

# Consistency Between Survey and Interview Data Concerning Pregnancy Wantedness in the Philippines

Lindy Williams, Teresa Sobieszczyk, and Aurora E. Perez

*Through a comparison of survey and in-depth interview data reported by a small sample of Filipino women and men, standard survey questions and the standard conceptualizations of pregnancy wantedness are assessed to determine whether they capture respondents' attitudes toward pregnancies and their timing in two areas in the Philippines. The study reveals that more than two-thirds of respondents were completely consistent in their survey and interview responses. Consistency was higher for women than for men, and it improved when a dichotomous measure (intended/unintended) was used rather than a more detailed variable that distinguished between intended, mistimed, and unwanted pregnancies. To the extent that the two data sources disagree, the interview transcripts suggest two possible reasons for inconsistent reports: deference to a spouse's perceived attitude or the respondent's ambivalence toward or ready acceptance of an unintended pregnancy. (STUDIES IN FAMILY PLANNING 2001; 32[3]: 244-253)*

Fertility has declined substantially in much of Southeast Asia, yet relatively high fertility persists in the Philippines (Population Reference Bureau 1999). Sanderson and Tan (1996) contend that the high fertility and short birth intervals experienced in the Philippines increase health risks to women and children beyond those identified in many other Asian countries. That these issues continue to be of concern is argued to be the result, in part, of the ongoing opposition of the Catholic Church to artificial methods of birth control. The Church has helped to block the widespread adoption of such methods (Alam and Leete 1993).<sup>1</sup> Nationally, only about half (56 percent) of all recent births were reported as intended,<sup>2</sup> according to the 1993 National Demographic Survey (NSO and MI 1994). Indeed, the total wanted fertility rate for the Philippines (as calculated by NSO and MI [1994]) was 2.9 children, compared with the actual total fertility rate

of 4.1 children per woman of reproductive age. The implication is that fertility would be lower and birth intervals would be longer if births were to occur more commonly to couples who (1) wanted another child at some point and (2) could space their childbearing effectively.<sup>3</sup> Recently, Casterline et al. (1997) reinforced the point that substantial problems remain in meeting the family planning needs for spacing among Filipino couples.

Clearly, a number of important policy implications surround the issue of fertility wantedness. High levels of unintended fertility may result in negative health consequences for mothers and children, may increase costs for individual couples (psychic, economic, and other kinds of costs), and may impede national economic growth (UNWire 2001). Therefore, maintaining high data quality is important. Unfortunately, the survey data commonly used to measure pregnancy wantedness frequently have been considered of questionable value (Welder et al. 1987; Bongaarts 1990; Hummer et al. 1995; Kost and Forrest 1995; Kaufmann et al. 1997; Bankole and Westoff 1998; Williams et al. 1999; Williams and Abma forthcoming). Among the most common criticisms is that, with the increase of time elapsed since a pregnancy occurred, respondents become more likely to report that it was intended (Ryder and Westoff 1969 and 1972; Ryder 1973; Bankole and Westoff 1998; Will-

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*Lindy Williams is Associate Professor, Department of Rural Sociology, Warren Hall, Cornell University, Ithaca, NY 14853. E-mail: lbw2@cornell.edu. Teresa Sobieszczyk is Postdoctoral Research Fellow, Population Studies Center, University of Michigan, Ann Arbor. Aurora E. Perez is Professor, Population Institute, University of the Philippines, Quezon City.*

iams et al. 1998; Casterline et al. 2001). As a result, their reports become biased in a positive direction. Researchers believe that this occurs through a process of rationalization or a failure to recall negative attitudes accurately over time, or because a respondent's judgment could, in fact, have changed as a result of experiences with a child who, at conception, was not wanted (Ryder and Westoff 1969; Bankole and Westoff 1998).

This study seeks to assess how well standard data-collection strategies capture the notion of pregnancy wantedness in the Philippines by linking data from a small sample of survey respondents with data from subsequent in-depth interviews with the same group of Filipino women and men.

