

CODEBOOK
Robin Hood 2015-2016 3-Month Follow up Survey
Updated May 18, 2023

[VAR: q1a1]

PUNCH

1
2
3
97
98
99

Do you currently live with a spouse or domestic partner (which is a live-in romantic partner)?

RESPONSE

Spouse
Domestic partner
Neither
No answer
Don't know
Refused to answer

[VAR: q1a2]

PUNCH

1
2
97
98
99

Do you have at least one biological or adopted child under the age of 18 who lives with you?

RESPONSE

Yes
No
No answer
Don't know
Refused to answer

*****NOTE: J and F Module questions only asked of individuals who did not complete this survey late (q1late)*****

[VAR: q1j1_1]

PUNCH

1
2

In this section, I'm going to ask about things that may have happened in the past 3 months. Below is a list of things that sometimes happen to people. Please tell me which of the following, if any, have happened to YOU in the past 3 months.

You moved?

RESPONSE

Yes
No

[VAR: q1j1_2]

PUNCH

1
2

In this section, I'm going to ask about things that may have happened in the past 3 months. Below is a list of things that sometimes happen to people. Please tell me which of the following, if any, have happened to YOU in the past 3 months.

You had a child?

RESPONSE

Yes
No

[VAR: q1j1_3]

In this section, I'm going to ask about things that may have happened in the past 3 months. Below is a list of things that sometimes happen

to people. Please tell me which of the following, if any, have happened to YOU in the past 3 months.

Someone moved in?

PUNCH

RESPONSE

1

Yes

2

No

[VAR: q1j1_4]

In this section, I'm going to ask about things that may have happened in the past 3 months. Below is a list of things that sometimes happen to people. Please tell me which of the following, if any, have happened to YOU in the past 3 months.

Someone moved out?

PUNCH

RESPONSE

1

Yes

2

No

[VAR: q1j1_5]

In this section, I'm going to ask about things that may have happened in the past 3 months. Below is a list of things that sometimes happen to people. Please tell me which of the following, if any, have happened to YOU in the past 3 months.

Started a romantic relationship?

PUNCH

RESPONSE

1

Yes

2

No

[VAR: q1j1_6]

In this section, I'm going to ask about things that may have happened in the past 3 months. Below is a list of things that sometimes happen to people. Please tell me which of the following, if any, have happened to YOU in the past 3 months.

Ended a romantic relationship?

PUNCH

RESPONSE

1

Yes

2

No

[VAR: q1j1_7]

In this section, I'm going to ask about things that may have happened in the past 3 months. Below is a list of things that sometimes happen to people. Please tell me which of the following, if any, have happened to YOU in the past 3 months.

Changed childcare arrangement?

	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
[VAR: q1j1_8]		<p>In this section, I'm going to ask about things that may have happened in the past 3 months. Below is a list of things that sometimes happen to people. Please tell me which of the following, if any, have happened to YOU in the past 3 months.</p> <p><i>Took time from work to meet with child's teacher/counselor?</i></p>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
[VAR: q1j2_1]		<p>Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.</p> <p><i>Someone started a new job?</i></p>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
[VAR: q1j2_2]		<p>Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.</p> <p><i>Someone lost their job?</i></p>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
[VAR: q1j2_3]		<p>Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.</p> <p><i>Someone started receiving public benefits?</i></p>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
[VAR: q1j2_4]		<p>Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.</p> <p><i>Someone's public benefits were cut off?</i></p>
	<u>PUNCH</u>	<u>RESPONSE</u>

- 1 Yes
- 2 No

[VAR: q1j2_5]

Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.

Someone had an unanticipated major expense?

PUNCH

RESPONSE

- 1 Yes
- 2 No

[VAR: q1j2_6]

Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.

Someone had a significant increase in income?

PUNCH

RESPONSE

- 1 Yes
- 2 No

[VAR: q1j2_7]

Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.

Someone had a significant decrease in income?

PUNCH

RESPONSE

- 1 Yes
- 2 No

[VAR: q1j2_8]

Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.

Someone had an accident, injury or illness that interfered with work or life?

PUNCH

RESPONSE

- 1 Yes
- 2 No

[VAR: q1j2_9]

Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.

Someone was the victim of a crime?

