The Challenges of Implementing the Chinese Family Panel Study (CFPS)

Gina-Qian Cheung and Nicole Kirgis
Survey Research Operation, Institute for Social Research,
University of Michigan

March 25, 2011

MICHIGAN INSTITUTE FOR SOCIAL RESEARCH
Social Science in the Public Interest

Copyright Cheung, Kirgis & CSDI

Overview

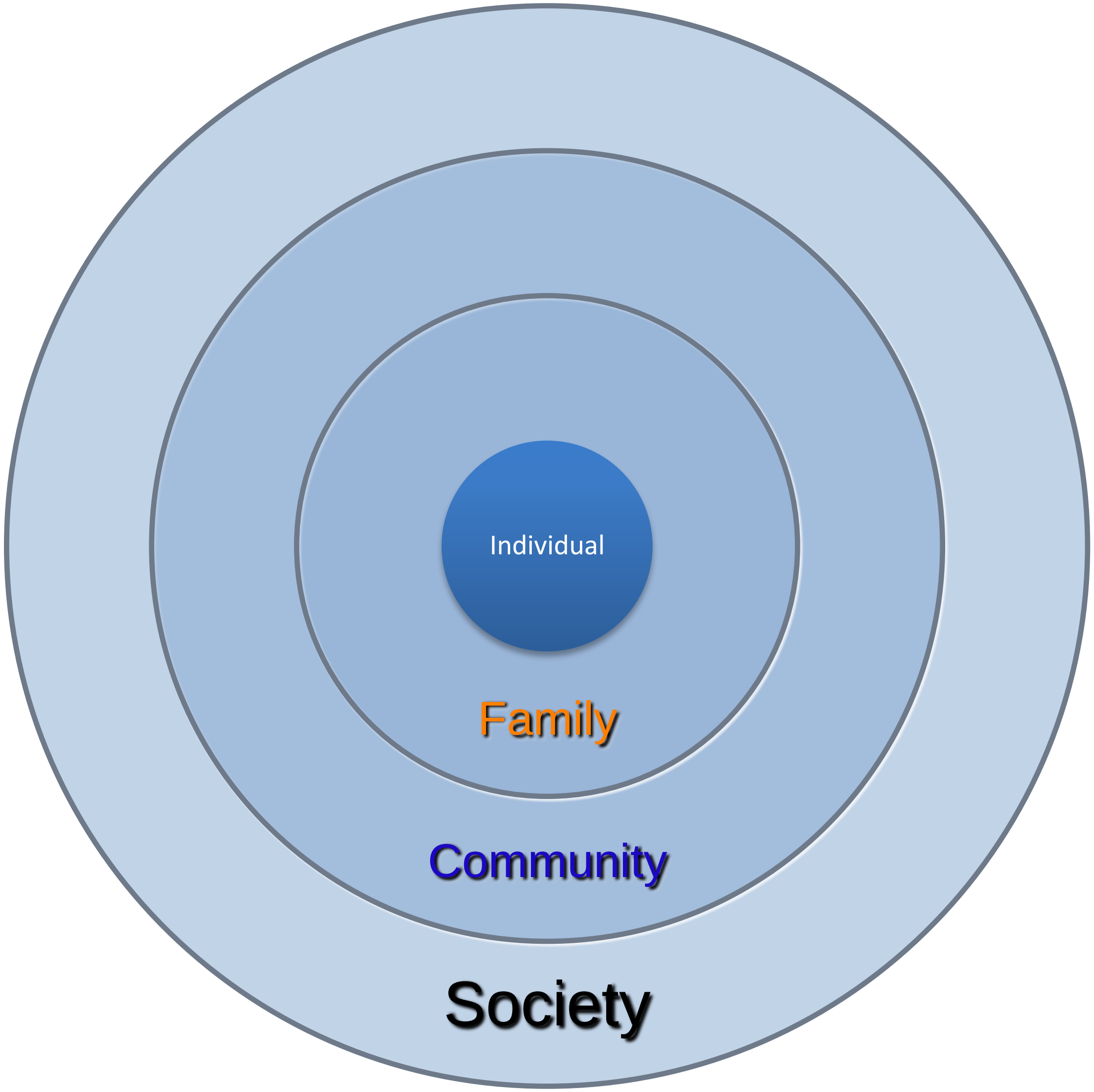
- Introduction
- Design
- Implementation processes
- Quality Control
- Challenges
- Outcomes

Induction

- CFPS is China’s largest CAPI nation wide panel survey with comprehensive research design
- 2008 Summer paper questionnaire pilot
- 2009 Summer CAPI follow up pilot
- 2009 Winter Rehearsal
- 2010 Summer baseline data collection production

The Design of CFPS

- Linking individual and family life course with community and social environment changes


Individual
Family
Community
Society

Note: This is a typical Chinese thinking about the relationship between individuals and society and the meaning of life.

Questionnaires Design

- Community Questions measure nature, social, economic, facility, and cultural environment for family and individuals
- Family Questions measure social, economic, living, and motional conditional for individuals
- Individual Questions social, economic, education, health, and life time changes with varied environment

2008 Planning

- 2008 paper questionnaire pilot:
  - – 2375 households in 2 cities and 1 province in China: Beijing, Shanghai, and Guangdong
  - – 2375 family Qs + about 8,000 around individual Qs who ware from age 1 to 80 + 95 community Qs
  - – "*Chinese Family Dynamics 2009*" has been published by using the pilot which has been submitted to the China State Council

2009 Planning

- 2009 Summer CAPI follow up pilot
  - Re-interview 2008 families and all the individuals, no communities
  - New move in and move out from the family, no re-interview conducted
  - First time using UM SRC Sample Management System -- SurveyTrak
  - First time to implement CFPS in Blaise…

2010 Baseline data collection

- Cover 25 provinces, 160 counties in rural and districts in urban, 640 villages in rural and neighborhood communities in cities
- The 25 Provinces cover 95% of the total population in mainland China
- The Qs will reach 16,000 households and 56,000 individuals from age 0 to 80 or above
- Production period April 2010 – September 2010

438 Interviewers

Total Interviewers = 438		Number of IWERs	%
Gender	Male	294	67.1
	Female	144	32.9
Married or not	No	266	60.7
	Yes	172	39.3
Age	18-19	10	2.3
	20-29	306	69.9
	30-39	101	23.1
	40 +	21	4.8
Education level	Master	11	2.5
	Bachelor	202	46.1
	College	157	35.8
	High School	68	15.5

Interviewer Hiring

Occupation	Number	Percent	Com.
Company	137	31.3	31.3
Student	109	24.9	56.2
Non-Profit	50	11.4	67.6
Freelance	44	10.00	77.6
Gov.	39	8.9	86.5
Teachers	29	6.8	93.4
Self-employ	30	6.6	100.00
Total	**438**	**100.00**	

