INFORMATION SERVICES ON SOCIAL RESEARCH AND METHODOLOGY THE SRM-DOCUMENTATION CENTRE

By G.W. Kantebeen

Introduction

The Social Research Methodology Documentation Centre* (SRM) at the Erasmus University Rotterdam, is engaged in the registration and documentation of literature on social research methodology, statistical analysis and computer programming.

A comprehensive overview of this scientific subject area is difficult to achieve. The continuous flow of publications buries researchers and students in the social sciences. New methodological topics or developments are raised in the various social science disciplines, such as sociology, psychology, social psychology, political science, anthropology or history; interesting methodological information is often interweaved in the reports of applied research projects. Therefore the main goal of SRM can be formulated as follows: SRM intends to inform social scientists, researchers, and students on what is going on in the field of research methodology, statistical analysis and computer programming in the social and behavioral sciences.

Since 1970, a team of social scientists at the Erasmus University Rotterdam, compiled a bibliographic database on social research methodology. During these years, a list of about 100 periodicals, as well as readers, books, research reports, proceedings, etc. are selected and screened "cover to cover". With the help of the SRM-Thesaurus relevant publications are selected, indexed and abstracted; the documentation is limited to the English, German, French, and Dutch literature. The database composed in this way, contains now about 40.000 literature references, mostly provided with an abstract. Annually, some 3.000 new references are added.

E-mail: info@srm.eur.nl

^{*} The Social Research Methodology Documentation Centre (SRM): SRM homepage: http://www.eur.nl/ub/srm

The SRM-Database is of interest to:

- Professors and their students across the social and behavioral disciplines.
- Social science researchers in designing a research project, in their choice of methods and analysis techniques, and in the use of computer software.
- Social scientists and methodological experts. With the help of the SRM-Database, meta analyses, and trendreports or "state of the art" publications can be conducted, and specific bibliographies are easy to compile.

The SRM-Thesaurus

In order to provide an effective selection and documentation of methodological literature, a hierarchically structured scheme for classification was designed in 1974. Recently the complete new and updated "Thesaurus of Social Research Methodology" (SRM-Thesaurus)* has been published.

The SRM-Thesaurus is a hierarchical classification of categories as well as a structured vocabulary of standardized terms that have been arranged by subject in a logical order rather than in an alphabetical order. In this system, indexing terms or keywords are called "descriptors" and connected terms (mainly synonyms) are referred to as "unauthorized terms". The interrelations between descriptors are indicated by means of "related terms". Together the SRM-Thesaurus comprises of an integrated and cohesive body of 1164 descriptors and 1795 unauthorized terms, arranged in 292 categories.

The advantages of such a classification system are many. It provides both specific search terms (descriptors) and generic points of access (categories), and promotes standardization and efficiency of search procedures.

The structure of the Thesaurus divides the field of social research methodology into twelve headings:

- A. Methodology of the Social Sciences
- B. Research Methodology. Research Design
- C. Types of Research
- D. Selection of Research Units
- E. Data Collection
- F. Measurement and Scaling Methods
- G. Statistical Theory and Tests

* The Thesaurus of Social Research Methodology/ M. van Logchem, G.W. Kantebeen, A.H. Reenders and J.M.A Hoogenboom. - Rotterdam: SRM-Documentation Centre, 1996. - 295 p. - ISBN 90-800520-8-6.

- H. Multivariate Analysis
- K. Data Processing and Interpretation
- L. Reliability and Validity
- M. Organization & Application of Research
- N. Information Sources

Broadly speaking, the sequence of these headings is based upon the successive stages of a research project in practice. Topics, relevant for all phases of a research project (L, M and N) are categorized at the end of the classification-scheme. These twelve headings are divided into juxtaposed and hierarchically categories and subcategories. From these premises, more precise concepts are derived in agreement with logical relationships and theoretical considerations. The lowest level of this hierarchical system is filled with terms (descriptors and unauthorized terms) reflecting specific methods and techniques used in social science research; the descriptors are used as index terms for the indexing and retrieval of the literature.