PUNCH

RESPONSE

- 1 Yes
- 2 No

[VAR q1j2_11]

Please tell me which of following, if any, have happened to you or ANYONE in your household in the past 3 months.

Someone lost or broke expensive belongings?

PUNCH

1

2

RESPONSE

Yes

No

[VAR: q1f2]

I'm going to read you a statement. Please tell me whether this was often true, sometimes true, or never true for you in the past 3 months. *"I worried whether my food would run out before I got money to buy more."* Would you say...

PUNCH

1

2

3

RESPONSE

Often

Sometimes

Never

[VAR: q1f6]

Did you stay at a shelter, in an abandoned building, an automobile, or any other place not meant for regular housing, even for one night?

PUNCH

1

2

RESPONSE

Yes

No

[VAR: q1f8]

Was your phone, gas or electricity service ever cut off because there wasn't enough money to pay the bills?

PUNCH

1

2

RESPONSE

Yes

No

[VAR: q1f9]

Was there a time when you or anyone else in your household needed to see a doctor or go to the hospital but couldn't go because of the cost?

PUNCH

1

2

RESPONSE

Yes

No

[VAR: q1f10]

In the past 3 months, how often did you run out of money between paychecks or before the end of the month?

PUNCH

1

RESPONSE

Often

2	Sometimes
3	Never

[VAR: q1b1]

PUNCH

1

2

3

4

5

97

98

**Would you say your health in general is
excellent, very good, good, fair, or poor?**

RESPONSE

Excellent

Very good

Good

Fair

Poor

No answer

Don't know

	99	Refused to answer
[VAR: q1b2]		In general, would you say your quality of life is...
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Excellent
	2	Very Good
	3	Good
	4	Fair
	5	Poor
	97	No Answer
	98	Don't know
	99	Refused
[VAR: q1b3]		In general, how would you rate your physical health?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Excellent
	2	Very Good
	3	Good
	4	Fair
	5	Poor
	97	No Answer
	98	Don't know
	99	Refused
[VAR: q1b4]		In general, how would you rate your mental health, including mood and ability to think?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Excellent
	2	Very Good
	3	Good
	4	Fair
	5	Poor
	97	No Answer
	98	Don't know
	99	Refused
[VAR: q1b5]		In general, how would you rate your satisfaction with your social activities and relationships?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Excellent
	2	Very Good
	3	Good
	4	Fair
	5	Poor
	97	No Answer
	98	Don't know

	99	Refused
[VAR: q1b6]		Please rate how well you carry out your usual social activities and roles
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Excellent
	2	Very Good
	3	Good
	4	Fair
	5	Poor
	97	No Answer
	98	Don't know
	99	Refused
[VAR: q1b7]		To what extent are you able to carry out your everyday physical activities?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Completely
	2	Mostly
	3	Moderately
	4	A little
	5	Not at all
	97	No Answer
	98	Don't know
	99	Refused
[VAR: q1b8]		How often have you been bothered by emotional problems such as feeling anxious
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Never
	2	Rarely
	3	Sometimes
	4	Often
	5	Always
	97	No answer
	98	Don't know
	99	Refused
[VAR: q1b9]		Rate your fatigue on average?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	None
	2	Mild
	3	Moderate
	4	Severe
	5	Very Severe
	97	No answer
	98	Don't know

	99	Refused
[VAR: q1b10]	<u>PUNCH</u>	How would you rate your pain on average? <u>RESPONSE</u>
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	97	No answer
	98	Don't know
	99	Refused

[VAR: q1b11]		In the past twelve months, have you stayed overnight in a hospital because of your own health? PROBE: Do not include hospital stays related to giving birth.
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer

	98	Don't know
	99	Refused to answer
[VAR: q1b12_1]		Has a doctor or other health professional ever told you that you have or had...
		<i>Asthma?</i>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused to answer
[VAR: q1b12_2]		Has a doctor or other health professional ever told you that you have or had...
		<i>Diabetes?</i>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused to answer
[VAR: q1b12_3]		Has a doctor or other health professional ever told you that you have or had...
		<i>Hypertension or high blood pressure?</i>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused to answer
[VAR: q1b12_4]		Has a doctor or other health professional ever told you that you have or had...
		<i>Heart Disease?</i>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused
[VAR: q1b12_5]		Has a doctor or other health professional ever told you that you have or had...
		<i>Cancer?</i>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes

