

Michigan Questionnaire Documentation System (MQDS): A User's Perspective

Heidi Guyer, Gina-Qian Cheung
The 11th International Blaise Conference
Annapolis, Maryland
September 2007





MQDS Background

- Goal: Develop a system used to generate questionnaires & codebooks from a Blaise data model / data set
- Developed by the University of Michigan's Survey Research Center
- Development Period: 2003 – 2007
- International Consortium of Users: 2006-present



Main features of MQDS

Core Tools

- Questionnaire Documentation
- Codebook Documentation (from Blaise BDB or SAS data set)

Additional Tools

- XML Merge
- Reapply Stylesheet
- Blaise to SAS
- SAS to XML



Review Method

- “Testing to robustness”
- Testing Team identified
- Testing plan developed
- Bug Log developed
- Data models assigned
- Group & Individual testing sessions
- Solicit comments from internal users
- Solicit comments from Consortium users



Overall Impressions

- **Key Features**

- Flexibility
- Supports multiple languages
- Updated interface

- **Pros**

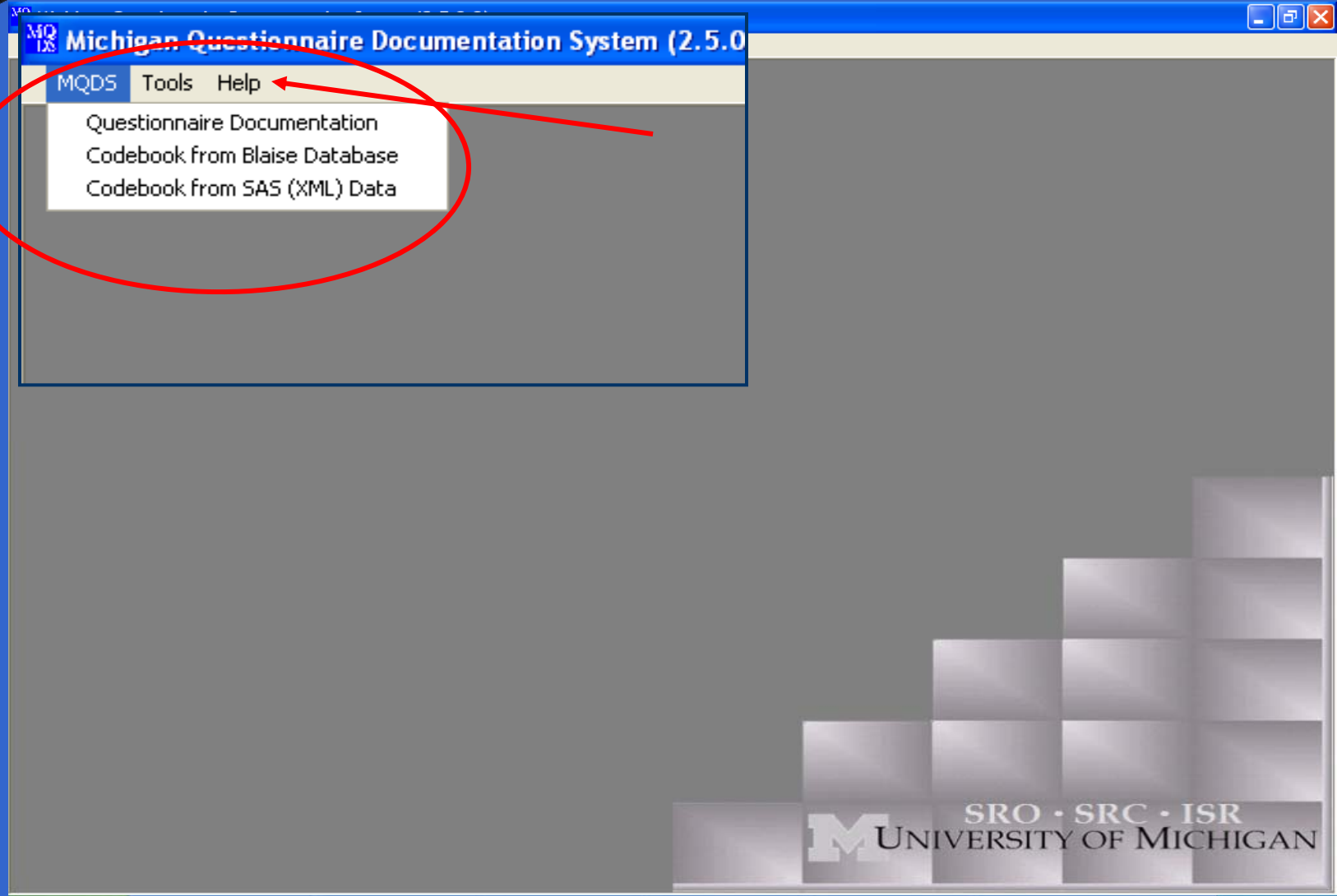
- Easy to install
- Sample project provided
- Updated and complete documentation
- Format of output

- **Cons**

- Limitations with large or complex data models



Program Interface





Questionnaire Documentation

- Key Features
 - Output in RTF or HTML
 - Include hyperlinks and external lookup files
- Pros
 - Flexibility in formatting
 - User selects items displayed
 - Supports multiple languages
 - Hyperlinks can be used to include other files
- Cons
 - Some of the screens are confusing (stylesheet selection)
 - Default color of hyperlinks and interviewer instructions is the same
 - Inability to display logic for large or complex data models



Questionnaire Documentation

MQDS Training Project

User Guide

Legend

Eng

- SECTION_HHL
- HHLIST
- SECTION_A
- SECTION_B
- SECTION_C
- SECTION_D

SECTION_A

A0

Before you begin this interview, you must have a consent form signed by the selected Respondent.

