Next Generation Higher National Unit Specification

Research in Sport and Physical Activity (SCQF level 8)

Unit code: J7CD 48

SCQF level: 8 (16 SCQF credit points)

Valid from: session 2023–24

Prototype unit specification for use in pilot delivery only (version 1.1) January 2024

This unit specification provides detailed information about the unit to ensure consistent and transparent assessment year on year.

This unit specification is for teachers and lecturers and contains all the mandatory information required to deliver and assess the unit.

This edition: January 2024 (version 1.1)

Unit purpose

This unit develops learners' knowledge and skills so they can propose, conduct and construct an academic research investigation on a sport, or physical activity, and health-related topic.

Learners use underpinning knowledge and areas of interest from their current academic studies to propose a research investigation topic. This gives them the opportunity to justify the rationale for their proposal and approaches to research.

Learners collect and collate the appropriate primary and secondary data to support their research investigation topic, and present their findings through an academic report. Through the academic report, learners develop their analysis skills, while critically evaluating their findings and the impact of the research investigation.

The unit allows learners to broaden their knowledge on subject matters relating to sport, physical activity and health, while helping them to develop their skills in researching, evaluating and presenting information. There may be opportunity to integrate other units involving academic writing, investigation and analysis.

The unit benefits learners who wish to develop transferable skills appropriate to further academic studies or workplace progression.

Entry requirements and progression routes

Entry to the unit is at your centre's discretion, however, learners must have completed either Next Generation Higher National Certificate (HNC) Physical Activity and Health, or HNC Fitness, Health and Exercise. We recommend learners have one or more of the following:

- Research Skills for Sport, Physical Activity and Health at SCQF level 7, as part of the HNC Physical Activity and Health or as a stand-alone unit
- the ability to use information and communication technology (ICT) independently to carry out complex searches
- current knowledge of the sport or physical activity and health sector
- communication skills equivalent to at least SCQF level 6

Learners should already be aware of the benefits of sport and physical activity on health outcomes. They should be able to recognise how health promotion and education can improve overall health and wellbeing and reduce the risk factors of developing poor health. We recommend that learners have some experience and/or participation in a sport or physical activity setting, such as:

- Higher National Diploma (HND) Physical Activity and Health at SCQF level 8
- local agreements for advanced entry into degree-level programmes

You can deliver this mandatory unit as part of the HND Physical Activity and Health or as a stand-alone unit.

Unit outcomes

Learners who complete this unit can:

1 propose a research investigation on a sport or physical activity and health related topic
2 conduct a research investigation to compile complex data from a range of sources
3 construct an academic report on a sport or physical activity and health related topic

Evidence requirements

Learners can generate evidence through stand-alone assignments, through oral questioning or as part of an overall unit project.

The standard of evidence must be consistent with the SCQF level of the unit.

For all outcomes, learners must produce evidence under open-book conditions.

Propose a research investigation on a sport or physical activity and health related topic (outcome 1)

Learners must provide evidence of their knowledge and skills by showing they can produce a detailed research proposal for a research investigation.

Learners must:

- propose a research investigation topic title in a sport, or health, and physical activity context
- provide detailed justification of the research aims and objectives
- discuss the range of research methodologies to be used
- identify a strategy to comply with statutory, ethical and voluntary controls that may impact on the investigation
- justify research approaches and resources that will be implemented during the research investigation
- outline a data storage plan

Conduct a research investigation to compile complex data from a range of sources (outcome 2)

Learners must provide evidence of their knowledge and skills by showing they can conduct their research and generate data from a range of sources.

Learners must:

- apply valid and appropriate research investigation methods
- compile a range of data from credible sources to research objectives from a range of deliberate and inadvertent primary sources
- analyse and evaluate data for reliability and relevance
- collate information effectively
- maintain a referenced record of research activities

Construct an academic report on a sport or physical activity and health related topic (outcome 3)

Learners must provide evidence of their knowledge and skills by showing they can construct an academic report and present their findings.