The SRM-Thesaurus is integrated into the retrieval software of the SRM-Database, as an instrument for the storage and retrieval of bibliographic information, helping to make searches systematic and comprehensive. The SRM-Thesaurus is also available in a printed (unbounded) version and will be updated annually to take into account new terms and concepts in social research methodology.

SRM-Information Services

SRM-Bulletin: Information on Social Research Methodology: New literature references are regularly published in a printed form in the "SRM-Bulletins". This highly current information quarterly, informs about recent published literature with a minimum of delay.

As a quick service new titles and abstracts are effectively indexed on author(s) and on subject(s); for over 1164 standarzided terms it is possible to check the treatment of subjects in the literature.

SRM-Search Services: Specific searches can be carried out upon request, in which SRM staff members acting as intermediairs, help with the translation of problems into descriptors of the Thesaurus, and the designing of a search profile. An SDI service, as a more continuous form of information services can be provided as well.

Also a thematic bibliography in specific sub-field can be compiled on request for the supporting of conferences, workshops, seminars, etc.

Sage Publications/SRM Database on CD-ROM*: The SRM-Database on CD-ROM is a product of professional partnership between the SRM-Documentation Centre and Sage Publications, the leading international publisher of social science methodology.

The CD-ROM is entitled "Sage Publications/SRM Database of Social Research Methodology". Updated every six months (March and September), this CD-ROM gives a cumulative access to the SRM-Database and to the latest research and publications in the field of social research methodology.

An easy-to-use interface facilitates complete bibliographic search options, as well as systematic subject searching by means of the Thesaurus structure. A free text retrieval option performs refined searches in a fraction of the time taken by a conventional library search.

With the unique and powerful Thesaurus, specific searches can be structured with the help of "broader and narrower terms" relations, and with the "see also" and "used for" references.

All available search options can be used in combination with each other, and the easy-to-use interface means virtually no training needed.

For more information and evaluation copies: market@sagepub.co.uk

*SRM-Helpdesk***: The team of information specialists of SRM are acting as intermediaires on request for information and help with the designing of search profiles. Helpdesk facilities are also available for more technical support, for instance with the installation of the CD-ROM and the use of the various functions or the user interface of the CD-ROM.

Contact the SRM-Helpdesk, e-mail address: helpdesk@srm.eur.nl

SRM-Site for Research, Methodology and Statistics for the Social and Behavioral Sciences***

Thanks to the information technology and network facilities, scientific communication and information are carried out more and more electronically. For the individual researchers it is hardly possible to keep informed on the enormous supply of electronic information and on all the current developments in the virtual

360

^{*} Sage Publications/SRM Database of Social Research Methodology/ SRM-Documentation Centre. -Rotterdam: SRM-Documentation Centre, Erasmus University. ISBN Stand Alone Version: ISBN 07619-0090-X. ISBN Network Version: ISBN 07619-0091-8.

^{**} SRM-Helpdesk: helpdesk@srm.eur.nl

^{***} SRM-Site for Research, Methodology and Statistics in the Social and BehavioralSciences: http://www.eur.nl/ub/srm/srmsite

world. For those reasons SRM enlarge its traditional tasks as a bibliographic information provider by means of a new www-service; the SRM-Site for Research, Methodology and Statistics for the Social, and Behavioral Sciences.

We intend to create one special address on the Internet for electronic and bibliographic information in such a way that brings together all relevant information on social research methodology. With the SRM-Site, various kinds of information can be gathered, selected and registrated as far as it is of interest for methodologists, students, and social researchers in practice.

The retrieval system for the SRM-Site is designed by SRM in cooperation with the Directorate of Information Systems and Information Technology of the Erasmus University Rotterdam. For the data-entry and the database they have used Dataperfect 2.3. Freewais-sf (structured fields) has been used for the indexing, and the retrieval-system is based on SFgate 4.0. Both packages have been developed by the Department of Computer Science of the University of Dortmund, and are available as public domain.

In correspondence with our earlier experience in bibliographic information retrieval, we have tried to design an authorized and classified retrieval system for the Site with easy and user-friendly search procedures. Besides primary information, the SRM-Site will also supply pointers to other electronic information resources on the Internet.

