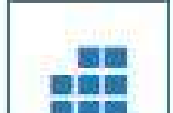
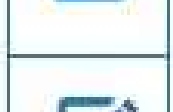
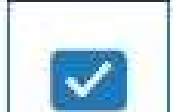
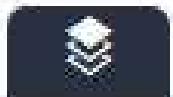
Check the feedback
from our previous
modules.

Provide an
overview of the
BMHP5019_BIRM
module.

Introduce the
concept and
purpose of
research.



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Take a moment to look at
your 'Feedback' from the
modules completed last
term.



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Welcome to the module!



Module Aims:

-To develop skills of independent enquiry, research and analysis by undertaking a sustained research project in order to investigate a topic related to the health, care or digital professions.

Learning Outcomes.

Upon successful completion of this module, the student should be able to:

- Use academic research and examination of literature to independently examine an area of study related to the health care or digital professions,
- Evaluate, justify and present research outcomes.

What will we be learning each week?

Week 1 - What is research? Why is research important?



Week 2 - What is a scoping review?



Week 3 - Developing your proposal - aims, objectives, review questions and ...



Week 4 - Revision of key concepts and workshop for Component 1



Week 5 - Introduction to Literature Review



Literature Review

Week 6 - In-depth look at Primary Research



Week 7 - In-depth look at Secondary Research



Week 8 - Thematic Analysis - for your Scoping review.



Week 9 - Revision of key concepts



Week 10 - Workshop Support for completion of Component 2



Assessments

Component	Task Overview	% of module	Submission Week
Component 1	Research Proposal – 400 words	10	Week 5
Component 2	Research Report – 3600 Words	90	Week 11

There will be time allocated within class to develop each piece of work, you must show your lecturer progress during class sessions.



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Reading and the resource list

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Reading List - Online access to resources

The online resources are collected together into the Leganto Reading list for you to access and use.

Resources for further independent study

Each week, you will be signposted to further relevant reading for you to engage with independently.



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Activity –

Visit the Module Moodle Page

Complete the 'Choice' activity.



What do you think is your strongest research skill?

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Introduction to Research

- What do we mean by the term 'research'?

"Research is the systematic and rigorous process of enquiry which aims to describe phenomena and to develop and test explanatory concepts and theories."

Bowling (2014, p1)



The Research Cycle



Introduction to research

Research studies are first published in articles which appear in journals. Some government or charity led research may be published on their websites or newsletters.

The press (newspapers and news channels) will then quote the research in their new reports.

For the purposes of this module, we will be focusing on research which is published in peer reviewed journal articles.

Clinical Medicine Insights: Oncology
Volume 18, 2024
© The Author(s) 2024, Article Reuse Guidelines
<https://doi.org/10.1177/11795549241228235>

Sage Journals

Navigating Breast Health: From Screening to Survivorship - Original Research



Breast Cancer in Young Women: Is It Different? A Single-Center Retrospective Cohort Study

Omalkhair Abulkhair¹, Ahmad Omair², Dorothy Makanjuola³, Manal Al Zaid⁴, Lolwah Al Riyees⁴, Nafisa Abdelhafiez⁵, Emad Masuadi⁶, Ghaida Alamri⁷, Fatinah Althan⁸, Abdulmohsen Alkushi⁹, and Ann Partridge¹⁰

Introduction: Breast cancer (BC) is one of the commonest cancers among women worldwide. Differences regarding tumor biology, presentation, genetics, and molecular subtypes may contribute to the relatively poorer prognosis among younger women. Limited information exists regarding pathologic characteristics and long-term outcomes among this group.

Why do you think it is important to read the primary source of the information rather than relying on news reports of the findings?

Think and plan

The first step in research is deciding what to investigate.

I wonder if brown haired people have more fun than blonde haired people?



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There needs to be a 'rationale' or reason for your research question. Some researchers begin by asking themselves... So what?
So, what impact will my research have if I do find out the answer to my 'research question'?

I wonder if people living in Birmingham are exposed to dangerously high levels of pollution?

Activity - Think and plan

What areas of research are you interested in?

In pairs or small groups **make a list of five areas** of research that you are interested in. Post your list on the module Padlet page.

