

## User Guide

### I. Project Overview

Principle Investigator	Yang-chih Fu, Su-hao Tu
Execution Institution	Institute of Sociology, Academia Sinica
Funding Sources	National Science Council
Project Period	2009.01.01-2009.12.31
Data Collection Period	2009.07.20-2009.08.31

### II. Released File Description

#### 1. User Guide

user guide.doc	including project overview, released file description, documentations for data validation and clean, note for usage etc.
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#### 2. Questionnaire

etscs2009q1ques.pdf	Questionnaire for data collection
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#### 3. Datasets

etscs2009q1.sav	SPSS dataset
etscs2009q1.dta	STATA dataset

#### 4. Others

etscs2009q1weight.doc	Weighting description
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### III. Guideline for data validation and usage

1. The Center for Survey Research (CSR), Research Center for Humanities and Social Sciences Academia Sinica, has checked wild codes and out-of-range values, consistency, and open-ended responses to validate and clean data. There is no doubt about data accuracy after the validation.
2. New variables
  - (1) **Complex sampling variables:** According to the sampling framework given by the research team, variables of *stratum*, *Primary Sampling Unit* (PSU), and *Secondary Sampling Unit* (SSU) are added for complex sampling.
  - (2) **Zip variable:** zip codes are added, based on the location of investigated villages and towns.

### 3. Mokken variable

As often seen in surveys, Guttman scaling is a method to locate respondents by means of a set of items ordered by degree of difficulty in which a unidimensional, or single hierarchical, response pattern is assumed. The deterministic form of Guttman scaling does not adequately account for fundamental statistical concepts such as the presence of error responses, due to either measurement errors or sampling errors.

As an alternative approach, Mokken scaling model is a nonparametric probabilistic form of Guttman scaling model.<sup>1</sup> An automated item selection procedure (AISP) is proposed to select a set of question items from a potentially large pool, which conform to the requirement of a Mokken scale. We applied AISP to select a set (or sets) of variables that conform to the requirement and calculated scale score(s) based on dichotomous responses. Scale score(s) can be used to represent a latent trait value of the respondents and can be further analyzed in empirical studies. Variables used to construct Mokken scales are the following:

Variable mokb23:

For questions of b23a to b23c, the responses of (3) agree and (4) Strong agree are combined as positive response, while (1) Strongly disagree and (2) Disagree remains negative response. When using AISP to select items for Mokken scale, all of the variables are kept to calculate scale scores as mokb23.

### 4. Note for data usage

- (1) The column widths of variable label and value description in the STATA are limited to 80 and 40 bytes, respectively, so the STATA dataset shows only the first 80 bytes as variable label, and the first 40 bytes as value description.
- (2) In case of any inconsistent findings between project report and dataset, priority is given to findings in dataset.

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<sup>1</sup> Mokken, R. J. (1971). *A Theory and Procedure of Scale Analysis with Applications in Political Research*. The Hague: Mouton.

#### **IV. Guideline for citation**

Citation, based upon the requirement of various journals, theses or dissertations, can be revised.

#### **Citation**

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#### **V. Contact us**

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