

Choreographing “the Best Interview Ever”: Developing and Implementing a Multimodal Family Interview

Caitlin R. Waickman¹, Daniel Goldstein¹,
Linda M. Powell¹, Elyzabeth Gaumer¹

¹ New York City Department of Housing Preservation and Development, 100 Gold Street, New York, NY 10038. The views expressed here are those of the authors and do not necessarily reflect those of the Department of Housing Preservation and Development or the City of New York.

Abstract

Many social surveys collect large amounts of data through multiple modes. This often translates into significant demands on respondents’ time, a barrier to recruitment. The NYC Housing and Neighborhood Study (NYCHANS) is a large-scale RCT assessing the impact of affordable housing on low-income New Yorkers. We seek to interview multiple respondents in a single family at one appointment with multiple modules. We discuss in this paper how our guiding principles—(1) respect the respondent and (2) work collaboratively across all levels of the project—reduce burden and produce high quality data. We present details of our appointment choreography, interview structures, and Interviewer training. Interview protocol focused on respondent experience and comfort. To this end, we conduct highly choreographed and structured appointments with carefully tailored consent/assent booklets and multimodal data capture including CAPI, CASI, and breakout cards. These principles can be used by any data collection effort to increase efficiency and effectiveness by incorporating carefully planned, multimodal instruments, within structured interview appointments.

Keywords: multi-mode, data quality, respondent burden

1. Introduction

Survey researchers aim to collect valuable, high quality data in an interview environment, but it can be a challenge to efficiently collect sufficient data within a limited amount of time. Researchers must also avoid undue burden on the respondent during the interview. Without careful planning, an interview can become a cumbersome list of questions that is taxing for both Interviewers and respondents.

Careful planning of interview structure, flow, and timing can help to alleviate respondent burden. By including multiple modes and interviewers, respondents of all ages can be engaged throughout the interview. A thorough training for Interviewers can also help to ensure that they are able to expertly and efficiently administer an interview and adjust as necessary.

In this paper, we discuss the choreography of a variety of interviews conducted as part of the New York City Housing and Neighborhood Study (NYCHANS). We provide detail on each interview component, data collection modes, and Interviewer roles. Each element of planning contributed to an interview that collected a large amount of data without

burdening respondents. In the following sections, we focus primarily on in-office interviews with multiple respondents.

2. The NYC Housing and Neighborhood Study

NYCHANS is a randomized control trial that evaluates the impact of affordable housing on the health and well-being of low-income households. It is a natural experiment that leverages the existing housing lottery system used by the City of New York to identify two groups: those that were offered an affordable housing unit (“treatment”) and those that were eligible for those same units but not offered housing because demand exceeds supply (“control”).

NYCHANS follows treatment and control households that applied to live in one of thirteen affordable housing developments (“study sites”) located in six neighborhoods in Manhattan, Brooklyn, and The Bronx. The study sites are newly constructed developments built between 2011 and 2015. NYCHANS includes a total of 900 low-income affordable units¹ ranging in size from studios to three-bedrooms; income eligibility ranges from 40 to 80 percent of HUD Income Limits.² Each study site held its own lottery following standard City guidelines for its marketing and lease-up process. All study participants lived in New York City at the time they applied for affordable housing.

3. Key Project Components

The research team collected a wide range of information to measure the overall impact of moving into affordable housing on low-income households. Data collected included unit-level measures about the home in which participants lived, household-level measures about the applicant households as a unit, and individual-level measures about the respondents and/or other co-resident household members, including children.

3.1 Study Participants

About 628 of study participants that completed interviews listed children on their application for affordable housing. They were eligible for the “caregiver” interview. Participants that did not apply with children were interviewed as “householders.” Up to two children in caregivers’ households were also invited to participate. Those between the ages of 8 and 13 were invited to participate in a “child” interview, while those 13 to 18 years old were invited to participate in a “teen” interview.