Learners must:

- demonstrate effective selection, analysis and synthesis of relevant information
- select relevant secondary research to support academic writing
- analyse and critique primary data
- present objective, reliable results
- develop and justify conclusions based on accurate analysis and evaluation of data collected
- structure ideas for impact
- demonstrate effective use of language, format and structure
- reference materials efficiently
- compile a referenced record of research activities and appendices

Knowledge and skills

The following table shows the knowledge and skills covered by the unit outcomes:

Knowledge	Skills
Outcome 1 Learners should understand: ♦ the contribution of research studies to the sport sector or physical activity and health industry ♦ research aims and objectives ♦ approaches to research, including primary and secondary data collection ♦ how to access resources including online publications ♦ models of research for sport or physical activity and health ♦ current local, national and international investigative initiatives on sport or physical activity and health-related areas ♦ ethical and legal considerations affecting research into sport or physical activity and health issues ♦ personal and practical project management skills	**Outcome 1** Learners can: ♦ identify and access resources, including online publications and podcasts ♦ identify aims and objectives for a research topic ♦ identify appropriate methods of research ♦ justify appropriate research approaches
Outcome 2 Learners should understand: ♦ library classification and cataloguing systems ♦ primary and secondary sources of information ♦ research techniques and methods, including electronic methods ♦ electronic information access and retrieval ♦ statistical concepts ♦ qualitative and quantitative data ♦ sampling techniques	**Outcome 2** Learners can: ♦ use appropriate research methods ♦ access and utilise appropriate contacts and network to enhance research investigation ♦ analyse and critically evaluate relevant primary and secondary source data ♦ access and select data relevant to research objectives from a range of secondary sources ♦ collate information effectively ♦ reference materials efficiently ♦ compile a record of research activities

Knowledge	Skills
Outcome 2 (continued) Learners should understand: ♦ interview skills ♦ survey methods, including use of digital applications or social media channels ♦ analytical and evaluative skills ♦ accuracy and precision in recording data ♦ efficient storage of notes and drafts	**Outcome 2 (continued)** Learners can: ♦ demonstrate research management skills
Outcome 3 Learners should understand: ♦ approaches to structuring an academic report ♦ comprehensive writing skills ♦ effective use of referencing ♦ analytical and evaluative skills ♦ selection of relevant accurate information ♦ effective organisation of information and ideas ♦ effective use of vocabulary, register and style	**Outcome 3** Learners can: ♦ comprehensively write a report ♦ understand and apply accurate, effective and ethical citation and referencing ♦ analyse the impact of data on the development and outputs of the investigation ♦ analyse and evaluate findings ♦ effectively organise information and ideas ♦ effectively use vocabulary, register and style in academic writing

Meta-skills

Throughout the unit, learners develop meta-skills to enhance their employability in the health and physical activity sector.

Self-management

This meta-skill includes:

- focusing: filtering out information that is not appropriate; identifying relevant data and literature appropriate to the research project — in outcomes 1 and 2
- integrity: understanding ethics and legal considerations affecting research into sport or physical activity and health — in outcome 1
- adapting: resilient to circumstances that may arise through the process of research; reflecting on new knowledge to gain a deeper understanding on the topic area — in outcomes 1, 2 and 3
- initiative: selecting the appropriate topic and approaches to research — in outcomes 1 and 2

Social intelligence

This meta-skill includes:

- communicating: understanding and mentally processing verbal or written communication received during data collection and discussions with you; presenting written information in the report and proposal — in outcomes 2 and 3

Innovation

This meta-skill includes:

- curiosity: questioning understanding and data that has been gathered; acknowledging what impact this has on current or previous research — in outcomes 1 and 2
- creativity: exploring various ways to gather and present data within the research report — in outcomes 2 and 3
- sense-making: analysing complex data — in outcomes 1 and 2
- critical thinking: identifying, analysing and evaluating primary and secondary data while also breaking down any problems or challenges before addressing them — in outcomes 1 and 2

Delivery of unit

This unit provides learners with the knowledge and skills they need to propose, carry out and construct an academic research investigation on a sport or physical activity and health-related topic. You should encourage learners to generate original ideas as they analyse and evaluate findings relating to the aims and objectives of the research investigation.

