Coding Interview Responses

Interviews have some specific purpose, so it is necessary to store the responses in a relevant, usable, and accessible form to fulfill this purpose. For example, after interviewing and examining a patient, a physician often dictates the results into a tape recorder. Later, a transcription is made and filed in the patient’s case history so it can be reviewed the next time the patient comes in. Human services workers often store information on clients in questionnaire forms or summary notes that cover the most important findings and results of an interview. Public opinion interviewers code much of the information during the interview by simply checking the nearest appropriate answer and leaving a few open-ended responses to be coded in the office; then the codes are fed into computers to obtain quantitative results. Everyone who uses the results of interviews, whether quantitative or not, needs some way to code the results so that they can be used without listening to the whole tape or reading the whole transcript.

Basic Steps in Coding

Regardless of the type of interview being coded or how the information is to be used, certain basic steps are essential in any reliable coding process. Difficulties in each of these steps arise depending on the type of information and the purpose for which it is to be used. The first step is to define the coding categories.

- **Defining the Coding Categories.** Some coding categories are so obvious and simple that no sophisticated definition is needed. For example, for a census-taker to classify respondents into male and female requires no refined definition. In contrast, other familiar concepts may present a difficult problem of definition. In Chapter 2 we saw how an apparently simple term like family requires a meticulous definition to have any reliability in counting the number of families in an urban neighborhood. The same need for careful definition exists in other seemingly simple terms like employed, family conflict, child abuse, addiction and so forth.

Once a tentative set of coding categories is developed and defined, it should be pretested by having independent coders code the same interview material using the same definitions. If there is little agreement on the number of responses that fall into a given category, the definition of that category should be examined, discussed, and possibly revised.

Coding categories, especially for a large number of interviews, present two dangers: A definition may be too concret so that it fits only a few examples from which it was derived, or it may be so abstract that the recognizable empirical characteristics are not specified and concrete cases cannot be identified. Nevertheless, coding categories must be more abstract than the concrete examples being classified in order to potentially include all of the relevant examples regardless of their superficial differences. [begin page 183]

A useful set of coding categories has two basic logical characteristics: It is all-inclusive and mutually exclusive. To be all-inclusive, the set must include the entire range of relevant response categories in a particular dimension. Here’s a simple example. If we want to classify people on the dimension of religious affiliation, the usual checklist of Protestant, Catholic, and Jewish is inadequate even in the United States where there are hundreds of thousands of Buddhists, atheists, humanists, and so on.

To be mutually exclusive, each category in the set making up the dimension must be defined clearly enough so that a concrete example could not logically fall into two categories at the same time.

Once we have a set of coding categories that is all-inclusive and mutually exclusive and that has been pretested for applicability, we can take the next step, which is relatively simple.
Assigning Category Symbols. To perform the task of summarizing, condensing, and storing a concrete example that falls into a certain coding category, we assign an abstract symbol to represent any case in that category. Thus each category has its own symbolic label, or code. This label may be an abbreviation, a number, a letter, a color, a geometric shape, or anything else that is convenient for the process of summarizing, analyzing, storing, or retrieving the information. When information is going to be entered into a computer, labels are usually alphabetical, numeric, or some combination of the two. For some types of case history material that will not be entered into a computer, it may be convenient to use color codes.

The symbolic label must indicate both the question (dimension) and the answer (category). For example, the response “Unitarian” in answer to “What is your religion?” might be represented as 25-g. In this case it is answer “g” in the response categories for question 25.

Since it is often impossible to anticipate all of the possible categories of answers to a particular question, it is wise to include a final “other” category for all unanticipated responses. If we write in the response after checking “other” we then have an opportunity to develop additional coding categories by reviewing all of the “other” responses.

Thus the fully developed code includes a name and definition for the dimension and for each category in the dimension and a symbolic label for the dimension and each category it contains.

Classifying Relevant Information. The concrete operational steps for coding relevant information depend on the nature of the information, the interviewing method used, the proportion of irrelevant information, the size of the verbal units (individual words, phrases, thoughts, feelings, themes, problems, and so on) being classified, and the level of abstraction of the coding categories. Rather than attempting to cover all of the possibilities, we will describe one good classifying process that can be used in learning to do effective depth interviews.