Householder Interviews were conducted with one adult in the household. These interviews took place at the study participant’s homes, although they were also offered interviews at the project offices or another place of convenience for them, if they

¹ This is the number of units included in the study and does not represent the total number of residential units in these developments. Some developments also include higher-income affordable units and/or market-rate units that were beyond the scope of NYCHANS. In some instances, only a subset of the low-income affordable units was included in the study; this was done to balance the distribution of unit types within and across study sites.

² In Fiscal Year 2020, this is equivalent to between \$37,560 and \$75,120 for a family of three; however, a household with a voucher may earn less than the minimum income to qualify for a unit. Actual income eligibility criteria were determined based on the year of the housing lottery for that development.

preferred. Caregiver, teen, and Child Interviews took place at the project offices, in a city government building.³

3.2 Content Areas

Because NYCHANS conceived of housing and its effects in broad terms, the research team did not limit its investigation to housing-related outcomes. Instead, the team collected information spanning many areas. All adults — householders and caregivers — were asked core questions, while caregivers were asked additional questions related to caregiving and their children. Children and teens were asked questions relevant to them.

3.2.1 Adult Content

All adult respondents were asked about their housing cost and quality as well as their perceptions of their housing cost and quality. Adults were also asked about their neighborhoods; they were asked to provide their own definition of its scope and their sense of its safety, quality, amenities, and affordability. Adults were asked about social aspects of their neighborhoods such as collective efficacy and disorder.

Beyond housing and neighborhoods, adult respondents were asked about their physical health, mental health, health behaviors, and access to healthcare. Physical health questions included overall self-rated health, asthma and diabetes diagnoses, and body mass index, both self-reported and objectively measured. Mental health items included measures of depression, anxiety, stress. Health behavior questions included diet and nutrition, smoking, alcohol consumption, overall physical activity and exercise level, and sleep measured using the Pittsburgh Sleep Quality Index (PSQI) (Buysse, et al. 1989). Respondents were also asked about their financial stability, including overall household income and debt as well as delay of critical expenses.

Respondents were asked to provide a full roster of all household members as well as demographic and income and employment information about all adults. Respondents were also asked to provide a five-year residential history, along with all members of their current and previous households. Finally, all adult respondents were asked about their social context, including a constructing a formal egocentric social network and answering questions about neighboring behaviors and collective efficacy within their buildings.

3.2.2 Caregiver Content

Caregivers were asked not only the same core questions as householders, but also additional questions about caregiving and parenting. As an additional measure of financial stability, caregivers were asked about child savings and investment and childcare cost and quality. They were asked questions about parental stress and engagement, family daily routine, homework and screen time, and their children's extracurricular activities. Caregivers were asked questions about intergenerational closure in their neighborhoods. Caregivers were also asked about their children's health, including blood lead levels, doctor visits, and dental care.

Objective health measures were also collected from caregivers, teens, and children, including blood pressure for caregivers and height and weight for caregivers, teens, and

³ Caregivers were offered an alternative at the end of the NYCHANS field period. A short, fifteen-minute version of the survey was offered in their home. This “short form” interview collected key measures and were completed as a CASI on a tablet. Most of these interviews were completed in respondents' doorways.

children. Caregivers and teens were invited to wear an actigraphy wristband for the week following the interview appointment as part of a supplemental module on physical activity and sleep.

3.2.3 Child/Teen Content

Teens were asked about their homework, school environment, and screen time. Teen Interviews also included questions on caregiver supervision and discipline. Teens were also asked about their physical activity and nutrition. Just as in the Householder and Caregiver Interviews, teens were asked to construct a formal egocentric social network. Teens were asked about risky behaviors among peers in their social network. Teens also answered questions on their mental health and their own risky behaviors. A subset of teens was also asked to define the boundaries of their neighborhood. Teens answered questions about their neighborhood including questions on collective efficacy, social cohesion, and safety.

Child Interviews included a subset of questions from the Teen Interview, including questions on school environment, caregiver relationship, and routine.

