The Discovery of Grounded Uncertainty: Developing Standardized Questions about Strength of Fertility Motivation

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Abstract

In survey interviews, expressions of uncertainty about subjective phenomena result from the interaction between the respondent’s "true" answer and the structure of the survey task. The first kind of uncertainty, state uncertainty, is important in conceptualizing the theoretical construct under study. Task uncertainty raises operational issues, such as whether to use filter questions and which response alternatives to offer respondents. Analysis of a series of answers to open question concerning feelings about having and not having children reveals that respondents' feelings may have low intensity or be unclear, and that respondents may be ambivalent or indecisive. Any of these states may lead respondents to express uncertainty. In addition, respondents recognize that circumstances shape their feelings and fertility goals and introduce uncertainty into their fertility plans. We propose standardized response categories to record spontaneous expressions of uncertainty as well as questions to measure these uncertainty dimensions directly. Data are provided by semi-structured interviews with 18 randomly selected Wisconsin adults aged 18-34.
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Introduction

Standardized survey questions designed to measure feelings or other subjective states frequently elicit respondent uncertainty. In face-to-face interviews, respondents may react to this uncertainty by simply saying "I don't know," but they may also make comments such as "I don't really have any feelings about that," "that doesn't apply to me," or "I'm not sure how to answer." A respondent who is uncertain how to answer a question in a self-administered questionnaire may simply skip the item. Such answers are usually lumped together in a "don't know," middle, or low-intensity category, depending on the type of question. In most cases, responses like these are excluded from analysis.

Expressions of uncertainty or nonresponse to standardized questions may stem from two sources: the respondent is uncertain of their "true" subjective state, or the respondent is certain of their state but uncertain how to answer the survey question to reflect it. State uncertainty, the first of these sources, is important in the conceptualization of the construct under study. Whether the construct is conceptualized as a dimension or a set of discrete positions, the role of uncertainty and distinctions among different states that may generate uncertainty - such as neutrality, lack of clarity, or ambivalence - should be specified.

Task uncertainty, the respondent's uncertainty about how to communicate their underlying state using the standardized question, raises operational issues such as whether to use filter questions and which response alternatives to provide.

These two general classes of uncertainty are not independent of each other. Expressions of uncertainty are produced by the interaction between the respondent's "true" state and the content and format of a standardized question. A respondent may have a definite substantive answer that expresses her true state - for example, she approves of large families, but only
if the family can support itself - but be unsure how to express that position using the available response categories. This respondent would not experience or express uncertainty if asked about poor and wealthy families separately. Or the respondent’s true state may be uncertainty - she has not decided what she thinks about family size. This respondent may express uncertainty to any question about family size. Whether and how task or state uncertainty is recorded depends on the available response categories and interviewer training. Accurate measurement requires that constructs incorporate distinctions among varieties of state uncertainty. Standardized survey questions that do not take these distinctions into account may generate task uncertainty.

To develop standardized questions to measure strength of fertility motivation, the desire to have or not have children, we undertook a series of semi-structured interviews with randomly selected adults, aged 18-34. This paper presents an analysis of responses to open question about thoughts and feelings toward having or not having (more) children. Our analysis serves several linked purposes: (a) It is a detailed case study in the use of semi-structured interviews for construct conceptualization and standardized question development. (b) We take respondents’ answers to open questions as a starting point for a content analysis of expressions of uncertainty. Such expressions appear in all types of interviews, on a wide variety of subjects, and may be particularly troublesome in standardized interviews. Our approach contrasts with published analyses (see below) of standardized questions. These studies try to distinguish among different types of “Don’t know” (DK) categories after data have been collected, rather than trying to discover the various forms of uncertainty respondents may express and then develop corresponding categories. (c) We propose using “Don’t know” categories that correspond to the different forms of uncertainty expressed by respondents. Appropriate DK categories should minimize the task uncertainty generated when respondents express uncertainty to standardized questions.

Identifying Uncertainties. Standardized survey questions about subjective states typically channel expressions of both task and state uncertainty into a middle, neutral, or
DK category. Which of these categories is relevant depends on the question's content (e.g., making judgments about statements or expressing one's own attitude) and structure (e.g., a request for a unipolar or bipolar rating). Once distinct answers are combined in one of these categories, it may not be clear whether the category represents a position on the underlying construct or a component of nonrandom measurement error. Studies of the heterogeneous answers grouped into these categories identify types of state uncertainty and illustrate its relationship to task uncertainty.

In a study of the different reasons that judges placed attitude statements in a "neutral" category, for example, Edwards (1946, p. 162) identified the following implicit meanings of neutral: ambiguous (statements with different interpretations), irrelevant (statements extraneous to the dimension being measured), indifferent (statements expressing lack of concern with respect to the issue), and ambivalent (statements expressing indecision). When experienced by a respondent, indecision is a form of state uncertainty; indifference toward the question's response dimension or perceiving it as irrelevant may generate task uncertainty, as may an ambiguous stimulus. The judges studied by Edwards resolved their own task uncertainty about where to classify these diverse statements by categorizing them as "neutral," but the Edwards' analysis reveals that the judges' strategy ignored substantive differences in the uncertainty states described by the statements.

Studies of bipolar items that respondents use to rate their own feelings or judgments provide slightly different classifications of possible uncertainty states and sources of task uncertainty. In their study of the effects of labels for a middle category, Kloper and Madden (1980, p. 98) distinguished four different states that could be thought of as in the middle of the response continuum: ambivalence ("sometimes you feel one way and sometimes you feel another"), uncertainty ("you are just not able to identify your feelings"), neutrality ("you don't care one way or the other"), and nonspecific ("you just cannot decide"). The first three categories describe the respondent's subjective state, while the last may describe either state uncertainty or uncertainty generated by the task. Kaplan (1972) notes that
labeling the middle category of a semantic differential scale, which is bipolar, “neither X nor Y; equally X and Y” is potentially problematic. If the middle category is neutral, then the poles mean “very X” and “very Y,” and the scale implicitly expresses intensity in each direction. But if the middle category indicates equal amounts of the qualities (ambivalence), then the poles are “all X” and “all Y,” and the scale expresses the relative amount of each quality. Thus, labeling the middle category with both phrases can make the meaning of the entire scale ambiguous and generate several kinds of task uncertainty. DuBois and Burns (1975) identify ambivalence and indifference as the two orientations expressed by selecting a middle category, the first being the more likely orientation if the person is involved in the issue and the second if they are not. Schuman and Presser (1981, pp. 177-178) find that respondents may express either low intensity or absence of opinion by selecting the middle category, but they suggest that ambivalence can also be expressed in this way.1

Studies of DK answers suggest that they may express one or more of the meanings already reviewed. For example, the DK category may include comments that the survey item is ambiguous or direct expressions of the respondent’s uncertainty (Coombs and Coombs 1976). Schuman and Presser (1981, pp. 143, 145) note that both low attitude strength and ambivalence may also play a role in DK answers, although the relationship is complex.

These studies suggest that task structure and content both affect the kind of uncertainty standardized questions elicit. Filter questions asking if the respondent has an interest in the subject, for example, probably reduce expressions of uncertainty due to lack of interest when a followup opinion question is asked. Similarly, the subjective states that make a respondent uncertain how to answer a unipolar rating scale (e.g., from “not at all happy” to “very happy”) probably differ from those generating uncertainty with a bipolar rating scale (e.g., from “very unhappy” to “very happy”). As suggested by the literature reviewed above,

1There are few reports of systematic attempts to record the variety of possible meanings respondents may intend when they select a category indicating uncertainty. An apparent exception is Goldberg (1971) who used a format that asked respondents to note next to each “?” response whether they meant that they were indifferent, had mixed feelings, did not know, or had some other reasons (cited in DuBois and Burns 1975).
the definition of the middle category is a bipolar rating scale also shapes uncertainty. If the middle category is defined as "ambivalence," respondents wishing to express low feeling intensity may be uncertain where on the response scale their answers belong. A respondent may also express uncertainty if they have not thought about the question topic or has thought about it but is undecided.

Not only does this literature identify distinct classes of uncertainty and document the heterogeneity of middle and DK categories (and their occasional similarity), it also finds that these distinctions sometimes have substantive implications: When rating their attitudes toward capital punishment, subjects used the middle category more often if it was labeled "ambivalent" than if it was labeled "uncertain." Labeling did not affect use of the middle category when subjects rated attitudes toward Sunday observance (Klopf er and Madden 1989). DK responses that reflect a position on the construct continuum yield a scale similar to that produced by substantive answers, while DK answers that reflect item ambiguity do not (Coombs and Coombs 1976). Respondents who have no knowledge about a subject may differ from those who have knowledge but no opinion (Faulkenberry and Mason 1978). 2

Integrating Uncertainty. Forms of state uncertainty must be not only identified but also integrated into the conceptualization of constructs being measured. Uncertainty may be particularly problematic if, as is typical, the model of the construct is a continuum. In this case those who are uncertain may be seen as expressing a categorical or qualitative distinction rather than a quantitative distinction that has a place on the continuum.

For example, Schaeffer and Bradburn (1989) report on a study in which informal caregivers were asked for magnitude estimates of the stress they would have to experience before they would put the recipient of care in a nursing home. A number of respondents said they did not know how to answer the question, since they would never put the person in a nursing home. There are at least two ways of integrating such answers with the model of a stress continuum underlying magnitude estimates. The first is to assume that "never" implies an

2 "Lack of knowledge" is our interpretation of the authors' "Don't know" category.
infinite amount of stress required for the action and to assign a very large value to represent this response. In fact, when a respondent said "never," some interviewers suggested very large numbers such as "a trillion" to the respondent (Schaeffer and Bradburn 1989). The second solution is to adopt a more complicated measurement model in which each respondent is thought of as having a switch for the variable "would ever place the person in a nursing home." If the switch has the value "yes," it is possible to identify the value at which the action would be taken; if the value has the value "no," then the level of stress is undefined (and the question is not asked). This is essentially what filter questions for opinion items do (e.g., Schuman and Presser 1981). Using a filter question implies that there is a separate opinion or knowledge dimension that conditions responses to opinion or attitude objects on an evaluative dimension and supplies a substantive interpretation to the conditioning dimension. For example, the "no opinion" filter identifies a class distinct from those who say "not sure" to the subsequent opinion item (Duncan and Stenbeck 1988).