The physical act of classifying relevant information from the transcript could be done in three ways. First, the transcript could be cut up with scissors and the relevant words, phrases, or sentences put into little boxes labeled with the appropriate category symbols. However, this is completely impractical for several reasons: It is a time-consuming process, bits of material can be lost, the results of the whole analysis cannot be seen at a glance, fragments of information are removed from their context, and it is very difficult to compare the results of two independent coders and to calculate the reliability score.

A second approach would be to read through the transcript, underline each fragment of relevant information, and label each with the category symbol, thereby showing the category of relevant information into which it falls. This method has two advantages: We don’t cut up the transcript and we keep each relevant fragment in its original context. However, it still has serious disadvantages: It does not allow the results of the whole analysis to be seen at a glance. It does not allow us to quickly compare the content of one interview with that of another or to compare one person's coding of an interview with another's. It does not allow us to summarize the results of a number of interviews on a topic by showing the frequency with which each type of answer was given. Finally, it does not provide a locating index to help find specific examples of a certain category of information in its original context in the transcript.

A third, and best, approach overcomes all of the shortcomings of the second approach. This method begins with the same first step — underlining the relevant words and phrases. Then, instead of labeling each fragment with the category symbol, we give each a unique identification number, sometimes called an “address,” which indicates the fragment’s precise location in the transcript. This number is simply the line number in the transcript plus a letter (a, b, c, or d) to indicate which fragment on that line is being located. The letter is needed only if there is more than one relevant fragment on the same line.

So far the relevant fragments are identified, but they are not classified into the categories of relevant information that have been defined. To carry out the classification process, we use a special coding sheet in which the column and row headings represent the categories of relevant information we have defined.
Then, we put the identification number of each fragment of relevant information into the appropriate cells. This is the symbolic equivalent of the physical process, in the first approach, of cutting up the transcript and putting the relevant fragments into boxes.

The third approach has none of the disadvantages of either the first or second. The third approach allows the coder to compare the content of one interview with another on the same topic, and to compare the coding of the same interview by two independent coders. It allows us to summarize the results of a number of interviews on the same topic by showing the frequency with which each type of information is given. Finally, it provides a locating index to help us find specific examples of any category of information in its original context in the transcript. [begin page 185]

This third system will be used in Exercise 10-B for a quick comparison between two independent coders’ results, and the code sheet will act as a summary and index for the transcript. For example, you wish to know every negative olfactory image the respondent had in high school. The locations of all these types of images in the transcript are given by the identification numbers placed in the cell in the table where the “negative” column intersects with the “olfactory” row. This method will become perfectly clear as you do Exercise 10-B.

• **Testing the Reliability of Coding.** The reliability of the coding process asks whether two independent codings of material into categories relevant to the purposes of the interview would be the same or whether they would vary grossly. There are two ways of obtaining independent codings of the same material. In the test-retest method, a person codes the material once and without looking at the results re-codes the same material to see whether the first and second coding agree. In the independent-coder method, two different people code the same material independently. In both methods it is not possible to obtain a high degree of agreement unless the coders are qualified. Their qualifications will be discussed later.

Both methods assume that the two codings being compared are done independently. In the test-retest method it may be more difficult to achieve independence, because the coder who is coding the same material for the second time may be able to remember precisely how specific fragments of information were coded the first time. To guard against this, there must be a time lapse between the first and second coding. If the coder is coding many interviews on the same topic, less elapsed time is needed between the first and second codings. Even so, some people have a powerful memory for interview and case-study material and can remember a specific case for months. Perfect independence of the codings is easier to attain when two coders are used. To be independent, the coders cannot discuss or even know how the other person has coded any particular bit of information until both have completed the coding process. It is permissible, in fact advisable, for the coders to discuss the category definitions and even work together on a practice case before doing the coding to be used in testing reliability.

In either of the approaches, reliability is tested by doing some sort of systematic comparison of the two independent codings to discover the amount of agreement or disagreement between them. The comparison may be qualitative; that is, the two coders, for example, could compare and discuss their disagreements in order to improve their reliability in future codings of the same type of material. Alternatively, the comparison could be quantitative, resulting in some type of numerical score that expresses the degree of agreement.