If this is an interview being taped for quality control purposes, the Respondent must also sign an audio tape consent form and you must start the tape recorder so that the following statement is on tape.

Everyone must be read the following statement:

Thank you for agreeing to be interviewed. Your help can make a real difference to your community. We are doing this study in order to improve banking and other financial services in the community. Your thoughts on these issues could help policy makers figure out how to help a lot of people in the community get better access to good financial services.

This interview is completely voluntary. If we should come to any question you don't want to answer, just let me know and I will go on to the next question. The answers that you give will be kept confidential to the maximum extent allowable under federal and state law.

♦ ENTER [1] to continue

1 Continue



Questionnaire Documentation

MQDS Training Project User Guide

Legend

Eng
·SECTION_HHL
·HHLIST
·SECTION_A
·SECTION_B
·SECTION_C
·SECTION_D

[F1] - HELP
Do you own or rent your home?

1 Own
 2 Rent

B1A_IC_11

B_Intro = 1 Yes

1 EXPR IS FALSE GOTO C1
 2 EXPR IS TRUE

B1a

I want to start by asking you about accounts at a bank, savings & loan or credit union. Please think about any accounts which you own, including joint accounts.

Do you currently have a checking account?

1 Yes
 5 No
 6 Respondent has no Bank Account of any kind GOTO B2

My Computer



Questionnaire Documentation

English

SO3INTR2

SO3INTR2.

You had a fear of a number of social or performance situations on the list.
Can you remember your exact age the very first time you had a fear of any of these situations?

- 1 YES
 5 NO

Spanish

SO3INTR2

SO3INTR2.

Usted ha tenido miedo a ciertas situaciones sociales de la lista.
¿Puede recordar la edad exacta que tenía la primera vez que tuvo miedo a alguna de estas situaciones?

- 1 SI
 5 NO

Tagalog

SO3INTR2

SO3INTR2.

Nagkaroon ka ng takot sa ilang bilang kalagayangpanlipunan o pagpapalabas sa iyong listahan. Matandaan mo ba ang hustong gulang mo noongpinakaunang panahon kang nagkaroon ng takot saalinman sa mga kalagayan ng mga ito?

- 1 Oo
 5 HINDI



Codebook

- Key Features
 - Output in RTF or HTML
 - Ability to generate a codebook from Blaise or SAS data set
- Pros
 - Flexibility in formatting
 - User selects items displayed
 - Supports multiple languages
 - Frequencies and descriptive statistics are displayed
- Cons
 - Same usability issues as with the Questionnaire Documentation
 - Inability to process extremely large data sets
 - Tool needed to confirm that all variables are included in the output
 - Codeframes will not match output for recoded or newly created SAS variables



Codebook Documentation

D1

The next questions are about money orders and other ways of making payments. Have you purchased a money order at least once during the last 12 months?

- 1 Yes
- 5 No [GOTO D7](#)

Universe

Value Label	Frequency	Valid Percent	Total Percent
1 Yes	666	66.53%	66.40%
5 No	335	33.47%	33.40%
8 Refused	1		00.10%
9 Don't Know	1		00.10%
Total cases	1003		

- **Position:** 16
- **Missing Data Codes:** 8,9,. (DK/RF are not valid)
- **Type:** numeric
- **Decimals:** 0



Demonstration



Additional Tools

- XML Merge
- Reapply Stylesheet
- Blaise to SAS
- SAS to XML

All useful, time-saving tools!



Additional uses of MQDS

- Can be used throughout the project lifecycle:
 - Instrument development and testing
 - Documentation
 - IRB submission
 - Training
 - During data collection
 - Post-data collection



Additional uses of MQDS

- Can be used for comparison purposes:
 - Across waves of a longitudinal study
 - Across the same study in multiple languages
 - Across similar studies



CPES Project

- Collaborative Psychiatric Epidemiology Surveys (CPES)
 - Three NIMH mental health surveys
 - National Comorbidity Survey – Replication
 - National Survey of Latinos and Asian Americans
 - National Survey of American Life



CPES Project

- Primary goals:
 - Harmonize and merge multiple datasets
 - Disseminate for public use



Harmonization and Disclosure Analysis

- Develop survey instrument crosswalk
 - Link sections and questions
 - Evaluate questions for comparability
 - Re-code questions and re-link if required for harmonization
- Merge datasets
- Perform disclosure analysis
 - Re-code and drop variables
 - Restricted use dataset will be available [soon]
- Generate XML question metadata files (MQDS)
 - Question text, response options, missing data codes, frequencies, etc.



