

**Introduction**

**Course dates / times:**

- 8, 15, 22 Oct, 5 Nov. Same time: 9.20-11.50, Room: A34 / 225.

\* If the seminars are online, these times may change slightly but the dates will be the same if possible.

**Course Objectives:**

- To improve academic skills, particularly reading, writing and speaking in English.
- To develop specific technical vocabulary in the field of sports science.
- To learn the basic language associated with conducting research in sports science.
- Improve academic vocabulary and spoken / written English grammar
- Improve reading, writing, listening and speaking skills in English

**Format and style of the seminars:** Due to the Covid-19 pandemic and related restrictions that apply at the university, this course will be conducted partially online, and partially as a self-directed study course this semester.

- Seminar notes will be placed on the MUNI information system some days prior to the seminar. It is recommended that students try to complete the seminar notes in pairs or small groups (via phone / skype etc) prior to the seminar.
- The online seminars will be used as a chance to review the seminar material, and to allow speaking practice in English and discussion about the seminar topics.
- We will likely use MS Teams as the platform for online seminars, and as the entire group is over 20 people, we may break into two smaller groups to allow discussion to be easier for all.
- \* When working together, try and practice using English for discussion whenever you can – it will help you improve your ability and confidence in speaking.

**Unit outline:**

**Seminar 1:** The Scientific method and Research

**Seminar 2:** Grammar and Vocabulary for Academic Writing.

**Seminar 3:** Essay Writing

**Seminar 4:** Essay Writing 2 and Revision.

**Expectations:** Attendance is expected at all the online seminars.

- In necessary circumstances one seminar may be missed, with prior communication and agreement only.
- Any missed seminar: all the seminar activities must be completed as home activities then scanned (preferably no photos unless really necessary) and sent to me no less than one week later than the missed seminar.

**Homework:**

Homework / assignment tasks will be set for completion by the next seminar. May involve presentation back to the group, writing and peer review.

**Assessment:** Completion of a 500 word essay on your chosen sports science topic. You will be assessed on the essay and it will contribute to your overall mark, along with attendance and participation in the seminars which will count also.

# Seminar 1: Research and the Scientific Method

## 1. Introduction

*\* Work in pairs. Find a person you don't know and introduce yourselves to each other.*

Feel free to take notes as you will be asked to introduce that person (name, dept, research area) to the group. Find out about the other persons research topic and academic interests.

(John Morgan, 2007)

## 2. The scientific method

**a) The scientific method is a process in which experimental observations are used to answer questions. Collocations are words that naturally are used together in English.**

*\* Complete the collocations for describing the stages in the scientific method using the words and phrases in the list below:*

*a hypothesis    an experiment (x2)    conclusions    data (x3)    the question*

Analyse \_\_\_\_\_  
Collect \_\_\_\_\_  
Conduct (run) \_\_\_\_\_  
Define \_\_\_\_\_  
Design \_\_\_\_\_  
Draw \_\_\_\_\_  
Interpret \_\_\_\_\_  
Form \_\_\_\_\_

**b) Number the stages above in the order you would normally do them.**

**c) Read this extract from a student website and check your answers to ex. 2.**

The scientific method is a process in which experimental observations are used to answer questions. Scientists use the scientific method to search for relationships between items. That is, experiments are designed so that one variable is changed and the effects of the change observed. While the exact methodologies used vary from field to field, the overall process is the same. First, the scientist must define the question – what exactly they are trying to find out. Next comes the formation of a hypothesis, which is an idea or explanation for a situation based on what is currently known. The next stage of the method is the design of an experiment which will allow this hypothesis to be tested. Usually a primary run of the experiment is conducted, and any changes to the experimental set-up made. In each

experimental run, data collection takes place, followed by data analysis. Finally the data is interpreted and from this, the scientist is able to draw conclusions.

**d) Read the extract again to find the noun forms of the verbs below. Which word/s use the same form for the verb and the noun? Eg..investigate – an investigation.**

*analyse – collect – design – explain – form – observe – relate – run - vary*

**\* Why is it important to know the noun forms of verbs in the academic arena?**

### **3. Conducting research – academic vocabulary**

**a) Choose the correct option:**

1. *Qualitative / Quantitative* research studies large samples with the intention of generalizing to populations.

2. Because of its nature, *qualitative / quantitative* research is appropriate to develop information about the values, beliefs, and behaviours of e.g. sport consumers and uncovers much richer information regarding their motivations and needs.

3. “Is there any gender difference in the extent to which sport fans identify with their favourite team?” is an example of a *research design / research question*.

4. “To determine and apply a suitable operationalisation of fan identification” is an example of a *research objective / research method*.

5. Case studies are a form of qualitative *predictive / descriptive* research that is used to look at individuals, a small group of participants, or a group as a whole.

6. *Dependent / Independent* variables are the presumed cause of the effect being researched, e.g. if gender influences attitudes towards violent sports, then it is gender that has the presumed effect.

7. *Dependent / Independent* variables are those that can be explained by the effect of the other variable, which in the above instance is the attitude towards violent sport.

8. *Reliability / Validity* means the extent to which measurements actually reflect the phenomena being studied.

9. *Reliability / Validity* (in quantitative research) refers to the extent to which findings would be similar if the research were to be repeated.