• **For a valuable learning experience,** do a qualitative comparison of your own coding of your own interview with another person’s coding of that interview. Answers that you accepted as adequate and did not probe any further may prove to be vague and ambiguous, if not completely irrelevant. This discovery can come either when you are coding your own interview or when you compare your own coding with that of the independent coder. Usually there is a tendency to be over optimistic about relevance when coding one’s own interview and to be shocked and amazed when one’s coding partner does not agree about the meaning of some of the responses.

It is also useful to go beyond the qualitative discussion and to measure reliability quantitatively. A quan-
Quantitative score allows you to answer such questions as: “Is my coding reliability improving?” “Is my evaluation and probing of responses in the interview improving?” “Do I have more reliability with one coding partner than with another?” “Do I obtain greater reliability on one interview topic than on another?” There are two basic methods of quantifying reliability.

- **Measuring Reliability.** Two general measures of reliability are the *percentage agreement* and the *reliability coefficient*.

The percentage agreement score is a crude measure of reliability. It is simply the percentage of information that was classified into the same category by two independent coders. This score is useful under certain conditions. It can be used to compare the reliability of one interview with another when both interviews are for the same purpose and use the same coding categories. It is also useful in discovering whether one pair of coders is more reliable than another in coding the same interview. It can be used to compare the reliability of a person’s first and second interview on the same topic.

Despite these positive uses, there are two important things the percentage agreement score cannot do. First, it cannot give a valid comparison of the reliability of coding one interview with the reliability of another interview on a different topic with a different number of coding categories. Second, it does not give a valid clue to whether a particular percentage is acceptable or not.

Intuitively, it may seem that a percentage agreement of 80 percent is good or that 40 percent is bad, but this is not necessarily the case. Whether a particular percentage is good or bad depends on the number of categories in the coding scheme. For example, if coders are classifying information into two categories (relevant and irrelevant), there would be a 50 percent chance of agreement even if neither coder looked at the information but simply flipped a coin to classify it. In this case, a percentage agreement score of 50 percent would indicate zero (0.0) reliability. A 50 percent agreement score could be very good, however, when coding information into 100 categories. In this case, the probability of two coders putting a specific bit of information into the same category by pure chance is one in a hundred, or 1.0%. So 50 percent is fifty times the chance expectancy.

For these reasons, several different formulas have been developed to arrive at a *coefficient of reliability* that takes into account not only the number of categories in the coding system, but also how the information is distributed throughout the categories. For example, in one ten-category system, 90 percent of the information collected might fall into only two of the ten categories; while in an-ten-category coding system, 90 percent of the information might fall into eight of the ten categories. This difference in distributions would also affect the probability of obtaining agreement by chance. Later in coding Exercise 10-B, you will be given a formula for the reliability coefficient which takes these important variables into account. The formula allows us to compare relative reliability even when the topic of the information is different and when the number of coding categories varies widely.

- **Locating Sources of Unreliability.** There are three general sources, or causes, of unreliability. Learning to reduce any or all of these will raise the reliability coefficient. First, the *coding categories* may be at fault either because they do not fit the information gathered or they are not clearly enough defined to be mutually exclusive and all-inclusive. Second, the *information* being coded may be ambiguous, vague, unclear, contradictory, or confusing. In this case, the interviewer may be at fault. Third, the *coders* may be at fault because they do not understand the definitions, cannot read well, are illogical, or not alert and motivated.

Therefore, reliability can be improved if we are careful in revising category definitions after pretesting them, if the interviewer clearly understands the purpose of the interview and is alert in evaluating and probing the responses, and if the coders understand the definitions of categories and are alert and logical in applying them. In my experience 100 percent reliability is rare and unreliability is due to some combination of these three causes.
SUMMARY

1 Six tactics should be considered when recording to store information:
   1. Precode structured answers.
   2. Make notes from memory after the interview.
   3. Take minimal notes in the interview and amplify later.
   4. Take verbatim notes during the interview.
   5. Dictate only the relevant information from the tape-recorded interview.
   6. Tape-record the interview and transcribe it all.