## Background

The literature suggests a variety of reasons for skepticism toward attitudinal survey data in general. For example, such data may be the product of a process by which (1) survey participants try to respond to a given question simply out of courtesy; (2) they attempt to answer questions they perceive as meaningless; or (3) they sense that responses to the questions are obligatory although the topic is one about which they have given little or no thought (Hauser 1967; Westoff 1990). Biases of a less random nature are introduced when respondents' answers reflect conscious attempts to mislead researchers in a particular direction (Berscheid 1985).

A recent study pertaining specifically to pregnancy wantedness in the United States showed that when two distinct sets of questions about pregnancy wantedness were administered during the same interview,<sup>4</sup> one-fourth of the women interviewed gave discordant responses (Kaufmann et al. 1997). The authors concluded that one or both sets of survey questions might have been misunderstood or that the questions failed to account for respondents' undefined or ambivalent feelings about the pregnancies in question (Kaufmann et al. 1997). The literature suggests generally that the reliability of attitudinal reports should be greatest when a respondent considers the topic to be important, feels strongly about the issue being discussed, and has a certain level of knowledge about or involvement in the topic (Feather 1969; Chaffee and Roser 1986; Burnbauer 1993).

## Analysis

In this analysis, we examine the extent to which respondents' answers to survey questions are consistent with those given in a subsequent in-depth interview during

which the issue of pregnancy wantedness could be elaborated upon. Clearly, attitudes may be misreported in both sorts of responses, and misreporting may occur consistently in some cases by chance alone. Therefore, we cannot determine with certainty the precision with which the reports reflect the view of the respondent at the time of conception. The transcripts from the in-depth interviews, however, enable us to assess the extent to which attitudes toward a given pregnancy were clearly formulated and to what extent they appear to have been forgotten or more loosely held. Where discrepancies arise between survey and in-depth interview data, we can determine the basis for those discrepancies.<sup>5</sup>

As a comparison, we also examine correspondence between survey and in-depth interview responses concerning two more clearly factual matters: the total number of children ever born to a respondent and the number of children still living. Our expectation is that the factual data will be more consistent between the two sources than will the attitudinal data. Again, however, if differences are observed between the data derived from the two interviews, we expect that the in-depth interviews will clarify some of the reasons for the incongruity.

Because parenthood is a significant life event for both women and men, consistency of attitudes toward the occurrence and timing of a particular birth is likely to be higher than might be true of other, lesser events. Because, in most contexts, women continue to bear more of the costs of pregnancy, childbearing, and child rearing than do men, however, we expect that these events will continue to be more salient for women than men and, therefore, that consistency of attitudes toward these events will be greater for the women than for the men in this study.

## Data and Methods

Survey data and data from in-depth individual interviews were gathered in 1993 in two provinces on the island of Luzon in the Philippines: eight rural *barangays* (neighborhoods) in the municipality of Munoz, Nueva Ecija, and five urban *barangays* in metropolitan Manila.<sup>6</sup> The research sites were chosen purposively in order to obtain interviews with respondents from rural and urban locales in which circumstances roughly matched those of the general population. Within *barangays*, probability samples were selected for the survey. In all, 780 married women aged 25–44 (and their husbands) were interviewed for the survey. A supplementary sample of 420 women was drawn to add statistical power to analyses performed using only the women's data, bringing the total number of women interviewed to 1,200.<sup>7</sup>

Individual in-depth interviews were conducted two to three months later with 16 of the women and ten of the men surveyed (half of these were rural residents and half were in Manila). The interview respondents were sampled according to the following criteria. One to three men and women from both urban and rural areas were to be selected in each of the following categories: (1) those with unmet need for contraception, (2) those practicing contraception, and (3) those not practicing contraception but not included in the group classified as having unmet need. In addition, none of the interview respondents was pregnant, infecund, or experiencing postpartum amenorrhea.<sup>8</sup> The survey and in-depth interviews were conducted by different interviewers. In each case, female interviewers queried women and male interviewers interviewed male respondents.

The variables we compare across interviews are the number of living children the respondent had had, the number of children still living, and the wantedness of the most recent completed pregnancy. The survey asked for a birth and pregnancy history, and the information about children ever born and those still living was derived from that section of the survey. Whether or not a pregnancy was intended was determined from a series of questions about the respondent's use or nonuse of a contraceptive method at the time of conception, and about whether she had wanted to become pregnant at that time. Most of the questions about pregnancy wantedness for this project were designed around the series used in the US National Survey of Family Growth (NSFG). (See the Appendix for the wording of questions.) To limit recall error, these questions concerned only those pregnancies occurring in the five years before the survey was conducted.