Conditioning dimensions can clearly complicate an analysis, particularly if different indicators of a construct have different conditioning dimensions. A different strategy is to conceptualize uncertainty as a property distinct from but parallel to an individual's position on a subjective continuum. That is, we may assert that everyone has a position on the continuum, but that some people are less certain of their position than others. Those who are uncertain may not have experienced the position very long, have reason to believe it will change, or have reasons not to know what the position is (ego-defensive bias, etc.). Thus, in order to describe an individual's true "state," we must simultaneously describe their position on the subjective continuum and the certainty with which they know it.

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3 This is similar to a proposal made by Converse (1970, p. 180) in discussing non-attitudes.
4 Furthermore, answers to filter questions also include error, so that a single indicator compounded of a filter and response scale has two sources of error.
5 Certainty and uncertainty can be conceptualized as separate poles of a bipolar construct or as two separate, but probably correlated, dimensions. Answers to questions in the semi-structured instrument suggest that certainty and uncertainty may be independent for some people: When offered a list of words to describe their feelings about having children, some respondents chose both "certain" and "uncertain," both
Uncertainty in Fertility Motivation: A Case Study

A recurring criticism of standardized questions is that they do not reflect the way in which feelings and beliefs are expressed and therefore do not accurately measure those feelings and beliefs - that standardized questions lack ecological validity (Briggs 1986; Cicourel 1974; Cicourel 1982; Jordan and Suchman 1987; Mishler 1986). Research on the meaning of answers to standardized survey questions in “don’t know” and “middle” categories (cited earlier) is one step is in this direction, but the research typically begins with categories in standardized questions and infers the meaning of answers or differences among categories. In contrast, we begin with statements about uncertainty, identify classes of statements, consider how these categories are integrated with the construct we wish to measure, and suggest standardized questions and categories that capture differences among these statements.

The ecological validity of any standardized instrument can be improved by analyzing the content and the structure of spontaneous expressions about a given subject, and by carefully analyzing “interactional troubles” produced by standardized questions (Jordan and Suchman 1987). Although accepted procedures recommend beginning the development of standardized questions with unstructured interviews (e.g., DeMaio 1983; McKennell 1974; Morton-Williams 1978), this advice is often ignored in the press of time and expense. Some practical guides to question development do not even include qualitative interviews as a step in the process (Converse and Presser 1986; Sudman and Bradburn 1982). Few published descriptions of actual development procedures or detailed case studies exist to guide the survey researcher. In the following sections we present a case study in which semi-structured interviews were conducted to ground the development of standardized questions for measuring motivational strength, specifically motivation for having or not having children. Our analysis of these interviews was used in all aspects of question development but we were particularly struck by the number and variety of expressions of uncertainty. We focus this paper on those expressions and on how we used them in developing structured items to

“stable” and “variable,” and other apparently contradictory adjectives (see below).
measure motivational states, including various forms of state uncertainty. In contrast to the practice of using qualitative interviews to obtain attitude statements for Likert-type scaling, we focus on the information respondents provide about the dimensions and structure of the construct we are investigating.

Conceptualisation of Fertility Motivation. Motivation is a force toward a goal, and stimulates goal-directed behaviors. We initially conceptualized motivational strength as having three dimensions: certainty, intensity, and centrality (Raden 1985). We further hypothesized that motivation toward a goal was not necessarily the inverse of motivation toward its opposite. That is, we believed we would need to measure motivation to have a child independently from motivation to have no more children. This approach allows for expressions of ambivalence. Uncertainty states or task uncertainty associated with low intensity, such as indifference or perceived irrelevance, can be thought of as positions on the intensity strength dimension.

These initial theoretical ideas are, of course, reflected in the structure and context of our semi-structured interviews. But we did not anticipate (and therefore do not believe we created) the variety of uncertainty expressions we report below. Although we did not rigorously follow the grounded theory method, we developed theory by searching for the structure in our data - an approach that characterizes grounded theory (Glaser and Strauss 1967; Strauss 1987). Furthermore, we developed our strategy for incorporating uncertainty categories or dimensions in response to the material respondents provided.

Developmental Interviews. Instrument development and interviewing proceeded simultaneously through three stages: semi-structured interviews consisting of standardized open questions and an agenda of topics to probe if the respondent did not discuss them spontaneously; feedback interviews in which standardized closed questions were tried out, revised, and tried out again; pretest interviews using a complete instrument with standardized closed questions. The semi-structured instruments were sufficiently standardized to help a team of inexperienced interviewers cover essentially the same material, but sufficiently unstruc-
tured not to impose our theoretical assumptions on respondents' answers. The agenda was provided since the respondent might initially cover some, all or none of the topics (see, for example, the discussion in Brown and Sime 1981, p. 165). The standardized open questions were deliberately long and somewhat repetitive in order to model lengthy responses and to give respondents time to collect their thoughts (Bradburn, Sudman, and Associates 1979; Mishler 1986; Spradley 1979). The analysis in this paper focuses on the semi-structured interviews.

Interviewers were the two investigators and eight students in a graduate survey research methods class. Because the number of interviewers was large, the data are not overly influenced by the preconceptions or orientations of any one person. For both the semi-structured and feedback interviews, each interviewer was assigned to complete two practice interviews and two interviews with persons selected in the local sample. Interviewers completed their first practice interview with another interviewer; thus, each interviewer was interviewed at least once using the instrument. The second practice interview was usually completed with another graduate student not in the class. The instrument was discussed and revised after each round of practice interviewing and interviewing with sample respondents. The development of the instrument was the focus of class activity; interviewing schedules and decisions about pursuing respondents were determined partly by class scheduling. These constraints resulted in fewer than the maximum number of interviews.

Sample. Random digit dialing was used to identify households with eligible respondents (aged 18-34) from telephone exchanges in the Madison metropolitan area. In later stages of sampling, exchanges near the university were omitted in order to increase the likelihood of finding married respondents. We attempted to select approximately equal numbers of all combinations of male and female, married and single, parent and nonparent respondents. Those who refused to provide an address at the time of the initial screening were not pursued, so cooperation among the remaining respondents was generally high. Respondents were assigned to semi-structured or structured feedback interviews depending on when they
entered the sample; respondents who were initially assigned to a semi-structured interview who were unavailable for several weeks were considered eligible for a feedback interview.

Although the resulting sample is probably better described as haphazard than random, the procedure we used avoided most of the selection biases that would have resulted from relying on our own acquaintance networks or student populations. Of the 18 respondents to the semi-structured interviews 10 are women; 12 are married, 1 is divorced, and 5 are never married; 3 have high school degrees, 2 are currently college students, and 13 have at least some college; and 9 have no children. (Appendix A summarizes respondents' characteristics.)

Analysis. This is a content analysis, the units of which are primarily meanings (e.g., Lofland and Lofland 1984, pp. 71-75; Mostyn 1985). Our analytic task is more general than but similar to that of developing a set of closed response categories from answers to open questions. Identifying dimensions or classes in these answers is essentially a pattern-recognition task. The researcher implicitly or explicitly performs a task similar to one sometimes presented to respondents: sort a set of statements into categories using whatever principles you like and describe the dimensions you used (see e.g., Canter, Brown, and Groat 1985; Weller and Romney 1988). There are two parts to this sorting procedure: identifying a relevant dimension and making judgments of similarity and difference along the dimension. These similarity-difference judgments lead to sorting statements into classes. If the classes can be ordered, a model of a property as a continuum may be reasonable. Injunctions that classes be mutually exclusive and exhaustive (e.g., Lofland and Lofland 1984, p. 96) are purely analytic rules and do not provide evidence for the existence of dimensions or categories. Obviously, any single statement may have a place on several dimensions. Because we do not have transcripts of the interviews the patterns we detect cannot rely on the exact choice of expressions.

Researchers sorting statements are guided by the cognitive organization of their world, just as respondents are. In the case of the researcher, that organization incorporates the-

6We refer to a principle used to classify statements, e.g., statements about contingencies, as a dimension, and categories within a dimension as classes or categories.
ory and previous research. Both the perception of relevant dimensions and judgments of similarity and difference are subject to reliability checks, but the meaning of reliability in identifying dimensions is less clear. To some extent, the identification of dimensions is irreducible - they are validated by their performance in research. In research "as in life," the dimensions one retains are those that successfully summarize past experience or guide later decisions (see Schuman and Ludwig 1983).

A related problem is what to conclude from the absence or presence of a possible response. The semi-structured interview consisted of standardized questions with neutral probes contingent on the initial response. When interviewers encountered situations that were not handled easily by the interview schedule, they adapted questions as needed. Thus, the stimuli presented by the interviewer were probably more variable than in most standardized interviews, and we do not have a complete record of this variability. If person A raises issue X, for example, but person B does not, one cannot infer that X is not a concern for person B. B may have focused on Y and temporarily forgotten about X, or may have decided to omit X to shorten the interview. Similarly, issues that are raised may be partly a function of the interview method or interviewer behavior. In an effort to be helpful, for example, a respondent may dredge up every relevant issue they can think of, whether or not each one is personally important to them; or the inflection of an interviewer's probe may suggest that the respondent should elaborate on one aspect of a previous answer rather than another. Relying on typologies developed only from open answers (Lofland and Lofland 1984, pp. 96-97) is risky unless the presence or absence of each possible category in the typology is explicitly verified. In general, then, our sample of responses has unknown properties and is produced by diverse processes, some of which are related to the construct under consider-

1 For example, one respondent changed her mind about the number of children she wished to have in the course of the interview, and the interviewer adapted the subsequent questions.

2 Standardized questions increase the comparability of respondents' answers by asking all respondents to explicitly accept or reject the same set of choices. In this sense, fully standardized questions provide stronger evidence than open questions for the absence of a category.
tion and some of which are not. Given these considerations, the result of such an analysis is not inferences, but hypotheses embodied in the categories we identify.

Having seen that expressions of uncertainty were very common in the interviews, we identified several uncertainty dimensions (uncertain fertility goals, neutrality and uncertainty, contingencies, adjustment) and classes of uncertainty within these dimensions in two ways. First, we reviewed the content of responses for expressions of uncertainty about having or not having children. Second, we searched for evidence of both task uncertainty and ways of expressing fertility desires that might lead to task uncertainty in a fully standardized interview. We tried out categories, reexamined the interviews, revised the classes we used, and examined the interviews again. The classification was reviewed by both investigators and an assistant, and discrepancies were discussed.