(Adapted from Gratton, C., Jones, I. (2010). Research Methods for Sports Studies. Routledge

**b) Discuss the meaning of any new vocabulary above with your partner, or the group.**

**c) Complete the gaps in the paragraph:**

‘Can you compete under pressure?’ aims to be the biggest ever \_\_\_\_\_ of the psychology of pressure. By \_\_\_\_\_ data from the participants, the scientists who are \_\_\_\_\_ it aim to shine new light on what \_\_\_\_\_ performance under pressure. In doing so, they’ll \_\_\_\_\_ something new about pressure in sport and in everyday life.

**\* What kind of research design would you use to explore pressure in sport?**

**4. Expressing cause and effect**

**A) Educational attainment and obesity**

**\* Read the article on educational attainment and obesity and answer the questions below:**

1. Some research suggests that there may be a relationship between obesity and poor educational attainment. It is likely that obesity and poor school performance are elements of a broader picture of inequalities in health and education, whereby disadvantaged socio-economic groups tend to have poorer health and lower levels of education. It is also possible that other factors influence obesity and attainment, such as gender, discrimination, and poor mental and emotional well-being.

2. Twenty-nine studies on the link between obesity and educational attainment were reviewed. While often conflicting, an overall pattern emerged from the research evidence suggesting that there is a weak negative association between obesity and educational attainment in children and young people; i.e. that higher weight is associated with lower educational attainment. However, obesity appears to be associated with other variables, such as socio-economic status, and when these other variables are taken into consideration, the association between obesity and attainment becomes still weaker, and often loses statistical significance. Specifically, place of residence, ethnicity, occupation, gender, religion, education, socio-economic status and social capital were all explored as potential moderating variables in the included research. The most commonly explored moderating variable was socio-economic status, which was tested in 23 of the 29 studies.

3. Most studies explored the influence of obesity upon attainment. Only two studies examined the influence of attainment upon obesity. Many authors suggested multiple causal pathways, many of which remained untested in their studies. The moderating variables used in statistical analyses of the relationship between obesity and attainment were not consistent with the causal pathways proposed, which is probably a reflection of the constraints imposed upon authors conducting secondary analyses of pre-existing datasets (i.e. they made use of

existing variables, rather than collecting their own, tailored data). The most frequently cited factors resulting from obesity and impacting upon educational attainment were poor mental health, stigmatisation and discrimination, disordered sleep, decreased time spent in physical activity and socialising, and absenteeism.

4 In summary, various factors appear to be associated with obesity which contribute to low educational attainment to some extent. Given the variation in definitions, analyses and quality of data, it is impossible to point to any causative or definite risk factors.

(Paper by the EPPI – Centre: The Evidence for Policy and Practice Information and Co-ordinating Centre, part of the Social Science Research Unit at the Institute of Education, University of London. Available at <http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2957>)

**\* Are the following statements true or false?**

1. The author believes that obesity is the major cause of low school performance. *True / False*
2. There was some disagreement in the reviewed studies on the relationship between attainment and obesity. *True / False*
3. In association with educational attainment, other variables, such as socio-economic status were found more significant than obesity. *True / False*
4. The author states that the existing studies have not explored all the intervening factors and causal pathways. *True / False*

**\* Find synonyms to the following expressions in the text:**

1. probable or expected (par. 1)
2. examined (par. 2)
3. the regular way in which sth. happens (par. 2)
4. things that limit sth., restrictions (par. 3)
5. made or adapted for a particular purpose (par. 3)
6. mention sth. that is important (par. 4)

## **B) Speaking**

The intervening/ moderating variables are the variables which affect the relationship between the dependent and independent variables.

**\* Look at the examples below, suggest which of the two is the dependent and which the independent variable, then think of a possible moderating / intervening variable.**

**\* Work with a partner, then share with the group:**

1. Leadership skills in basketball – performance
2. Sport preferences – gender
3. Injury rates of football players – warm up and stretching

### C) Vocabulary

*\* Find collocations expressing relationships in the above article.*

*\* Fill in the prepositions which normally accompany the verbs. Then use the expressions to fill the gaps in these sentences. You may have to change the form of the verb.*

compare ....  
react ....  
associate ....  
contribute ....  
correlate ....  
refer ....  
rely....

1. The study shows that the presence of significant eating disorders often \_\_\_\_\_ high body dissatisfaction of the individual.
2. Some sports \_\_\_\_\_ stamina for peak performance, while in other sports it is not so relevant.
3. The media representation of sport \_\_\_\_\_ the formation of the public image of sport and sports people.
4. The term reliability \_\_\_\_\_ whether the scientific method and data are replicable at different times, and between different studies.
5. The results of the experimental group were significant when \_\_\_\_\_ the established normative values.
6. This demonstrates that babies understand if their mother is \_\_\_\_\_ their distress, and that they prefer it when their mothers are being responsive.
7. Type two diabetes is generally \_\_\_\_\_ older, overweight individuals and develops when the body cannot use the hormone insulin properly.

#### **Extra task:**

*\* Consider eating dark chocolate and stress levels. Formulate a hypothesis about the effect, suggest an experimental/ descriptive; qualitative/quantitative study and predict the results.*

**HOMEWORK TASK:**

*\* Research / look up 3 new examples of useful academic words that you think might be useful when writing-up a research project or generally for academic writing.*

*\* Write down a sentence each for the meaning and an example of the word used in context.*

*\* We will share and peer review this vocabulary next seminar.*