2	No
97	No answer
98	Don't know
99	Refused

[VAR: q1b12_6]

**Has a doctor or other health professional ever told you that you have or had...
*Arthritis?***

<u>PUNCH</u>	<u>RESPONSE</u>
1	Yes
2	No
97	No answer
98	Don't know
99	Refused

[VAR: q1b12_7]

**Has a doctor or other health professional ever told you that you have or had...
*Migraines?***

<u>PUNCH</u>	<u>RESPONSE</u>
1	Yes
2	No
97	No answer
98	Don't know
99	Refused

[VAR: q1b12_8]

**Has a doctor or other health professional ever told you that you have or had...
*Sleep disorder?***

<u>PUNCH</u>	<u>RESPONSE</u>
1	Yes
2	No
97	No answer
98	Don't know
99	Refused

[VAR: q1b12_9]

**Has a doctor or other health professional ever told you that you have or had...
*Any kind of chronic health condition, other than the ones I just asked about?***

<u>PUNCH</u>	<u>RESPONSE</u>
1	Yes
2	No
97	No answer
98	Don't know
99	Refused to answer

[VAR: q1b17]

In the past twelve months, how often did you

have four or more alcoholic drinks in one day?
Was it... (READ LIST)

<u>PUNCH</u>	<u>RESPONSE</u>
1	Every day
2	A few times a week
3	A few times a month
4	About once a month
5	Less than once a month
97	No answer
98	Don't know
99	Refused to answer

[VAR: q1b20]

By yourself, and without using any special equipment, how difficult is it for you to...
...Walk a quarter of a mile - about 3 city blocks?

<u>PUNCH</u>	<u>RESPONSE</u>
1	Not at all difficult
2	Only a little difficult
3	Somewhat difficult
4	Very difficult
5	Can't do at all
6	(Vol) Don't do this activity
97	No answer
98	Don't know
99	Refused to answer

[VAR: q1b32]

Do you use any special equipment like a wheelchair, cane, walker, or crutches to get around?

<u>PUNCH</u>	<u>RESPONSE</u>
1	Yes
2	No
97	No answer
98	Don't know
99	Refused

[VAR: q1b34]

Do you have any type of disability that limits your use of city buses and subways?

<u>PUNCH</u>	<u>RESPONSE</u>
1	Yes
2	No
97	No answer
98	Don't know
99	Refused

[VAR: q1b35]

Do you have any type of disability that limits

		your use of city buses and subways?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused
[VAR: q1c2]		Is [FOCAL_CHILD] male or female?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Male
	2	Female
	97	No answer
	98	Don't know
	99	Refused to answer
[VAR: q1c3_age]		How old is [FOCAL CHILD] in years and months? [in months and years]
	<u>PUNCH</u>	<u>RESPONSE</u>
	Open ended	Entered response
[VAR: q1c4]		Now, I'd like to ask you some questions about [FOCAL CHILD]'s health and development and how [he / she] is doing. In general, would you say [FOCAL CHILD]'s health is excellent, very good, good, fair, or poor?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Excellent
	2	Very good
	3	Good
	4	Fair
	5	Poor
	97	No answer
	98	Don't know
	99	Refused to answer
[VAR: q1c6]		In the past twelve months, has [FOCAL CHILD] stayed overnight in a hospital [for any reason]? PROBE: Please do not include time spent in the hospital at birth.
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know

	99	Refused to answer
[VAR: q1c7_1]		Has a doctor or other health professional ever told you that [FOCAL CHILD] has... <i>Asthma?</i>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused to answer
[VAR: q1c7_2]		Has a doctor or other health professional ever told you that [FOCAL CHILD] has... <i>Food allergy or sensitivity?</i>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused to answer
[VAR: q1c7_3]		Has a doctor or other health professional ever told you that [FOCAL CHILD] has... <i>Any other kinds of allergies?</i>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused
[VAR: q1c7_5]		Has a doctor or other health professional ever told you that [FOCAL CHILD] has... <i>Developmental problems, such as developmental delay, ADHD, autism or other learning disability?</i>
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused to answer

[VAR: q1c7_6]

Has a doctor or other health professional ever told you that [FOCAL CHILD] has...
Any kind of chronic health condition, other than the ones I just asked about?