You should encourage learners to use a wide variety of resources throughout the unit. These include, but are not restricted to:

- published academic journals
- academic books
- Scottish Health Survey
- World Health Organization (WHO)
- Office of National Statistics (ONS)
- Public Health Scotland (PHS)
- National Institute for Health and Care Excellence (NICE)
- national governing bodies

You can integrate the outcomes of this unit effectively with assessments for either of the mandatory PDA units requiring the production of a complex written research report. These units include PDAs in:

- Management of Long-Term Health Conditions for Exercise Practitioners
- Personal Trainer

Additional guidance

The guidance in this section is not mandatory.

You can integrate this unit effectively with assessments for either of the mandatory PDA units, or the PDA units within the restricted optional section of the HND Physical Activity and Health that require the production of a complex written research report.

Content and context for this unit

Propose a research investigation on a sport or physical activity and health related topic (outcome 1)

Learners explore various sport or physical activity and health topics of interest to develop a written research investigation proposal. It may be appropriate to present learners with examples of research investigation topics or develop activities that allow them to identify specific areas of interest based on their learning within their physical activity and health studies.

Learners develop their written proposal, identifying aims and objectives for investigative research while identifying methods and approaches to researching their chosen topic. It may be appropriate to discuss the difference between primary and secondary data collection, with specific examples of each and how they can positively contribute to research. Understanding the advantages and disadvantages of different approaches to research allows learners to justify the approaches they have decided to use. You may also wish to establish the differences between quantitative and qualitative data.

When teaching the outcome, you could include time for learners to receive one-to-one discussions and feedback with you, to discuss ideas for their research investigation topic and approaches to collecting information. Formative tasks may also include students preparing and delivering short presentations to their peers on their investigation proposal ideas, to receive peer feedback.

Outcome 1 requires students to identify and justify approaches to gathering data. You should show learners how to collect and gather secondary data and have discussions centred around credible sources of data. You may wish to invite library staff into the classroom to discuss the resources that their specific centre has access to, including:

- academic websites
- consensus statements
- journals
- government sources or resources
- books
- online publications
- podcasts
- other appropriate resources

Discussion or tasks centred around the skills required when conducting research may benefit learners. They should pay particular attention to time management and developing an appropriate timeline to ensure they stay on track and manage workload appropriately.

You may also wish to present learners with various academic research, so they can critically reflect on the approaches and methods of data used within the literature. This develops their understanding and justification for research approaches.

Conduct a research investigation to compile complex data from a range of sources (outcome 2)

Outcome 2 focuses on learners gathering a range of primary and secondary data. You should show them the skills and techniques of data collection. If learners have completed Research Skills for Sport, Physical Activity and Health at SCQF level 7 then it may be appropriate to briefly recap their skills and knowledge of research and data collection and focus on advancing their skills for this particular unit. It is appropriate to develop learners' understanding of specific limitation of data collection and resources used, as well as detailing permissions and the appropriate protocol to follow, to ensure that primary research is accurate and ethical.

As learners develop a review of literature in outcome 3, you may wish to start teaching outcome 2 by introducing secondary data and how to analyse it for relevance and reliability, as this may support or contribute to the approach learners will use for primary data collection. While collecting data, you should expose learners to inadvertent data sources. Inadvertent sources include any information learners come across that supports or adds depth to the research project, but was unknown or not thought about. This may occur during observations, interviewing or focus group discussions.

Learners may benefit from regular one-to-one support to track progress of data collection and to ensure they are working to an appropriate time frame.

Learners should be aware of the various platforms available for data collection, and they can generate surveys or questionnaires to practise these techniques before potentially distributing them.

Learners can practise designing interview questions and questionnaires in small groups. You can use peer discussions to evaluate the relevance of primary resource design, purpose and practicality. You can explain how to collate tables or diagrams to summarise results and present numerical data effectively.

Outcome 2 requires learners to collate information correctly and present it in their academic report. You may wish to demonstrate or provide examples of how to present various different types of primary data sources, including generating interview transcripts. In-class tasks may provide learners with the opportunity to practise these skills and gather feedback before applying them to their own research data.