4. Structure and Content of the Family Interviews

In order to conduct such comprehensive interviews, the NYCHANS research team utilized multiple modes of data collection to break up the interview and hold the respondents' interest. The modes of data collection in the Caregiver Interview included:

1. Interviewer-Administered (CAPI)
2. Interactive Interview Cards
3. Self-Administered (CASI)
4. Objective Health Measures (OHM)
5. Actigraphy
6. Interviewer Observations

A multi-modal approach to interview appointments allowed the research team to separate interviews into smaller components and incorporate breaks. The structure of each interview differed based on (1) whether interviews were conducted in the project offices, in the respondents' home or elsewhere and (2) whether the respondent was a householder, caregiver, teen, or child. Below, we discuss each mode of administration and its content.

4.1 Interviewer-Administered (CAPI)

During the CAPI portion of the interview, questions were read by an Interviewer off a project tablet. Interviewers also entered answers into the tablet, which then determined the logic of later questions. The CAPI included questions on all key interview components mentioned above. For child and Teen Interviews, the CAPI ended in the Peabody Picture Vocabulary Test, 4th Editions (PPVT-4) (Dunn and Dunn. 2007).

Respondents were shown response cards for most questions. Response cards were compiled into answer guide booklets with attached stands that allowed Interviewers to flip back and forth between cards. The cards allowed respondents to consider each answer option, without the wasted time of the Interviewer reading each answer out loud. PPVT-4 (Dunn and Dunn. 2007) also required its own set of response cards with pictures for each vocabulary word.

NYCHANS Interviewer-administered CAPI questionnaires varied in length and content across householders, caregivers, teens, and children. See below for the average length of interview by type.

Table 1: Length of Interview by Type

Interview	Length
Householder	60 minutes
Caregiver	90 minutes
Teen	45 minutes
Child	30 minutes

4.2 Interactive Interview Cards

Interactive interview cards were interspersed throughout the interview. These cards allowed the team to collect visual or narrative data that may otherwise be difficult to capture. Interactive cards also provided privacy for potentially sensitive questions.

- *Neighborhood Definition Card* - Respondents were asked to draw a map of their neighborhood and label its boundaries on a blank card.
- *Residential History Card* - Interviewers collected the respondent's five-year history of addresses and household compositions.⁴
- *Social Network Roster* - Respondents were asked to provide names or initials of their social ties, including bridging and bonding ties in their neighborhood and building.
- *Social Network Density Card* - Interviewers asked which of the respondent's social ties interacted with each other regularly.
- *Mental Health Card* - Respondents answered questions about their mental health using the Patient Health Questionnaire – 8 (Kroenke, et al. 2009) and GAD-7 (Spitzer, et al. 2006) on a card that was filled out without Interviewer involvement.⁵

4.3 Self-Administered (CASI)

In Caregiver Interviews, CASI allowed Interviewers to give the respondent a break from verbal responses, as it was completed on a tablet and didn't require any Interviewer guidance. CASI content included:

- Child Health
- Family Routine
- Caregiver Mental Health
- School-related Activities
- Child Discipline
- Child Nutrition
- Child Behavior Checklist (CBCL) Anxious/Depressed and Aggressive Behavior scales (Achenbach. 1991).

⁴ In Householder Interviews, residential and household composition history was collected only for the respondent. In Caregiver Interviews, residential and household composition history was collected for the caregiver as well as one focal child.

⁵ The Mental Health Card was only used during Householder Interviews. For Caregiver Interviews, mental health questions were administered as part of the CASI questionnaire.

CASI interviews allowed respondents privacy to answer questions that were potentially sensitive. Interviewers made it clear that they would not be looking at the respondents' CASI answers. CASI also helped to save time. While some respondents were not used to working on a tablet, the interface of the CASI was intuitive and helped respondents to quickly move through questions that may otherwise have taken more time to read aloud.⁶

4.4 Objective Health Measures (OHM)

Interviewers collected objective health measure for caregivers, teens, and children. These included blood pressure for caregivers and height and weight for caregivers, teens, and children. Height, weight, and blood pressure were all measured electronically by using medical-grade devices⁷.