PUNCH

RESPONSE

1

Yes

2

No

97

No answer

98

Don't know

99

Refused to answer

[VAR: q1d3]

The following statements are about behavior problems many children have. For each item, think about [FOCAL CHILD]'s behavior over the last three months. Then indicate whether the statement is often true, sometimes true, or not true.

[FOCAL_CHILD] cheats or tells lies.

PUNCH

RESPONSE

1

Often

2

Sometimes

3

Never

97

No answer

98

Don't know

99

Refused to answer

[VAR: q1d4]

The following statements are about behavior problems many children have. For each item, think about [FOCAL CHILD]'s behavior over the last three months. Then indicate whether the statement is often true, sometimes true, or not true.

[FOCAL_CHILD] has difficulty concentrating or cannot pay attention for long.

PUNCH

RESPONSE

1

Often

2

Sometimes

3

Never

97

No answer

98

Don't know

99

Refused

[VAR: q1d5]

The following statements are about behavior problems many children have. For each item, think about [FOCAL CHILD]'s behavior over the last three months. Then indicate whether the

statement is often true, sometimes true, or not true.

[FOCAL_CHILD] is easily confused or seems to be in a fog.

PUNCH

1

2

3

97

98

99

RESPONSE

Often

Sometimes

Never

No answer

Don't know

Refused

[VAR: q1d6]

The following statements are about behavior problems many children have. For each item, think about [FOCAL CHILD]'s behavior over the last three months. Then indicate whether the statement is often true, sometimes true, or not true.

[FOCAL_CHILD] bullies or is cruel or mean to others.

PUNCH

1

2

3

97

98

99

RESPONSE

Often

Sometimes

Never

No answer

Don't know

Refused

[VAR: q1d7]

The following statements are about behavior problems many children have. For each item, think about [FOCAL CHILD]'s behavior over the last three months. Then indicate whether the statement is often true, sometimes true, or not true.

[FOCAL_CHILD] does not seem to feel sorry after [he / she] misbehaves.

PUNCH

1

2

3

97

98

99

RESPONSE

Often

Sometimes

Never

Don't know

Refused

Refused

[VAR: q1d8]

The following statements are about behavior problems many children have. For each item, think about [FOCAL CHILD]'s behavior over the last three months. Then indicate whether the

statement is often true, sometimes true, or not true.

[FOCAL_CHILD] is impulsive, or acts without thinking.

PUNCH

RESPONSE

1	Often
2	Sometimes
3	Never
97	No answer
98	Don't know
99	Refused

[VAR: q1d9]

The following statements are about behavior problems many children have. For each item, think about [FOCAL CHILD]'s behavior over the last three months. Then indicate whether the statement is often true, sometimes true, or not true.

[FOCAL_CHILD] has a lot of difficulty getting [his / her] mind off certain thoughts.

PUNCH

RESPONSE

1	Often
2	Sometimes
3	Never
97	No answer
98	Don't know
99	Refused

[VAR: q1d10]

The following statements are about behavior problems many children have. For each item, think about [FOCAL CHILD]'s behavior over the last three months. Then indicate whether the statement is often true, sometimes true, or not true.

[FOCAL_CHILD] is restless or overly active or cannot sit still.

PUNCH

RESPONSE

1	Often
2	Sometimes
3	Never
97	No answer
98	Don't know
99	Refused

[VAR: q1d11]

The following statements are about behavior problems many children have. For each item, think about [FOCAL CHILD]'s behavior over the last three months. Then indicate whether the

statement is often true, sometimes true, or not true.

[FOCAL_CHILD] breaks things on purpose or deliberately destroys [his / her] own or another's things.

PUNCH

1

2

3

97

98

99

RESPONSE

Often

Sometimes

Never

No answer

Don't know

Refused

[VAR: q1d12]

PUNCH

1

2

3

4

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6

97

98

99

What type of school does [Focal_Child] attend?

