D4909 - Introduction to Academic Writing in Sports Sciences

Introduction

Course dates / times:

- October: 14th, 21st, November 4th, 11th from 16.30 – 19.00

- Seminars will be in present form, but on MS Teams if there are any issues due to the pandemic.

Goals:

Improve your knowledge of both research and academic English

Improve your academic writing

Practice speaking and presenting of academic work in English.

To promote discussion and interaction in English

Course Curriculum:

The scientific method, academic language and writing, research designs and data collection,

writing a scientific abstract, data analysis and presenting data.

Homework Tasks:

Homework tasks will be set for completion by next seminar. These may involve presentation back to the group, will usually involve some writing and peer review or group feedback.

Please be prepared to share / work on with the group your written work as it's a good opportunity to improve your written English in a group setting.

Presentation to the group on a topic of your choice during the final seminar in November.

Assessment: Is derived from attendance and participation at the seminars, the presentation task, completion of a scientific abstract on your chosen topic, the final assignment and discussions during the course.

**** What are you hoping to gain from the course? What would you like to improve in your English?***

***** Please try and communicate in English whenever possible during the course.***

2. 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 whole group.

**** Online course: Each person to introduce themselves, their study area, project title, how far they are through their studies, experience so far etc.*** *(feel free to take some notes, to ask follow up questions)*

(John Morgan, 2007)

Unit 1 The Scientific Method

What is the role of research in modern sport and exercise science?

What do you think about when you hear the term "research"?

How do you think research is applicable to sport and exercise environments? Why is it relevant?

Two approaches to sport and performance: which is likely to work better?

a) turn up on the day, try and be positive, focus hard, concentrate… and hope you will perform well and be successful…

b) train specifically for the event, learn particular tactics and training methods to help you perform well, research the best way to train for the sport and compete against your opponents, have a more detailed game plan and approach..…or in other words, to take a more scientific approach?

Definitions of research:

There are lots of different definitions of research…but which is the best? Do they have any common points?

**** Discuss with a partner, then feedback to the group.***

- Research implies *'a careful and systematic means of solving problems'* (Thomas and Nelson

2001, p.3).

- *'Research is a systematic process of discovery and advancement of human knowledge'.*

- Research – *'Any honest attempt to study a problem systematically or to add to man's knowledge of a problem may be regarded as research.'* (Theodorson and Theodorson 1969 cited in Reber 1995, p.663)

- *"The aim, as far as I can see, is the same in all sciences. Put simply and cursorily, the aim is to make known something previously unknown to human beings. It is to advance human knowledge, to make it more certain or better fitting . . . the aim is, as I have said, discovery".* (Elias 1986, p.20) (from Okasha, S. *Research Methods for Sports Studies.* OUP, 2002.)

** common link:*

But why scientific study in sport and exercise?

Are they important enough? Surely health, education, the environment etc. are far more important? **** Discuss with the group:***

Why undertake research? Summary of the different purposes of research

As we have already suggested, much of our knowledge about sport is based upon research carried out by others. By undertaking systematic investigation into certain areas, we have increased our knowledge about sport dramatically in recent years. The ways in which knowledge can be advanced by research are outlined by Hussey and Hussey (1997), who summarise the different purposes of research as follows:

**** Work in pairs and think of 1 example of scientific research that falls under each of the following headings:***

To investigate some existing situation or problem:

To provide solutions to a problem:

To explore and analyse more general issues:

To construct or create a new procedure or system:

To explain a new phenomenon:

To generate new knowledge:

……or a combination of two or more of any of the above.

What are the characteristics of scientific investigation?

**** Discuss with the group and complete the gaps below:***

What are the basic steps of a scientific method? Complete the gaps.

1. _____ of a phenomenon or group of phenomena
2. Formulation of a _____ to explain the phenomena
3. Performance of _____ or an _____ in order to investigate the predictions

If the experiments bear out the hypothesis it may come to be regarded as a theory or law of nature. If the experiments do not bear out the hypothesis, it must be rejected or modified.