The timing and choreography of the health measures were key to ensuring valid measurement as well as comfort of the respondent. Caregivers had to be seated for five minutes before their blood pressure could be measured, so Interviewers rolled in an automatic blood pressure monitor as soon as the interview finished, while the respondent was still seated. Height and weight were taken in an adjacent room, where caregivers could keep their children within eyesight, but none of the respondents were able to read others' height and weight measurements.

4.5 Actigraphy

While the actual actigraphy measurements took place during the week following the interview appointment, participating caregivers and teens had to be educated on the process and equipped with the wristband before leaving the project offices. These minor additions had the potential to take up valuable appointment time. If a caregiver and/or teen consented to the actigraphy module, over the course of the appointment Interviewers were sure to:

- Explain guidelines for the actigraphy module:
 - Participants were to wear the wristband for a week following the interview appointment. They would wear it all day and all night.
 - The wristband should only be removed if it was going to get wet.
 - Participants should not sync the wristband with their own accounts.
 - They were responsible for returning to the office to turn in the wristband and receive a monetary “thank you” at the end of the week.
- Measure the participant's wrist for a small, large, or extra-large wristband.
- Allow the participant to pick their preferred wristband color.
- Give the participant their wristband (synced with their assigned account) and show them how to take the wristband on and off.
- Set up a follow-up appointment to return the wristband.

4.6 Interviewer Observations

Over the course of the appointment, Interviewers observed the interactions between the caregivers and their teens and children. These observations started as soon as families arrived and were recorded after families left the office. Interviewers scored interactions

⁶ This depended on the respondents' familiarity with using a tablet and comfort reading, though. Some respondents took longer to fill out a CASI than they would answering questions out loud.

⁷ For height and weight, the research team used a SECA 284 Wireless 360 Measuring Station. For blood pressure measurements, the team used A&D Medical Automatic Blood Pressure Monitor (TM2657P).

on two 5-point Likert scales. These qualitative measures were based on Interviewer observations over the course of the entire interview appointment.

4.7 Order of Components

In order to break up what would otherwise be an overwhelming interview, all interviews were mixed by mode. Changes in mode allowed respondents to not only switch their focus, but also allowed them to interact with different Interviewers over the course of the appointment. As discussed later in Section 8, Interviewers were trained to know the sequence and timing of each component of the interview. This avoided any lags in the interview and helped one component to flow seamlessly into the next. There were no pauses or wasted time for any of the scheduled appointment time. The diagrams below represent the order of each component of the interview, by interview type.