2 Probe notes, in contrast to notes for storing information, may be used later in the same interview. Follow these guidelines when using probe notes:
   1. Take probe notes under appropriate conditions.
   2. Know the characteristics of good probe notes.
   3. Understand the tactics for using probe notes.

3 Regardless of the type of interview being coded, certain basic steps are essential to code information reliably:
   1. Define the coding categories.
   2. Assign code labels to the categories.
   3. Classify relevant information into the categories.
   4. Test the reliability of the coding.
   5. Measure the reliability of the coding.
   6. Locate the sources of unreliability in the coding.

Exercises 10-A and 10-B provide you an opportunity to practice taking probe notes and coding relevant information.

NOTES


Exercise 10-A: Taking Probe Notes (Omit this one)

Objectives

To take probe notes, which means to note what should be probed, you must first clearly understand the objectives of the interview and evaluate each response in terms of its relevance, clarity, completeness, and validity in relation to these objectives. This exercise lets you practice making these evaluative decisions instantaneously in response to a live interview. At the same time, as an observer-listener you are
relieved of the other responsibilities of the interviewer, if you practice making probe notes on someone else’s interview, you will improve your chances of making good probe notes during your own interview.

Procedure

1. A pair of students will do an interview in front of the class. The interview may or may not be tape-recorded depending on the decision of your instructor. The rest of the class members take the role of listener-observers.
2. The interviewer chooses a topic from the list in this exercise and informs the class of the choice so they also may study the objectives of the interview.
3. The interviewer studies the objectives of the interview and prepares three or four questions to start the interview.
4. The observers study the objectives so they can evaluate responses and note the points that need to be probed.
5. The interviewer begins the interview and continues for ten minutes.
6. The respondent cooperates by answering all questions spontaneously but with no particular effort to elaborate in great detail.
7. The listener-observer makes notes on points that need to be probed in view of the objectives of the interview. Remember that each note should be only a word or a phrase and a direct quote from the respondent. [begin page 190]
8. The listener-observer crosses out a particular probe note if the respondent volunteers the information or the interviewer covers that point immediately or later.
9. When the interview is finished at the end of ten minutes, the listener-observers count how many probe notes they made and how many they crossed out because the items were covered by the respondent or interviewer. They also calculate the percentage of points that were covered by the interviewer. They then put these three figures at the top of the probe note sheet in the following form:

   Total probe notes _________
   Number covered _________
   Percent covered _________

10. The instructor will decide at this point whether you should meet in pairs to compare notes and discuss your differences or go directly into a general discussion with the whole class.

Possible Interview Topics and Objectives

You may have used one of the first two topics that follow in a previous exercise, and you will use one of the second two in Chapter 11. This need not determine your choice of topics for this exercise, because there are advantages both in dealing with a familiar topic and in becoming familiar with a new topic you might use in the future.

Select a topic (if you are the interviewer) and study the objectives carefully so you can use them as a guide to your probing for relevance, completeness, and validity.

**Topic 1: Plans for After College.** In general, try to cover three dimensions of this topic: images, feelings and actions.

1. Images: What does your respondent imagine about the period after college? What will he or she be doing, where, when, how, with whom, and why? How clear is the image? What are some of the alternative possibilities? What do these alternatives depend on?
2. Feelings: How does your respondent feel about these images? How sure does he or she feel that they will actually happen? Which points show some ambivalence of feeling? What is your respondent anxious or worried about? At which points does your respondent have confidence, pride, or faith in the future?

3. Actions: What actions has your respondent taken in preparation for the after-college period?

Topic 2: Most Serious Social Problems in the United States. There are several general objectives in this interview.

1. Discover which problems are seen as serious (a list).
2. Discover the rank order of seriousness of those on the list.
3. Find out what criteria your respondent uses in ranking one problem as more serious than another.
4. Find out how your respondent feels about the most serious problem. Is there hope for a solution? Will it probably get worse? Will it get better? How does your respondent feel about people who contribute to the problem? About those who do nothing to help solve the problem?
5. What actions does your respondent feel might help solve the problem? Is there anything he or she could do personally to help solve the problem? If so, what would that be? Has your respondent ever taken any action to solve any of these problems?