The tables present quotations from the semi-structured interviews, ordered by respondent identification number. The material has been edited slightly for easier reading, and we enclose interview material in the text in quotation marks. Interviewers attempted to record comments using the respondent's words as much as possible but some abbreviations necessarily occurred. We place brackets around most words we added in editing, but we do not wish to give the impression that the remaining material is itself quoted exactly. Quotations are followed by a case identification number and the number of the question or questions from which the quoted material was taken. The notation allows the reader to determine the characteristics of the respondent making a particular statement by referring to Appendix A and to verify that the material contributing to our conclusions was drawn from all our respondents and from answers to a wide range of questions. Appendix B presents the exact wording of all questions.

None of the problems mentioned above is particularly limiting for our purpose, which is to deepen our understanding of subjective expressions of uncertainty and to find ways of incorporating this understanding into standardized questions. The present analysis forms the basis for future studies to verify the prevalence of uncertainty answers and describe their
relationship to each other.

State Uncertainty: Spontaneous Expressions of Uncertainty

The salience and prevalence of the uncertainty-certainty dimension is illustrated by the words respondents chose to describe their feelings about having or not having children. A list of 22 pairs of words was presented approximately two-thirds of the way through the interview. Five pairs expressed uncertainty-certainty dimensions: clear-unclear, stable-changing, certain-uncertain, unsure-definite, variable-constant. Five respondents chose only words indicating certainty, five chose only words indicating uncertainty, seven chose both kinds of words. Only one chose no uncertainty-certainty words. The mean number of words selected by those choosing words was 3.3. The words most commonly chosen were unclear, changing, certain, definite, and variable.

Expressions of state uncertainty appeared throughout the interviews and referred to feelings, goals, and conditions that might influence them. We found expressions indicating that the respondent felt neutral, ambivalent, indecisive, or was not sure how they felt. These uncertainty states can easily cause task uncertainty. Neutral states are also associated with uncertainty in the statements of some respondents and may also give rise to task uncertainty. Respondents also provided insights into the mechanisms underlying uncertainty: respondents described contingencies that affect fertility desires and the process of acceptance and adjustment that modifies their desires. The number and kind of contingencies a respondent recognizes may indirectly express how certain their feelings are. Although expressions about acceptance differ from the other categories in important respects, we discuss this category briefly because it suggests the limits of certainty: respondents recognize they need to be flexible, since fertility outcomes cannot be guaranteed. Our discussion includes comments respondents made about past, present, and expected subjective states and about both the direction and timing of fertility decisions.9

9Only one respondent - 25, who was trying to get pregnant - made no statements that suggested any
Uncertain Goals. Respondents indicated uncertain fertility goals by providing a range when asked how many (more) children they wished to have, if any. Out of the 18 sample respondents interviewed, 10 expressed some kind of uncertainty about the number of (additional) children desired, although in one case that uncertainty was expressed much later in the interview (see Appendix A). In 5 of these cases the respondent indicated certainty about wanting (additional) children, but uncertainty about the number. For example, 1 respondent said that ideally they would have one more child, but that they might have two more [42-09]. In the remaining 5 cases, the range given included the possibility of no (additional) children. A range that includes zero indicates that the immediate fertility goal (to have or not to have a child) is itself uncertain; a range that does not include zero foreshadows such uncertainty.

Neutrality. Neutral answers describe feelings that have very low intensity or cannot be perceived. The respondent knows how they feel - they just do not experience a particular feeling or the feeling is of very low intensity. Expressions of neutrality indicate that the person is indifferent to fertility outcomes or that having a preference seems irrelevant to them. As the data in Panel A of Table 1 indicate, respondents expressed neutrality about the timing of the children [04-10], the number of children desired [14-25], and about the relevance of fertility preferences [40-04, -18, -24, -40, -47, -55]. Panel F of Table 1 presents “mixed expressions,” some of which express neutrality as a postulated state in the recent past [Panel F 13-40], or combine neutrality with other forms of uncertainty, for example, ambivalence about having or not having children [Panel F 09-04]. Respondent 40 himself uses the word “neutral.” His repeated statements indicate that neutrality can be a very definite state. In a structured interview, such repeated expressions would be problematic unless an appropriate response category were available.

uncertainty about the direction of fertility goals or their timing. We examined the answers in each category for patterns by sex, number of children, and number of children desired, but, given the small number of cases, no patterns emerged.

10In some theoretical domains, it might be worthwhile to pursue this distinction, but we do not do so here.
Lack of Clarity. Feelings may be unclear for various reasons (see Panel B of Table 1). For example, the person may not have thought about an issue [08-40, 14-10, 18-17], they may be in the process of making or revising a decision [Panel F 19-12], or their feelings may be contradictory and difficult to summarize [Panel F 13-40, 26-21]. At least two respondents expressed increasing lack of clarity during the course of the interview and indicated that listening to their own answers had confused them [08-40, Panel F 13-40]. How a respondent expresses unclear feelings depends partly on the question they are answering. For example, conflicting feelings may be expressed as a lack of clarity only if a person is asked to summarize them on only a single positive-negative dimension.

Ambivalence. An ambivalent person has opposing or mixed feelings - whether moderate or strong - toward an object. Because it is inherently a compound state, ambivalence presents problems that the other categories do not. Although we did not begin by looking for expressions of ambivalence, we were attempting to compile lists of positive and negative feelings associated with having and not having children. For this reason, the initial questions in the interview included probes for negative and positive feelings if both were not mentioned spontaneously. This use of probes may be considered either as providing stronger evidence for the absence of ambivalence because respondents must deny competing feelings or as providing weaker evidence for the presence of ambivalence because respondents were not required to express competing feelings spontaneously. 11 Statements of positive and negative feelings could be separated by a neutral probe that followed one of the structured questions or could appear in response to different structured questions - sometimes at very different locations in the interview. Furthermore, the positive and negative feelings respon-

11 The assumption that spontaneity indicates depth, intensity, relevance, or importance is common, but is largely untested. Arguments that the importance of the content to the respondent - and the validity of the answer, in some sense - is greater if the answer is relatively unprompted, (e.g., questions without response categories provide more valid answers than questions with, material provided before a probe is more valid than material provided after a probe, etc.) rest on questionable assumptions. Kane and Schuman (1989) discuss some of these issues and provide some relevant data that suggest the status to items mentioned spontaneously is problematic.
dents expressed were not necessarily equally intense, or the relative intensity of the feelings was difficult to determine - as was the appropriate range of combinations of intensity to consider ambivalent. Finally, respondents could discuss positive and negative aspects of having or not having children without directly communicating feelings about these considerations.

These problems in identifying ambivalent expressions have substantive implications for measuring fertility motivation, but the issues cannot be resolved using these unstructured interviews. For example, we cannot tell if a respondent's discussion of costs and benefits communicates conflicted feelings or simply recognizes the complexities of trade-offs and choices. Similarly, any judgments we make about the intensity of competing positive and negative feelings would necessarily be tentative - for example, a woman who says she would feel both "panicked" and "excited" if she got pregnant communicates intense feelings, but the relative balance of positive and negative feelings is not clear, and the question requires studies scaling these feeling words to resolve [Panel D 19-16]. Because of these complications, the category of ambivalent statements is less well-defined than the others, and we focus on illustrating the range of answers.

Statements that express mixed feelings by noting that feelings are variable avoid most of the problems just discussed (see Panel C of Table 1). Variability in feelings may be seen as a possibility [14-21], or as the current state of things: "It really depends. Sometimes I really want to have a child, and other times I don't" [09-34]. Variable feelings also appear with other expressions of uncertainty [Panel F 09-04, 39-09]. But variable feelings do not necessarily indicate indecision; the balance may be tipped in one direction [01-19].

While interpreting descriptions of variable feelings as ambivalent is fairly straightforward, interpreting other expressions is not (see Panel D of Table 1). Almost all respondents expressed awareness of both positive and negative feelings about having children, either in response to the same or to different questions. An exception was an unmarried 19 year old man who worked as a loader at a drugstore and said he had "no negative thoughts" about having a child [04-36, not in tables]; his most negative expression was an acknowledgement
that children would use financial resources [04-36, not in tables]. The clearest expression of simple ambivalence came from a married man who was unsure whether he wanted a fifth child: "I wonder why I will have another child. It's hard to explain. 'Can't live with them, can't live without them'" [Panel F 39-33]. But ambivalence may be communicated in more complicated ways or involve answers to more than one question. Respondent 8's description of her feelings about having a child presents both positive and negative feelings in a single answer: she does not want to be pregnant or to have the sole responsibility for a child, but thinks there are rewards to having children [08-11]. In contrast, respondent 26 says her feelings are mixed ("both good and bad" [26-19]), but describing her feelings more fully requires comparing answers to different questions [26-18 -19; see also the Panel F-21]. These two respondents also illustrate how the contrast between someone's stated fertility goal and other statements may suggest ambivalence: Respondent 8 is very definite about not wanting a child (at least until the interview). In contrast, respondent 26 repeatedly expresses negative feelings but also sounds as though she definitely decided to have another child: "It is important. I am 27, and I want to have it before I am 30. I really do not want [my daughter] to be alone anymore" [26-22, not in tables]. Some descriptions of positive and negative feelings are ambiguous: Is a person who recognizes that parental love is positive but the stress of parenting is negative [07-27], or that the first two years of childrearing are disruptive [42-33] expressing ambivalence?

Indecision. When a person perceives that it is time to try to have a child, uncertainty may also be expressed as indecision (see Panel E of Table 1). Some of the statements of variable feelings just reviewed implicitly express indecision. Circumstances may determine when the time of decision arrives, and indecision may be linked to the likelihood of these circumstances. For example, job and financial uncertainties may lead to indecision about fertility matters [03-51, 22-30, Panel F 39-34]. A woman who expressed neutrality, ambivalence, and lack of clarity, suggested the relationship between indecisiveness and other forms of uncertainty: "In spite of my uncertainties, it's important that they come at this point.
Uncertainty comes before decision. I'll come to a point where I'm sure and all the plans come into place. Somehow my husband and I will at some point have done enough talking to each other so that we'll both be sure and a baby will be conceived" [13-36]. Several other respondents also expressed indecision along with other forms of uncertainty [Panel F 10-12, 26-21, 39-34]. The stress attached to uncertainty and indecision may be such that even an unwanted pregnancy can be a relief [Panel D 19-16].

