

Cambridge TECHNICALS LEVEL 3

Cambridge  
TECHNICALS  
2016

# HEALTH AND SOCIAL CARE

Unit 25

Research methods in health, social  
care and childcare

A/615/1576

Guided learning hours: 120

Version 2 - November 2017 - black lines mark update

## **LEVEL 3**

### **UNIT 25: Research methods in health, social care and childcare**

**A/615/1576**

**Guided learning hours: 120**

**Essential resources required for this unit:**

**This unit is externally assessed by an OCR set and marked examination.**

#### **UNIT AIM**

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Research is a fundamental part of health and social care. It is through research that we know what treatments, interventions and practices are most effective, for whom and in what circumstances. It is how we improve our understanding of the needs of groups and individuals and develop more effective ways of meeting their needs.

Health and social care research begins with research questions, such as, "What are the most effective treatments for individuals with long-term physiological conditions?" The most appropriate research methods to use will vary depending on the research question.

You will find out about different research approaches and methods and their strengths and limitations. Ethics are a key part of carrying out research and you will find out how researchers ensure their investigations cause no harm to participants.

In this unit, you will be required to carry out research by using secondary sources around a particular focus in health, social care or childcare.

This unit is particularly relevant if you plan to continue studying at a higher level.

## TEACHING CONTENT

The teaching content in every unit states what has to be taught to ensure that learners are able to access the highest grades.

Anything which follows an i.e. details what must be taught as part of that area of content. Anything which follows an e.g. is illustrative.

For externally assessed units, where the content contains i.e. and e.g. under specific areas of content, the following rules will be adhered to when we set questions for an exam:

- a direct question may be asked about unit content which follows an i.e.
- a direct question will not be asked about unit content which follows an e.g.

Learning outcomes	Teaching content	Exemplification
The Learner will:	Learners must be taught:	
<p>1. Understand the purpose of research in health, social care and childcare</p>	<p>1.1 Areas of research:</p> <ul style="list-style-type: none"> <li>• health, i.e.               <ul style="list-style-type: none"> <li>○ treatment</li> <li>○ health policy</li> <li>○ practices in health care</li> </ul> </li> <li>• social care, i.e.               <ul style="list-style-type: none"> <li>○ interventions</li> <li>○ social care policy</li> <li>○ practices in social care</li> </ul> </li> <li>• childcare, i.e.               <ul style="list-style-type: none"> <li>○ child development</li> <li>○ early years and childcare policy</li> <li>○ practices in early years and childcare</li> </ul> </li> </ul> <p>1.2 Purposes of research in health, social care and childcare, i.e.</p> <ul style="list-style-type: none"> <li>• to improve outcomes for individuals</li> <li>• to establish an evidence-base for treatments/interventions</li> <li>• to improve practice</li> </ul>	<p>1.1 Learners must understand what is meant by ‘research’ in health, social care or childcare and the areas that research focuses on. They will be able to choose one of the three areas of research to be the focus of the independent research they will carry out in preparation for the exam.</p> <p>Learners should gain experience in reading a range of research reports in areas of health, social care or childcare. They should identify and discuss the purpose of the research they read, i.e. think about how the findings might be used and who they might be useful to.</p>

Learning outcomes	Teaching content	Exemplification
The Learner will:	Learners must be taught:	
	<ul style="list-style-type: none"> <li>• to identify gaps in provision</li> <li>• to identify the needs of groups or individuals</li> <li>• to inform policy</li> <li>• to increase knowledge and understanding</li> <li>• to measure impact</li> </ul>	
<p>2. Understand research methodology, methods and ethics</p>	<p>2.1 Research methodologies, i.e.</p> <ul style="list-style-type: none"> <li>• Quantitative</li> <li>• Qualitative</li> <li>• Multi-methodology (mixed methods)</li> </ul>	<p>2.1 Learners should understand that methodology means the approach you use to carry out research. Methodology is linked to beliefs about what counts as knowledge.</p> <ul style="list-style-type: none"> <li>• Quantitative methodology assumes that things can be measured reliably. It involves using objective measurements and analysing statistical or numerical data. The aim is to either build evidence for theories / hypotheses or to disprove them.</li> <li>• Qualitative methodology recognises that some things can't be measured. Data collected is usually words rather than numbers. The aim is to achieve in-depth understanding of the aspects studied.</li> <li>• Multi-methodology acknowledges that qualitative and quantitative methodologies are complementary and can be used together in a research study to gain a holistic understanding. Quantitative methodologies are best for finding out what is happening. Qualitative methodologies are best for exploring why and how things are the way they are.</li> </ul>