Research: First steps

Every scientific enquiry begins with a question or a series of questions, which result from curiosity. Curiosity is a consequence of the interest people develop while interacting with various objects and aspects of their environment.

For example, athletes who are interested in improving their personal achievements show curiosity, which leads them to ask questions such as, "what equipment, techniques or training can I use to help me to enhance my performance?" A question such as this leads to inquiry and investigation.

The following diagram describes a typical sequence of events that leads to scientific research:

The fundamentals of research:

Leedy (1985) and Walliman (2001) note a number of characteristics of research. These include the following:

**** Please comment on each statement below. Do you agree or disagree with them?***

1 Research is generated by a specific research question, hypothesis or problem.

2 Research follows a specific plan or procedure – the *research process.*

3 Research aims at increasing understanding by interpreting facts and reaching conclusions based on those facts.

4 Research requires reasoned argument to support conclusions.

5 Research is reiterative – it is based on previous knowledge, which it aims to advance, but it may also develop further research questions.

* Research is, therefore, more than simply searching for facts. As we suggested earlier, research is a *systematic* investigation to answer a question. Many people associate

research simply with methods of data collection such as interviews and questionnaire surveys. Data collection is just one part of a wider process, however, and other stages are equally important.

There are a number of important **stages of scientific research:**

**** In pairs, put the following in the correct order, discuss why each stage is important. Then discuss with the group:***

Drawing conclusions and the reporting of the research to communicate the findings to others.

The analysis of the data – with reference to the theoretical framework adopted – to answer the question.

The stage of designing how to collect the data to answer the question, or the *research design*.

The researcher selects the topic, in combination with *reviewing the literature.*

The actual data collection stage, where the data is collected by one or more *research methods*.

The researcher decides upon the research question (hypothesis), the aim of the research, the research objectives and develops the theoretical framework that underlies the research.

The ***research process*** is the overall process that guides a research project.

Academic Vocabulary: What is the True Nature of Identity?

In my opinion, the very **concept** of identity, **corresponds precisely** to the **perception** and **interpretation** of it's meaning by the individual themself. It's not necessary for one to scour the research looking for irrelevant **variables** and obscure **analysis**, simply to go with one's own **intuition**.

The **principle** of identity is therefore an **interpretation** of what someone believes about themselves, rather than the **acquisition** of information, **data** or estimates from formal or scientific sources….I **deduce** that I am who I think I am, a **function** of my own innate creativity, emotions, imagination and **cognitive** processes. And it is my own opinion and **estimate** that is **significant**, not **comments** or thoughts from anyone else….

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**** Discuss in pairs: What's the meaning? What do the words in bold mean?***

Vocabulary shift – verbs.

There is a tendency in academic writing to use a single verb or the noun form of a word where possible, rather than verb + preposition or phrasal verbs. For example:

People are often very short of time, therefore they must routinely **put into practice** creative solutions to solve unexpected problems.

People are often very short of time, therefore they must routinely **implement** creative solutions to solve unexpected problems.

**** Work with a partner: look at the following sentences and replace the phrases in Italics with a verb (in the correct form) from the list, to make the sentences more formal:***

tolerate	*maintain*	*eliminate*	*determine*	*constitute*
decrease	*consider*	*investigate*	*develop*	*increase*

Many technology manufacturers in developed countries *put up with* widespread copyright violations in less developed countries, and even offer local versions of their products.

Scientists are *looking into* a new and advanced drug delivery system that can transport and deliver a drug precisely and effectively to its site of action.

The purpose of this study is to try and *figure out* what is lacking in our current understanding of the effects of long term drug addiction on mental health and depression.

Researchers have *come up with* plug-in hybrid vehicles that can draw from two sources of energy. It is hoped these new vehicles will be much more environmentally friendly.

Rice and aquatic foods *make up* a major part of the diet of the people of the Mekong Delta, Vietnam and other parts of south-east Asia.

The use of touch screen voting systems could *get rid of* problems associated with traditional paper-based ballots, including the potential for corruption during the voting process.

