

JAZYKOVÁ KOMPETENCE I Session I

Task 1 The scientific method

a) The scientific method is a process in which experimental observations are used to answer questions. 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 nouns forms of the verbs below. Which word/s use/s the same form for the verb and the noun?

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

Task 2 Doing research - 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) Having completed task 1, give the following expressions in English:

výzkumná otázka

vhodná operacionalizace

vzorek,

zobecnění

závislá a nezávislá proměnná

příčina

postoj

platnost

jevy

případová studie

účastníci

stanovit

c) Complete the gaps in the paragraph:

'Can you compete under pressure?' aims to be the biggest ever _____ of the psychology of pressure. By _____ the data from those who take part, the scientists who _____ it aim to shine unprecedented light on what _____ performance under pressure. In doing so, they'll _____ something new about pressure in sport and in everyday life.

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