Learning outcomes	Teaching content	Exemplification
The Learner will:	Learners must be taught:	
	<p>2.2 Research methods, i.e.</p> <ul style="list-style-type: none"> <li>• primary methods, i.e. <ul style="list-style-type: none"> <li>○ experimental method (Randomised Controlled Trial)</li> <li>○ survey/questionnaire</li> <li>○ observation, i.e. formal and informal</li> <li>○ interviews, i.e. structured, semi-structured, unstructured, focus groups</li> <li>○ case study</li> <li>○ action research</li> </ul> </li> <li>• secondary methods, i.e. <ul style="list-style-type: none"> <li>○ literature review, i.e. <ul style="list-style-type: none"> <li>▪ journals</li> <li>▪ books</li> </ul> </li> <li>○ other documentary sources, i.e. <ul style="list-style-type: none"> <li>▪ government organisations</li> </ul> </li> <li>○ published statistics, i.e. <ul style="list-style-type: none"> <li>▪ census data</li> <li>▪ government statistics, e.g. ONS, DH, DfE</li> </ul> </li> </ul> </li> </ul>	<p>2.2 Learners should be taught the key features of research methods, as well as their strengths and limitations.</p> <p>Experimental methods: establish cause and effect; control over variables; pre-test and post-test; careful measurement of results.</p> <p>Survey/questionnaire: representative sample; closed questions, use of Likert scales; open questions; administered by post/email/telephone/face-to-face.</p> <p>Observation: structured (standardised, checklist), unstructured (natural behaviour, field notes).</p> <p>Interviews: structured (closed question, schedule), unstructured (open questions, tape recorded and transcribed).</p> <p>Case study: in-depth study of individual, group, organisation, variety of methods and sources of data, study over a period of time.</p> <p>Action research: research into practice, practitioner as researcher, solves problems, in real settings.</p> <p>Secondary research: uses primary research reports, academic literature, other documents, and published statistics, in order to answer a research question or find out what is known about a particular issue.</p> <p>Learners should be encouraged to understand that research methods will depend on the research question e.g.</p> <ul style="list-style-type: none"> <li>• Is a new treatment effective in improving health? – experimental methods</li> <li>• How has personalisation improved the well-being of individuals receiving care? – interviews/case study</li> <li>• How can we promote positive behaviour in this residential setting? – action research.</li> </ul>

Learning outcomes	Teaching content	Exemplification
The Learner will:	Learners must be taught:	
	<p>2.3 Participants in research, i.e.</p> <ul style="list-style-type: none"> <li>• individuals</li> <li>• groups</li> <li>• practitioners/professionals</li> <li>• sampling strategies, i.e.               <ul style="list-style-type: none"> <li>○ whole population</li> <li>○ random sample</li> <li>○ stratified sample</li> <li>○ opportunity sample</li> </ul> </li> </ul>	
	<p>2.4 Research ethics, i.e.</p> <ul style="list-style-type: none"> <li>• ethical principles, i.e.               <ul style="list-style-type: none"> <li>○ provide benefit (i.e. health research)</li> <li>○ cause no harm</li> <li>○ obtain informed consent</li> <li>○ protect anonymity or confidentiality</li> <li>○ avoid deception</li> <li>○ allow the right to withdraw</li> <li>○ ensure transparency and integrity</li> </ul> </li> <li>• importance of ethics, i.e.               <ul style="list-style-type: none"> <li>○ Human Rights Act</li> <li>○ Data Protection Act</li> <li>○ organisational procedures, i.e. ethical review boards</li> </ul> </li> <li>• ethical issues in health, social care and childcare, i.e.               <ul style="list-style-type: none"> <li>○ independence of research (i.e. who has commissioned it? what is the purpose of the research?)</li> <li>○ access to information</li> <li>○ who the research may affect i.e.                   <ul style="list-style-type: none"> <li>▪ vulnerable adults</li> </ul> </li> </ul> </li> </ul>	<p>2.4 Learners should discuss the importance of ethics in research in health, social care and childcare. They must be taught the ethical principles and be given the opportunity to discuss why these are important. They could read examples of unethical practice to increase their understanding of the importance of ethics.</p> <p>Learners could investigate the work of ethics committees in order to understand how organisations promote ethical research. They could find out how legislation protects the rights of individuals and could reflect on what this means for carrying out research in practice.</p> <p>Learners should understand that ethical considerations are not always clear-cut or easily addressed in practice.</p>