- Think about why you are interested in each of these areas.
- What value would researching this area have for other people?



Feedback

- What ideas did everyone have?
- Are there any common areas of interest?



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Break

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What is 'Peer review' ?



"peer review"

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What methods exist?

Primary

Secondary

Quantitative

Qualitative

Mixed
Methods

During this module you will be developing your own piece of secondary research, to do this you will be examining lots of primary research studies.

Being clear on the differences between these terms is important for your progress.

Primary Research



Primary research means that a study has been completed by the authors of the journal article with a first-hand sample of data that they have collected from participants.

We will look in detail at how to navigate Primary Research studies during Week 6.

A primary research study can be quantitative, qualitative or mixed methods.

A primary research study will have an abstract, introduction, hypothesis, methods (detailing sample size and recruitment information), results, analysis, discussion, conclusion and reference list.

Secondary Research

A research study that has used secondary data are very common and can be very useful in developing our knowledge of a subject.

Secondary Data can come from official statistics that have been collected by organisations, governments. For example, ONS or NHS data

Secondary research can also examine the findings of other studies, for example – a systematic analysis of primary research studies.

Which researchers are using a Primary method and which are using a Secondary method?

Primary or Secondary?

A researcher interviews 16 people at a hospital about their eating habits



A researcher examines the admissions data for a busy emergency department to see if there is an increase or decrease in admissions during bank holidays.



A researcher sends out 250 questionnaire to the families of residents in a nursing home to investigate their awareness of dementia symptoms.



Quanti or Quali ?

- Quantitative Research

Scientific research relies heavily on quantitative (numerical) data. This means it focuses on changes or differences that can be measured, this aligns with the positivist approach discussed earlier.

Standardised measurements are used, such as frequency (number), time, weight, scores on tests or financial information.

Often, quantitative studies are researching **correlation** (cause and effect) between two variables.

For example, A quantitative study research question may be - Is there a correlation between stress level and calorie intake? So if gender, age and level of education are the same for a group of participants we can increase their stress level (variable X) and see if it causes and increase or decrease in their calorie intake (variable Y).

The sample (group) of participants (people taking part in the study) is vital to a primary research study and will be discussed in detail in week 6.

Quantitative research will often use questionnaires, laboratory tests, or field data.



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Quanti or Quali ?

Qualitative Research

Qualitative research methods are those investigative approaches that result in descriptive textual descriptive information. This is not easily 'measurable' and can become subjective.

This type of research is especially useful when examining: opinions, feelings and values or to examine a case study.

Qualitative research is exploratory in nature, often aiming to understand the complex reasons for human behaviours.

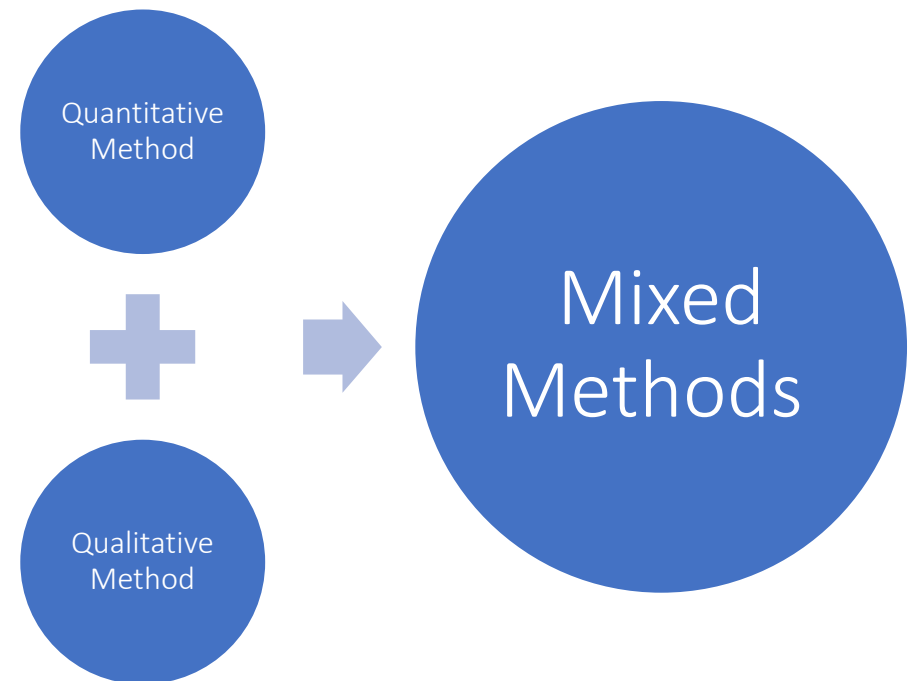
Common qualitative methods include; case studies, focus groups, interviews.

