

Student Name:.....

(Qualitative) Research Methods for the Information Sciences (code 400290)

01 April 2010

FINAL EXAM

VU University Amsterdam (VUA/FEW/D)

IMPORTANT NOTICE: This is a **closed book** exam. You are supposed to answer the questions on your own, i.e. without the use of a computer, books or any other material and without discussing the exam with anyone else. Cheating is not tolerated and will be handled according to strict University policies.

This exam has been designed to test your overall knowledge and understanding of the material covered in the course. It consists of **a set of questions for a total of 100 points**. The exam score is your total number of points divided by 10, and yields 2/3 of the final mark for this course; the remaining 1/3 comes from your score for the MSc review essay assignment.

Please make sure to use *the present form* for your answers, and use the space provided under each question. Answers will be evaluated based on content rather than length. In other words, there are no extra points for providing needlessly long answers. You are free to answer in English or Dutch.

This exam is not meant to be stressful and should not take you much more than one hour to complete if you have carefully studied the course materials. But: **Please make sure that your handwriting is legible and that you have printed your name at the top of each page. Good luck!**

Student Name:.....

Student ID Number:.....

Points:

- | | | |
|----|-------|-----------|
| 1) | _____ | out of 15 |
| 2) | _____ | out of 11 |
| 3) | _____ | out of 20 |
| 4) | _____ | out of 15 |
| 5) | _____ | out of 15 |
| 6) | _____ | out of 24 |

Points total: _____ out of 100 (Exam score = points/10)

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Question 1 (15 points):

The “research design” is one of the key scientific concepts in the early stages of conducting a research study. Give a (concise) definition of what a research design is.

Question 2 (11 points):

There are many different forms of reasoning, and they are variously used in different types of scientific method. This question is on two basic forms of scientific reasoning.

Question 2a (5 points):

Explain what “deduction” is. Also, give a concrete example. Limit your answer to 4 lines.

Question 2b (6 points):

Explain what “abduction” is. Also, give a concrete example. How is it typically used in a research setting? Limit your answer to 6 lines.

Question 3 (20 points):

The “case study” is a prime example of a flexible research design in the Information Sciences.

Question 3a (5 points):

A first kind of case study is an “exploratory” case study. Explain what an exploratory case study is. Limit your answer to 3 lines.

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Question 3b (5 points).

Give a concrete example of a research question or setting in which it would be useful to carry out an exploratory case study. Limit your answer to 5 lines.

Question 3c (5 points).

Another kind of case study is called a “validating” case study. Explain what a validating case study is. Limit your answer to 3 lines.

Question 3d (5 points).

Give a concrete example of a research question or setting in which it would be useful to carry out a validating case study. Limit your answer to 5 lines.

Question 4 (15 points):

The “validity” of results and claims is a central concept in scientific research; but there are many different types of validity.

Question 4a (5 points).

Explain what “internal validity” means. Limit your answer to 4 lines.

Question 4b (5 points).

Explain what “external validity” means. Limit your answer to 4 lines.

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Question 4c (5 points).

Clarify the distinction between internal and external validity by giving some concrete examples that clearly demonstrate what the difference is. Limit your answer to 6 lines.

Question 5 (15 points):

These days, governments in many countries are increasingly restricting smoking in public spaces, including universities and other public buildings, but also restaurants, pubs and bars. A typical argument made in favour of such policies is that smoking is a danger to health (because it induces cancer), and it does so not only for the smoker him/herself, but also for bystanders that inhale the smoke produced by others. One typical counterargument commonly heard against such policies is of the following type: *“But I had a granddad that smoked two packs a day and he lived to the blessed age of 96.”* (And many more instances can be produced along the same lines).

Now, consider this as a possible scientific counter-argument that must be taken seriously, and analyze its quality and strength from a scientific point of view. Is it a scientifically acceptable argument? If yes, why? If not, then *what* precisely is wrong with it? Limit your answer to 10 lines.

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Question 6 (24 points):

In your Master research, you are studying a specific social network on the Web (of the type Facebook, LinkedIn, etc.). To find out about what and how the Web community under investigation believes, acts, likes and dislikes, you carry out a survey by means of an electronic questionnaire via the Website of that social network, and you get a good response. However, a typical research problem in such studies is the validity of the results of the electronic survey: you do not know for sure whether the answers you get over the Web, actually and truthfully reflect what the members of the social network really think or believe and how they behave in reality. A possible solution is to attempt to validate your survey results by means of a triangulation approach.

Question 6a (10 points).

Explain what triangulation is.

Question 6b (14 points).

Discuss how in such a study you could validate your survey data, such that you can make a stronger claim that your data indeed give an adequate picture of the real-life opinions, attitudes and behaviours of the members of the social network.

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Feedback (optional):

- If you feel that a question was unclear, please indicate below the number of the question and provide a brief explanation.
- Was preparation for this exam a good way to get you to go over the class material again? Would you have reviewed the material otherwise?
- Do you feel that this exam was fair as a test of your knowledge about the course material? If not, what would you have done differently?
- How long did it take you to finish this exam?