The terms "intended," "mistimed," and "unwanted" are technical terms (constructed by the researchers, not by the respondents) that refer to the respondents' attitudes toward their pregnancies at the time of conception. They can be clarified as follows. An intended pregnancy is one that was wanted at the time of conception (and timed satisfactorily). A mistimed pregnancy was wanted at some time, but occurred sooner than the respondent would have preferred. (Pregnancies that occurred later than the respondent would have liked are not considered mistimed because such delays generally are not the result of planning or choice; such pregnancies are classified as intended). An unwanted pregnancy is one that occurred after the respondent wished to avoid all further childbearing. Unintended pregnancies are those that were either mistimed or unwanted, that is, those that occurred when the respondent did not wish to become pregnant.<sup>9</sup>

The most detailed attitudinal variable thus assesses whether the most recent pregnancy (of those occurring

within five years of the survey) was wanted and satisfactorily timed, mistimed, or unwanted.<sup>10</sup> In the second portion of the analysis, we examine the same variable dichotomized into intended versus unintended pregnancies.<sup>11</sup>

The data in Tables 1 and 2 establish the consistency of the respondents' answers between the survey (Time 1) and the in-depth interview (Time 2), assigning responses to the categories: more positive, more negative, or consistent (no change). A consistent report occurred (1) if the respondent had classified a pregnancy as wanted and correctly timed at both interviews (the survey interview and the subsequent in-depth interview); (2) if she or he said the pregnancy was mistimed at both interviews; or (3) if she or he reported at both interviews that the pregnancy was not wanted then or in the future.

A more positive report resulted if the respondent claimed at Time 1 that the pregnancy was unwanted and then reported at Time 2 that the pregnancy was mistimed or correctly timed, or if she or he said at Time 1 that the pregnancy was mistimed and at Time 2 that it was correctly timed. A more negative report resulted if the respondent said at Time 1 that the pregnancy was wanted and correctly timed and said at Time 2 that the pregnancy was mistimed or unwanted, or if she or he said in the survey that the pregnancy was mistimed and reported during the in-depth interview that it was unwanted.

Although the in-depth individual interview questions on wantedness were not always worded precisely the same way from interview to interview, they were intended to assess many of the same issues considered by the survey. Had the respondent wanted to become

**Table 1** Percentage of survey responses and corresponding responses from the in-depth interview (IDI) indicating wantedness status of the respondent's most recent pregnancy at time of conception, by sex of respondent, Philippines, 1993

Survey responses	Total IDI responses (N = 22)		
	Intended	Mistimed	Unwanted
Intended	Consistent 46	More negative 0	More negative 5
Mistimed	More positive 0	Consistent 0	More negative 5
Unwanted	More positive 9	More positive 14	Consistent 23
Total percent consistent: 69			
<b>Women (n = 15)</b>			
Intended	Consistent 60	More negative 0	More negative 0
Mistimed	More positive 0	Consistent 0	More negative 7
Unwanted	More positive 7	More positive 7	Consistent 20
Total percent consistent: 80			
<b>Men (n = 7)</b>			
Intended	Consistent 14	More negative 0	More negative 14
Mistimed	More positive 0	Consistent 0	More negative 0
Unwanted	More positive 14	More positive 29	Consistent 29
Total percent consistent: 43			

**Table 2** Percentage of survey responses and corresponding responses from the in-depth interview (IDI) indicating intendedness status of respondent's most recent pregnancy at time of conception, by sex of respondent, Philippines, 1993