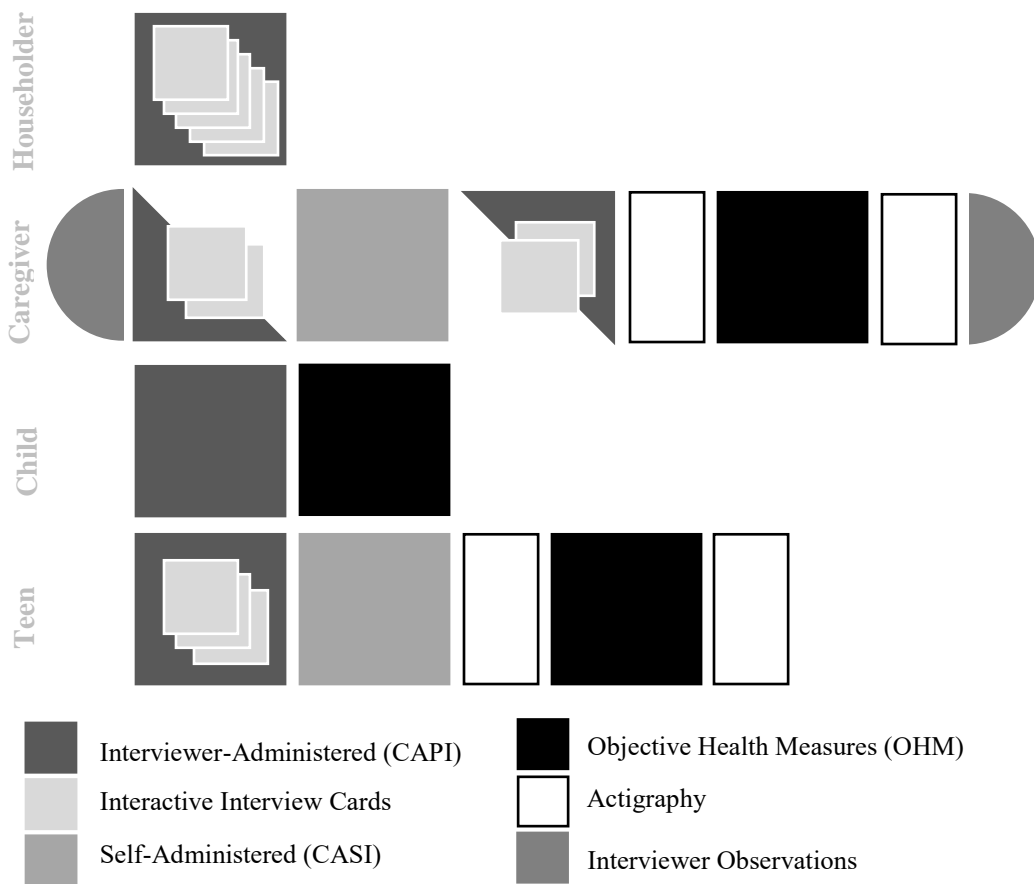


Figure 1: Mode and Sequence by Type of Respondent

5. Using Paired Interviewers

All interviews with adults (both householders and caregivers) were conducted with two Interviewers from the research team. Each Interviewer was assigned one of two distinct roles that were designed to ensure both data quality and respondent comfort. The research

team codified these roles and trained Interviewers on how to inhabit each one. The two roles were referred to as “First Chair” and “Second Chair.”

First Chairs were responsible for reading the CAPI instrument out loud and entering responses. They focused on accurately capturing data and monitoring the pace of the interview. First Chairs engaged with the respondent during the interview but kept their attention on the data collection process.

Second Chairs stayed focused on the respondent. It was their responsibility to be on the respondent’s “team.” This took many forms over the course of the interview. Second Chairs administered consent, ensuring that respondents understand each component of the study and their rights as study participants. During the interview, they stayed fully engaged with the respondent, working to put them at ease. They helped to clarify questions if the respondent was confused, comforted and commiserated with the respondent if they reacted strongly to a question, and listened attentively and read the body language of the respondent throughout the interview.

Second Chairs also administered Interactive Interview Cards and took objective health measurements. This helped to break up the interview by alternating which Interviewer the respondent was hearing from. While the Second Chair was tasked with supporting the respondent over the course of the interview, respondents may have felt more comfortable with either Interviewer. Changing not only modes, but also Interviewers, ensured that the respondent was continually engaged with both Interviewers and reduced Interviewer-effects, as the roles of individual interview staff varied from one interview to the next.

Paired interviewing also helped improve data quality. Interviewers were less likely to falsify any data or make mistakes in the field protocol if there were two people responsible for its collection. This was also an important component of training, as senior research staff could do interviews *with* an Interviewer without altering the protocol or any procedures. This allowed the research team to address problems early and maintain high interview quality. Since Interviewers were also going into respondents’ homes, paired interviewing one way the research team worked to keep Interviewers safe.⁸

6. Choreographing Multiple Interviews and Modes of Data Collection

The research team had many aspects of the interview appointment to plan for prior to starting the data collection process. For Householder Interviews, there were multiple Interviewers and modes of data collection to organize in a variety of interview environments, including respondents’ homes, cafes, and parks, among others.⁹ For

⁸ Research staff took additional steps to ensure safety as well. A communication protocol was set prior to any fieldwork. Interviewers in the field used a coded location to communicate with senior staff at the office regarding their location, interview progress, and any issues they came across. There were never any issues of safety in the field.