Average global temperatures have *gone up* by 0.2 degrees in the past decade.

If an individual isn't able to manage to *keep up* regular exercise, it can have a serious impact on his physical fitness.

The number of people who are physically active more than five days a week in the US has *gone down* over the past twenty years.

Many governments are now *thinking about* ways they can balance their budgets, and avoid excessive spending.

(adapted from Swales and Feak, Academic Writing for Graduate Students*, 2015)*

Phrasal verbs in academic English

Although phrasal verbs occur most frequently in more informal spoken and written English, they are also sometimes used in an academic context. You will hear them used in lectures and will read them in serious journals.

Phrasal verbs often have one-word synonyms. These are usually of Latin origin and sound more formal that their phrasal verb equivalent but both may be appropriate when writing or talking about academic subjects.

**** Complete the table with synonyms for the phrasal verbs below:***

aim check conduct consist of constitute discuss observe present

phrasal verb	*synonym*	*example*
put forward (an idea, theory, plan, opinion)		In her latest article Kaufmann puts forward a theory which is likely to prove controversial.
carry out		I intend to carry out a series of experiments.
make up		Children under the age of 15 make up nearly half of the country´s population.
be made up of		Parliament is made up of two houses.
point out		Green points out that the increase in life expectancy has led to some economic problems.

set out		In her article Losanova sets out to prove that…
go into		In this book the author goes into the causes of the civil war in some depth.
go through		Go through your calculations carefully.

**** Now complete the sentences below using an appropriate formal word in the gap provided:***

a) In his article Kingston on the American Civil War _____ the reasons why the situation developed in the way it did.

b) Please _____ your work again carefully before handing it in.

c) Women now _____ over half the student population in most universities in this country.

d) We _____ a series of experiments to test our hypothesis.

e) Cole _____ some fascinating theories on the development of language in his latest book.

f) The psychologist _____ that it was very unusual for a young child to behave in this way.

g) In this article Simpson _____ to prove that the Chines reached America long before the Vikings.

*** Homework: in preparation for next seminar:**

a) Watch the videos on database searching on the IS system

https://is.muni.cz/auth/el/fsps/podzim2019/d053/um/M1_L2_final_video.mp4?lang=en

https://is.muni.cz/auth/el/fsps/podzim2019/d053/um/M1_L3_final_video.mp4?lang=en

b) Use the advice given in the videos to search for 3 articles that are relevant to your research / topic of interest.

** If you have completed your literature search for your project, it's not necessary to complete this….unless you want the extra practice.*

c) Use the synthesis plan (see next page, also in the IS system) to process / evaluate the articles (or use other ones relevant to your research / projects).

d) Prepare a short written piece (several paragraphs) on your research: Your topic, previous literature on the topic, the gap in the research, research question, relevance of the research project, main goals and objectives of your research.

- Be prepared to present to the group next seminar, and to share your written work with the group.**

** Please have your written work in a separate word file uploaded on to the MS Teams files area. Then we can share the work and look at the English as a group.**

"SYNTHESIS PLAN" for the integration of information resources and personal intentions

Study	**Main concerns**	**Sample**	**Method**	**Main findings**	**Personal comments**
e.g. Festinger (2012)	Heart-rate during imagery	20 female athletes, age 22.35	Using computerised equipment	No changes in excitation. Changes in relaxation.	Short imagery sessions.

(Tenenbaum, G., Driscoll, M.P. (2005). *Methods of Research in sport Sciences.* Meyer & Meyer Sport.)

https://books.google.cz/books?id=m9Aq1usVqY8C&pg=PA660&lpg=PA660&dq=Methods+of+Research+in+sport+Sciences&source=bl&ots=1Og7_s0Ag2&sig=ACfU3U1wXD5Z2F1mPoUfDLvmm53FqrBKqw&hl=en&sa=X&ved=2ahUKEwi1wcbY9-3kAhXnShUIHWkHBFU4ChDoATAAegQICRAB#v=onepage&q=Methods%20of%20Research%20in%20sport%20Sciences&f=false