As learners are required to maintain a referenced record of research, you should discuss and demonstrate various way to store research and data, paying attention to GDPR and data protection protocol. You may also wish to spend time with learners developing their

knowledge and skills on using Harvard referencing and using supporting websites and the Microsoft Word referencing tool.

Construct an academic report on a sport or physical activity and health related topic (outcome 3)

Outcome 3 involves learners presenting the information and data they have gathered in the form of an academic report. Learners should understand ways to structure their report and the various sections that a report should contain. Their report can include:

- a topic title page
- a contents page
- an introduction
- a review of available literature around the topic
- the methodology
- their results
- a discussion on their findings
- a conclusion
- a reference page

You can invite library staff to show learners how to correctly format a document when writing an academic report, using appropriate text fonts, text size, text alignment, double line spacing and correctly referenced secondary sources.

For practice, you can provide learners with a body of text and ask them to correctly format it within the requirements of the academic report.

Learners may benefit from one-to-one support with you throughout the process of writing the report. This can be as often as time and availability allow.

Approaches to assessment

Experiencing a range of assessment methods helps learners to develop different skills that should be transferable to work or further and higher education.

Propose a research investigation on a sport or physical activity and health related topic (outcome 1)

You can use a range of assessment methods to gather evidence for outcome 1, including:

- an open-book written proposal
- an oral presentation

If you use a written research proposal on a sport or physical activity and health topic of the learner's choice, we recommend that the research proposal is approximately 1,000 words.

If you use an oral presentation, we recommend that the presentation is 8 to 10 minutes long.

Learners' research proposals must include a research topic title, their research aims and objectives, and the methodology of research. The proposal must also include which data collection approaches they intend to use, with justification for their choices.

You could generate an assessment template with headings covering the evidence requirements for learners to complete. Alternatively, you could develop an assessment brief for learners. An assessment brief could bullet point the evidence requirements that learners should write about, allowing them to write the report in their own style. The assessment template or brief may break down and suggest the number of words learners should write for each evidence requirement. This will help them to meet the target word count across the six evidence requirements.

Conduct a research investigation to compile complex data from a range of sources (outcome 2)

You can assess outcomes 2 and 3 holistically through an academic open-book written report in approximately 2,500 words. The target word count does not include:

- references
- reference page
- bibliography
- appendices

Outcome 2 requires learners to use appropriate research methods, including at least 15 primary data responses across one or a range of deliberate or inadvertent primary data sources. Should learners' research projects require practical experiments, then we encourage them to include a minimum of six participants in the data-gathering process. Learners must also use a range of secondary sources, and we encourage a minimum of six resources across the various secondary data sources used. A range of sources is defined as at least three types of sources.

Primary sources of data collection could include:

- interviews
- surveys
- experiments
- focus groups
- personal observations
- meeting records
- transcript recordings
- field work

This list contains examples only, and is not exhaustive.

Construct an academic report on a sport or physical activity and health related topic (outcome 3)

You can integrate the outcomes effectively with assessments for either of the PDA units requiring the production of a complex written research report.

You can assess outcomes 2 and 3 holistically through an academic open-book written report that is approximately 2,500 words. The target word count does not include:

- references
- reference page
- bibliography
- appendices

You can integrate the outcome effectively with assessment for either of the PDA units requiring the production of complex written research reports.

You may wish to develop an assessment brief outlining the structure in which learners should write the report, with some guidance of what the word count for each section should contain, to achieve the target 2,500 word count. You may wish to develop separate assessment briefs for each of the stages leading up to writing an academic report.

Sections in the academic report structure may include:

Topic title

The topic title page can contain details of the research topic title, the learner's name, the department, the educational institute or centre's name and the submission date. You may wish to develop a template to help learners to meet the standards required for this page.

Contents page

The contents page should provide a table of contents including a list of all the chapters and page numbers. This provides the academic report with an overview of the report structure and how it is presented.

Introduction to the topic

In the topic introduction, learners should structure the ideas surrounding their research. The introduction may detail the purpose and relevance of the research topic, while clearly stating the aims and objectives of the chosen research topic. Learners may use this section to discuss existing research and show relevance to a broader problem or debate. This may be linked to units they are studying within their course.