Mixed expressions. The mixed expressions in Panel F illustrate how our analytic distinctions appear in respondents' talk and how respondents experience the relationships among different kinds of uncertainty. The close relationship between neutrality and uncertainty is illustrated by respondent 9's statement, which suggests that she uses neutrality to resolve her variable feelings about having a child [09-04]. The remaining examples illustrate various reasons feelings may be unclear. A simple statement that feelings are not clear - "I wonder if I do want a child!" [13-40] - can summarize complex considerations. This respondent, who wanted a child, thought she was neutral about having a child overall, that "it would be OK either way, fine" [13-40]. But in reviewing what she said during the interview, she implicitly contrasts her positive feelings of wanting a child with her negative actions: "People who do want children have them, and I still don't have one" [13-40]. This contrast suggests ambivalence - apparently also to the respondent, who must now reconsider her previous use of neutrality to balance positive and negative orientations to having children. Other respondents also summarize ambivalent or variable feelings by describing their feelings as unclear: "Not sure if I want any more. I don't know. I go back and forth." [39-34]. By saying that the desire for another child is "sometimes...not that strong" or that one feels "scared" when the decision gets close [26-21], this respondent implies that stronger and more positive feelings are sometimes present, that is, that her feelings are mixed. In this case, her desire for another child coexists with negative feelings, resulting in variable feelings and a lack of clarity: "I just do not know how I feel all the time" [26-21] - which implies that sometimes she does know how she feels.
Contingencies. Almost every respondent described, either spontaneously or in response to direct questions, at least one circumstance that might affect their fertility goals. Table 2 presents examples of the most common categories of contingencies: having a partner or the right kind of relationship with a partner, the wishes of the spouse or partner, goals that compete with fertility desires, employment or financial considerations, the health of the parents or the child, the experiences of friends, fertility issues, and unanticipated pregnancy. Respondents identify a variety of contingencies, as illustrated in Table 3. We do not discuss each category in detail, however, because our principal interest is in how respondents manipulate these contingencies in their talk.

Respondents recognize uncertainty in fertility goals by stating them directly as contingent, by listing the contingencies, and by describing how events can cause ultimate fertility to differ from desired fertility. Respondents appear to formulate rather complex causal models, estimate the likelihood that the relevant conditions will occur, and make statements about fertility goals based on these calculations. Respondents do not appear to distinguish consistently among conditions that limit the available choices, determine desires, and shape eventual outcomes. The causal models respondents present also recognize that people often come to want what they can or do get.

We can illustrate how respondents discuss contingencies using statements about the role of a partner or the partner's wishes (Panel A and Panel B of Table 2). For example, in answering the question about events that might make the respondent feel differently about wanting a child, a respondent who wanted two children said, "A requirement for having a child is to have a strong relationship with my girlfriend. If there was a possibility of breaking up our relationship during raising a child, I would feel differently. A requirement for wanting a child is that not only I want to have a child, but my partner also wants to have

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12 The exceptions were two respondents who were sure they did not want more children, one of whom had serious permanent health problems [18]. This respondent acknowledged a slight possibility that she and her husband might "change their minds" and decide to adopt a third child [18-53]. The other could think of no reason to change her desires, but said that God might not want her to have another child [26-52].
a child” [02-52]. This respondent discusses conditions that affect actually having a child, feelings about having, and, finally, wanting a child. This respondent also implies that what he wants is a function of what is available (“A condition for wanting a child…”). He and his girlfriend had discussed having children [02-47] and agreed that they want two [02-55]. This context probably contributes both to the certainty with which the respondent expresses his goal and to his conflating of the number of children he thinks he will have and the number he wants to have; he has good reason to expect them to be the same. The way respondents spontaneously distinguish among what their choices are, what they want to do, and what they will do probably depends on the perceived likelihood of conditioning events.

Any uncertainty attached to conditions that must exist before pregnancy is sought spreads to fertility goals, making it difficult for the respondent to express fertility goals without referring to the contingencies. For example, an unmarried woman who said “If I have [children], then I’d have 2” [09-09, not in tables], also said she did not think she would actually have children because she would probably not get married [09-55]. This woman’s fertility goals are inherently uncertain, and she can only express them as contingent. Contingencies can also be described indirectly, as when a respondent implies that she does not want a child if she is not married: “My fear is that if I don’t have one in the next few years, my husband and I might have come to the decision that we not stay together” [13-25]. Similarly, present outcomes can be explained by identifying contingencies in the past: “My husband doesn’t want one anymore. If I [had wanted a child] in the first 10 years, we would have…” [19-40].

Within the available choices, respondents identify goals that may compete with fertility goals (see Panel C of Table 2). These other goals are also part of the causal models that respondents present to explain how their fertility desires develop and are enacted. Alternative goals may give rise to uncertainty if they are conditions for having children, as for this woman who wants to have a child but is uncertain when or if it will happen: “If I wait, I’ll be in the middle of something that I won’t want to leave. A conflict with what I need - to stay home
for a few years. If I wait, my career will be a problem, because I’ll want to stay with it, and that conflicts” [13-50]. But other goals may make fertility outcomes more certain if the alternatives are more attractive than childrearing: “[I do not want a child because it would mean] No freedom to pick up and move. Wouldn’t be able to go back to graduate school. [I] would live in an urban area, but I wouldn’t want to raise children in that environment” [08-50]; “Right now there would have to be some dramatic changes in my life for me to have children...I’m more actively pursuing my career” [42-55].

Other goals may compete for attention only at a given time, so that all goals are seen as attainable in sequence. A man suggested a temporal structure to his goals when he said that having children ranked third or fourth as an “overall goal,” behind finishing his education, finding a job, and developing his relationship with his wife [03-22]. The temporal sequencing of goals may introduce uncertainty into fertility outcomes. If childrearing does not rank high among a person’s goals, it may be repeatedly and indefinitely postponed. A man trying to decide whether to have another child noted, “If [my wife] got a teaching job, that would stop us for another year or two, and then it’d be too late” [39-52, see also 13-50].

Financial considerations (Panel D of Table 2) are probably second-order conditions for most respondents: they only become important when a like-minded partner has been found and other goals do not conflict with childbearing. Health issues may preempt fertility concerns (Panel E). Friends (Panel F) play a role in developing desires for children because of social learning processes and because people recognize that they are at a particular stage of life by observing the actions of their peers, as illustrated by a man’s description of his wife’s concern with having children: “...We [wife and respondent] are physically separated. The fact that she feels especially lonely affects [her desire for a child] somewhat. She feels that she is getting old. She is 31. Her friends have children already. I think about it because it’s on her mind so much. Several of my...friends have children....They seem to enjoy it” [03-04, not in tables].

Finally, respondents recognize that haphazard fertility events may affect desires for
children and the number of children borne. Those who want children may be unable to have
them because of fertility problems (Panel G); those who want no children may experience
unanticipated pregnancies (Panel H).

Adjustment and acceptance. The influence of circumstances on desires and feelings
is recognized in descriptions about how these develop within the constraints of the possible.
All but two respondents, [4] and [26], predict that they would undertake emotional work if
circumstances and fertility goals did not match or the probabilities attached to condition-
ing circumstances changed (e.g., when a person decides that finding a partner is unlikely).
Respondents made these statements, for example, when discussing how they would respond
to having a child they originally did not want, having a child earlier than they wanted, or
not having a desired child. Respondents describe adjustment - accepting what has happened
and bringing feelings into line with reality: "What can you say? If I don't change my mind
[to want a child sooner], that's the way it is. What you have, you have to feel good about"
[22-32]. A more radical sequence of feelings was predicted by a woman when asked how she
would feel about having a child within a year: "Panicked. Distressed. Relieved I wouldn't
have to make a decision [about whether to have a child]. Pretty upset. Get excited once
I got used to the idea." [Panel D of Table 1 19-16]. This process of acceptance introduces
another kind of uncertainty - to maintain their flexibility and the ability to be happy when a
desired outcome cannot be guaranteed, respondents hold open the possibility of change. This
uncertainty differs from the others we found because it is tied to eventual outcomes. But
respondents' descriptions suggest that they may remember the ambivalence, neutrality, and
other uncertainties they experience and use these uncertainties productively in the process
of accepting fertility outcomes.

Reducing Task Uncertainty: Recording State Uncertainty

Having documented these varieties of uncertainty and its expression, we attempted
to develop ways of recording these expressions within a standardized telephone interview.
All of these types of state uncertainty are potential sources of task uncertainty. These
answer suggest that a simple DK category would not solve the problems respondents and interviewers would face with standardized questions about fertility motivation, since many of these respondents know how they feel - but feelings depend on uncertain circumstances, vary over time, or are experienced at all. To provide a more accurate description of fertility motivation and to reduce the task uncertainty that could result from not providing for expressions of uncertainty, we developed categories to record spontaneous expressions of uncertainty, rules for training interviewers in recording these answers, and direct questions about strength or uncertainty dimensions.¹³

**Uncertain Goals.** We expect spontaneous certainty about the direction of one's fertility goals to be associated with strong fertility motivation. The free answers to the question about fertility goals suggest that expressing fertility goals as a range could be quite common and that the inconsistent goals indicated by a range including zero and an integer might identify an important subpopulation. We decided to record all numbers the respondent mentions when asked how many (more) children they wanted, rather than ask the respondent to choose a single number, and to record all comments the respondent makes during this answer. By accepting the respondent's answer to this question, which appears early in the interview, we also wished to communicate that we would try to record any uncertainty elicited by our questions.

"Uncertainty" Categories. Based on the analysis presented above, we distinguish three states that either constitute an uncertain condition or are likely to generate task uncertainty and that are relevant for a large number of questions in our interview: neutrality, ambivalence, and lack of clarity.¹⁴ The training materials for interviewers define these cate-

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¹³After developing these training materials, we found that Faulkenberry and Mason (1978) had experimented with having interviewers distinguish between "no opinion" and "lack of knowledge." The attitude they studied was simpler than strength of fertility motivation and has a different structure.

