

Psykologiska institutionen



Course instructions

PSMT49

Applied Questionnaire Methods (7,5 p)

HT 2023

Responsible course teacher: Johnny Hellgren
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Course instructions

Content

In psychology, theories and hypotheses often refer to latent (not observable) and manifest (directly observable) concepts or constructs. Empirically, these constructs are often studied with questionnaires. Consequently, a good questionnaire design is vital for the reliability and validity and the overall quality of research studies for which questionnaires are used as tools of data collection.

This course teaches basics of measurement theory and questionnaire development in order to provide course students with essential skills to be able to develop, use, and evaluate questionnaire studies. Questionnaire studies are embedded in their research design tailored to answer a research question. The course therefore also includes lectures and exercises about research design and evaluation, as well as ethical considerations.

The course contains both classroom lectures and practical exercises. Classroom lectures contain presentation and discussion of important concepts and methods for questionnaire construction and evaluation. In the practical exercise, students formulate a research question to be studied with a self-developed questionnaire for which data is collected online. Following that, students evaluate their own questionnaires in terms of reliability and validity aspects. Finally, data collected with the questionnaire is used for further analyses to answer the initially formulated research question. Students present the process of questionnaire construction and evaluation, as well as the analysis and interpretation of the findings concerning the overall research question in both an oral presentation and in a written report. Instructions for the content and design of the written report are given during the course.

In order to provide students with the necessary skills to set up their questionnaire online, and do the appropriate statistical analyses to evaluate measurement properties, this course contains three tutorials in which each student needs to bring their own computer. These three tutorials include one for questionnaire design with an online survey and data-collection tool, and two for getting familiar with statistical analyses of reliability and validity in statistical programs.

Expected learning outcome

After the course, students are expected to be able to design a questionnaire, collect data and evaluate the questionnaire's quality on their own. In more detail, this means that students are expected to be able to

1. Discuss and evaluate how different research questions relate to the appropriateness of different research designs, sampling and data collection methods and demonstrate their understanding of how these aspects influence the validity of findings and their interpretation
2. Relate the theoretical ideas of psychometry to issues of reliability and validity in data collections done with questionnaires
3. Perform statistical factor-analytic techniques and demonstrate understanding of the theoretical ideas behind these in order to evaluate the measurement properties of a questionnaire
4. Demonstrate their understanding of methodological questions in research studies through critical evaluations of their own and peers' work, spanning from the

formulation of a research question, questionnaire construction and data collection, as well as statistical analysis and the interpretation and presentation of findings

Both the course lectures and practical exercises are designed to enable the students to write their final report and prepare for the written exams, and students are thus expected to attend lectures and exercises. **Students are expected to read the literature before each classroom lecture. Discussions in seminars are based on prepared material.**

Knowledge Assessment and Examination

Course requirements

The following requirements must be met to receive a final grade in the course:

- Uploading the written report before deadline.
- Attendance and oral presentation of the written report as well as actively commenting and discussing fellow students presentations and reports (absence is compensated for by a compensation assignment) in the examination seminar.

The final examination of the course is in the form of an individually written examination (test) based on the course literature. Grades in the course are given according to the seven-point ECTS scale (A, B, C, D, E, Fx, F).

Grading Criteria

Grade	Criterion
A	Excellent. <i>The expected study outcomes have been reached to an exceptionally high degree.</i> 90-100% points on the individually written examination.
B	Very good. <i>The expected study outcomes have been reached to a very high degree.</i> 80-89% points on the individually written examination.
C	Good. <i>The expected study outcomes have been reached to a high degree.</i> 70-79% points on the individually written examination.
D	Satisfactory. <i>The expected study outcomes have been satisfactorily reached.</i> 60-69% points on the individually written examination.
E	Adequate. <i>The expected study outcomes have been reached despite some deficiencies.</i> 50-59% points on the individually written examination.
Fx	Fail, some additional work required <i>The learning outcomes have not been reached.</i>
F	Fail, much additional work required <i>Completely insufficient.</i> Less than 50% points on the individually written examination.

Plagiarism, cheating and unauthorized cooperation

As part of your responsibility as a student, you must know the rules that exist for examination. Detailed information can be found both at the department's and Stockholm University's website www.su.se/regelboken. Teachers are obliged to report suspicion of cheating and plagiarism to the principal and the disciplinary committee. Plagiarism and cheating are always

disciplinary matters and can lead to suspension. An example of plagiarism is to write a text in a verbatim or almost verbatim manner (applies to single sentences) and not to indicate where this comes from. This also applies to texts you have previously written (self-plagiarism). For example, cheating is counted as having access to unauthorized means, such as mobile phone, during examinations. Having study groups together is developing and time-saving, but when it comes to examination tasks, you must be careful to work yourself (unless otherwise clearly stated) in order not to risk it being counted as unauthorized cooperation.

Literature

The literature consists of a book and research articles. All students read the research articles, for the book there is a **choice between** a Swedish and a English course book.

The Swedish-language course book is:

Berntson, E., Bernhard-Oettel, C, Hellgren, J., Näswall, K. & Sverke, M. (2016). *Enkätmetodik*. Stockholm: NoK. ISBN: 9789127137080 (**B**)

The English-language course book is:

DeVellis, R. F. (2016). *Scale development: Theory and applications*. 5th ed. Thousand Oaks, CA: Sage. ISBN: 978-1-5443-7934-0 (**DV**)

For **all** students, the following articles/book chapters are course literature:

Borsboom, D., Mellenberg, G. J., & van Heerden, J. (2004). The concept of validity.

Psychological Review, 111 (4), 1061-1071. DOI:10.1037/0033-295X.111.4.1061

Cortina, J. M., Sheng, Z., Keener, K. R., Grubb, L. K., Schmitt, N., Tonidandel, S., Summerville, K. M., Heggestad, E. D., & Banks, G. C. (2020). From alpha to omega and beyond! A look at the past, present, and (possible) future of psychometric soundness in the journal of applied psychology. *Journal of Applied Psychology*, 105 (12), 1351-1381. (C): <https://psycnet.apa.org/doi/10.1037/apl0000815>

Costello, A.B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation*. 10 (7), 1-9. (CO): <https://doi.org/10.7275/jyj1-4868>

Messick, S. (1995). Validity of psychological assessment: Validation of inferences from person's responses and performances as scientific inquiry into score meaning. *American Psychologist*, 50(9), 741-749. (M): <https://psycnet.apa.org/doi/10.1037/0003-066X.50.9.741>

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. (PM): DOI: 10.1037/0021-9010.88.5.879

On Athena: Research integrity and ethics policy, AERA, APA, NCME (2014). *Standards for educational and psychological testing*. Washington, DC. (Validity, 11 pages) (**A**)

Teachers

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