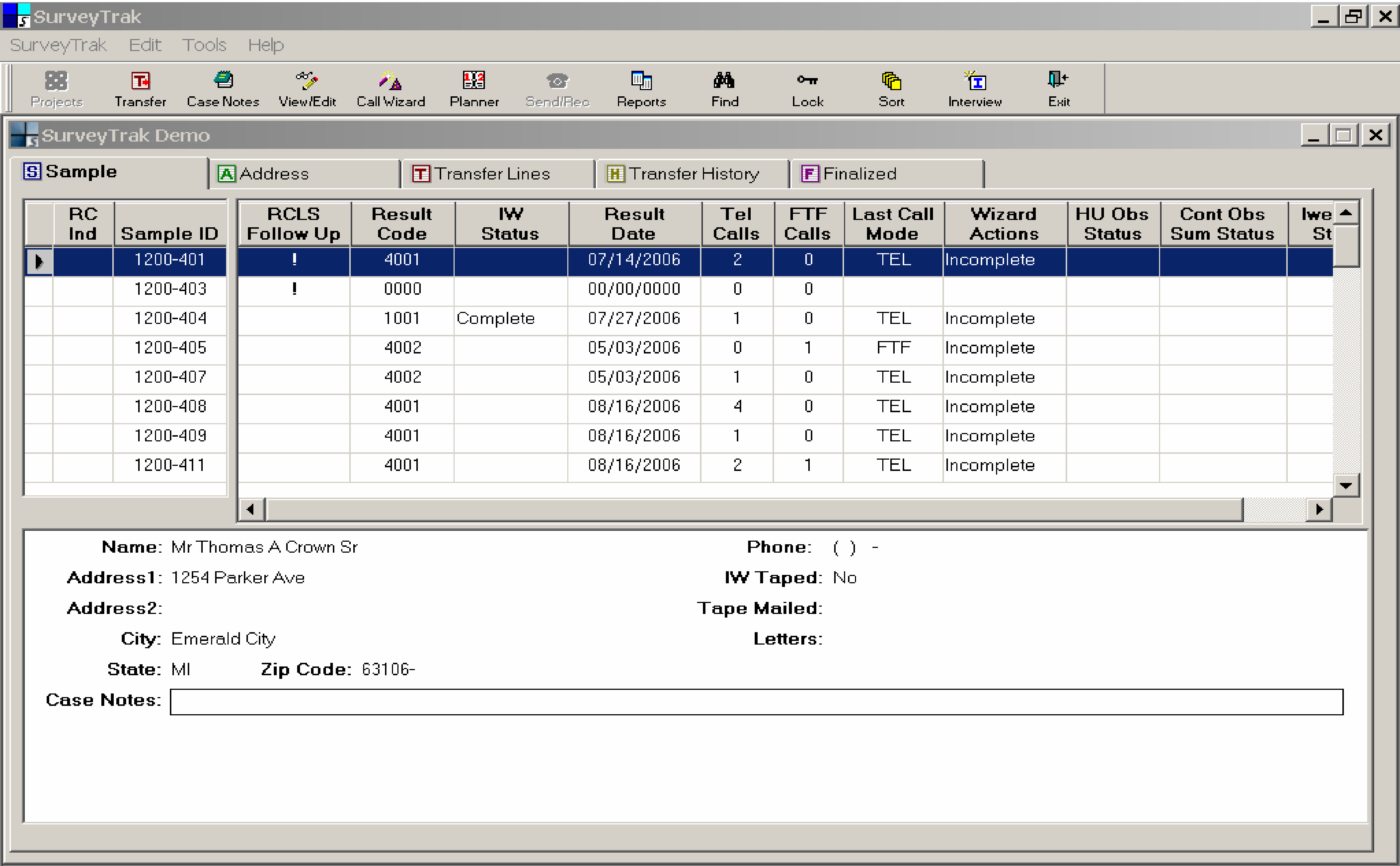
Interviewer Training

- All travel to PKU from sample counties or districts
- Six full days, including general interview training, study lectures, group practice, field practice, final certification
- Totally, more than 14 training cohorts

CFPS CAPI Management System

- Used University of Michigan SurveyTrak system as base
- Translated all the interface screen from English to Chinese
- Added more functions which is needed to the data collection environment in China
- Created full training procedures for Chinese field interviewers

SurveyTrak in English

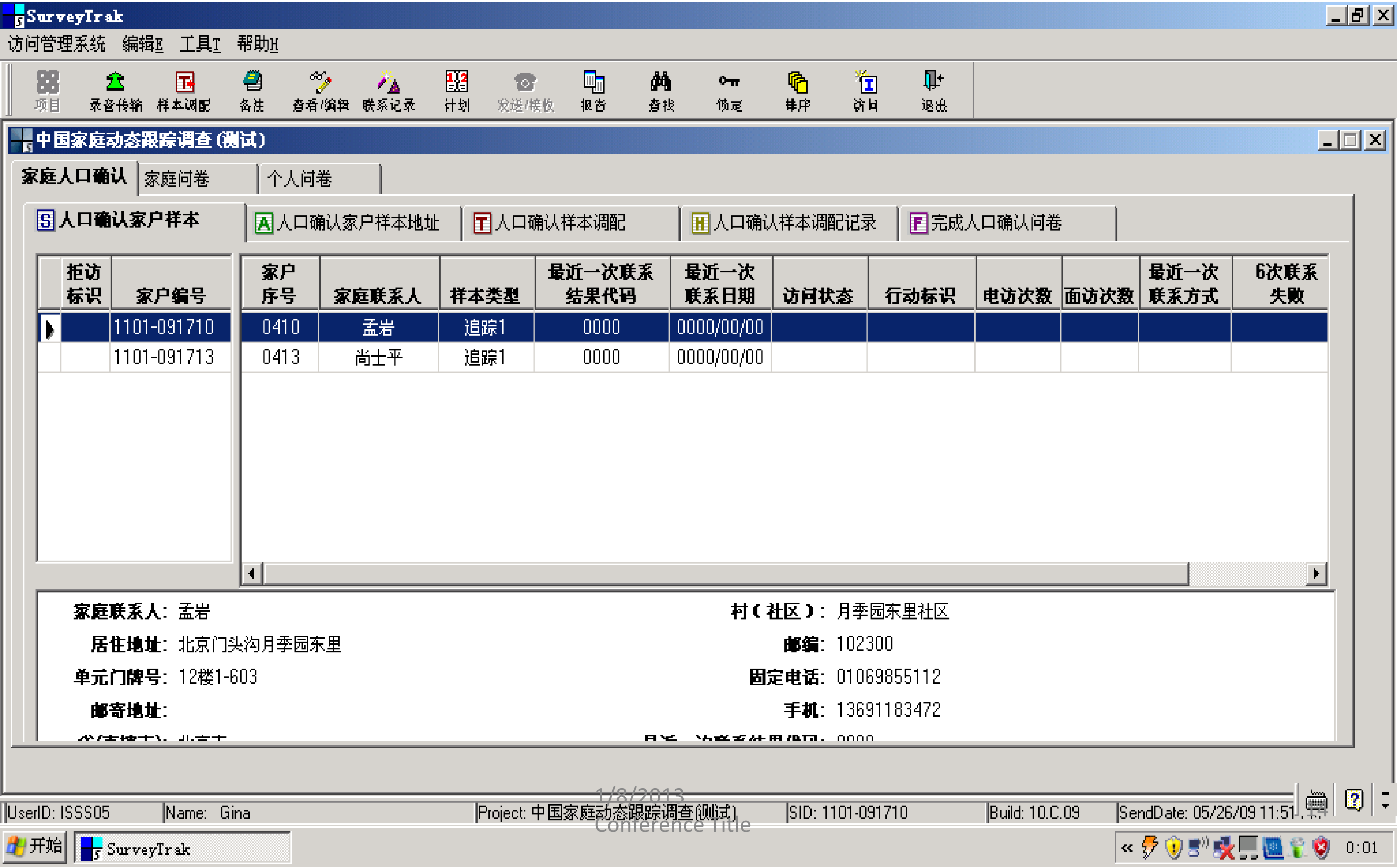

SurveyTrak
SurveyTrak
Edit
Tools
Help
Projects
Transfer
Case Notes
View/Edit
Call Wizard
Planner
Send/Rec
Reports
Find
Lock
Sort
Interview
Exit
SurveyTrak Demo
Sample
Address
Transfer Lines
Transfer History
Finalized