¹⁴We did not include a category for indecision, since - as the material presented earlier indicates - it is usually associated with one of the other categories, and we wanted to keep the number of uncertainty categories small. We expect most expressions of indecision to be accompanied by descriptions of variable feelings (see Edwards [1946] described above) or ambivalence. We do ask whether the respondent has made
gories as follows:

**Neutral.** These respondents know how they feel about having or not having a child, and their feelings are pretty much in the middle or of very low intensity. Neutral or indifferent feelings are sometimes difficult to express, so they may also cause R to be uncertain how to answer the question, and therefore to say “don’t know.” It is important to distinguish being “in the middle” and being “on both sides” of the question. The first response is neutral; the second is ambivalent. There is one other type of response we classify as neutral – R says the question is irrelevant to their feelings, it just does not describe the way they feel or think about the issue.

**Ambivalent.** R expresses two or more conflicting feelings. For example, they feel both happy and unhappy at different times, about different aspects of having a child, or under different circumstances (e.g., if X happens I’ll feel happy, if not, I’ll feel sad.)

**Not sure of feelings (Lack of clarity).** The respondent does not really know how they feel; they cannot find or sort out their feelings. This is not the same as a simple “not sure” response to a question, because that response could also indicate that the respondent knows their feelings but does not know which answer is the best way to express them.

For each question in the interview we determined whether any of the categories we offered respondents expressed neutrality, ambivalence, or lack of clarity. We then added categories

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15 If the respondent predicts different feelings depending on the circumstances, we classify the response as “ambivalent.” In presenting the standardized questions, such answers were most common when we asked about feelings. For example, we asked how the respondent would feel if they had a child and the respondent replied that they would be excited if they were “ready” but not otherwise. We consider respondents who could only express feelings by referring to contingencies as exhibiting a “structural” or “circumstantial” ambivalence. Our approach includes a kind of indecision within ambivalence.
for recording volunteered expressions of the other types of neutrality or uncertainty. Table 4 provides examples of questions and the instructions used in training interviewers. In the first example, the neutral category is offered as part of the question but categories for recording ambivalent answers and expressions that feelings are not clear are also available.

Our experience in feedback interviews (not reported in detail here) suggests that respondents who express uncertainty frequently cannot easily choose one of the offered categories even after probing. For this reason, interviewers are trained to code clear expressions of uncertainty without probing. The interviewer tells the respondent what they are doing, so that the respondent can clarify or change their answer if they want to, and so that the respondent knows that they can express uncertainty in the remainder of the interview. If the respondent expresses ambivalence, for example, the interviewer says “I can put down that you have mixed feelings” and enters the code for ambivalent. If the respondent gives a vague answer, such as “I don’t know” or “I’m not sure,” the interviewer uses a single neutral probe (e.g., “How do you think you would feel?”) and records the subsequent response. Answers that cannot be classified after probing are recorded in a residual “Don’t know” category.

These procedures provide interviewers with guidelines for responding to and recording answers that are unpredictable and could otherwise be problematic for both respondents and interviewers, but that are conceptually distinct from each other. Although interviewers may vary in how well they execute these procedures, interviewer handling of respondents’ expressions of uncertainty appear to be highly variable in any case, and explicit training should reduce interviewer variability in probing and recording uncertain answers. (For illustrative passing comments on interviewer variability in dealing with DKs, see Duncan and Stenbeck 1988, p. 515 and Schuman and Presser 1981, p. 146.) These procedures provide interviewers with ways of reducing respondents’ task uncertainty by communicating that the interviewer will attempt to record the respondent’s answer even when it does not fit the offered categories precisely.16

16An alternative strategy would be use to use filter questions for uncertainty dimensions. We did not think this strategy was feasible, given the number of uncertainty dimensions we identified, our ignorance
Direct Questions. Because of the potential importance of these dimensions for understanding fertility motivation, we also included direct measures of uncertainty: intensity (neutrality), sureness (lack of clarity), ambivalence, and contingencies (see Table 4). Each of these questions also includes categories for other types of uncertainty the respondent might volunteer. The question about contingencies affecting the desire for a child operationalizes a model of fertility desires proposed by respondents: that desires depend on uncertain circumstances. The versions of this and the other direct questions are illustrative; we do not discuss them or justify them in detail here. The material presented in Table 1 through Table 3 suggests approaches other than those illustrated in Table 4. For example, instead of asking how often feelings "go back and forth," we could ask about how much of the time the respondent feels they want a child.

Conclusion

The case study presented here illustrates how relatively unstructured responses can be used to inform the conceptualization of the construct under study and the resulting structure of standardized survey questions. The domain we examined, expressions of uncertainty, is clearly central to fertility motivation, but it is also relevant to a wide range of subjective phenomena. Our content analysis offers a fuller understanding of uncertainty and its role in the construct under study than could have been gained using a traditional approach, such as classifying answers recorded in the DK category of a standardized question. The material we presented suggests the idiom respondents use to express their uncertainties, the different ways uncertainty is experienced, how respondents see circumstances as affecting their uncertainties, and the way different forms of uncertainty coexist. The material presented suggests that the subjective experience of attitude strength may often be expressed using the language of uncertainty rather than certainty.

of the frequency with which they might occur for different items, and the large increase in the number of items that would be very tedious for respondents to answer. Similarly, it is impractical to offer a full menu of uncertainty categories for each item since the number of response categories respondents can process in a telephone interview is fairly limited (Sudman and Bradburn 1982).
Comprehensive distinctions among different kinds of uncertainty and certainty and appropriate measurement approaches are only slowly cumulating (see e.g., Raden 1985; Schuman and Presser 1981), but the evidence in our interviews suggests that to reduce task uncertainty, we must be prepared to record information about subjective states of uncertainty. Furthermore, the sensitivity of operationalized constructs and research results is limited by the sensitivity of data collection: We can only examine the categories we record. DK categories are often poorly defined and the procedures used to record DK answers are difficult to reconstruct. The data collection techniques we suggest are experimental and will be improved based on our research and that of others. But they provide a method for systematically recording potentially important distinctions and a public procedure for dealing with some problematic answers in survey interviews. Our suggestions reflect our interest in research that contributes to developing standard approaches to difficult issues in data collection (see e.g., Freedman et al. 1988).

Whether the distinctions we found in the semi-structured interviews make a difference is an empirical question that must be examined within a given subjective domain. There is good theoretical reason to believe, and a bit of empirical evidence to suggest, that uncertainty about fertility goals influences fertility outcomes (Beach, Hope, Tovanes, and Campbell 1982; Westoff and Ryder 1977; see also Morgan 1981; 1982; 1985), but the design of the survey questions described here simply provides the raw material for that test. The theoretical and practical significance of these distinctions can be evaluated only by systematically offering all respondents an opportunity to express uncertainties and comparing these answers to a criterion.17 The absence of a criterion in our content analysis is hardly a problem, however.

17The direct questions about uncertainty provide one set of criteria to use in evaluating the uncertainty categories. In addition, the design of our study includes a one-month reinterview with most of the strength questions in the original interview and a one-year followup that will repeat the measures of strength of fertility motivation and collect data on contraceptive behavior and fertility outcomes. The ultimate usefulness of identifying and measuring uncertainty will be evaluated by examining its role in predicting contraceptive behavior and fertility outcomes. Prior to that follow-up, however, we can examine whether direct measures of neutrality, ambivalence, and lack of clarity are related to use of these categories for other measures, and
Recent research has convincingly demonstrated the importance of understanding respondents' expressions of uncertainty (e.g., Duncan and Stenbeck 1988; Schuman and Presser 1981) in some areas. But since there is no reason to expect uncertainty to play the same role in every subjective domain, the analysis of uncertainty expressions presented here would not be invalidated even if uncertainty had little impact on fertility behavior: the role of uncertainty must be evaluated separately in different research areas. Simply omitting respondents whose answers are recorded as DK may bias our understanding of constructs and the results of analyses. Advances in both data collection and analytic techniques are needed to thoroughly integrate an understanding of uncertainty into our constructs and reduce task uncertainty.

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whether some of these uncertainty categories and uncertainty questions are more reliable than others.
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## Appendix A: Respondents for Semi-Structured Interviews

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<tr>
<th>Case Number</th>
<th>Sex</th>
<th>Age</th>
<th>Marital Status</th>
<th>Education</th>
<th>Occupation</th>
<th>N Children Have</th>
<th>N (Additional) Children Wanted</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>F</td>
<td>30</td>
<td>Married</td>
<td>B.A.</td>
<td>Housewife</td>
<td>1, pregnant</td>
<td>0-1 more</td>
</tr>
<tr>
<td>02</td>
<td>M</td>
<td>28</td>
<td>Never married</td>
<td>M.A.</td>
<td>Not available</td>
<td>0</td>
<td>2</td>
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<tr>
<td>03</td>
<td>M</td>
<td>33</td>
<td>Married</td>
<td>Doctoral student</td>
<td>Graduate teaching assistant</td>
<td>2-3</td>
<td></td>
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<tr>
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<td>M</td>
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<td>Never married</td>
<td>High school graduate</td>
<td>Loader at drugstore</td>
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<td>2-3</td>
</tr>
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<td>07</td>
<td>M</td>
<td>22</td>
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<td>College senior</td>
<td>Student</td>
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<td>2</td>
</tr>
<tr>
<td>08</td>
<td>F</td>
<td>28</td>
<td>Never married</td>
<td>Some college</td>
<td>Student</td>
<td>0</td>
<td>0, 2</td>
</tr>
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<td>09</td>
<td>F</td>
<td>32</td>
<td>Never married</td>
<td>14 years</td>
<td>Clerical worker</td>
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<td>0, 2</td>
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<td>13</td>
<td>F</td>
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<td>B.A.</td>
<td>Employment counselor</td>
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<td>2</td>
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<tr>
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<td>F</td>
<td>30</td>
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<td>M.A.</td>
<td>Housewife (speech pathologist)</td>
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<td>1-2</td>
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<td>B.A.</td>
<td>Head nurse</td>
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<td>0</td>
</tr>
<tr>
<td>19</td>
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<td>M.A.</td>
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<td>0</td>
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<td>Married</td>
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<td>0, 1</td>
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<td>25</td>
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<td>Married</td>
<td>B.A.</td>
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<td>2</td>
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<tr>
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<td>Housewife</td>
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<td>1</td>
</tr>
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<td>6</td>
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<tr>
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<td>Married</td>
<td>B.A.</td>
<td>Landscape architect</td>
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<td>0, 1</td>
</tr>
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<td>30</td>
<td>Married</td>
<td>High school graduate</td>
<td>Executive chef</td>
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<td>1</td>
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<tr>
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<td>F</td>
<td>32</td>
<td>Divorced</td>
<td>High school graduate</td>
<td>Accounting clerk</td>
<td>2</td>
<td>1, 2</td>
</tr>
</tbody>
</table>

*Respondent said she wanted no children at the beginning of the interview; she became unsure of what she wanted during the interview and at the end of the interview she said that if she had any, she would want 2.
Appendix B: Question Wording

4. To begin with, I'd like to find out whether having a child or not having a child is something that's been on your mind recently, say in the last six months or so. In other words, in the last few months, how often have you thought about YOUR having or not having (a/another) child, or is that something that you don't really think about? (AGENDA: what brings the subject up, when does it come up, cover both having and not having, relative and absolute frequency)

7. Who else have you talked with about these things, about having or not having (a/another) child? (AGENDA: what brings the subject up, is it regular, how often, are conversations long or short)

9. Now I'd like you to think about having (a/another) child, not having a child right away, but just sometime. Thinking about your life the way it is and the way you think it will be in the future, how many (more) children do you want to have, or would you prefer not to have any (more) children?