Some studies use quantitative methods to explore a broad sample of participants.

For example, 1000 questionnaires about our attitudes towards making a GP appointment online.

These studies may then seek more contextual or more detailed information about this topic and use a qualitative method to collect this data.

For example, Conduct three focus groups to explore the reasons behind negative attitudes towards online GP appointments.



Activity – Article – Quali or Quanti?

- Look through the selection of journal articles in the week 1 folder.
- Identify:
 - A study that has used **primary** data.
 - A study that has used **secondary** data.
- For each of your chosen studies, determine whether they have used a **quantitative** approach or a **qualitative** approach.

Feedback to the group

- Which studies did you focus on?
- What methods were used?

Reflect:
How easy or hard was it to engage
with the studies?



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- Remember that every researcher starts somewhere.
- Give yourself time to develop.

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Research terms

Hypothesis

- A hypothesis is a provisional idea whose merit requires further evaluation. In research, a hypothesis must be stated clearly and is often directional (increase or decrease)

Rationale

- The explanation of the reason or reasons for researching something. We will focus on this in detail in week 3.
- A clear description of why researching a topic has relevance and why your particular study is important in filling a 'gap' in our current understanding.

Literature review

- A literature review are systematic syntheses of previous work around a particular topic.
- We will explore this process in detail during week 5.

Analysis

- The process of breaking down the data collected into meaningful information that conveys some meaning. Quantitative analysis often includes statistical analysis of variance and correlation. Qualitative analysis often uses language analysis or the identification of common themes in their results.

Two vital skills for researchers.

Effective
Time Management

Critical Thinking



Time Management

A key skill for a researcher is managing their time effectively.

Think back to your first term of level 4 and your 168 hours activity, do you still fit in your independent study time into your week?

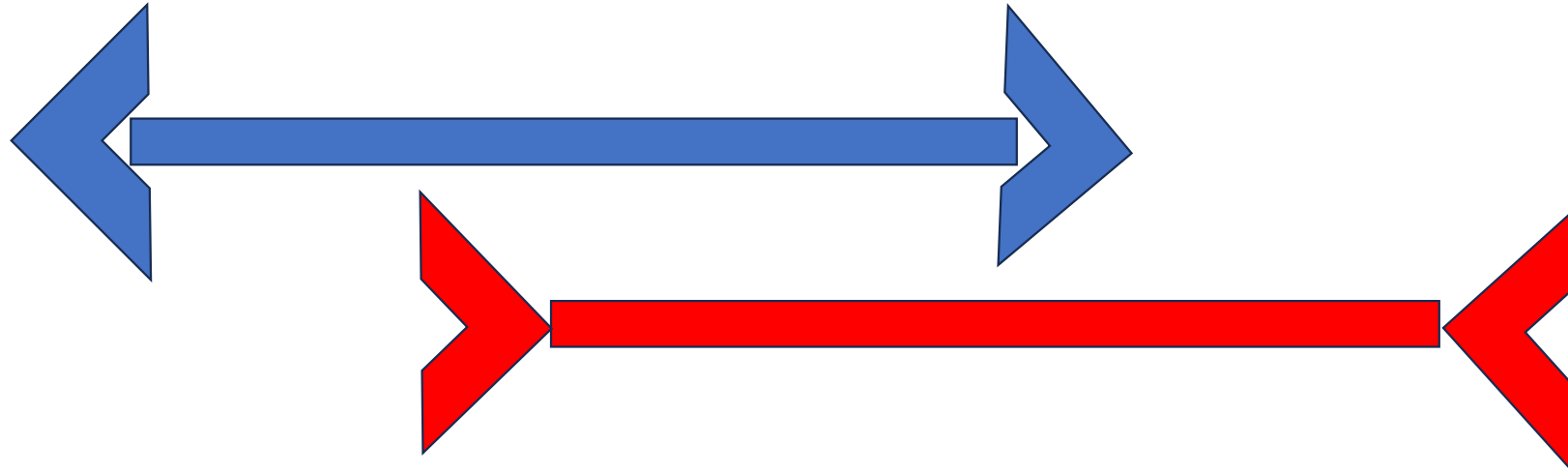
Remember the 5D Strategy?