RESPONSE

Public

Private

Charter

Homeschool

Other (Please specify):

(Vol) Child does not attend school

No answer

Don't know

Refused

[VAR: q1d14]

In a typical month during the most recent school year, how many days was [FOCAL CHILD] absent from school?

PUNCH

1

2

3

4

5

97

98

99

RESPONSE

Less than 1 day

1 day

2 days

3 days

More than 3 days

No answer

Don't know

Refused

[VAR: q1d15]

Has [FOCAL CHILD] been expelled or suspended from school even for one day during the past 12 months?

PUNCH

1

2

97

98

99

RESPONSE

Yes

No

No answer

Don't know

Refused

[VAR: q1d16]

PUNCH

1
2
3
4
97
98
99

What kind of grading system does [FOCAL CHILD]'s school use?

RESPONSE

Letter grade
Quality assessment grading
Other
Numeric scale 0-100
No answer
Don't know
Refused to answer

[VAR: q1d17a]

PUNCH

1
2
3
4
97
98
99

Which best describes the grades that [FOCAL_CHILD] is getting in school?

RESPONSE

As
Bs
Cs
Ds
No answer
Don't know
Refused

[VAR: q1d17b]

PUNCH

1
2
3
4
97
98
99

Which best describes the grades that [FOCAL_CHILD] is getting in school?

RESPONSE

Mostly 90s
Mostly 80s
Mostly 70s
Less than that
No answer
Don't know
Refused to answer

[VAR: q1d17c]

PUNCH

1
2
3
4
97
98
99

Which best describes the grades that [FOCAL_CHILD] is getting in school?

RESPONSE

Excellent
Very Good
Satisfactory
Poor or Failing
No answer
Don't know
Refused

[VAR: q1d18]

PUNCH

1

Has [FOCAL_CHILD] ever repeated a grade?

RESPONSE

Yes

	2	No
	97	No answer
	98	Don't know
	99	Refused
[VAR: q1d19]		Has [FOCAL CHILD] ever been classified by [his / her] school as needing special education, or been given an individual education plan (IEP)?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer
	98	Don't know
	99	Refused to answer
[VAR: q1e1]		Now I am going to read a statement. Please tell me how often this applies to [FOCAL_CHILD]. "[My spouse or / My domestic partner or] I spend time looking at or reading books with [FOCAL_CHILD]." During a usual week, does this happen...
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Every day or nearly every day
	2	3 or 4 times a week
	3	Once or twice a week
	4	Or hardly ever or never
	97	No answer
	98	Don't know
	99	Refused to answer
[VAR: q1e2]		In the past month, how often did you [or your spouse / or your domestic partner] help [FOCAL CHILD] with homework or school assignments?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Every day
	2	Several times/week
	3	Once/week
	4	Not once
	97	No answer
	98	Don't know
	99	Refused
[VAR: q1newyork]		Is respondent still a resident of NYC?
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No
	97	No answer

	98	Don't know
	99	Refused to answer
[VAR: q1surveyyear]		Survey Year
[VAR: q1surveymonth]		Survey Month
[VAR: q1weight_p] [See Appendix A]		Person level weight
[VAR: q1weight_pu] [See Appendix A]		Family level weight
[VAR: q1late]		Flag indicating whether subject took the 3m survey late.
	<u>PUNCH</u>	<u>RESPONSE</u>
	1	Yes
	2	No

Appendix A

Overview

This memo details our approach to survey weighting, by which we ensure that the Robin Hood Poverty Tracker sample is representative of New Yorkers age 18 and over. The primary Poverty Tracker is selected from an option survey at the conclusion of the Community Healthy Survey. The CHS is a Random Digit Dial (RDD) phone sample conducted by the survey research organization SRBI. The first panel generated a sample of approximately 3,403 RDD sample members. We included both landline and cell phone numbers in our sample frame. In addition, a second pool of 505 participants were recruited from agencies that provide assistance to low-income individuals. The purpose of this second pool was to oversample those using social service agencies in New York City. Oversample specific populations characteristics (social service agencies in this case) is a statistically and efficient way to increase the sample sizes of populations of interest in surveys.

Survey weights are then used to adjust statistical parameters (estimates) so that inferences made from the data apply to the overall population from which the sample was drawn (in this case, NYC). Data are weighted to a three-year American Community Survey (ACS) dataset provided by the United States Census Bureau.