10. ASK IF R (WANT/MIGHT WANT) 1 OR MORE ADDITIONAL CHILDREN. If you were to have (a/another) child, would you like that to happen NOW, that is in the next year or so, or would you rather wait until later?

11. ASK IF R WANTS NO (MORE) CHILDREN. I'd like you to think about YOUR (not having/having no more) children and what that would be like. When you think about (not having/having no more) children, what things do you think about? (AGENDA: what consequences does R see, anyone else important, probe for negative/positive events, "anything else")

12. I'd like you to focus on your FEELINGS about (not having/having no more children. When you think about (not having/having no more) children, how does that make you feel?

16. ASK IF R WANTS NO, MORE) CHILDREN. You've said that you prefer not to have (a/another) child, but now I'd like you to suppose that you DID have (a/another) child now, that is, in the next year or two. If that were to happen, how would you FEEL about it? (That is, what would be your FEELINGS about having (a/another) child now? (AGENDA: focus on feeling words, that describe levels or intensity of feelings, probe for negative/positive feelings, "anything else")

17. ASK IF R WANTS NO (MORE) CHILDREN. And what if it happened later on, that is, what if you had (a/another) child sometime in the future. Do you have any other feelings about having (a/another) child later on? (AGENDA: similarities/differences by timing, positive and negative changes, changes in intensity of feelings)

18. ASK IF R WANTS (A/ANOTHER) CHILD NOW. Now, I'd like you to think about YOUR having (a/another) child, and what it would be like. Not necessarily having a child now, but just sometime. When you think about having (a/another) child, what things do you think about? (AGENDA: about ever vs never, what consequences does R see, anyone else important, negative and positive aspects, "anything else")

19. ASK IF R WANTS (A/ANOTHER) CHILD NOW. ASK IF R HAS NOT DISCUSSED FEELINGS IN Q 18. Now I'd like you to focus on your FEELINGS about having (a/another) child. When you think about having (a/another) child, how does that make you feel?
20. You've indicated you'd like to have (a/another) child in the next year or two. When you think about having (a/another) child during THIS TIME rather than later, are there any other feelings or thoughts that come up?

21. ASK IF R WANTS (A/ANOTHER) CHILD NOW. I would like to know how much you want to have (a/another) child in the next year or two? (AGENDA: ask R to expand, PROBE: Can you tell me more about that? focus on intensity words.)

22. ASK IF R WANTS (A/ANOTHER) CHILD NOW. And how IMPORTANT is it to you to have (a/another) child in the next year or two? (AGENDA: R to expand, PROBE: Can you tell me more about that? focus on intensity.)

24. ASK IF R WANTS (A/ANOTHER) CHILD NOW. You've said that you'd like to have (a/another) child within the next year or two. Now I'd like you to suppose that you DO NOT have (a/another) child within the next year or two. If that were to happen, how would you feel? (That is, how would you feel about NOT having (a/another) child within the next year or two?)

25. ASK IF R WANTS (A/ANOTHER) CHILD NOW. Now, I'd like you to suppose that you DO NOT have (a/another) child, even though you might like to. If that were to happen, how would you feel? (That is, how would you feel about NOT having (a/another) child?) (AGENDA: think about ever vs never.)

26. ASK IF R WANTS (A/ANOTHER) CHILD LATER, BUT NOT NOW. Now, I'd like you to think about YOUR having (a/another) child, and what that would be like. Not necessarily having a child now, but just sometime. When you think about having (a/another) child, what things do you think about? (AGENDA: thinking about ever vs never, consequences, anyone else important, negative/positive aspects, "anything else?")

27. Now I'd like you to focus on your FEELINGS about having (a/another) child. When you think about having (a/another) child, how does that make you feel?

29. How IMPORTANT is it to you to have (a/another) child?

30. ASK IF R WANTS (A/ANOTHER) CHILD LATER, BUT NOT NOW. Are there things that you have done, that you do now, or that you plan to do soon to help make sure that you have (a/another) child? (AGENDA: things R does to reach goal: past, now, future.)

31. You've said that you'd like to have (a/another) child sometime. Now, I'd like you to suppose that you DO NOT have (a/another) child, even though you might like to. If that were to happen, how would you feel?

32. ASK IF R WANTS (A/ANOTHER) CHILD LATER, BUT NOW NOW. You've also said that you would (probably) rather not have (a/another) child in the next year or two. Now, I'd like you to suppose that you DO HAVE (a/another) child within the next year or two. If that were to happen, how would you feel? (That is, how would you feel about having (a/another) child within the next year or two?)

33. ASK IF R IS NOT SURE WHEN THEY WANT (A/ANOTHER) CHILD. I'd like you to think about YOUR having (a/another) child and what that would be like. Not necessarily
having a child now, but just sometime. When you think about having (a/another) child, what things do you think about? (AGENDA: think about ever vs never, consequences, possible/hypothetical circumstances modify perceived consequences, anyone else important, negative/positive feelings, "anything else?")

34. ASK IF R IS NOT SURE WHEN THEY WANT (A/ANOTHER) CHILD. ASK IF R HAS NOT DISCUSSED FEELINGS IN Q 18. I'd like you to focus on your FEELINGS about having (a/another) child. When you think about having (a/another) child, how does that make you feel? (AGENDA: focus on feeling words, words that describe levels/intensity of feelings, negative and positive feelings, "anything else?")

35. ASK IF R IS NOT SURE WHEN THEY WANT (A/ANOTHER) CHILD. I'd like you to think about YOUR (not having/having no more) children and what that would be like. When you think about (not having/having no more) children, what things do you think about? (AGENDA: consequences, is anyone else important, negative and positive events, "anything else?")

40. Now, is there anything we've left out, or any other feelings or thoughts about having or not having (a/another) child that occurred to you as we talked? (AGENDA: describe them, feelings about having and not having)

41. The next questions are somewhat different from those I've been asking. Now I need to know some specific words or phrases that you might use in describing your feelings about your having or not having children. I am going to read you some sentences, and I'd like you to fill in the blank. If you can think of more than one word to fill in the blank, tell me all the words you think of. Some of the sentences sound similar to each other, but they ARE different. Here is the first sentence. For me, having (a/another) child would be —. REPEAT SENTENCE UNTIL R HAS NO MORE WORDS.

43. Here is the next sentence. For me, NOT having (a/another) child would be —.

46. Next I have two more sentences that I would like you to complete. The sentences are a bit different from the others. Here is the first sentence: Having (a/another) child would make me —. REPEAT SENTENCE UNTIL R HAS NO MORE WORDS.

47. And here is the last sentence. NOT having (a/another) child would make me —. REPEAT SENTENCE UNTIL R HAS NO MORE WORDS

48. Now I'd like you to think about your life THE WAY IT IS NOW and the things in your life that would make it difficult or easy to have (a/another) child in the next year or two, if you WERE to have one. Lets start with the difficulties. What things in your life would make it difficult to have (a/another) child in the next year or two? 50. Now think about the way you EXPECT YOUR LIFE TO BE in the future. Given the way you think your life will be, what things would make it difficult for you to have (a/another) child later on? (AGENDA: "anything else?")

51. And what things would make it easy for you to have (a/another) child at some later time?

52. You've said that you (would/would not/are not sure whether or not you would) like to have (a/another) child. Can you think of anything that might happen, some change in your life, that would make you feel differently (about wanting (a/another) child/no more) children? (AGENDA: changes in ever vs never, what might make R feel differently)

53. ASK IF R IS SURE THEY WANT OR DO NOT WANT (A/ANOTHER) CHILD. Given that you want (a/another child/no (more) children), what might keep that from turning out
the way you want? That is, is there anything that stands in the way or might make things turn out differently from the way you want.

55. Why do you think you’ll end up having (that number of children/no children)?
A. Neutrality—low intensity, indifference, irrelevance

Either way [now or later]. If it was meant to be it will be. I’ll take it if it comes. If it didn’t, I’d wait [04-10].

Satisfied with things as they are. Ultimately, if no more, CK [14-25].

I’ve thought about it. My wife doesn’t want a child, has a career going now. It really doesn’t matter to me. If we had another child it would be great. If we didn’t, it’s fine...[40-04]. ...Don’t really think [about having a child] that much. It’s destiny. If it happens it does. If it don’t, it don’t...[40-18]. Not trying to have one or not have one. It’s fate [40-24]. Not really [have anything to add]. I’m very neutral. If we have a child, it’s up to my wife. She’s the one that has to be pregnant...[40-40]. ...[Not having another child] wouldn’t matter. I’ve read that only children are smarter and more adjusted, I think. Wouldn’t make me unhappy or happy. I guess I’m neutral there [40-47]. [Will have] one probably. Why not. I guess I felt like I had to come up with a number. It would just as likely be zero. It’s god’s will...It’s nature. We’re not planning to have one or planning not to have one. If it happens it does; if it don’t, it don’t. I’d say one. I guess neither of us wants to have any more, more than one. That’s plenty [40-55].

B. Lack of clarity

I hadn’t really thought about this stuff until you asked me. Now I’m confused. How do I really feel?...[38-40].