CPES Home Page Overview

www.icpsr.umich.edu/CPES

Collaborative Psychiatric Epidemiology Surveys



Background

Using CPES

Interactive
Documentation

Download Data

Publications

Online Analysis

- Related Sites
- Search
- Contact Us
- Help
- MyData options...

About CPES

The National Institute of Mental Health Collaborative Psychiatric Epidemiology Surveys (CPES) provides data on the distributions, correlates, and risk factors of mental disorders among the general population, with special emphasis on minority groups. This project joins together three nationally representative surveys: the [National Comorbidity Survey Replication](#) (NCS-R), the [National Survey of American Life](#) (NSAL), and the [National Latino and Asian American Study](#) (NLAAS). CPES permits the investigation of cultural and ethnic influences on mental health.

Compare Questions & Variables

CPES is a harmonization of three surveys on mental health. Browse by subject to view all questions/variables in CPES, or select an individual survey.

Browse CPES by Subject

DSM-IV

- [Mood](#)
- [Anxiety](#)
- [Substance](#)
- [Impulse Control](#)

ICD-10

- [Mood](#)
- [Anxiety](#)
- [Substance](#)
- [Impulse Control/Other](#)

Browse the Individual Surveys

- [NCS-R](#)
- [NLAAS](#)
- [NSAL](#)



Interactive Documentation

Interactive Documentation

file: [CPES](#) >

You can also choose to browse by selecting [DSM-IV/ICD subjects](#).

CPES

NCSR

NLAAS

NSAL

Below is a list of all the sections in CPES. They are currently sorted alphabetically by section name. You can also choose to [view them in the order they appeared](#) in the questionnaire.

- [30-Day Functioning](#)
- [30-Day Symptoms](#)
- [Acculturative Stress](#)
- [Adult Demographics](#)
- [Agoraphobia](#)
- [Attention-Deficit Hyperactivity Disorder](#)
- [Childhood](#)
- [Childhood Demographics](#)
- [Children](#)
- [Chronic Conditions](#)
- [Conduct Disorder](#)
- [Constructed Demographic Variables](#)
- [Context of Exit Questions](#)
- [Demographics](#)
- [Depression](#)



Interactive Documentation: Frequencies / Summary Stats

Agoraphobia

file: [CPES](#) > section: [Agoraphobia](#) > language: English

You can also choose to [view all variables in this section in](#)

* indicates there is some discrepancy in the question and

† For the individual studies, this variable exists in different

ID	Label
V01626	Ever strongly fear being home alone
V01627	Ever strongly fear being in crowds
V01628	Ever strongly fear traveling away from home
V01629	Ever strongly fear traveling alone or away from home
V01630	Ever strongly fear using public transportation
V01631	Ever strongly fear driving a car
V01632	Ever strongly fear standing in line in public places
V01633	Ever strongly fear being in stores/malls
V01634	Ever strongly fear being in large auditoriums
V01635	Ever strongly fear being in restaurants or other public places

[<- previous variable](#)
[next variable -->](#)

[CPES V01631](#)
[NCSR AG1F](#)
[NLAAS AG1F](#)
[NSAL AG1F](#)

Variable Label: Ever strongly fear driving a car

AG1f

(Did you ever strongly fear any of the following situations?)

Driving a car?

1 YES

5 NO

7 N/A

Value	Label	Frequency
1	YES	480
5	NO	1560
7	N/A	54
.	Missing	17919

Disclaimer: Frequencies displayed above are not weighted.

[<- previous variable](#)
[next variable -->](#)

[CPES V01631](#)
[NCSR AG1F](#)
[NLAAS AG1F](#)
[NSAL AG1F](#)

Variable Label: Ever strongly fear driving a car

AG1f

(Did you ever strongly fear any of the following situations?)

Driving a car?

1 YES

5 NO

7 N/A

Universe

Applicable for all respondents.

Value	Label	Frequency	Valid Percent	Total Percent
1	YES	167	24.93%	02.75%
5	NO	488	72.84%	08.02%
7	N/A	15	02.24%	00.25%
.	Missing	5412	-	88.98%

Disclaimer: Frequencies displayed above are not weighted.



Future Directions

- Investigate incorporation of Data Dissemination Initiative (DDI) v.3 recommendations.
- PDF output



Summary

- Useful tool for creating questionnaire and data documentation
- Primary drawbacks encountered with large, complex data sets



Acknowledgments

ISR-SRC-SRO

Tricia Blanchard, Karl Dinkelmann, Eduardo Galván,
Hemant Kannan, Peter Sparks

ISR-SRC

Health & Retirement Study, Panel Study of Income
Dynamics

MQDS Consortium Members

Mathematica Policy Research, National Centre for Social
Research, Statistics Canada, UMich Survey Research
Center