⁹ Field staff were committed to doing interviews in any environment where the respondent felt at ease; however, each environment was assessed to ensure that the Interviewers would be able to maintain privacy from other household members as well as strangers. For example, an interview could take place in a café but the Interviewers arrived in advance to select a table that was removed from other seating and would encourage respondents to provide the letter choice from a response card whenever possible, rather than say the answer out loud. In respondents’ homes, other family members would sometimes be present, and Interviewers could ask that they either

Caregiver Interviews, there were multiple interviews (Caregiver, Teen, and Child) in project offices, as well as objective health measures, to collect.

For householder Interviewers, choreography started in the doorway of respondents' homes. Interviewers were trained to always stand side by side, within site of the peephole, a slight distance from the door. Once inside the home, Interviewers avoided sitting in such a way that they were both across from the respondent. Instead, the First Chair sat across from the respondent and the Second Chair sat to the side, in between the First Chair and the respondent. This triangle formation allowed both Interviewers to engage with the respondent, without sitting in such a way that may have felt intimidating or antagonistic. Interviewers achieved this seating arrangement in a variety of ways, by moving chairs, adjusting the angle of their body, or sitting on the floor. Respondents came from a variety of socioeconomic backgrounds and lived in a variety of living situations. If there was not enough seating for all those present in the interview appointment, Interviewers always made sure to be the one(s) sitting on the floor. Respondents' homes varied widely, but Interviewers were equipped with the training and experience to adapt and establish a careful interview environment, regardless of where they were.

Caregiver Interviews required more choreography than Householder Interviews, as they were longer and involved interviews with minors. Caregivers were scheduled to come in with up to two children between the ages of 8 and 18 for interviews. They were also welcomed to bring additional children if they could not find childcare. This required project staff to work efficiently to screen which family members were eligible, conduct interviews, and watch any additional children during the appointment. It was important that each participant be engaged over the course of the appointment to avoid boredom or frustration.

Each appointment involved a minimum of three Interviewers, although many appointments required additional staff to be available. Two Interviewers interviewed the caregiver, while another interviewed the children and/or teens in an adjacent room. Additional staff assisted with additional children as necessary. A senior staff member was present at each appointment as a "Supervisor on Call."¹⁰ This senior staff member often served as one of the Interviewers in an appointment.

The adjacent interview rooms were carefully planned and laid out. The two rooms were divided by soundproof glass windows that allowed respondents (caregivers, teens, and children), to see each other, but still enabled the research team to keep the interview confidential. The windows were large enough to establish clear sightlines, but not so large as to create a clinical atmosphere. Each room had a table and three chairs: one for the respondent and one for each Interviewer. Respondents were always seated in the chair that faced the other room. Each room also had soundproof glass that faced the reception and play area. This allowed caregivers to also see children that were waiting or playing during the appointment (and vice versa).

move to another room or (in the case of small apartments) relocate the interview to a lobby or community room.

¹⁰ Supervisors on Call were responsible for addressing any ethical breaches and for implementing action plans if there were any concerns for the safety of a respondent and/or child.

At the appointment time, one of the Caregiver Interviewers waited for the family to arrive in the lobby of the City government building where the project's offices were located. The Interviewer served as a friendly, helpful face as the family went through security in the lobby and helped to minimize delays. Once upstairs, the family sat down with one of the Caregiver Interviewers and one of the Teen/Child Interviewers for an overall introduction and screener. This not only clarified who came to the appointment and who would be participating in interviews, but also provided valuable interactions between the caregiver and the researchers that would be interviewing their child.