The weighting approach that we employ, which adjusts for oversampling and for random over- or under-representation, for non-response, and for attrition, is used in all nationally and locally representative studies.

In the remainder of this memo, we provide more technical details on the construction of Poverty Tracker survey weights. The target population is adults (18+) who are New York City residents.

Structure of baseline sample

SRBI

The SRBI phone sample consists of 3,403 New York City residents contacted by random digit dialing (RDD). Of the 3,403 respondents, 1,774 were contacted by cellphone and 1,629 by landline.

Agency

The face-to-face sample includes 505 respondents from 26 agencies.

SRBI cell phone 1,774

SRBI landline 1,629

Agency 505

Total 3,908

Subsequent waves

For subsequent survey waves, we adjust for panel attrition using the stratification response propensity score method. Non-coverage is addressed by post-stratification. For each survey wave we compute individual weights for each respondent as well as family (poverty unit) weights.

Poverty units

The definition of the poverty unit differs from the traditional family in that unmarried partners are included as family members. Poverty unit weights are obtained from the personal weights by dividing by the number of adults in the poverty unit.

Post-stratification

The data used for post-stratification comes from 2014-2016 American Community Survey (ACS) NYC sample. We approximate the population distributions of the post-stratification variables using weighted ACS numbers.¹

For agency sample, one variable, social service use, is not collected by the ACS. While, it is important to post-stratify on this variable because the agency sample oversamples individuals who use these services. We use the SRBI sample to estimate social service use in the population, which we used to post-stratify to.

Baseline weights

Constructing the baseline weights consists of three steps:

1. Weight the SRBI phone sample to match the NYC adult population (see the SRBI weights section).
2. Use the weighted SRBI sample to estimate the population distribution of social service use (see the Agency weights section).
3. Combine the SRBI and agency samples and weight to match social service use and demographics (see the Combined weights section).

SRBI weights

Using the SRBI phone sample only, we adjust for selection bias and nonresponse to match the ACS data:

1. ***Adjustment for the number of adults in the household and family.*** The larger household, the smaller the selection probability is for each individual. However, the larger the family, the larger the response probability from the family. We therefore need to weight up larger households while weighting down larger families. Gelman and Little (1988) recommend square roots for this weighting adjustment because inverse probability weights for household sizes tend to overcorrect in telephone surveys. For each respondent we use the square root of the ratio of the number of adults in the household to the number of adults in the family.

¹ That is, we use the weights provided with the ACS and obtain a weighted frequency for each post-stratification variable.

2. **Adjustment for phone availability.** Respondents with multiple phones in the household are more likely to be selected into the sample, while those who experience interrupted phone service are less likely to be selected. In this stage of the weighting process, we assign respondents in these two categories weights of $\frac{1}{2}$ and 2, respectively.

Because the landline and cellular RDD frames overlap there are cases of dual-service, that is, respondents from the landline sample who also have a cell phone in the household or respondents from the cell phone sample who also have landline service. We use frame integration weights (Lohr, 2009) to combine the landline and cellular components of the sample, with the dual-service respondents from the two frames integrated in proportion to their effective sample sizes. We can make this adjustment by assuming that the dual-service households from each of the two groups are random samples from the population of dual-service households.

To compute the effective sample sizes, we first calculate a design effects for both landline and cellular groups. For the cellular sample we take the weights for the respondents who also have landline and compute the coefficient of variation cv_C . For the landline sample the calculation of cv_L is analogous. We take the design effects to be $1 + cv_C^2$ and $1 + cv_L^2$, respectively. The effective sample sizes (ESS) for the dual-service cases are then computed as the raw sample sizes divided by the design effects.

Finally, the frame integration weights for the dual-service cell phone cases (cell phone respondents who have a landline) are $fiw_C = \frac{ESS_C}{ESS_C + ESS_L}$, which is the ratio of the effective number of dual-service cases among the cell phone respondents to the total effective number of dual-service cases in the landline and cell phone respondents combined. For the dual-service landline respondents, the frame integration weights are computed analogous as $fiw_L = \frac{ESS_L}{ESS_C + ESS_L}$. Single-service cases (in this case landline-only or cellphone-only) are given a frame integration weight of 1.