RC Ind	Sample ID	RCLS Follow Up	Result Code	IW Status	Result Date	Tel Calls	FTF Calls	Last Call Mode	Wizard Actions	HU Obs Status	Cont Obs Sum Status	Iwe St
	1200-401	!	4001		07/14/2006	2	0	TEL	Incomplete			
	1200-403	!	0000		00/00/0000	0	0					
	1200-404		1001	Complete	07/27/2006	1	0	TEL	Incomplete			
	1200-405		4002		05/03/2006	0	1	FTF	Incomplete			
	1200-407		4002		05/03/2006	1	0	TEL	Incomplete			
	1200-408		4001		08/16/2006	4	0	TEL	Incomplete			
	1200-409		4001		08/16/2006	1	0	TEL	Incomplete			
	1200-411		4001		08/16/2006	2	1	TEL	Incomplete			

Name: Mr Thomas A Crown Sr
Address1: 1254 Parker Ave
Address2:
City: Emerald City
State: MI **Zip Code:** 63106-
Case Notes:

Phone: ( ) -
IW Taped: No
Tape Mailed:
Letters:

SurveyTrak in Chinese


SurveyTrak
访问管理系统
编辑E
工具T
帮助H
项目
录音传输
样本调配
备注
查看/编辑
联系记录
计划
发送/接收
报告
查找
锁定
排序
访问
退出
中国家庭动态跟踪调查(测试)
家庭人口确认
家庭问卷
个人问卷
S 人口确认家户样本
A 人口确认家户样本地址
T 人口确认样本调配
H 人口确认样本调配记录
F 完成人口确认问卷
开始
SurveyTrak
0:01

拒访标识	家户编号	家户序号	家庭联系人	样本类型	最近一次联系结果代码	最近一次联系日期	访问状态	行动标识	电访次数	面访次数	最近一次联系方式	6次联系失败
	1101-091710	0410	孟岩	追踪1	0000	0000/00/00						
	1101-091713	0413	尚士平	追踪1	0000	0000/00/00						

家庭联系人: 孟岩
居住地址: 北京门头沟月季园东里
单元门牌号: 12楼1-603
邮寄地址:

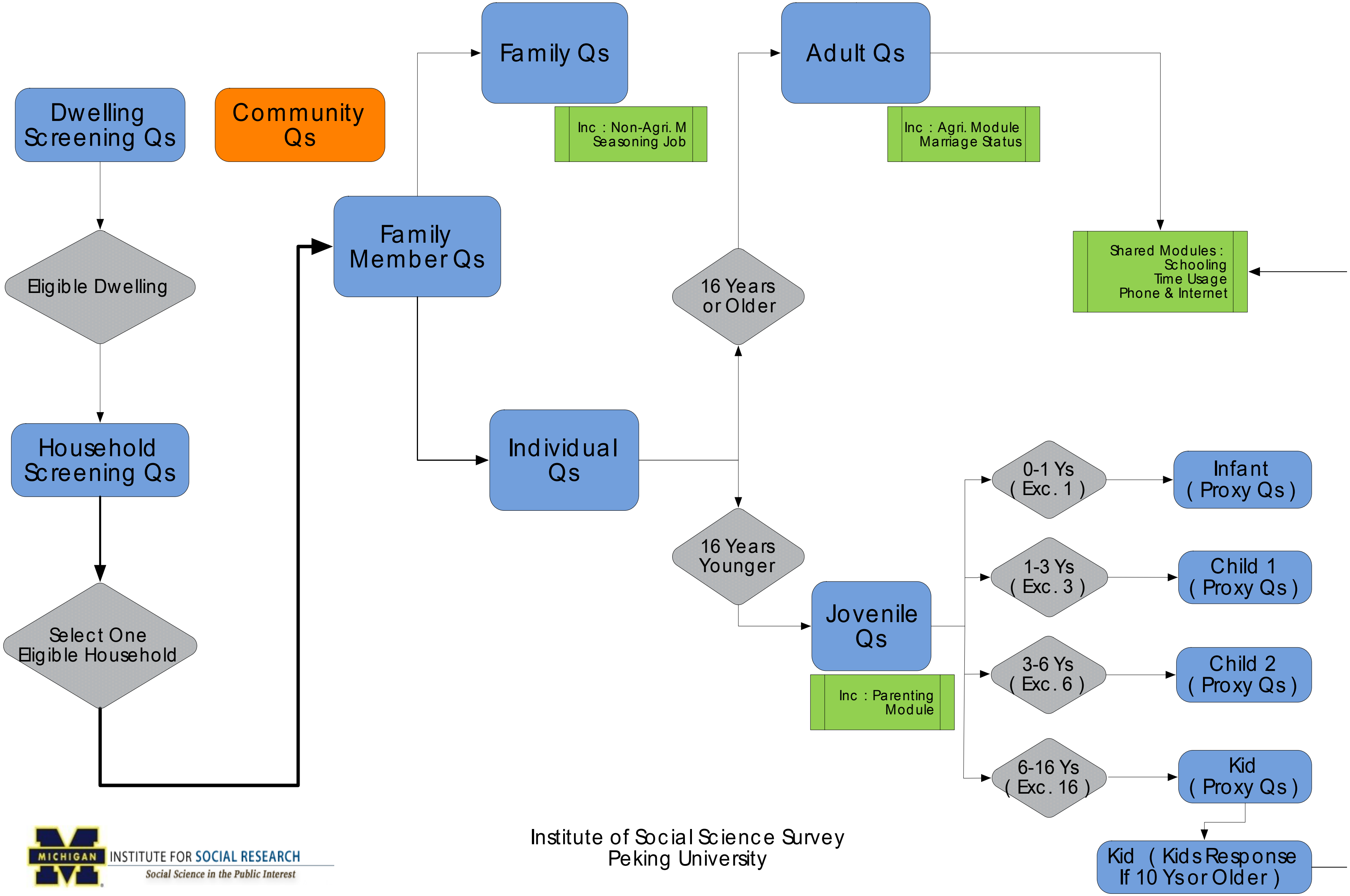
村(社区): 月季园东里社区
邮编: 102300
固定电话: 01069855112
手机: 13691183472

UserID: ISSS05 | Name: Gina | Project: 中国家庭动态跟踪调查(测试) | SID: 1101-091710 | Build: 10.C.09 | SendDate: 05/26/09 11:51...