Survey responses	Total IDI responses (N = 22)	
	Intended	Unintended
Intended	Consistent 44	More negative 4
Unintended	More positive 9	Consistent 44
Total percent consistent: 88		
<b>Women (n = 16)</b>		
Intended	Consistent 56	More negative 0
Unintended	More positive 6	Consistent 38
Total percent consistent: 94		
<b>Men (n = 7)</b>		
Intended	Consistent 14	More negative 14
Unintended	More positive 14	Consistent 57
Total percent consistent: 71		

pregnant at the time or at any point in the future? What about her/his spouse? Was the pregnancy much discussed? Was there much disagreement? The semistructured interviews comprised open-ended questions with follow-up probes. The questions were not to be asked in any particular order, although interviewers were given a specific list of topics. Questions were asked about respondents' current fertility intentions, and then retrospectively about all pregnancies that had been reported.<sup>12</sup>

In analyzing the in-depth individual interviews, the transcripts were read and summarized by different readers and then compared for intercoder reliability. In nearly every case, the coding matched exactly. For the instances in which we disagreed, we discussed the cases until we were able to reach consensus. The consistency of respondents' reports is examined separately for men and women and for rural and urban subsamples.

## Results

### *Consistency Between Interviews*

As anticipated, consistency in responses concerning the number of children ever born and the number currently living was higher than was respondents' correspondence on the attitudinal questions. All women and men from both Nueva Ecija and Metro Manila reported completely consistent answers to the survey and in-depth interview questions seeking this more clearly factual information. As shown in Table 1, however, a number of respondents did not give answers concerning pregnancy wantedness during the in-depth interviews that were consistent with their survey responses.<sup>13</sup>

Although about two-thirds of all respondents gave answers that were consistent in both interviews, fewer than half of the men did so. Women were more consistent, with more than three-fourths reporting the same attitudes in the survey and in the in-depth interviews.<sup>14</sup> Interestingly, among those who reported inconsistent answers, both women and men were more likely to switch to a more positive response at the second interview. Reports in the in-depth interviews were more negative than in the surveys in about 10 percent of the cases, but more positive in nearly one-fourth of the cases. Women were about two times more likely to report a more favorable response than they were to report a more negative one, whereas men were about three times more likely to do so (see Table 1).

Although responses across the two interviews were not always consistent on the more detailed measure of intended compared with mistimed and unwanted pregnancies, as would be expected, they were much more consistent on the less detailed measure of intended versus unintended pregnancies (see Table 2). More than 90 percent of the women and nearly three-fourths of the men were consistent on the dichotomous measure.

Moreover, some subgroups' responses were even more consistent across interviews. For example, women in the rural subsample were the most likely of any group to provide consistent responses (data not shown). Among the women interviewed, seven out of eight gave answers in the survey and the in-depth interviews that matched exactly. In the eighth case, whether the respondent in the in-depth interview thought of the pregnancy as unwanted or mistimed was unclear, but the response indicated that the pregnancy had been unintended (corresponding to the survey response). The responses of the sample of rural women were, therefore, totally consistent about intendedness, and almost totally consistent on the more detailed assessment of whether the pregnancy had been intended, mistimed, or unwanted.<sup>15</sup>

Among urban women, more than half of the responses were completely consistent on the more detailed measure, whereas seven out of eight were consistent as to whether the pregnancy had been intended or unintended. Urban men's reports were far less congruous, however. Only one out of five of those interviewed gave completely consistent responses on the more detailed measure, and only two out of five gave comparable responses on the dichotomized variable. Data quality was only slightly better for rural men; two out of five gave consistent responses to the trichotomized measure, and the responses of three out of five were consistent as to the two-category measure. Although a larger sample would have been desirable, whether it would have provided more reassuring results is unclear. Some of the reasons

for the lack of consistency, particularly among the men who took part in the interviews, are suggested below.

### *What the Interview Data Reveal*

In a number of cases in which a discrepancy occurred between the survey and in-depth interview data, the respondent seems to have based the answer to the survey question on a calculation of the spouse's or couple's view of the wantedness of the pregnancy, not on her or his own view, even though separate questions were asked about the respondent's own views and those of her/his spouse. The result is that both more favorable and less favorable reports were given in response to the survey questions than in response to the in-depth interviews.

#### *Case 1*

An example of a less favorable report from the survey is the following excerpt from an in-depth interview with one of the men interviewed in the urban sample. His survey response indicates that the pregnancy was unwanted, but the in-depth interview transcript shows that, in fact, he considered it to be mistimed; he had wanted an additional child but had hoped to postpone it.