Topic 3: The American Way of Life. The objective is to discover your respondent's images, feelings, and knowledge regarding the American Way of Life.

1. What images come to your respondent's mind when he or she hears the phrase the American Way of Life? What are some of the positive images? Negative images? Neutral images? Who agrees with these images? Who promotes these images? (Try to get concrete images that you could see, hear, smell, and feel rather than abstract generalizations.)
2. Discover how your respondent feels about these images. How sure is he or she that they are correct or representative? What does he or she like most about the United States? Dislike most?
3. Discover if your respondent knows any facts to back up these feelings or images.

Topic 4: Mexico. The objectives are the same as those in topic 3—to discover your respondent's images, feelings, and knowledge about Mexico. [begin page 192]

Exercise 10-B: Coding Relevant Information (Do this one)

This exercise covers only two of the four basic steps in coding outlined in this chapter. You will not have to define the coding categories or assign labels to these categories; these will be supplied. You will classify relevant information and do a crude test of the reliability of the coding.

Purpose of the Exercise

By dealing with the end-product of another person's interview, you will become aware of the need for the interviewer to keep the objectives of an interview firmly in mind and to pursue them relentlessly in order to increase the relevance, clarity, and completeness of the information. Similarly, when you are coding the interview transcript, you must constantly be aware of the same objectives so you can reliably classify the relevant information. Remember that even if you code the responses with logical precision, perfect reliability is not possible if the information is vague or incomplete. There is no way the coder can make up for deficiencies in the original interviewing.
This exercise will help prepare you for the field project in the final chapter by alerting you to the need to probe for relevance, clarity and completeness and by familiarizing you with part of the coding process to be used there.

Overview of the Procedure

1. Read the purposes of the interview and rapidly read through the transcript of the dialogue presented at the end of this exercise.
2. Reread the dialogue and classify each underlined bit of information into one of the 18 cells (cross-categories) in the coding sheet furnished by your instructor. Note that the coding sheet requires you to simultaneously classify each underlined bit on two different dimensions: sense mode and feeling tone.
3. You classify an underlined bit of information by putting only the number of the line of the interview transcript on which it appears into one of the 18 cells in the coding sheet. In cases where two or more bits are underlined on the same line, add an a, b, or c to the number to show whether it appears first, second, or third in order on the line. Before beginning this classification process, carefully read the section titled Classification Hints in this exercise.

You must do your classification independently without discussion with another person in order to have a valid test of reliability when you compare your coding with your partner's.

4. When you have finished classifying the information, count the number of coded items in each row and column of the coding sheet and write in the row and column totals. Even though different coders may disagree on these totals, the grand total should equal 60 if you have not omitted any underlined bit of information. Also, if you have counted and added correctly, the sum of the row totals and the sum of the column totals should each equal the grand total of 60.
5. When entering the numbers on the coding sheet, be sure to put the first number in any cell in the upper left corner of that cell. Other numbers entered later in that cell should appear in rank order from left to right with commas in between. This will greatly facilitate the comparison of coding sheets with your coding partner in the next step.
6. Choose a partner for the purposes of (1) comparing your coding, (2) discussing your disagreements on coding, (3) noting the sources of your disagreements (whether they are due to poorly defined coding categories, ambiguity in the responses to be coded, or faulty logic on the part of the coders), and (4) calculating the percentage-agreement score according to the procedure given later in this exercise.
7. Bring to the class discussion your percentage-agreement score and your ideas on the sources of your disagreements with your coding partner.

Classification Hints

4 Sense Mode. The sense modes (the row heading on your coding sheet) need no special definitions because they are generally understood and directly experienced by all of us. It is enough to say that visual refers to the sense of sight, auditory refers to hearing, olfactory to smell, gustatory to taste, and tactile to touch.