CFPS Blaise Instruments

- 6 interview questionnaires:
  - Screening
  - Family Member Confirmation
  - Family
  - Community
  - Adult
  - Child
- 1 observation questionnaire

Qs Structure for CFPS 2010 Baseline Survey



Dwelling Screening Qs

Community Qs

Eligible Dwelling

Household Screening Qs

Select One Eligible Household

Family Member Qs

Family Qs

Inc : Non-Agri. M
Seasoning Job

Individual Qs

16 Years or Older

Adult Qs

Inc : Agri. Module
Marriage Status

Shared Modules :
Schooling
Time Usage
Phone & Internet

16 Years Younger

Jovenile Qs

Inc : Parenting Module

0-1 Ys (Exc. 1)

Infant (Proxy Qs)

1-3 Ys (Exc. 3)

Child 1 (Proxy Qs)

3-6 Ys (Exc. 6)

Child 2 (Proxy Qs)

6-16 Ys (Exc. 16)

Kid (Proxy Qs)

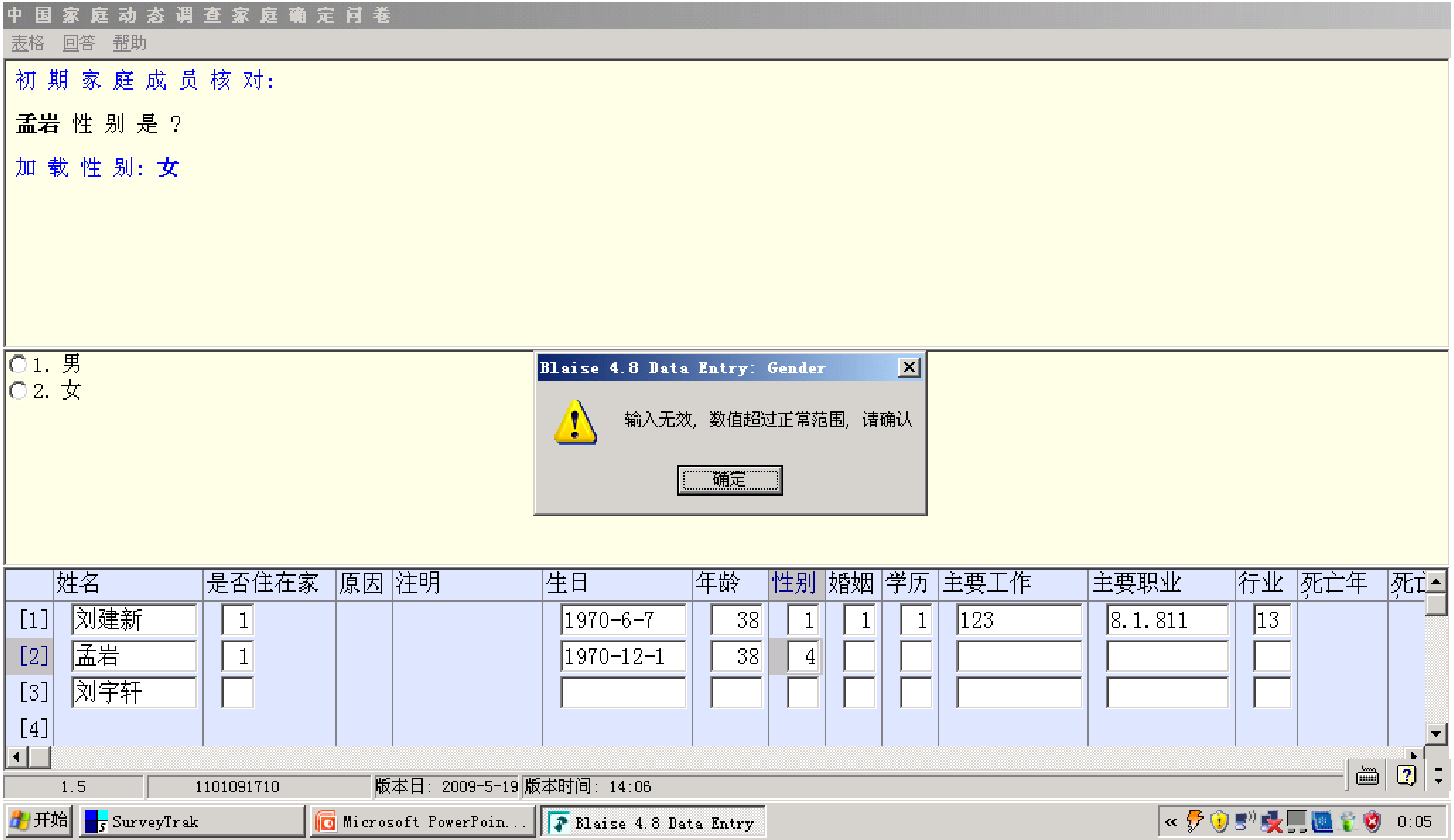
Kid (Kids Response If 10 Ys or Older)

Institute for Social Research
Social Science in the Public Interest

Institute of Social Science Survey
Peking University

Blaise in Chinese

- Set up the Blaise Chinese Environment so that Chinese can be displayed right
- Translation Blaise system text to Chinese
- Test, test, test… in Chinese


中国家庭动态调查家庭确定问卷
表格 回答 帮助

初期家庭成员核对:

孟岩性别是？

加载性别: **女**

○ 1. 男
○ 2. 女

Blaise 4.8 Data Entry: Gender

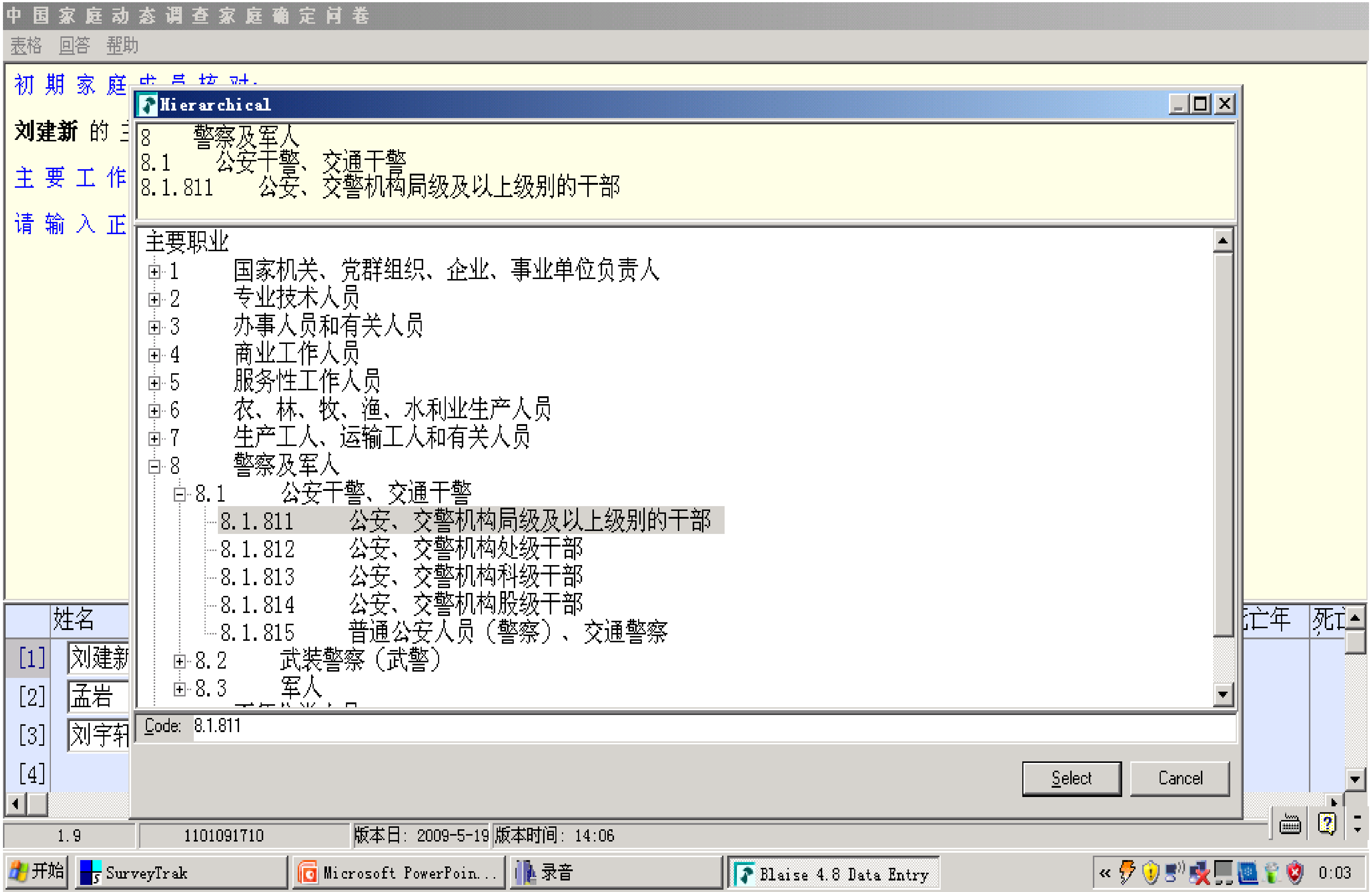
输入无效，数值超过正常范围，请确认

确定

	姓名	是否住在家	原因	注明	生日	年龄	性别	婚姻	学历	主要工作	主要职业	行业	死亡年	死
[1]	刘建新	1			1970-6-7	38	1	1	1	123	8.1.811	13		
[2]	孟岩	1			1970-12-1	38	4							
[3]	刘宇轩													
[4]														

1.5 1101091710 版本日: 2009-5-19 版本时间: 14:06

开始
SurveyTrak
Microsoft PowerPoin...
Blaise 4.8 Data Entry
0:05


中国家庭动态调查家庭确定问卷
表格
回答
帮助
Hierarchical
Select
Cancel
开始
SurveyTrak
Microsoft PowerPoin...
录音
Blaise 4.8 Data Entry
0:03

初期家庭

刘建新 的 主

主要工作

请输入正

8 警察及军人
8.1 公安干警、交通干警
8.1.811 公安、交警机构局级及以上级别的干部

主要职业
- 1 国家机关、党群组织、企业、事业单位负责人
- 2 专业技术人员
- 3 办事人员和有关人员
- 4 商业工作人员
- 5 服务性工作人员
- 6 农、林、牧、渔、水利业生产人员
- 7 生产工人、运输工人和有关人员
- 8 警察及军人
  - 8.1 公安干警、交通干警
    - 8.1.811 公安、交警机构局级及以上级别的干部
    - 8.1.812 公安、交警机构处级干部
    - 8.1.813 公安、交警机构科级干部
    - 8.1.814 公安、交警机构股级干部
    - 8.1.815 普通公安人员（警察）、交通警察
  - 8.2 武装警察（武警）
  - 8.3 军人