Learning outcomes	Teaching content	Exemplification
The Learner will:	Learners must be taught:	
	<ul style="list-style-type: none"> <li>▪ children,               <ul style="list-style-type: none"> <li>○ how they may be affected</li> <li>▪ implications of findings, (i.e. benefits, consequences)</li> </ul> </li> <li>• ethics in practice, i.e.               <ul style="list-style-type: none"> <li>○ keeping participants informed (i.e. information sheets, sessions)</li> <li>○ obtaining informed consent from participants</li> <li>○ maintaining anonymity (i.e. pseudonyms, no identifying information)</li> <li>○ confidentiality when anonymity is not possible, with informed consent</li> <li>○ responsible use of research findings</li> </ul> </li> </ul>	
<p>3. Be able to carry out secondary research</p>	<p>3.1 Locating sources, i.e.</p> <ul style="list-style-type: none"> <li>• library search</li> <li>• internet search</li> <li>• use of key terms</li> </ul> <p>3.2 Selecting sources, i.e.</p> <ul style="list-style-type: none"> <li>• appropriate</li> <li>• relevant</li> <li>• trustworthy</li> <li>• complementary</li> </ul> <p>3.3 Using sources, i.e.</p> <ul style="list-style-type: none"> <li>• developing a focus/theme/topic for research</li> <li>• writing good research questions/hypotheses, i.e.               <ul style="list-style-type: none"> <li>○ relevant</li> <li>○ manageable in scope</li> <li>○ original/Interesting</li> </ul> </li> </ul>	<p>Learners should be taught how to use library catalogues to locate resources. They should be given the opportunity to practice using key terms to find resources relevant to a theme. They should be encouraged to understand that academic sources are much more preferable to internet sources due to being more trustworthy and less likely to be biased. They should be encouraged to be selective when locating resources by making sure they are relevant to the theme they are researching.</p> <p>Learners should develop their skills in making effective notes. Notes should be written in their own words. They should ensure the source they are using is referenced in their notes. Notes should extract information selectively that relates to the question or theme they are addressing.</p> <p>Learners must be taught about plagiarism and how to avoid it by making notes in their own words and acknowledging the source for the information, e.g. 'Research carried out by Calder in 2010 found that ...'</p>

Learning outcomes	Teaching content	Exemplification									
The Learner will:	Learners must be taught:										
	<ul style="list-style-type: none"> <li>○ answerable</li> <li>○ clear</li> <li>● making accurate notes i.e.               <ul style="list-style-type: none"> <li>○ avoiding plagiarism</li> <li>○ appropriate acknowledgment of sources</li> </ul> </li> </ul>										
<p>4. Be able to present and evaluate research</p>	<p>4.1 Presenting research, i.e.</p> <ul style="list-style-type: none"> <li>● formal writing, i.e.           <ul style="list-style-type: none"> <li>○ well-structured, with introduction and conclusion</li> <li>○ build an argument</li> <li>○ clear expression</li> <li>○ justify appropriateness of research methods</li> </ul> </li> <li>● link research ideas together</li> <li>● compare and contrast methods, results or findings</li> <li>● acknowledge source</li> <li>● avoid plagiarism</li> <li>● evaluate research, i.e. strengths and limitations of research methods</li> <li>● draw conclusions i.e.           <ul style="list-style-type: none"> <li>○ in relation to research question/hypothesis</li> <li>○ makes judgements on evidence/findings</li> <li>○ discusses implications</li> </ul> </li> </ul> <p>4.2 Ways of evaluating research i.e.</p> <ul style="list-style-type: none"> <li>● assess validity, reliability and generalisability, i.e.           <ul style="list-style-type: none"> <li>○ trustworthiness of source (i.e. journal articles/books are more trustworthy than media reports)</li> </ul> </li> </ul>	<p>4.1 Learners should be able to present their own research formally and ensure they can draw conclusions.</p> <p>Learners should discuss the importance of being objective when evaluating research, i.e. learners should discuss the strengths and limitations of research methods rather than whether they personally agree with the findings.</p> <p>Strengths and limitations of research methods:</p> <table border="1" data-bbox="1279 724 2033 1437"> <thead> <tr> <th>Method</th> <th>Strength</th> <th>Limitation</th> </tr> </thead> <tbody> <tr> <td>Experiments</td> <td>Standardized procedure used so easy to copy (reliable). Can establish cause and effect by controlling variables.</td> <td>Laboratory conditions may not reflect real life. Participants may alter their behaviour because they are being tested.</td> </tr> <tr> <td>Survey</td> <td>Cost effective; large samples (generalizable).</td> <td>Respondents may not give honest or accurate answers; poorly worded questionnaires may not cover all answer options (low validity).</td> </tr> </tbody> </table>	Method	Strength	Limitation	Experiments	Standardized procedure used so easy to copy (reliable). Can establish cause and effect by controlling variables.	Laboratory conditions may not reflect real life. Participants may alter their behaviour because they are being tested.	Survey	Cost effective; large samples (generalizable).	Respondents may not give honest or accurate answers; poorly worded questionnaires may not cover all answer options (low validity).
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Learning outcomes	Teaching content	Exemplification		
The Learner will:	Learners must be taught:			
	<ul style="list-style-type: none"> <li>○ bias</li> <li>○ strengths or limitations of research methods used</li> <li>○ ethics of the research</li> <li>○ representative samples</li> <li>● implications of findings, i.e.               <ul style="list-style-type: none"> <li>○ for individuals</li> <li>○ groups</li> <li>○ practitioners/professionals</li> <li>○ practice</li> <li>○ settings</li> <li>○ government policy</li> </ul> </li> <li>● areas for further research, i.e.               <ul style="list-style-type: none"> <li>○ questions that have not been answered</li> <li>○ areas where further evidence is needed</li> <li>○ alternative research methods that could be used</li> </ul> </li> </ul>	Formal observation	Observation schedule or checklist can be used by different researchers with the same result – high reliability.	When participants know they are being observed they may act differently – low validity.
		Informal observation	Participants behave more naturally – high validity.	High dependence on researcher being skilled at noticing relevant factors – low reliability.
		Structured interviews	The same questions are asked of all participants – high reliability.	Lack of flexibility and depth – new questions can't be asked to gain further information.
		Semi-structured interviews	Flexibility to ask open questions gives greater depth of understanding (high validity).	Time consuming to analyse. Dependence on researcher being skilled at asking probing questions – low reliability.
		Case study	Detailed, rich information generated. Can be useful for exploring the factors that are relevant to test	Can't generalize to the wider population. Researcher's own feelings may shape the findings