To obtain more agreement between you and your partner in classifying the relevant bits of information on this dimension, follow these rules:

1. If an underlined word or phrase is not clearly connected with any particular sensory mode in the context of the interview, classify it as visual if the person, object, or event named is described in such a manner that you could draw a picture of it. If no concrete picture comes to mind, classify it
as “unclear” (row 6) in the sense mode dimension of your coding sheet. [begin page 194]

2. In deciding on which sense mode is involved, take into consideration the context immediately preceding and following the underlined bit of information.

3. Classify each underlined fragment of information into only one category on the sense mode dimension and only one category on the feeling dimension, in other words, into only one of the 18 cells.

5. Feeling Tone. Feeling tone is defined broadly to include any emotional reactions, attitudes, or feelings associated with a remembered object, person, or event at the high school. Ideally, the objective is to find salient positive and negative memories and determine which end of the scale is predominant. The “neutral or undetermined” category of feeling tone actually contains two kinds of information. First are associations with images that are clearly emotionally neutral. In a sense, these might be considered irrelevant to the objectives of the interview because they would have relatively little influence on the student’s attitudes toward college. Second are those objects, persons, or events that might have either a positive or a negative feeling association, but it is not clear from the context of the interview which it is. This should have been clarified at the time of the interview.

6. You must be careful when coding not to project your own values and attitudes by assuming, since you personally like or dislike something, that this respondent would also, even though there is no concrete evidence for this feeling. Of course there are times when it is safe to assume that a person does not like something, for example, a slap in the face; but if independent coders do not agree on what can be assumed in the particular context, then nothing should be assumed. Empathy is useful in both interviewing and coding, but it is not infallible.

7. In classifying information according to feeling tone, you should apply rules 2 and 3 for classifying according to sense mode.

Calculating the Percentage Agreement

8. Get together with your coding partner and compare your coding sheets using the following procedure, which should take no more than ten minutes.

1. One person calls off the numbers in cell number 1 of his or her own coding sheet. The caller should say “cell number one” and then call the numbers in rank order and wait for his or her partner to say “yes” or “no” to indicate that his coding sheet does or does not have the same number in that cell. Every time the partner says “yes,” that number should be circled on both coding sheets to indicate agreement.

2. Repeat this process for all 18 cells in the coding sheet.

3. Calculate the percentage-agreement score by simply dividing the number of agreements (items circled on one of the coding sheets) by 60, which is the total number of items classified. Then multiply by 100 by moving the decimal point two places to the right to get the percentage. Do not despair if you find that this percentage figure is low. Its real value is measured by comparing the percentage agreement with the probability of getting agreement purely by chance. In this case, since there are 18 categories, there is only one chance in 18 or a 5.5 percent probability of agreeing by chance. So an 11 percent agreement, for example, is twice as good as chance. In Chapter 11 you will be given a more sophisticated formula to calculate the coefficient of reliability.

Interview to be Coded

The interview in this exercise is part of a larger study of academic success and creativity in college. This particular interview aims at testing the hypothesis that one important factor in predicting students’ success in college (other than the usual college entrance test scores and rank in high school class) would be their emotional experiences in high school. The kinds of pleasant and unpleasant feelings associated with high school might be important—whether they are associated with courses, teachers, students, physical plant, classroom procedures, or extracurricular activities. Conscious or unconscious associa-
tions with high school might color a student's attitude toward college. These images might be visual, auditory olfactory, gustatory, or tactile, and they might carry a negative, positive, ambiguous, or neutral feeling tone.

The following transcript represents only the early part of one exploratory interview. Lines with relevant material are numbered for coding purposes.

Interview Transcript
I = interviewer question. R = response. Numbers in parentheses are line numbers.

I-1 As you already know, this interview is part of a larger study to discover whether there is any connection between how well people do in college and the kinds of memories they have of their high school experiences. Would you start by telling me some of your most outstanding memories of your high school?

R-1 Well, it's been two years—a long two years! But I can't forget certain things. I probably won't as long as I live.

(9) For example, I entered the ninth grade a year younger than average, so I got bullied around quite a bit by the other boys. . . got my nose bled in gym when I was paired with a guy with about six inches longer reach than I had.

I-2 How did that make you feel about the school?