After the initial screener two Interviewers, the First and Second Chair for the Caregiver Interview, brought the caregiver into an interview room to begin the consent process. The Teen/Child Interviewer engaged with the children, played games, talked, and generally built rapport. In the interview room, the Second Chair, assisted by the First Chair, walked through each component of NYCHANS with the caregiver, guiding them through the consent process.¹¹

Caregiver	Child/Teen
Screener	
PCG Consent	
PCG Interview	Child/Teen Assent
PCG Neighborhood Definition Card	Child/Teen interview
PCG Residential History Card	Teen Neighborhood Definition Card
PCG CASI	Teen Social Network Roster Card
PCG Social Network Roster Card	Teen Social Network Density Card
PCG Social Network Density Card	Child/Teen Vocabulary Assessment
PCG Actigraphy Supplement	Teen Actigraphy Supplement
PCG Objective Health measurement	Teen CASI
	Child/Teen Objective Health measurement
Close-out, Actigraphy Follow-up Appointment	

Figure 2: Caregiver and Teen/Child Appointment Components

The Caregiver Interview began directly after consent. Caregiver interviews started in CAPI format, with two interactive interview cards (a neighborhood definition card and a residential history card) interspersed. About two-thirds of the way through the interview, a CASI module allowed respondents a break from talking with Interviewers. The last third of the interview was CAPI, with two more interactive cards (social network roster and density cards).

Once the Caregiver Interview began, the child or teen was moved to the adjacent interview room where the assent process was initiated. Up to two Child/Teen Interviews were conducted while the Caregiver Interview was ongoing. Teen interviews were CAPI, with three interactive cards (neighborhood definition¹² and social network roster and

¹¹ Interviewers were also trained on the choreography of consent. The consent booklet was separated into sections, which allowed Interviewers to pause at the end of each section and make sure they addressed any of the respondent's questions before they were asked to sign consent forms.

¹² Neighborhood Definition Interactive Interview cards were administered during a subset of Teen Interviews.

density cards). They completed their CASI at the end of the interview, so they could sit on their own and complete it while Interviewers started on any additional teen or Child Interviews. Child interviews were entirely CAPI, with no interactive cards.

As soon as teen and Child Interviews finished, an Interviewer took their height and weight. All health measurements were taken in the room adjacent to the Caregiver Interview. If the teen assented to the actigraphy portion of the study, Interviewers explained all necessary details, took their wrist measurement, and let them pick their wristband color. They then waited and played until their caregiver finished their interview.

After the Caregiver Interview, caregivers were given the same explanation of the actigraphy device and allowed to pick their preferred wristband color. During that time, the other Interviewer rolled in an electronic blood pressure cuff. It was important that the cuff was portable. If the respondent had to stand and move to a new location, Interviewers would have to wait 5 minutes before taking a blood pressure measure. Instead, the respondent had been sitting for the whole interview and the blood pressure measure could be taken immediately. Interviewers then measured the caregivers' height and weight in the adjacent room.

After all interviews were complete and the family was seated in the waiting area, Interviewers quickly fitted participating respondents with activity wristbands and set up follow-up appointments. Each Interviewer gave a thank-you folder (including the incentive) to their respective respondents. Interviewers thanked the respondents for their time and accompanied them to the exit.

7. Efficiency of the Interview

Interviews varied in length and composition. Householder interviews were about 60 minutes long, with five breakout cards (four conducted collaboratively with the Interviewer and one self-administered). Interviewers were trained to use time effectively. One Interviewer would set up interview materials while the other administered consent. Both Interviewers would work together to move through the interview questions, continually directing the respondent's attention back to response cards and the question at hand.

Caregiver appointments were booked in 2-hour time slots¹³. Each moment of the appointment, from the time respondents entered the lobby, was used to build rapport and collect data. All Interviewers were trained to move efficiently and keep track of the pace of not only their own interview, but any interviews happening simultaneously. Two teen and/or Child Interviews could take place within the span of a Caregiver Interview. Teen interviews took about 45 minutes and Child Interviews took about 30 minutes. Interviewers monitored pacing and adjusted as necessary to ensure that a caregiver never had to wait after a 90-minute interview for their children to finish.

¹³ 2-hour appointment slots included time getting through security in the lobby, completing the screener, and finishing close-out, as well as the actual time spent in the interview.