As a starting point for the design of this system we have taken the user's needs and their requests for information as leading ideas. In fact two basic questions, can be asked: First of all: "What kind of information do you want?" and second: "What subject(s) are you looking for?". SRM is very familiair with the last question: while we handled these subject queries for more than 25 years in the bibliographic database. Led by our experience and the availability of the SRM-Thesaurus, we compiled a Subject-Index for the SRM-Site. This Subject-Index is based on the headings of the SRM-Thesaurus following the successive stages of a research project. Within the same structure we selected 139 leading and commonly used descriptors of the Thesaurus as authorized keywords for the Subject-Index.

In the past, SRM had only to deal with these subject queries in providing bibliographic information. But the extensive growth of electronic information, not only in quantity but also in diversity, requires a completion to this traditional way of subject-indexing. So, in addition to the Subject-Index, a distinction between the various types of electronic information can be made.

Therefore we constructed the Information-Index, in which all kinds of electronic information, related to the process of knowledge development and knowledge dissemination are categorized as follows:

- 1. General Information Resources
- 2. Researchers Forums, Meetings, Calls and Projects
- 3. Research Centers, Data Archives and Documentation Centers
- 4. Teaching Research Methodology and Statistics
- 5. Literature Information on Research Methodology and Statistics
- 6. Software for Social Science Research

Within this Index we have specified 25 authorized keywords, based on the distinctive kinds of electronic information available on the Internet.

In the SRM-Site we enclosed four different search options, based on the two already mentioned leading questions:"What kind of information do you want?", being the basis of the Information-Index, and "What subjects are you looking for?", categorized in the Subject-Index. Both indexes can be used as "stand alone" search options. Within one index more keywords can be selected in one search; in this case the Boolean operator is standard "OR". A combination of keywords from the Subject-Index as well as from the Information-Index is also possible. The Boolean operator is standard "And" in this case. Besides these two search-options, an "Alphabetical List of Terms" of all the keywords from the Subject-Index and from the Information-Index (together 164), is added as the third retrieval option. Finally a "Free Text" option completes the retrieval system.

"Free Text" includes searching in all fields of the records (names, electronic addresses, keywords, and annotation).

The information-specialists of SRM have traced many electronic information resources in the last 6 months. After contemplating discussion lists, announcements, newsletters, advertisements, etc., many electronic resources and their Internet addresses were registered and checked on their accessibility.

First of all, when we checked their access, it seemed that about 50 % of the mentioned addresses were incorrect or not operational. We checked them further in all kinds of search engines, like Netsearch on Netscape, and Alta Vista; so we could correct 30 % of the data.

That means, that about 20 % of the selected information sources could not be traced or doesn't exist anymore!

In the beginning stage, the SRM-Site contains now \pm 200 operational linked references to electronic information resources, all of them carefully indexed and mostly with a brief annotation.

At this moment, as far as it concerns the subject-indexing of these resources, only the more general concepts of the Subject-Index have been used, like the keywords "methodology of the social sciences", "research methods", "statistical analysis", qualitative research", and several types of "applied research", such as "public opinion research", "marketing research" or "action research". But we suppose, that with the fast growing expansion of electronic publications, it will be necessary to use also the more precise concepts of the Subject-Index as well.

Quality Control:

Thanks to the developments in information technology the growth of worldwide communication is expanded immensely. The Internet, started as a worldwide scientific communication network between universities, is overflowed now with commercial information, fuzzy messages, and other rubbish and the need for authorized information and for quality control becomes more and more urgent. For this reason, we wish to provide a professional and controlled electronic information-service with the SRM-Site.

Quality of information will be guaranteed by SRM by using the following procedures:

- First of all, selection of the electronic information is based on the methodological relevance, according to the criteria that have been developed through the years for the selection of bibliographic information in the SRM-Database.
- The development of a classification-instrument at first, before the selection of the resources, permits a very specific and accurate indexing and retrieval of the electronic information sources.
- The Subject-Index for the Site is deduced from the SRM-Thesaurus, and follows the same authorized structure of main categories and concepts.
- The selected information will be added with keywords and with a short annotation
- Each address is carefully checked on its accuracy and its real access on the Internet.