Review of literature surrounding the topic

Learners should conduct secondary research to develop a review of literature. They must use a range of secondary sources and include a minimum of six resources across the various secondary data sources. A range of sources is defined as two or more types of sources.

Learners should use the literature review as the theoretic framework that may address gaps in literature or research and build on existing knowledge and new data, while advancing a theoretical debate.

Secondary sources of data collection could include:

- websites
- books
- professional journals
- government publications
- associated health publications
- associated sport publications

Methodology

Within the methodology, learners discuss how they conducted their research. This section should include their approach and method of primary data collection. It should also include details of where, when and how they conducted their research, and detail why these approaches were the best to answer the research question.

Results and discussion and analysis of results

Depending on their approach to research, learners may wish to separate these two sections. Where research is of a quantitative nature, producing data, learners can present their results in a separate section. Learners may present the data through graphs, tables or charts. Where research is based on qualitative research approaches, they can integrate their result with the discussion.

Within their discussion, learners should explore the meaning or impact of their results in relation to their research question.

Conclusion

Learners should draw upon all their findings and answer their research question. The conclusion is also an opportunity for learners to reflect on what they did and how they did it.

References, bibliography and appendices

Learners must provide full details of all secondary data sources cited within the reference page and use the Harvard referencing style. If learners conducted an interview, they may add interview transcripts to an appendices page. A bibliography is required if learners consulted sources they didn’t directly cite within their report.

References, appendices and bibliographies are not included in the academic report word count.

This is an example of how the report can be written and presented, however you may choose your own particular structure, as long as the evidence requirements are met.

Learners must write and present their report in an academic style. This includes the use of third person writing, cohesive language, and correct grammar and punctuation. They should present their report in a coherent format. Centres may wish to specify their own format criteria. This may include text font, text size, double line spacing and text alignment.

These approaches to writing allow learners to develop transferable skills appropriate for future academic and workplace progression.

The written report should contain a declaration of validity that the content submitted is the learner's own work, unless cited otherwise, and the learner should sign and date their submissions. You should encourage digital submission through the centre's virtual learning environment (VLE) using anti-plagiarism software.

Equality and inclusion

This unit is designed to be as fair and as accessible as possible with no unnecessary barriers to learning or assessment.

You should take into account the needs of individual learners when planning learning experiences, selecting assessment methods or considering alternative evidence.

Guidance on assessment arrangements for disabled learners and/or those with additional support needs is available on the assessment arrangements web page: www.sqa.org.uk/assessmentarrangements.

Information for learners

Research in Sport, Physical Activity and Health (SCQF level 8)

This information explains:

- what the unit is about
- what you should know or be able to do before you start
- what you need to do during the unit
- opportunities for further learning and employment

Unit information

In this unit, you carry out a research project, producing an academic report on a sport, or physical activity and health related topic.

The unit allows you to build on knowledge and understanding you have developed with your physical activity and health studies. You explore a topic area of your choice, conduct primary and secondary research in your chosen subject area and present this through an academic report. Before starting the unit, you require good digital and communication skills.

In outcome 1, you create a sport or physical activity and health research investigation proposal on a topic of your choice. The topic can be from an area you are interested in from a previous or current unit within your course. You develop an understanding of research aims and objectives and methods of research. You also develop an understanding of approaches to research and the various methods of gathering primary and secondary data and their benefits.

In outcome 2, you begin compiling complex data for your research investigation. You develop the knowledge and skills of data collection and how to use various resources to gather data. You also develop your knowledge and skills of collating data and preparing it for analysis.

Outcome 3 allows you to gain the knowledge and skills you need to write an academic report. You learn how to correctly structure your report, providing analysis, reflection and a conclusion. You reference the materials you use in your report.

The unit helps you to develop transferable skills appropriate for future academic and workplace progression. You develop the meta-skills of initiative, communication and critical thinking.

Administrative information

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Superclass: MA

History of changes

Version	Description of change	Date
1.1	Amendment to word count guidance in page 11, outcome 1 assessment approaches, increased to 1,000.	January 2024

Note: please check SQA's website to ensure you are using the most up-to-date version of this document.