Learning outcomes	Teaching content	Exemplification	
The Learner will:	Learners must be taught:		
			later with other methods. (researcher bias). Low reliability. Time consuming.
		Action research	Focuses on solving problems, high probability of influencing change. Can't generalize to the wider population. Time consuming.
		<p>Definitions:</p> <ul style="list-style-type: none"> <li>• validity, i.e. did the research methods used measure what they were intending to measure?</li> <li>• reliability, i.e. how trustworthy is the research? Would the same results be achieved if the research was repeated?</li> <li>• generalisability, i.e. how relevant is the research to other settings? How representative was the sample used in the research?</li> </ul> <p>Learners should understand that validity and reliability are judgements about how trustworthy research findings are. They could explore the ways that validity and reliability can be increased, e.g. minimising bias, making sure that questionnaires are unambiguous, using appropriate research methods for the research question, being transparent about research methods. They should understand that generalisability is a judgement about the extent to which the research findings are transferable to other situations. They could explore what makes research generalisable, e.g. large randomised samples. They should understand that small scale qualitative studies are not generalizable to other settings but that they are useful in providing a deeper level of understanding of what is going</p>	

Learning outcomes	Teaching content	Exemplification
The Learner will:	Learners must be taught:	<p>on than large surveys can do. When lots of small studies are reporting similar findings their validity, reliability and generalisability is increased.</p>

## Synoptic assessment and links between units

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For the assessment of this unit, learners will be required to draw on knowledge and understanding from units from across the complete range of units in the qualification. The knowledge and understanding required to be drawn from other units will depend on the subject of the pre-release material and the research topic that each individual learner chooses as a result of this.

## LEARNING OUTCOME (LO) WEIGHTINGS

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Each learning outcome in this unit has been given a percentage weighting. This reflects the size and demand of the content you need to cover and its contribution to the overall understanding of this unit. See table below:

<b>LO1</b>	5% - 9%
<b>LO2</b>	25% - 29%
<b>LO3</b>	22% - 37%
<b>LO4</b>	30% - 45%

## ASSESSMENT GUIDANCE

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All learning outcomes are assessed through an externally set, written examination paper, worth 60 marks and of 2 hours duration.

A range of different types of questions will be used in the external examination. These will include short answer questions and longer, extended response, questions.

There will be a set of pre-released materials for the external examination for this unit and learners will be expected to carry out secondary research on a theme of their choosing that relates to the subjects included in these materials. Some of the questions in the examination will be set in the context of these pre-release materials. Learners will be expected to demonstrate their understanding of the purposes, methodologies and methods of research and their ability to carry out and evaluate secondary research. They will be expected to report their findings regarding the secondary research they carried out and to evaluate their chosen secondary sources.

To find out more  
**[ocr.org.uk/healthandsocialcare](http://ocr.org.uk/healthandsocialcare)**  
or call our Customer Contact Centre on **02476 851509**

Alternatively, you can email us on **[vocational.qualifications@ocr.org.uk](mailto:vocational.qualifications@ocr.org.uk)**



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