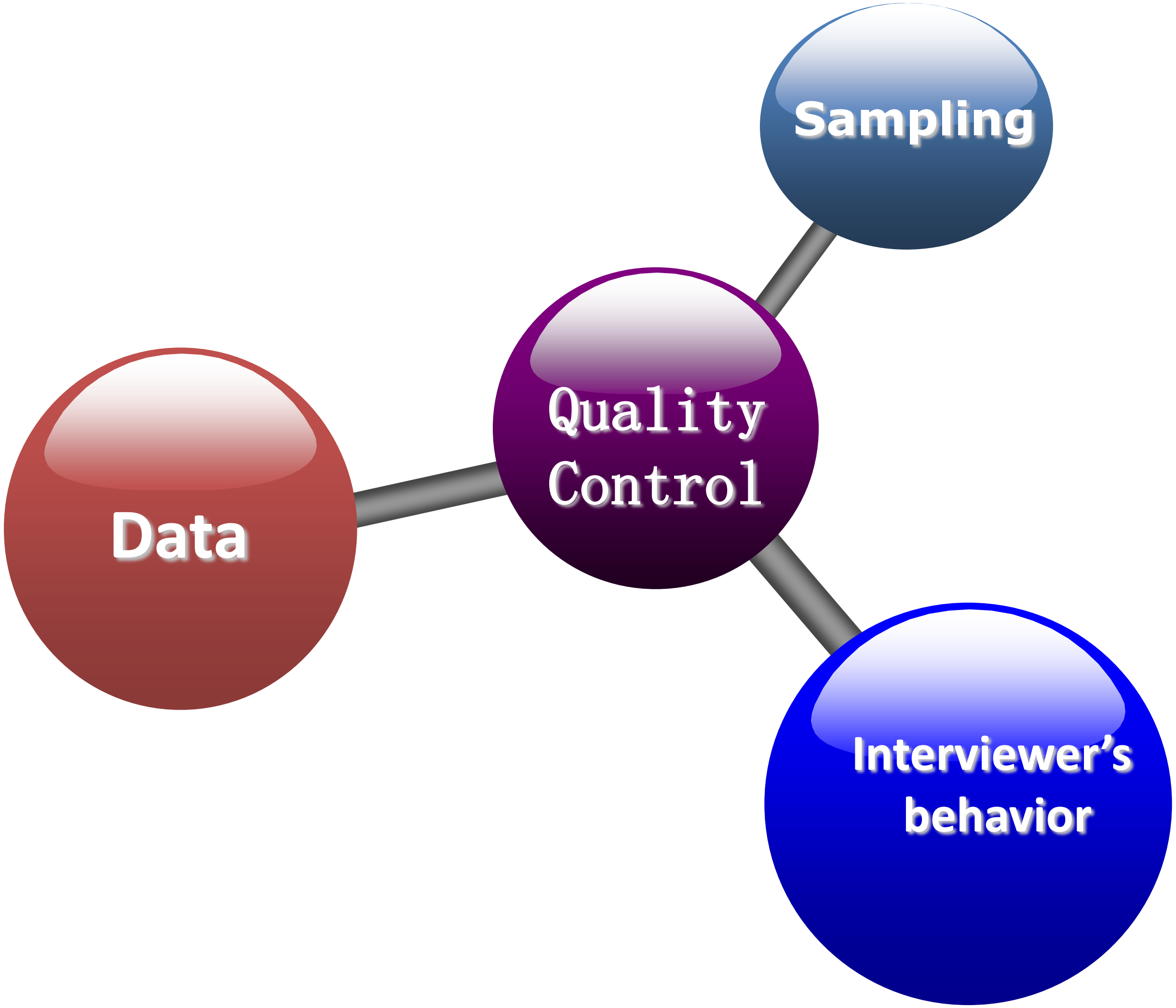
Code: 8.1.811

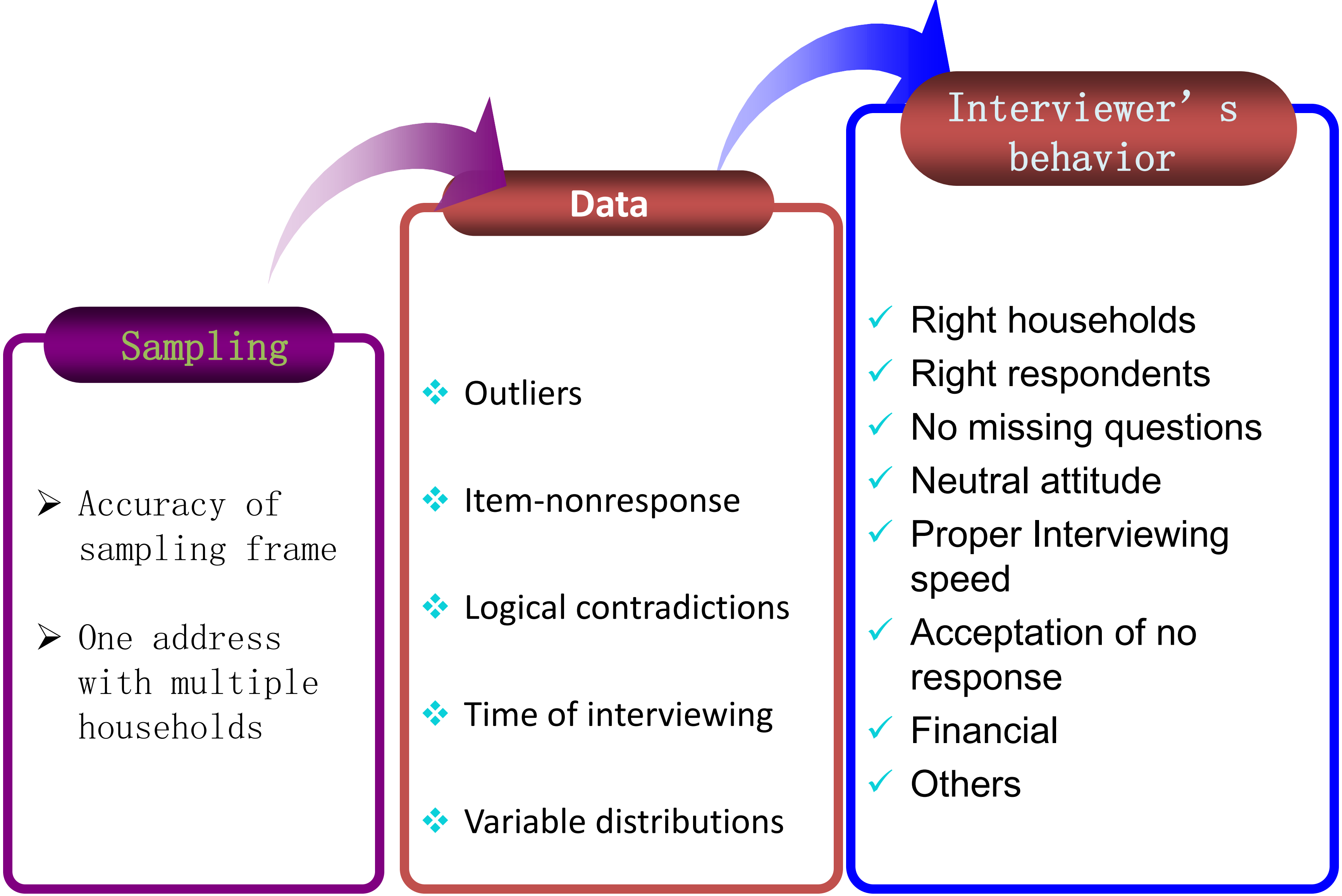
	姓名	亡年	死亡
[1]	刘建新		
[2]	孟岩		
[3]	刘宇		
[4]			

1.9 | 1101091710 | 版本日：2009-5-19 | 版本时间：14:06

INSTITUTE FOR SOCIAL RESEARCH
Social Science in the Public Interest

Quality Control


Sampling
Quality Control
Data
Interviewer's behavior



Sampling

- ➢ Accuracy of sampling frame
- ➢ One address with multiple households

Data

- ❖ Outliers
- ❖ Item-nonresponse
- ❖ Logical contradictions
- ❖ Time of interviewing
- ❖ Variable distributions

Interviewer’s behavior

- ✓ Right households
- ✓ Right respondents
- ✓ No missing questions
- ✓ Neutral attitude
- ✓ Proper Interviewing speed
- ✓ Acceptation of no response
- ✓ Financial
- ✓ Others

Quality Monitor Methods

Recording

15% HHs/COMM

- Random sampling
- Fast interview
- High DK rates

Telephone

25% HHs/COMM

- Random sampling
- Fast interview
- High DK rates

Playback

5% HHs/COMM

- Cases with extremely short interviewing time

Face to face

15% HHs/COMM

- Completion of interviewing
- Non-housing unit
- Co-work with third-party universities

Challenges

Interviewing related	Accessibility: geographic, refusal, blocking
	Complexity: address, dwelling, house unit, household
	Mobility: community, family, individual
	Fast change: rural and urban features, ……

Challenges

Tracking related	Harder to track accessible address for frequent migrants or seasonal workers
	Harder to update phone number for students, seasonal workers, ……
Interviewer related	Harder to have interviewers working longer
	Still harder to discovering sort of cheating

Outcome for 2010 CFPS baseline

- 2010 Production started on April 3rd, 2010
- 2010 Production ended on September 25, 2010 (with some area needed to go back in late fall or early months of 2011.)

The Numbers are Impressive!

