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Methods of Survey Analysis i Management [od redaktora naukowego]

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Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.



Scientific Editor's Note

During July and August 2014, a group of over 100 PhD students, in the social sciences, management, but also other fields, as physic or biology, spent the hottest two weeks of a Polish summer learning advanced, quantitative data analysis techniques. They were taught by professors Roman Konarski, Katarzyna Kopczewska and Michał Bojanowski (Poland), Roel Popping and Christoph Stadtfeld (the Netherlands), Per Block and Zsófia Boda (United Kingdom), Richard Gonzalez (United States), and Warren Thorngate (Canada), all recruited for a unique summer school. The Warsaw School of Data Analysis (WSAD) was organized by the University of Warsaw and the Inter-university Center for Social Science Theory and Methodology in the Netherlands. Its goal was to raise data analysis competence of the students and of the data analysts outside academia who also attended.

The most active WSAD students formed research groups during the summer school. Each group undertook a research project, guided by a tutor. Most of the articles in this volume report the results of the hard and creative work done on these projects. Some of the articles are directly based on analyses conducted at the school. For others, school lectures and discussions inspired subsequent work. All articles reveal an attitude of curiosity and eagerness to explain, thoroughly and with attention to detail, various national and international social phenomena.

Publically-available, social research data are abundant but most of them lie fallow, unanalyzed or forgotten, awaiting researchers interested in the insights they can provide. Many WSAD exercises attempted to teach students how to use new analytical techniques to mine these data. Instructors illustrated how to address many unanswered questions using available data, rather than gathering more. Most data analyses presented in the articles in the present volume use one or more of three excellent, social data sources publically-available on the internet:

- the European Social Survey (ESS) www.europeansocialsurvey.org
- the World Values Survey (WVS) www.worldvaluessurvey.org
- the International Social Survey Program (ISSP) www.issp.org

While pursuing their WSAD research projects, students soon learned that data mining is as much an art as a science, and that the flow of insights depends very much on how the data are approached and analyzed. Several articles in this volume explore some of these dependencies.

Most developed countries face changes in age-related, demographic structure. Age can influence the way respondents answer, and what they



answer. Bielecki *et al.* explore the relationship between "don't know" answers and age. Aging is also at the heart of the article by Haczyński, who analyses the relationship between age, health, education and happiness using International Social Survey Program data gathered across five regions of the world.

Mikucka discusses ways of measuring the employment status and occupation in analyses of survey data. Internal inconsistencies and overlaps in employment categories can be a problem both in precisely planned international surveys (as shown in ESS data), and in short surveys created ad-hoc by researchers and managers in many different contexts.

Kowalczyk, Mulak & Król replicate three published studies using World Values Survey data, each addressing the topic of happiness & life satisfaction. The authors expanded the studies by examining Extreme Response Scale (ERS) indicators to determine whether ERS is a passing trend in social research, or is important enough to justify increasing the awareness of the issue among researchers.

Nowak, Markiewicz, Gawraczyński & Mazurkiewicz explore environmental concern in different countries. They employ confirmatory factor analysis to verify the dimensionality of environmental concern, and to provide conclusions relevant both to research and policy-making.

International surveys, even if delivered in the same form in each country (which is very rare), need to be translated to each local language. Wierzbiński & Kuźmińska discuss comparability problems of international survey data using the example of Japan and Italy.

Zdziarski & Czerniawska use social network analysis tools to investigate whether the diversity and homophily of boards of directors are related to positions in an interlocking directorates network. Their analyses employ public data about membership on the boards of directors of companies listed on the Polish Stock Exchange.

Many students in Poland decide to pursue multiple degrees in order to improve their chances of success on the job market. Turska used a sample of 1,070 students to analyze a moderating effect of interval activity style (the tendency to accept a lot and form broad acceptance sets) on student choices leading to either a single major or a double degree.

Finally, three articles focus on generic problems of quantitative data analysis.

Most of the data available in management, and in social sciences, are correlational. They are therefore subject to spurious correlations and exposed to risks of drawing incorrect causal conclusions. Kuźmińska discusses problems of a third (confounding) variable in quantitative research.

While most social science data are analyzed with variants of the General Linear Model, many interesting and important social phenomena cannot be addressed with the GLM. Thorngate presents Ordinal Pattern Analysis technique, which was developed to examine such excluded phenomena.

Wieczorkowska & Król point out ten methodological threats in data analysis in management studies. Among them are the scarcity of experimental studies, lack of standard operationalizations, and weaknesses of measurement. These and the remaining seven threats discussed by the authors are shown to be relevant both to management studies and to other social sciences.

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