Upto now the main focus was pointed at the selection of electronic resources and the linkages to other homepages and e-mail addresses. But in the future, we will extend the service of the SRM-Site as provider of electronic publications as well.

In this way, the Site will function also as a Clearinghouse, offering "one virtual market-place for the demand and supply of electronic publications on social research methodology and statistics". Thanks to the Subject-Index, a precise selection, storage and retrieval can be guaranteed, even with the expected growing supply of electronic publications in the future. With the SRM-Site and the forthcoming service as Clearinghouse, SRM will complete the scientific information services from printed bulletins and CD-ROMS to an advanced intermediary for electronic information on the World Wide Web.

Subject-Index for Social Research, Methodology and Statistics

Methodology of the social sciences

Philosophy of the social sciences

Logical reasoning Theory formation Theory testing

Theory and research

Methodological approaches

2 ResearchMethodology/Research Design

Research methods Research design

Formulation of problems

Formulation of hypotheses

Conceptualization Facet design

Selection of indicators

Formation of category system

3. Types of Research/Applied Research

Qualitative research

Quantitative research Types of research

Exploratory research

Descriptive research

Hypothesis testing research

Explanatory research

Comparative research

Longitudinal research

Research strategies

Field research

Action research

Survey research

Case study/life history

Applied research

Public opinion research

Political research/election polls

Marketing research

Mass communication research

Policy research

Forecasting research

Educational research

Ecological research/area research

Demographic research

Anthropological research

Organizational research

Group research

Family research

Behavioral research

Psychological research

4. Selection of Research

Units/Sampling

Sampling Sampling theory

Sample size

Sample design

Census

Nonresponse

5. Data Collection

Data collection techniques

Content analysis

Secondary analysis

Meta analysis

Observation

Questionnaire

Mail survey

Interviewing

Types of interview

Qualitative interview

Unstandardized interview

Standardized interview

Group interview

Telephone interview

Computerized interview

Interview situation

Interviewers

Respondents

Responses

6. Measurement and Scaling Methods

Measurement

Measurement theory

Levels of measurement

Measurement models

Rating

Scaling techniques

Unidimensional scaling/item scaling

Multidimensional scaling

Latent structure analysis

Latent trait models

Test theory

Item response theory

Test construction

7. Statistical Analysis, Theory and Tests

Statistical analysis

Statistical theory

Probability theory

Statistical inference

Estimation

Hypothesis testing

Data

Presentation of data

Graphical presentation

Summary measures

Statistical tests

Univariate tests

Multivariate tests

8. Multivariate Analysis and Models

Multivariate analysis

Measures of association

Measures of agreement

Regression analysis

Analysis of variance

Analysis of covariance

Factor analysis

Discriminant analysis

Panel analysis

Cohort analysis

Time series analysis

Cluster analysis

Correspondence analysis

Models

Linear models

Nonlinear models

Latent variable models

Structural equation models

Causal models

Process models

Markov models

Discrete models

Log-linear models

9. Data Processing and Interpretation

Data processing

Coding

Data interpretation

Elaboration

Levels of analysis

Individual analysis

Relational analysis

Group analysis

Multi-level analysis

10. Reliability and Validity

Errors

Reliability, theory and testing

Validity, theory and testing

11. Organization & Application of Research

Research management and organization

Research policy

Quality of research

Research ethics

Application of research

Information-Index for Social Research, Methodology and Statistics

1. General Information Resources

Research Forums, Meetings, Calls and **Projects**

Researchers

Researchers associates

Special interest groups

Newsletters

Discussion lists

Meetings

Calls/projects

3. Research Centers, Data-Archives and **Documentation Centres**

Research centers

Data-archives/Data services

Documentation centers

4. Teaching Research Methodology and Statistics

Teaching research methodology

Courses/Summerschools Course materials/Courseware Manuals/Guides

5. Literature information on Research Methodology and Statistics

Libraries/Vitual library servers Bibliographic databases Document delivery services Electronic publications Publishers Books/New titles Periodicals Grey literature

6. Software for Social Science Research

Computer packages/Software New Programs Software information services

TruusKantebeen srm-documentation centre Erasmus University Rotterdam P.O. Box 1738 3000 DR Rotterdam The Netherlands