Not sure [now I’d feel about having a child] in the next year. Perhaps in next two years. Wouldn’t wait five years [14-10].

Don’t know how we’d feel about starting this 7 or 8 years from now. There are advantages...to having them together. You have images of where you’ll be at different ages [18-17].

Not sure when or whether I will have a child [42-10].

(table continues)
C. Ambivalence expressed as variable feelings

I feel really good about having another child. I enjoy having kids and love babies. At the end of the day when the place looks like a tornado hit, I have my doubts, but get over those pretty fast [01-39].

...I'm emotionally ready now [to have a child], but I'd like to stay home, and if I had to have a job, then I'd take in babysitting. [Thoughts about having children are] Sometimes negative, especially when I see a little kid running around loose and their mom or dad, their parents, let them do it. That's when I'm glad that I don't have any. Or when I see an older child with a pacifier [09-33]. It really depends. Sometimes I really want to have a child, and other times I really don't...[59-34]. Like I said, sometimes I'm glad I don't have them...[09-35].

Probably trying soon means very much, almost, determination. I know I want to, but if I think too much, I may change [14-21].

D. Ambivalence expressed in other ways

Positively, love shared between me and a child. Negatively, certain stressful times [07-27].

I don't want to carry a child—the morning sickness, getting larger and larger, the physical things....I wouldn't want to give a handicapped child up for adoption, but would really not be prepared to meet that demand in my life. On the other hand, I'm in education and children are an important part of my life. I enjoy kids and would like to see them and participate in their raising. I just don't want the primary and sole responsibility. Yet there are rewards—seeing it grow, giving it love and care. The baby's first step and the accomplishments and achievements throughout its life. That would be rewarding...[08-16]. [If I had a child] I would be really scared. Confused. Probably also really excited...[08-16].

[If I had a child in the next two years] probably would be the last child. Turning point—to be done. Sad. Enjoyed phase of life. But also a relief [14-20].

(table continues)
D. Ambivalence expressed in other ways (continued)

[If I had a child in the next two years, I would be] panicked. Distressed. Relieved wouldn’t have to make a decision. Pretty upset. Get excited once I got used to the idea. Wonder if it would change my career or work [19-16].

It is tradition for a woman to have children with her husband. I am, though, not happy about having to be pregnant and delivering and the first four months of the baby. I would like to just get one that is eight months old, but is my own child and not someone else’s. Having a baby is painful and terrible. I do not like staying at home. I love clothes and I like dressing in fashion, but sometimes I think that a woman who is a mother is not supposed to look like young people. There is supposed to be some way that a woman is supposed to look when she is a mother [26-18]. [My feelings about having another child are] both good and bad. Sometimes when I was pregnant, my husband would do everything for me. I like to be taken care of that way. Everyone worries about you and likes to know that you are OK. My husband would call me three times a day when I was pregnant. I like being the focus. I like everyone being worried about me. There is more love between my husband and I. It is fun [26-19].

[I think about] dirty diapers, toilet training, the joys of watching them grow. Those first two years seem to go on forever. Then comes the fun. It’s fascinating to watch...[42-33]. I’ve always had an easy labor. My kids were a delight to me. One of the biggest highs I’ve ever had. They felt so good. They were so beautiful. I breast fed both of them. They are a burden sometimes though...[42-34].

E. Indecision

...Yes, one thing [more]. If I don’t find a job within the not too distant future, my wife and I will be doing a joint search in December. She might be throwing up while we’re interviewing. [Having a child could complicate that second job search?] Yes. I'm not sure if it will change our decision. It will require much more thought [03-20]. That’s interesting - as opposed to lack of financial security now. Would make it easier to postpone the decision [03-21].
E. Indecision (continued)

...I'm presently unsure about my commitment to my marriage. We may be incompatible. We may figure out why we're fighting and decide not to be married...[13-53]. I want them very much. If I have one child I'll have two. I want them to grow up healthy and happy. Better to grow up with another child. It isn't fair to the child. It's better for the parents to have two children. In spite of my uncertainties, it's important that they come in this point. Uncertainty comes before decision. I'll come to a point where I'm sure and all the plans come into place. I'll survive with whatever money is available. It's relative. Family make it on less. Somehow my husband and I will at some point have done enough talking to each other so that we'll both be sure and a baby will be conceived [13-55].

When I want to have one, it's a matter [I] control. If I don't get a job, may change mind. If I find a job, the decision will come closer [22-30].

Irregularly. I'm not obsessed. Haven't had the time to think or talk about it. In the next few months we'll have to decide. Wife is watching neighbor's 6-month-old baby. It's getting to that time. If we're going to accomplish our goal, got to do it now. Just got present children out of diapers and now have to get back into it...[39-04].

F. Mixed expressions

Yes. When I'm around kids I enjoy it, but when I'm at home in my peaceful surroundings, I'm glad I don't have them. Only kids trigger [conversations about having children]. If I have a baby, that's fine. If I don't, that's fine, too...[09-04].

I've noticed more than I realized how much I've talked about not having children scares me. Not having a child is a big issue for me. I'm aware as we talk that it seems to make a big difference to me that I do it soon. I thought it would be OK either way, fine. I'm surprised how negative I sound to myself. I've been so careful in not having a child, I wonder if I do want a child. People who do want children have them, and I still don't have one. This is a sensitive area, but I feel like adding that my husband and I have had lots of sex issues. I wonder if that isn't related to our thoughts about having children. Since my marriage a year ago, we've had increased sexual problems, and I think it might be around having children. That's where the negativity and fear come from. It's really possible that it's not going to happen [13-40].

(table continues)
F. Mixed expressions (continued)

[If I don't have children I'll feel guilty. In a way, mad at myself because I can't make a decision, and I wish I would quit thinking about one or the other. Regretful. I don't know. Guilty came pretty quickly, didn't it?] [19-22].

Sometimes it is not that strong. When we come close to having one, I get scared. It gets too close. After the first baby, it is a much more difficult decision about having another one. After we got married, just three months after, we wanted a baby and we were so happy about it. But now to have another one is a big decision, and many things count. Like I said, being able to leave the house to go shopping. If I had a baby, who would get [my daughter] to school? I would have to sit at home, and I do not like that at all. [My daughter] is just now the age where it is easy for me to take her along with me. Some people love children. I just do not know how I feel all the time. Two children for when we grow old and then we can have grandchildren ever and it will be fun. Mostly, [my daughter] would not be alone anymore if we had a baby [26-21].

If we have another, we'll have one more. Not sure if I want any more. I don't know. I go back and forth. The kids are out of diapers. Do I want to get involved in having a newborn again? You also think about the financial end [39-09].

[I think about] changing diapers. How nice children are. I enjoy my children. I wonder why I will have another child. It's hard to explain. Can't live with them, can't live without them. I think about the responsibility. Is it worth it?...[39-33]. Overall, I'd like to. Anxious is the wrong word. The thought brings anxiety because I'm not sure. If I had my choice we would have had another child two years ago. Initially wanted three. I'm being wishy-washy. [Thought of having a child] Makes me feel good. One way [about having a child] and then the other. I usually don't [feel anxious]. ...I don't sit up at night thinking about it. It's not that intense. Just wondering. Once we have time to talk, make the decision, that's it. This may take a month. It's not a five minute discussion. [I think about] What it's going to do to my wife's career more than anything. having another child is not going to affect me. The care of a new child is no big deal. I don't want the baby to affect wife's job. If she has a baby, she'll have to stay home. Do we chance her being out of the job market for two or three years? [39-34].

A. Relationship with partner

If my husband got killed...[01-52].

A requirement for having a child is to have a strong relationship with my girlfriend. If [there was a] possibility of breaking up our relationship during raising a child, I would feel differently...[02-52].

Be alone. Didn't meet someone or continue with the person I'm going with now [04-52].

Feel strongly about good marriage before having a child. If something happens and no plan to get married and nobody for a good mother, desire for a child would be put aside, but not totally down perhaps [07-53].

I don't think I'll be getting married, therefore I don't think I'll have a baby...[09-55].

[Having a child] is important, but it's more important to me that my marriage be working well. If we found out we couldn't have children, I'd still be committed to this marriage...[13-22].

...My fear is that if I don't have one in the next few years, my husband and I might have come to the decision that we not stay together...[13-25].

If I divorced and remarried, might start family with new wife...[37-52].

I must have a partner. The children's father was not active in their lives, and I don't want that to happen again [42-33].

B. Spouse's wishes

...A requirement for wanting a child [is that] not only I want to have a child, but my partner also wants to have a child. That's a shared feeling. Both me and my partner would feel able to have a child [02-52].

...If my husband really decided, 'no way' [14-53].

...My husband doesn't want one anymore. If I [had wanted a child] in the first 10 years we would have, but I was in school and working [19-40].
Table 2 (continued)

B. Spouse’s wishes (continued)

I would say that [when we have a child] depends on my husband. I hope that he is finished in August, but he wants to stay in the United States now for a few more years at least...(26-10).

I’ve thought about it. My wife doesn’t want a child. Has a career going now.... I’d love to have another child, but it’s going to be up to my wife to make that decision. She’s the one that has to leave her work or give up work to have a child [40-04].

C. Other goals

...Certain conditions should be met before having children. In our case, finishing studies, no financial problems, emotions more ready to start taking care of children...(02-26).

As far as overall goals, it would rank third or fourth. Other goals are: finish thesis, find job, cultivate relationship with wife...(03-22).

[I would not want a child if I had a] feeling that I was more committed to my work or career. Couldn’t feel that I could give a child what he needed: time, commitment, ability to provide a home...(07-52).

...And I don’t want to change my lifestyle. Besides not wanting to go through the pain of labor and the actual birth. I’m not interested in having a commitment for 18 years to someone. I wouldn’t want to give a handicapped child up for adoption, but would really not be prepared to meet that demand in my life...(08-11). Not enough free time. No freedom to pick up and move. Wouldn’t be able to go back to graduate school. [I] would live in an urban area, but I wouldn’t want to raise children in that environment...(08-50).

...It’s more important to understand myself and how I fit into the world, even though I might not have a child...(13-22). If I wait, I’ll be in the middle of something that I won’t want to leave. A conflict with what I need -- to stay home for a few years. If I wait, my career will be a problem, because I’ll want to stay with it and that conflicts [13-50].