3. **Adjustment for deviation on SES information from corresponding ACS-NYC 2014-2016 weighted totals.** Before making this adjustment, we obtain individual weights by multiplying the household weights obtained in the previous step by the number of adults in the household.² We then match the marginal distributions of post-stratification factors via raking procedure. Although the joint distribution by cross tabulation is available, we use raking under an independence assumption to control the variability due to small post-stratification cell sizes. The information used for post-stratification includes gender, age, education, immigration status, tenure (own or rent home), race, the number of children in the household, the number of seniors in the household, the number of working aged adults in the household, a poverty gap measure for the household³, and interactions between many of the demographics and the

² For this calculation, the number of adults in the household is capped at 4 due to sparseness at larger values.

³ From the World Bank: Poverty gap is the mean shortfall from the poverty line (counting the non-poor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence.

poverty measure to account for dependencies between these factors. After the raking procedure, we trim the resulting weights at the 97.5% percentile.

Because the weights adjust for the unequal selection, under-coverage and nonresponse, there is no simple formula for estimating the variance. We use the bootstrapping method implemented in the R **survey** package to obtain 50 sets of replicate weights for each set of sampling weights, from which we can obtain variance estimates.

Agency weights

For the Agency sample, we adjust weights by the (self-reported) frequency of agency services usage. To avoid over-representation, the more frequently an individual uses a service, the smaller the assigned weight.

Combined weights

The SRBI and Agency samples are then combined.⁴ Again we correct for differences due to over-sampling from poor households by post-stratifying the household weights to the ACS household information. This is essentially the same adjustment that is made in the SRBI weights (see Step 3 in the SRBI weights section) but here we perform the adjustment on the combined SRBI and Agency samples. We then multiply the household weights by the number of adults in the household to obtain the person (individual) weights. Similarly, to Step 4 in the SRBI weights section, using these person weights we then post-stratify to adjust for deviations of the two samples from the corresponding ACS-NYC 2014 weighted totals. We also again adjust for frequency of social service use by including it as a post-stratification variable.⁵

Subsequent wave weights

Subsequent waves in the Poverty Tracker study have longitudinal weights calculated. These weights use the baseline weights as a basis but make two adjustments. The first adjustment corrects for nonresponse between the baseline and the wave of interest. The second adjustment is a raking adjustment back to the baseline population demographics.

The method for the first adjustment is inverse propensity scoring. This method uses a logistic regression to predict nonresponse given baseline characteristics, including race, education, immigration status, source – how many respondents were originally contacted, use of service frequency, the number of working adults in the household, the number of seniors in the household, spouse or partner in the

household, material hardship, severe health disadvantage, OPM income to needs ratio, OPM poverty status, receipt of government housing, and mental health status. From this model, the probability of

⁴ The weights for each sample are also separately normalized to each have a mean of 1.

⁵ There will be unbalanced coverage of agency service visitors because frequent service users will be over-represented in the Agency sample. For the purpose of representing the general population of NYC adults, it is necessary to down-weight individuals in the sample who frequently use social service agencies. In order to post-stratify on frequency of service use, we need a measure of the distribution of social service use in the population. Unfortunately, we do not have any gold standard for the distribution

responding was predicted for each respondent, which we then broken into 20 quantiles to reduce noise. For each quantile, the inverse of the probability of responding is calculated, which we then use to adjust the baseline weights for nonresponse. After that, we do the second adjustment, raking procedure. We then trimmed and created replicate weights with the same technique as described for the baseline.

References

Gelman, A. (2007). Struggles with survey weighting and regression modeling. *Statistical Science* 22(2), 153--164.

Gelman, A. and T. C. Little (1998). Improving on probability weighting for household size. *Public Opinion Quarterly*, 62(3), 398--404.

Lohr, S. (2009). Multiple-frame surveys. In D. Pfeffermann and C. R. Rao (Eds.), *Handbook of Statistics, Vol. 29A: Sample Surveys: Design, Methods and Applications*, Chapter 4. Elsevier/North Holland.

Lumley, T. (2014). Survey: analysis of complex survey samples. *R package*, version 3.30.