8. Field Interviewer Training

Interviewers were acting as representatives of New York City, as well as researchers, so they needed to be prepared to act professionally and adapt to each unique interview environment. In order to prepare Interviewers, the research team developed two main guiding principles: (1) respect the respondent and (2) work collaboratively across all levels of the project to reduce burden and produce high quality data. Respect for the respondent took precedence. Interviewers were trained to pay careful attention to each respondent through deep listening and reading of body language. Project staff also taught, however, that the second guiding principle is key to completing the first. An interview that collects accurate data respects the respondent by accurately portraying the information they have provided and capturing their unique experience. An efficient interview respects the respondent by reducing burden, respecting their limited time, and ensuring that they feel they are contributing to important research that can make a difference in the lives of New Yorkers.

These guiding principles were the basis of a week-long training for NYCHANS Interviewers. Each Interviewer completed the training, including certification in the protection of human subjects and mandated reporter training,¹⁴ prior to any interactions with respondents. The guiding principles served as building blocks that led to further lessons on timing, choreography, body language, and tone. Each of these components was used to practice deep listening and establish a safe, respectful environment for respondents.

Interviewers were trained to mirror respondents' body language and volume of speaking. They paid close attention to how much respondents were leaning in and gesturing. They identified how close the respondent stood and sat to others and how often they made eye contact. Interviewer pairs used mirroring to make it clear that the respondent had control in the interview environment. Mirroring also helped to convey that the respondent was speaking with someone they could relate to and that no one would overpower them in the interview environment. These tools (taught during training) helped Interviewers to stay focused on the respondent during the interview and react to their needs.

Research staff were trained to utilize each moment in the appointment to establish rapport and collect accurate and comprehensive data. This was especially important as many participants worked multiple jobs and juggled school schedules. Their time was often difficult to schedule and could not be wasted once they were in the appointment. The CAPI questionnaire included a timing update that appeared regularly on the Interviewer's screen. This notification told them where they should be in the interview, based on how much time had passed. Interviewers were trained to adapt and make adjustments if interviews were going long.¹⁵

9. Conclusion

NYCHANS interviews required careful planning and choreography in order to collect a large amount of data from multiple respondents during an interview appointment. First, the research team designed an interview with multiple modes of data collection, including

¹⁴ See the Human Services Learning Center (HSLC) at <https://www.hslcnys.org/hslc/>.

¹⁵ Because respondent comfort always came first, Interviewers were empowered to skip questions or even entire sections if time was running out.

CAPI, CASI, and interactive interview cards. Modes changed multiple times over the course of the interview, which helped to keep momentum and the respondent's interest. Second, the research team utilized a paired Interviewer approach to interviews. Each Interviewer played a unique role and made sure the respondent was engaged throughout the interview. Paired interviewing also helped to ensure data quality, regardless of the appointment's location.

The research team also carefully choreographed each step of the interview. Interview components were arranged in a way that allowed Interviewers to efficiently collect data without wasting the respondents' time. This choreography was put into practice by Interviewers who had been thoroughly trained on each component of the interview, the choreography, and the research teams' guiding principles. Interviewers were trained to put respect of the respondent first in the interview environment, which led not only to high quality data, but happy respondents (of all ages) who enjoyed participating.

References

- Achenbach TM. (1991). *Manual for the Child Behavior Checklist/4-18 and the 1991 Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Buysse DJ, Reynolds CF, Monk TH, Berman SR, Kupfer DJ. (1989). The Pittsburgh Sleep Quality Index: new instrument for psychiatric practice and research. *Psychiatry Research*, 28: 193-213.
- Dunn, L. M., & Dunn, D. M. (2007). *Peabody Picture Vocabulary Test - 4*. Circle Pines, MN: American Guidance Service.
- Kroenke K, Strine TW, Spitzer RL, Williams JB, Berry JT, Mokdad AH. (2009). The PHQ-8 as a measure of current depression in the general population. *Journal of Affect Disorders*, 114: 163-173.
- Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of internal medicine*, 166(10), 1092-1097.