If I lost my job, obviously. If [my wife] got a teaching job, that would stop us for another year or two, and then it’d be too late. If we’re going to have another child it’ll have to be now [39-52].

(table continues)
C. Other goals (continued)

I’d like to go back to school and it wouldn’t be fair to a child if I were pursuing that, or if I got really involved in a career [42-52]. Right now there would have to be some dramatic changes in my life for me to have children, and I’m really not actively working towards it. I’m more actively pursuing my career [42-55].

D. Employment and financial concerns

...If [my job search is] successful, I’d have no hesitation about having a child within the next year [03-10].

...If [I don’t find a job] may change my mind [about having a child]. If I find a job, decision will come closer [22-30].

If I or my wife lost our job, obviously, we couldn’t afford it...[40-52].

E. Health related

If my wife were ill or I were ill...[03-52].

...I might not be as ready as I am if I was sure my age wouldn’t prevent me from having one in the coming years. I’m in a hurry to get there [13-21].

...And my age. I know doctors say that the baby will be healthier if you have it when you are young [26-10].

If I discovered that I had some kind of disease that could be transmitted to my child or my wife, I guess we wouldn’t have another child then [40-52].

F. Friend’s experiences

If a friend’s baby became important to me, I would consider having a child of my own. Being out of school and working might make me want a kid of my own. Or being involved with someone who had a child [08-52].

If my friend had children, I would have one. It would make a big difference. I usually go with the flow...[19-40].

(table continues)
G. Fertility

...I don't know if I can get pregnant, and if I could, whether I could hold it [09-55].

...Finding out that we couldn't would make me feel differently [13-52].

Medical difficulties. Well, fertility problems can become very frustrating. It could ultimately make me question whether I wanted to continue to put myself through the frustration and depression...[25-52].

The biggest problem is that I'm not sure I can have another child...[42-34].

H. Unanticipated pregnancy

[I would have a child by] Deciding not to have an abortion if I got pregnant, or if I could have a child without getting pregnant [08-53].

Marriage [could result in my having a child]. If I got pregnant, if I had to, I would have a child [09-52].

[I would have a child] if birth control failed [19-53].
Table 3. Adjustment and Acceptance

As long as I knew I could have one later, it wouldn’t be that big of a deal. Wouldn’t be happy if I could never have another child, but I would adjust [01-14].

Maybe I can answer by looking at the opposite. What would it mean if I don’t have a child. Too bad, but that’s not the worst thing that can happen. My life being happy does not depend on having children or not [02-29].

You just sort of adjust. If I were still working on my thesis, that would be terrible. Not having a job would be a source of concern [03-40].

I wouldn’t feel necessarily crushed by [having a child now]. I would accept it. Not ideal situation, but I would accept it and do the best I could...[07-32]...If I were ready, it would be wonderful [07-41].

[If I had a child], I would have planned for it [08-17].

[If I didn’t have another child, it would require a] Bit of adjustment in my thinking. If couldn’t, would be possible to adjust [14-43].

Panicked. Distressed. Relieved I wouldn’t have to make a decision [about whether to have]. Pretty upset. Get excited once I got used to the idea. Wonder if it would change my career or work [19-16].

...Would have to accept it. When the baby arrived, would feel positive, but first couple of months would be upset during pregnancy. Not overly upset...[37-16].

...What can you say?...If I don’t change my mind [to want a child sooner], that’s the way it is. What you have, you have to feel good about [22-32].

[Not having a child] would not be limiting. I mean I would not become obsessed with it [42-40].
Table 4. Sample Questions

A. Neutrality as offered category

We would like to know your feelings about having (a/)another child, whether or not you are able to, or plan to have one. On a scale that goes from -3 for very unhappy to +3 for very happy, and where 0 stands for in-between, what number stands for how unhappy or happy you would feel if you had (a/)another child?

<table>
<thead>
<tr>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
<td>VERY UNHAPPY</td>
</tr>
<tr>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Neutral (IN-BETWEEN)</td>
</tr>
<tr>
<td>+1</td>
<td></td>
</tr>
<tr>
<td>+2</td>
<td></td>
</tr>
<tr>
<td>+3</td>
<td>VERY HAPPY</td>
</tr>
</tbody>
</table>

ENTER -3 THROUGH +3, OR:
- a. AMBIVALENT / DEPENDS / OPPOSING FEELINGS
- b. NOT SURE OF FEELINGS
- c. DON'T KNOW
- r. REFUSED

Interviewer instructions:

NEUTRAL: In between, 0, Neutral...
I wouldn't feel either happy or unhappy.
I know I'm not going to have a child, so how it would make me feel just isn't relevant to me.
Having children is something that's up to God,
feeling happy or unhappy about it just doesn't make sense.

AMBIVALENT: I would feel happy in some ways, unhappy in others.
Sometimes I think I would feel happy, other times I'm not sure.
It depends on whether I had a partner.

NOT SURE OF FEELINGS: I just don't know how I'd feel.
I cannot really picture what it would be like to have a child.

TO BE PROBED: I might feel happy.
I don't know.
I don't know how to answer that.

(table continues)
B. Direct measure of intensity

Overall, are your feelings of wanting NOT to have (a/another; child very strong, moderately strong, a little strong, or not strong at all?

1. VERY STRONG
2. MODERATELY STRONG
3. A LITTLE STRONG
4. NOT AT ALL STRONG
5. AMBIVALENT/DEPENDS/OPPosing FEELINGS
6. NOT SURE OF FEELINGS
7. DON'T KNOW
8. REFUSED

Interviewer instructions:

NEUTRAL: NOT AT ALL STRONG ...

I just don't have any feelings one way or the other.

AMBIVALENT: Sometimes my feelings are strong, other times, they aren't.
They are strong in some ways, not in others. Some of my feelings are strong, but others aren't.

NOT SURE OF FEELINGS: I just don't know how I feel.

TO BE PROBED: I'm not sure.
That's hard to say.

(table continues)
Table 4 (continued)

C. Direct measure of lack of clarity

How sure are you that you do not want to have (a/another) child? Are you very sure, moderately sure, slightly sure, or not at all sure?

1. VERY SURE
2. MODERATELY SURE
3. SLIGHTLY SURE
4. NOT AT ALL SURE
5. AMBIVALENT / DEPENDS / OPPOSING FEELINGS
6. DON'T KNOW
7. REFUSED

Interviewer instructions:

NEUTRAL: (There is no 'neutral' point for this measure.)

AMBIVALENT: Sometimes I'm sure and sometimes I'm not.

NOT SURE OF FEELINGS: NOT AT ALL SURE...

I just haven't thought it through or made up my mind.
I don't know how sure I am because I just never thought about it before.
I don't know. I am just not that sure.

TO BE PROBED: I don't know how sure I am.
I can't answer that question.

(table continues)
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<table>
<thead>
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<tbody>
<tr>
<td><strong>D. Direct measure of ambivalence—Variable feelings</strong></td>
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<tr>
<td>Would you say your feelings about having no (more) children have gone back and forth from day to day, week to week, month to month, or haven’t they gone back and forth at all?</td>
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</tr>
<tr>
<td>1.</td>
<td>DAY TO DAY</td>
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<tr>
<td>2.</td>
<td>WEEK TO WEEK</td>
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<td>3.</td>
<td>MONTH TO MONTH</td>
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<td>4.</td>
<td>HAVEN'T GONE BACK AND FORTH AT ALL</td>
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<tr>
<td>5.</td>
<td>CONSTANTLY GOING BACK AND FORTH</td>
</tr>
<tr>
<td>6.</td>
<td>NEUTRAL / NO FEELINGS</td>
</tr>
<tr>
<td>7.</td>
<td>NOT SURE OF FEELINGS</td>
</tr>
<tr>
<td>8.</td>
<td>DON'T KNOW</td>
</tr>
<tr>
<td>9.</td>
<td>REFUSED</td>
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</tbody>
</table>

**Interviewer instructions:**

**NEUTRAL:** I just don't have any feelings about it. I know I'm not going to have a child, so I don't have any feelings to change.

**AMBIVALENT:** Day to day, week to week, etc., Constantly (category available for separate coding)

**NOT SURE OF FEELINGS:** I just don't know how I feel.

**TO BE PROBED:** That's too hard to answer. I can't remember.

*(table continues)*
### Table 4 (continued)

#### E. Direct measure of ambivalence—Mixed Feelings

Would you say your feelings about having no (more) children are only positive, mostly positive, or equally mixed with negative feelings?

1. ONLY POSITIVE  
2. MOSTLY POSITIVE  
3. EQUALLY MIXED WITH NEGATIVE FEELINGS  
4. NEUTRAL, NO FEELINGS  
5. NOT SURE OF FEELINGS  
6. DON'T KNOW  
7. REFUSED

**Interviewer instructions:**

**NEUTRAL:** I don't really feel either positive or negative about it.  
I just don't think about it that way.

**AMBIVALENT:** MIXED FEELINGS ... Sometimes my feelings are positive, sometimes they're negative.  
My feelings depend on which day it is.

**NOT SURE OF FEELINGS:** I just haven't thought about it, so I don't know.

**DON'T KNOW:** Maybe I would feel positive.  
It's really hard to say.

(table continues)
F. Direct measure of contingencies

I’m going to describe some conditions that might make it easier to have a child. For each condition, think about what it would be like if the condition were true for you. Then tell me whether or not it would change your feelings about wanting no (more) children. That is, if the condition were true, would you want to have (a/another) child? Also, please tell me if the condition is already true for you.

First, if you could find good, affordable, child care, would you want to have (a/another) child?

1. YES, WOULD WANT (A/ANOTHER) CHILD
2. NO, WOULD NOT WANT (A/ANOTHER) CHILD
3. CONDITION TRUE NOW
4. AMBIVALENT, DEPENDS/OPOPOSING FEELINGS
5. NOT SURE OF FEELINGS
6. NOTHING WOULD MAKE R WANT (A/ANOTHER) CHILD
7. DON’T KNOW
8. REFUSED

Interviewer instructions:

NEUTRAL: (There is no ‘neutral’ point for this measure.)

AMBIVALENT: Sometimes I think I would want one, sometime I don’t.

It would depend on other things, too.

NOT SURE OF FEELINGS: I just can’t be sure.

I don’t know if I would want one or not.

TO BE PROBED: I don’t know.