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Marja Alastalo, Marja. 2008. What is there to be learned from the downswing of survey methods? Observations on Finnish sociology. *The Finnish Journal of Education Kasvatus* 39 (2), 155–166. — The weak position of quantitative methods and the small number of experts in these methods has been debated in social sciences. This article investigates the changes in the popularity of the various research methods in the field of sociology. The data consists of Finnish doctoral dissertations in sociology (N= 222) in 1947–2000. The article focuses particularly on the decreasing use of survey methods since the 1970s. First, the way research methods were written about during this downswing is analysed in order to better understand the present position of survey methods. Secondly, the analysis concerns the circumstances in which survey research and quantitative methods in general were carried out during the downswing.

The article shows that an unfavourable perception of survey methods was established during the downswing. In this period quantitative methods were mainly used in doctoral dissertations that were written in research groups and research institutes. These proved to be important arenas in which methodological skills were shared among sociologists. Without a surrounding, lively culture of survey method use, teaching these methods alone does not seem to encourage researchers to adopt them in their doctoral dissertations.

Descriptors: quantitative methods, survey research, research group, method trend

Murtonen, Mari – Lehtinen, Erno – Olkinuora, Erkki. 2008. Useless skills? University students' views on the usefulness of reasearch skills in working life, orientation to learning, and difficulties experienced in studying. *The Finnish Journal of Education Kasvatus* 39 (2), 119–130. — This study examined university students' views on the importance of research methodology skills in working life, in connection to difficulties experienced in research skills learning and to motivation-based orientation in a learning situation. Altogether, the study involved 46 education students, who were at the time attending a half-year-long Master's level course on general research methodology. The students filled in

a questionnaire in the beginning and in the end of the course. About half of the students were of the opinion that they will need research skills in their future working life, while the other half were unsure about this need. The views did not change much during the course. The unsure students experienced more difficulties in their learning of methods, and they were less task-oriented than the students who were more convinced about the need of research skills in their future work. Practical implications about improving research skills learning through instruction and curriculum are also discussed in the article.

Descriptors: research methods, learning, working life, motivation

Rautopuro, Juhani – Malin, Antero. 2008. Why not to use the exact words? on the necessity of statistical methods in educational sciences. The Finnish Journal of Education Kasvatus 39 (2), 108–118. — This article discusses the importance of using statistical methods for educational research. The raise of qualitative methods and the decrease in the use of statistical methods have weakened the knowledge of educational researchers in this field. In sharp contrast, the development of statistical methods especially for analysing data that is typical in educational sciences has been rapid. Research in educational sciences has remained apart from this development, partly because the knowledge of basic statistical methods is inadequate. Researchers in education need to learn how to use the newly developed statistical techniques if their research is to be considered of a high international standard. In addition, during the training of statistical methods, students should also be taught how to communicate their findings.

Descriptors: statistical expertise, statistical communication, research of high international standard

Silén, Marianne. 2008. Statistics in research and teaching. The Finnish Journal of Education Kasvatus 39 (2), 145–154. — The impetus for this article derives from my experience as a statistics teacher since 1994 and my doctoral thesis, which deals with the use of statistical methods (especially factor analysis) in social scientific research. In this article I discuss how to teach statistics to students of social sciences. I propose that the teaching of statistics should be a highlight of the research process. I argue that there are differences in the way social scientists and statisticians see the research process, particularly in the way they understand research questions and the interpretation of data. In the article I tell an autoethnographic story that exemplifies this different understanding.

Descriptors: statistics, teaching of research methods, research process, research question

Väisänen, Pertti – Pitkäniemi, Harri. 2008. The Role of Goal Orientations in Learning Quantitative Research Methods – Methodical Elaboration. The Finnish Journal of Education Kasvatus 39 (2), 131–144. — The purpose of the present study was to examine how general and domain-specific goal orientations, self-perceived competence, expectancies of success, and learning efforts are interrelated, and what impact they have on cognitive and affective learning outcomes in applied statistics for undergraduate students (N = 162). The data was collected in three phases of the course 'Quantitative Research Methods 1' designed for education students in an eastern Finland university. The students' general goal orientations were measured, as well as their perceptions of themselves as statistics learners, using a 30-item Likert-type inventory at the beginning of the course. Half-way through the course, the students' domain-specific goal orientations were measured. In the last phase of the course, students responded to an instrument investigating their learning efforts and affective learning

experiences. The measurements proved to be reliable with reasonably high reliability estimates ranging from .70 to .88 when measuring goal orientations and .79 - .91 in the other areas. Multitrait-multimethod correlational analyses and ordinary zero-order correlations lent support to the construct validity as well as to the concurrent and discriminant validity of the instruments. Variation in the stability of group membership was apparent when comparing general and domain-specific goal orientations.

Descriptors: goal orientations, psychometrics, multitrait-multimethod analysis, quantitative research methods, validity