Completed Questionnaires	Case
Household Screening Survey	15,593
Family Member Conf. Survey	14,865
Family Survey	14,698
Child Survey	9,001
Adult Survey	33,598
Community Survey	628
Total Case Completed	88,374

Rates

Response Rate RR3=I/(I+R+NC+O+EUH)	78.91%
Refusal Rate REF2=R/(I+R+NC+O+EUH)	0.90%
Contact Rate CON2=(I+R+O)/(I+R+NC+O+EUH)	80.02%
Cooperation Rate COOP2=I/(I+R+O)	98.61%

Address Screening

Result Codes	Freq.	Percent	Cum.
Don’t know dwelling or not	1,217	6.09	6.09
Wrong address	33	0.17	6.25
Area can’t access	21	0.11	6.36
Dwelling	18,059	90.36	96.72
Non dwelling	86	0.43	97.15
Empty dwelling or non	570	2.85	100.00
Total	**19,986**	**100**	

Non-Response to Harder Qs

Qs	Monitoring Qs	Variables	Non-Resp. Rate
Community Qs	24	Beef extreme price last year	30.00
		Amount of residents in age 0-15	17.81
		Highest price of house	13.30
Family Conformation Qs	15	Birthday of FM No. 5	8.18
		Birthday of FM No. 4	7.67
		Birthday of FM No. 2	6.74
		Birthday of FM No. 3	6.56
Family Qs	18	Bus schedules	13.97
		When moved in current house	5.15
		Construction area of the house	4.69
Adult Qs	16	Birth weight	72.87
		Primary school graduate year	17.31
		Length when 3 years not with father	4.21
Child Qs	6	Math score ranking in class	51.25
		Chinese score ranking in class	48.81
		Birthday of friend 2	38.25
		Birthday of friend 1	31.01

Time Consumption (nit: Minutes)

Qs	Mean	SD	Min	Median	Max
Cumm. Qs	55.96	164.76	8.45	44.39	3928.78
Household Scr.	2.76	3.4	0.17	1.95	188.95
Family Conf.	18.37	23.89	0.93	15.22	2219.00
Family Qs	28.65	16.16	3.68	25.7	775.43
Adult Qs	46.29	34.37	5.13	42.63	3312.1
Child Qs	28.19	25.15	1.68	17.55	607.55
0-1 Ys.	5.09	2.5	1.68	4.42	18.87
1-2 Ys.	9.91	4.39	2.12	9.1	42.52
3-5 Ys.	13.95	8.55	2.47	12.74	252.27
6-9 Ys.	16.03	19.33	2.68	13.97	607.55
10-15 Ys.	51.53	21.1	7.25	49.37	352.70

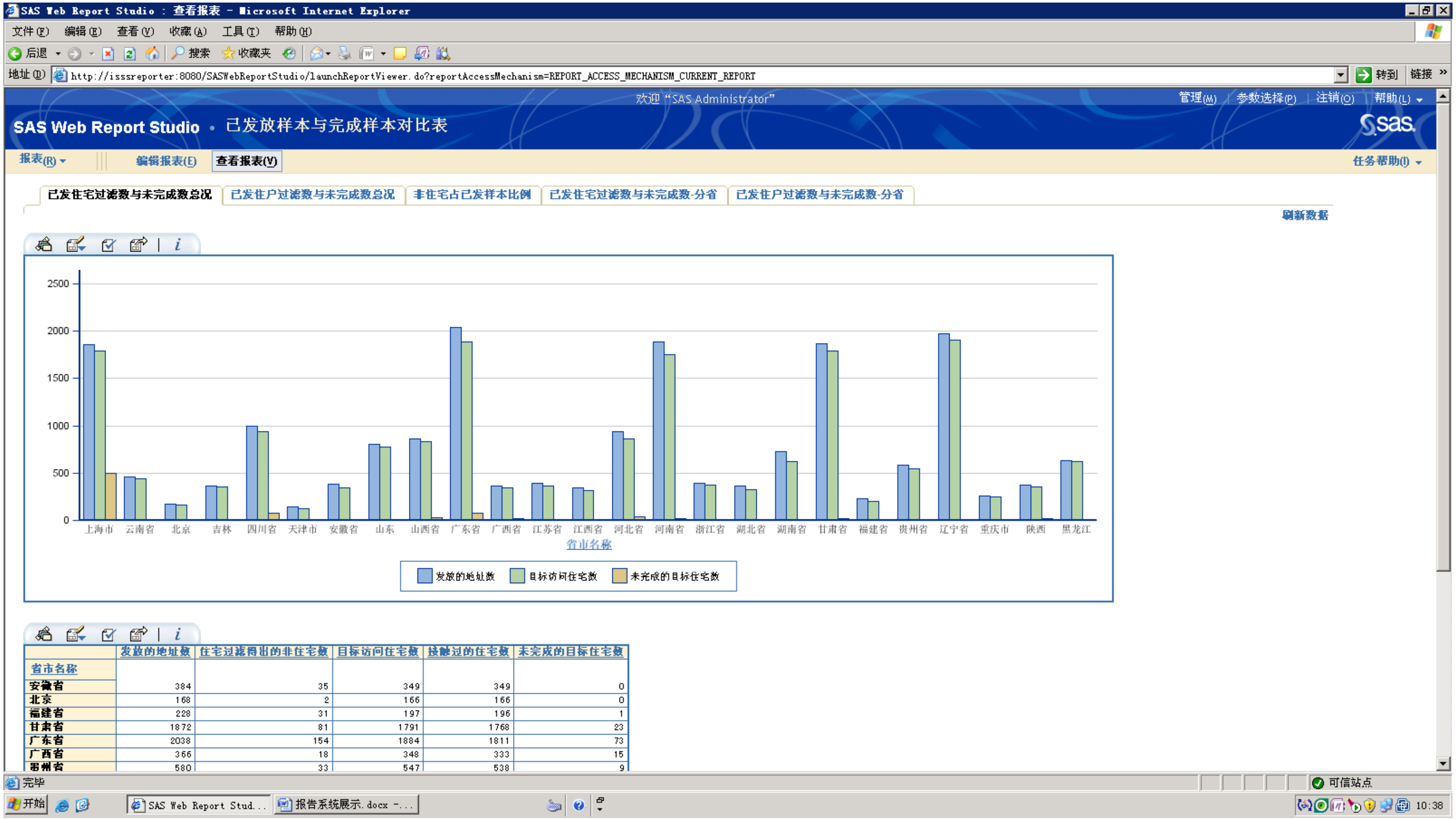
Monitoring Outcomes

- Adult Qs answered by others: 81
- Child Qs answered by others: 22
- Time use too short: 1864
- Not following interview guidance: 899