R-2 Well, it was a fearful place at break time, before and after school before I caught the bus home, and in gym, but not in the classroom. [begin page 196]

I-3 What about lunchtime?

R-3 That was a pleasant experience because I always took my lunch in a brown paper bag and ate lunch with the same two friends for a couple of years. Not only were the friends the same but so was the lunch—always two sandwiches and some good fruit like an orange, apple, or banana. Same sandwiches too. Velveta cheese with lettuce and one peanut butter and jelly on whole wheat. I loved that lunch. It never occurred to me to get tired of it.

I-4 Tell me a little more about what was pleasant about the lunch period.

R-4 Well, my two friends at lunch were Donald Cortez and Bernie Johnson and we all felt like outcasts, Don because he was a minority member and Bernie because he had just transferred from Rancho Military Academy and felt lost, and I was younger than most. I entered North Hollywood High School before my thirteenth birthday. We shared experiences and made remarks about what we were witnessing at the moment.

(35) We nearly always ate on a bench under a tree in the large patio and could watch the others. The patio had a large arcade with Spanish arches and was about 200 feet long.

(36) There was one long row of benches on the arcade where some of the other students either ate their brown-bag lunch or collected after eating in the cafeteria, which none of the three of us could afford.

I-5 Any other memorable experiences with students, either pleasant or unpleasant?

R-5 Since I lived in another town and had to catch the old yellow school bus home every night, I could not participate in extracurricular activities, so most of my association with students was before school for about ten to fifteen minutes or during lunchtime. My second two years I didn't eat as often with Don and Bernie because I had joined the orchestra, playing violin. The bass fiddle player was a good guy and a year ahead of me. He asked if I would be interested in playing with him and a guitarist friend during the lunch hour. So for a year we met at lunchtime in the projection booth of the auditorium and played pop and country-western music. We got a few little jobs in North Hollywood and West Los Angeles. That was a lot of fun! On a couple of occasions we lost track of time, didn't hear the bell, and were late to class after lunch.
I-6 So far you haven't mentioned anything about courses, classes, teachers, or administrators. Are there any pleasant or unpleasant memories in any of these areas? [begin page 197]

R-6 I can remember every teacher I had in that four years. There were 1300 students in the school and 43 teachers. I remember I counted them in my annual, called El Camino. I had about 15 of these teachers. I liked most of them and they seemed to like me. There were some exceptions to that.

(68) There was Miss Fink who taught algebra and looked like a bulldog and had the same nasty disposition.
(70) Then there was Mr. Soloman who taught geometry. He always
(71) "had a smile and a "chuckle in his voice. He knew how to
(72) explain things. I loved geometry and hated algebra so
(73) didn't take trigonometry. I can still hear his voice as he
(74) practically sang a theorem. Then there was Miss Hamilton. She had a very pleasing figure and seemed to inspire rumors among the male students.

I-7 What sorts of rumors?

R-7 Well...it was rumored that after biology class one of the boys asked her what the tissue of the mammary gland was like and she told him to gently press her bosom to note the spongy quality. Probably wishful thinking on somebody's part.

I-8 In general how did you, personally, feel about Miss Hamilton?

R-8 I thought she was great and glamorous. She had a good sense of humor and kept us interested in most of the course. She had a little problem with some of the girls who did not want to dissect frogs.

I-9 Any other memorable teachers?

R-9 There was Mr. Persons who taught physics. He was generally a good guy with an easy-going manner. I liked him a lot until he accused me of copying from other people in an exam when it had been the other way around. I guess he assumed that since I had opportunity by sitting next to the other student and since I never talked much in class discussion and since I was younger, I must have been the one who copied. Then there was Mr. Corbin, the chemistry teacher. He was my idol. He was a Cal-Tech graduate, an Olympic fencing champion, and played the violin. And to make him more glamorous, every Fourth of July he acted as navigator on the yacht Monsoon in the race from Los Angeles to Honolulu. Since I also played the violin and had aspirations toward things nautical, I thought he was great. I never thought of it before this moment, but he may be the reason why I took fencing here at Richmond State.

I-10 Are there any other teachers that stand out in your mind at the moment? [begin page 198]

R-10 Not really, none of the gym coaches stand out. None of the English teachers stand out except one that I hated.