- Do it
 - Delay it
 - Delegate it
 - Drop it
 - Do it less well
- (Burroughs, 2019)

Think about your workload over the next ten weeks as well as your other commitments and tasks in everyday life.

Can you apply the five D's to your workload and commitments?

Critical Thinking



Critical thinking is not the same as 'criticism'

Critical thinking requires you to take your time to consider the information in front of you. Identifying the strengths and weaknesses of a study as well as the relevance and currency.

As you begin your reading for this module, remember the CRAAP test?

Currency

Relevance

Authority

Accuracy

Purpose



UWTSD Library Support

Academic and InfoSkills

Our Skills programme is designed to create opportunities for students to develop their transferable academic and information skills, facilitating both their academic success and employability. The curriculum covers a wide range of topics – from finding library resources to fake news to managing your online presence.

Our team of Academic Liaison Librarians have developed a series of online Units that allow you to develop your skills anywhere, anytime, to suit you. Click the tiles below to get started:



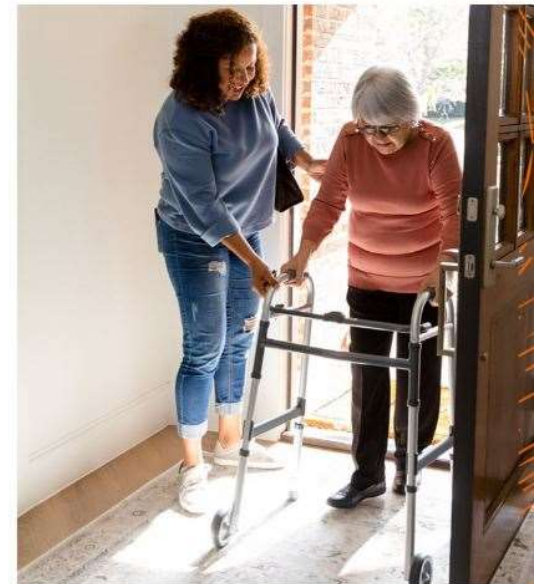
The UWTSD Library team have provided additional support to help you to develop your research skills. These are available for you to work through at your own pace.

What impact does research have?

The Medical Research Council (MRC) is part of UK Research and Innovation. The MRC Impact Showcase provides information about how research has impacted the world we live in.

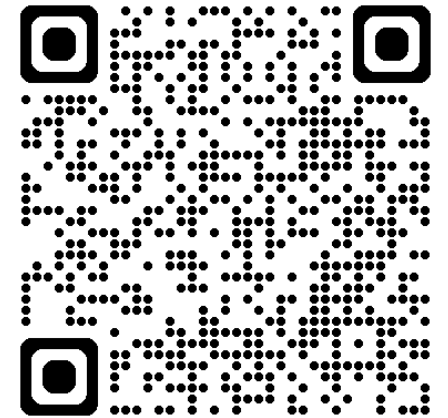
Preventing falls in older people

- Falls are a significant concern for older people and come at a cost of more than £2.3 billion per year to the NHS
- Home adaptation services – such as stairlifts, grab-rails and ramps – are available for those who want to continue living in their home. However, until now, there has been no evidence to demonstrate their effectiveness
- Researchers from the MRC-funded Health Data Research UK have created a dataset that shows these adaptations can help prevent falls and also identifies those most at risk of falling. The research could help inform policy for proactive interventions



Activity

In groups explore the MRC Impact showcase and choose one area of research that you feel is most interesting.



<https://www.discover.ukri.org/mrc-impact/index.html>

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