Dashboard for Production

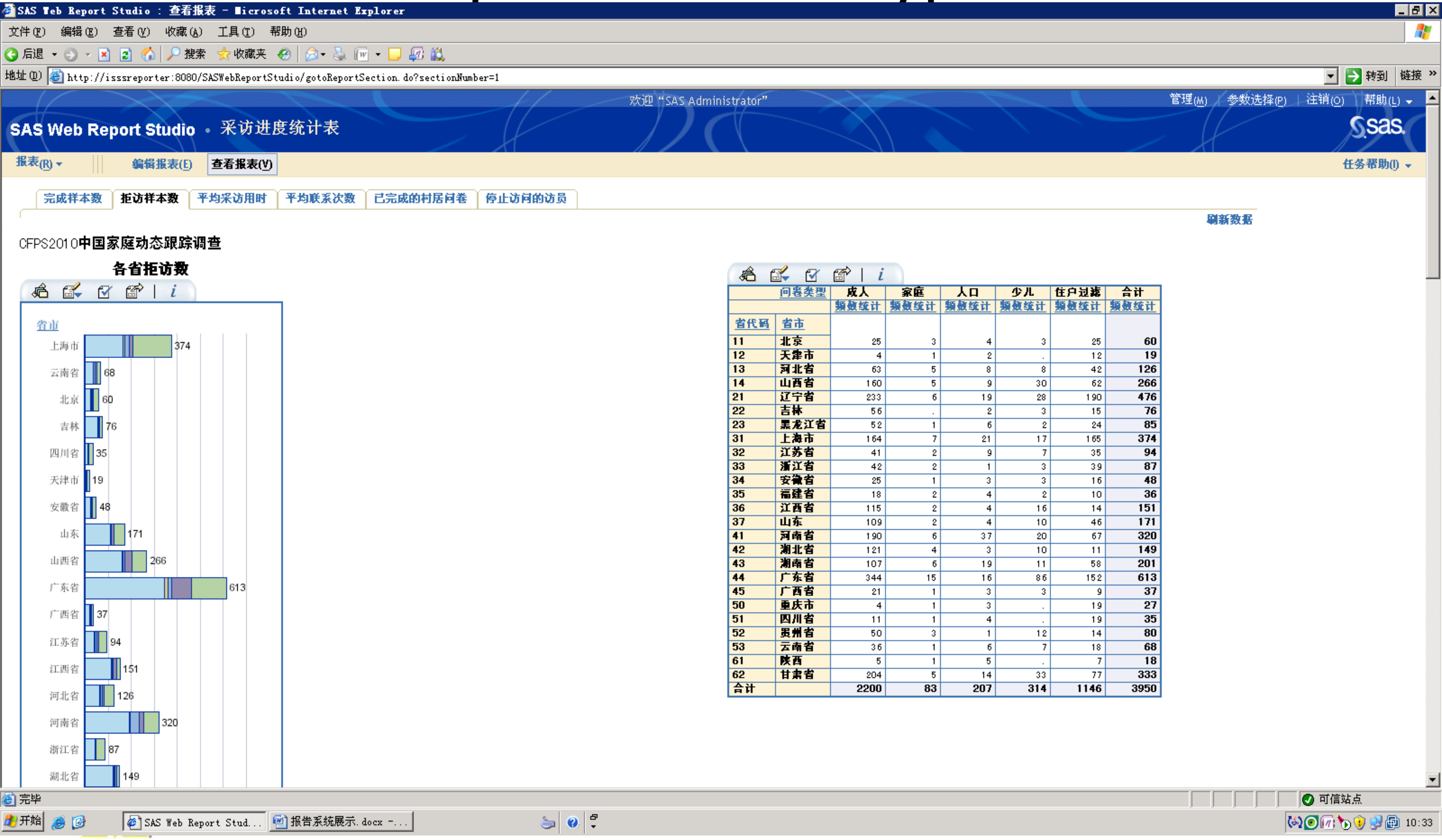
- Using SAS Business Intelligent software
- Web Based
- Many level draw down
  - By State (25 of them)
  - By questionnaire type (6 of them)
  - By interviewer (438 of them)

Release Sample vs. Completed Sample


SAS Web Report Studio : 查看报表 - Microsoft Internet Explorer
文件(F) 编辑(E) 查看(V) 收藏(A) 工具(T) 帮助(H)
后退 搜索 收藏夹
地址(D) http://isssreporter:8080/SASWebReportStudio/launchReportViewer.do?reportAccessMechanism=REPORT_ACCESS_MECHANISM_CURRENT_REPORT
转到 链接
欢迎 "SAS Administrator"
管理(M) 参数选择(P) 注销(O) 帮助(L)
SAS Web Report Studio • 已发放样本与完成样本对比表
sas
报表(R) 编辑报表(E) 查看报表(V) 任务帮助(I)
已发住宅过滤数与未完成数总况
已发住户过滤数与未完成数总况
非住宅占已发样本比例
已发住宅过滤数与未完成数-分省
已发住户过滤数与未完成数-分省
刷新数据
2500
2000
1500
1000
500
0
上海市
云南省
北京
吉林
四川省
天津市
安徽省
山东
山西省
广东省
广西省
江苏省
江西省
河北省
河南省
浙江省
湖北省
湖南省
甘肃省
福建省
贵州省
辽宁省
重庆市
陕西
黑龙江
省市名称
发放的地址数
目标访问住宅数
未完成的目标住宅数
完毕
可信站点
开始
SAS Web Report Stud...
报告系统展示.docx -...
10:38

省市名称	发放的地址数	住宅过滤得出的非住宅数	目标访问住宅数	接触过的住宅数	未完成的目标住宅数
安徽省	384	35	349	349	0
北京	168	2	166	166	0
福建省	228	31	197	196	1
甘肃省	1872	81	1791	1768	23
广东省	2038	154	1884	1811	73
广西省	366	18	348	333	15
贵州省	580	33	547	538	9

Refusal cases by each state and questionnaire type


SAS Web Report Studio : 查看报表 - Microsoft Internet Explorer
文件(F) 编辑(E) 查看(V) 收藏(A) 工具(T) 帮助(H)
后退 搜索 收藏夹
地址(D) http://isssreporter:8080/SASWebReportStudio/gotoReportSection.do?sectionNumber=1
转到 链接
欢迎 "SAS Administrator"
管理(M) 参数选择(P) 注销(O) 帮助(L)
SAS Web Report Studio • 采访进度统计表
sas
报表(R) 编辑报表(E) 查看报表(V) 任务帮助(I)
完成样本数 拒访样本数 平均采访用时 平均联系次数 已完成的村居问卷 停止访问的访员
刷新数据
省市
上海市 374
云南省 68
北京 60
吉林 76
四川省 35
天津市 19
安徽省 48
山东 171
山西省 266
广东省 613
广西省 37
江苏省 94
江西省 151
河北省 126
河南省 320
浙江省 87
湖北省 149
完毕
可信站点
开始
SAS Web Report Stud...
报告系统展示.docx -...
10:33

CFPS2010中国家庭动态跟踪调查

各省拒访数

	问卷类型	成人	家庭	人口	少儿	住户过滤	合计
		频数统计	频数统计	频数统计	频数统计	频数统计	频数统计
省代码	省市						
11	北京	25	3	4	3	25	60
12	天津市	4	1	2	.	12	19
13	河北省	63	5	8	8	42	126
14	山西省	160	5	9	30	62	266
21	辽宁省	233	6	19	28	190	476
22	吉林	56	.	2	3	15	76
23	黑龙江省	52	1	6	2	24	85
31	上海市	164	7	21	17	165	374
32	江苏省	41	2	9	7	35	94
33	浙江省	42	2	1	3	39	87
34	安徽省	25	1	3	3	16	48
35	福建省	18	2	4	2	10	36
36	江西省	115	2	4	16	14	151
37	山东	109	2	4	10	46	171
41	河南省	190	6	37	20	67	320
42	湖北省	121	4	3	10	11	149
43	湖南省	107	6	19	11	58	201
44	广东省	344	15	16	86	152	613
45	广西省	21	1	3	3	9	37
50	重庆市	4	1	3	.	19	27
51	四川省	11	1	4	.	19	35
52	贵州省	50	3	1	12	14	80
53	云南省	36	1	6	7	18	68
61	陕西	5	1	5	.	7	18
62	甘肃省	204	5	14	33	77	333
合计		2200	83	207	314	1146	3950

2011 Production starts soon

- Training starts in April
- Tracking will be new challenge this year!