And I liked the orchestra teacher, Miss Sheets. Then there was Mr. Lynn teaching Spanish—he was plain funny and fun.

I-11 Tell me about the English teacher you hated.

R-11 I'll never forget her. She was Mrs. Kleinpeter who taught World Literature. She stood in front of the class the first day, told us that we were to read sixteen books from a list and make a book report on each using the outline she would supply. We all went to the library, got our first book, sat down in class and read. That was the last we heard from her. She had her desk in the rear of the classroom and was not in the classroom most of the time, but would drift in quietly to the rear once or twice during the hour. This went on for sixteen weeks.

I-12 This may sound like an unusual question, but are there any sounds that you associate with your time at North Hollywood High School?

R-12 Definitely! One football cheer of the rhythmic type comes back to me. It goes "Dot-dot, ski-watten-dotte, rah, rah, boom!" There is the sound of violins playing off key in the orchestra rehearsal and the much better sound of our extracurricular trio. Then once in awhile in geometry class there was the squeaky sound of chalk on the blackboard. Then in art metal class there was the hammers pounding on copper.

I-13 Was the pounding of hammers a good or bad sound?

R-13 It was definitely good—a sort of relief after having to be quiet in classes.
I-14 Do you recall any smells associated with your high school?

R-14 One unpleasant smell was when I had a student-aid job in the cafeteria when I was a senior. I had to wash these dirty garbage cans. Then there was the time in chemistry class when someone knocked over an ammonia bottle. It was a full gallon jug and the fumes were terrible. Then there was the sickening smell of liver of sulfur in the art metal class. Oh yes, on Mondays there was always the smell of a cedar oiled sawdust used by the janitors to sweep up the dust from the floors. That was pleasant. Of course there is always the gym lockers and the sweating bodies before taking a shower. This is particularly unpleasant with the amount of crowding we had in gym.

I-15 What are the most memorable visual images of your high school? [begin page 199]

R-15 First, I see the buildings and grounds. It was sort of pseudo-Spanish architecture with Roman arches, arcade, patios, et cetera. Then there were the red tile roofs too. The lawn was always well manicured in front of the buildings in the gym field. Then I picture the auditorium crammed with people during regular assemblies and on rainy-day gym periods. Some of the students were colorful. The fad was for the boys to wear dirty corduroy pants with graffiti penciled about. Most of the girls wore skirts and blouses or sweaters except for the girls from Italian and Mexican background who often wore dresses that showed them off to advantage but seemed a little like overkill to most of us.

I-16 Any other outstanding visual images?

R-16 Not really, except the things I have already mentioned.

I-17 I forgot to ask you when we were talking about memorable smells whether there were any pleasant ones?

R-17 Ah yes. There was Miss Hamilton. She always wore some brand of delicious perfume.

I-18 What can you remember about how anything felt to the sense of touch?

R-18 Hmm . . . that’s a hard one. I don’t seem to recall anything along that line. Except the gritty feel of the seats in the bleachers after a dust storm. Oh yes, and the damp feel of the grass after a rain when we were doing push-ups in gym class.

Coding Sheet for Interview Transcript

For each of the underlined words and/or phrases in the transcript, enter the line number (and letter if needed) into the appropriate cell. Do this individually.

In class, you will meet with one other person and compare your results by calculating the percent agreement.

For those items where disagreement exists, discuss why you classified the word as you did.
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F. Coding Interview Responses. After completing the interviews, we manually transcribed each interview. Then, the transcriptions were
coded. Coding is a process that is meant to make referencing transcriptions quicker and easier [32]. We used Gordon’s basic steps to
code our interviews and use the codings to help organize the Results (Section IV). Before coding an interview, “coding categories” need
to be defined. Coding interviews can be nerve-wrecking. Preparation is key. In this article, I am going to teach you how to prepare and
eventually get hired. Are you feeling a little nervous because you have a coding interview coming up? I feel you! You are definitely not
alone. Every person experiences some level of nervousness before big defining moments in their life. Especially if this is an interview for
your first job then the stakes are pretty high.