*With your fourth child . . . the age interval is almost three years. Did you want your wife to become pregnant at that time?*

No, she didn't.

*What about you?*

I also didn't want her to get pregnant at the time, but it was already there . . .

*That pregnancy . . . was how many months or years early?*

It was a year early. (Urban man)

Based on the in-depth interview, this pregnancy would probably be considered unwanted by the respondent's wife. He notes that she had only wanted to have two children, and this was her fourth.

*What was your wife's desired interval between [baby's name] and [next baby]?*

She wanted two.

*She wanted a two-years' birth interval?*

No, she wanted to have two children.

In the survey, the man reported correctly that his wife considered the pregnancy unwanted, and she reported the same in the survey. We believe that this man's survey response reflects more closely his wife's view than it does his own and that this point is clarified by the in-depth interview data.

#### *Case 2*

Similarly, in the second case described below, the survey data indicate that both partners of a couple had not considered their most recent (third) pregnancy unwanted. The in-depth interview transcripts show, however, that although the woman aborted the pregnancy, her husband was hoping and expecting to have a third child at some time. Once again, the man's survey response appears to reflect some combination of the couple's views or his wife's views, although the question specifically requested that he state his own view of the situation.

*So your wife informed you only when she was about to go to the hilot [traditional birth attendant]. What was your reaction when she had an abortion?*

I was a bit angry.

*But you also consented?*

Ah, no.

(Then later . . .)

*You said earlier you wanted to have three children. That pregnancy was the third, wasn't it?*

Yes. They could have come consecutively, after which I would have asked her to be ligated. (Rural man)

#### *Case 3*

Women may also report a "couple's view" in response to questions about pregnancy-intention status, or their responses may reflect more accurately their husbands' positions rather than their own. In the following excerpt, an urban woman who had reported her most recent pregnancy as unwanted in the survey clearly preferred to have another child. Based on the full text of her in-depth interview, the pregnancy appears to have been mistimed in her view and unwanted by her husband.

My husband wanted three children. He wanted us to stop having children after the third, but I asked for one more because I did not want to have three. I wanted to have four children.

*Why four?*

Three is common. In fact I wanted even more children. It is I who want more children. My husband wanted only three.

*Why did he want three?*

Because he said life is hard. I was the one who wished for a fourth child.

*So after your third baby, you did not use any family planning method because you said you wanted to have another baby . . .*

No, I also planned to have an IUD inserted after my third baby. But I . . . failed to go back to the center for the IUD insertion. . . . I wasn't able to return that month, so I became pregnant with my fourth. I told you that I easily get pregnant. (Urban woman)

#### Case 4

In another case, the woman clearly had not wanted to have another child and her husband obviously had. In this case, the pregnancy was classified as mistimed in the woman's survey response, which is midway between her wish to avoid all future childbearing and her husband's strong desire to have another child, as expressed in her in-depth interview. She also indicated in the survey that she thought her husband felt the pregnancy was mistimed; therefore, she may have responded in the survey in a way that reflected what she thought they had both agreed to.

*It seems that you planned to have a third baby.*

Oh yes.

*Whose decision was it to have the third child?*

It was my husband's.

*What about you?*

I did not like to have another child.

*Why?*

Life is so difficult. Besides I experienced so much pain every time I conceived and gave birth.

*But still you decided to have another child.*

Yes, because I did not like him to entertain ill thoughts about me. He might think that I did not like to get pregnant so I can bum around while he's out of the country. So I gave in to his wish. (Urban woman)

#### Case 5

Another urban woman discussed her recent childbearing during the in-depth interview in more positive terms than her survey report suggested she would be likely to do (the pregnancy was classified as unwanted in the survey). In the in-depth interview, she noted that she and her husband had both been happy when she became pregnant most recently. We suspect that the context she described, in which her cousin, niece, and husband are all fairly pronatalist, steered her discussion in the in-depth interview to the reverse position from the view she had expressed in the survey. In this instance, we believe her survey response may have described her atti-

tude toward the pregnancy more accurately than did the response she gave during the in-depth interview:

My cousin up to now is pushing and teasing me to get pregnant. Perhaps I just don't easily get pregnant. I have a niece who got married later than I did but her children came one after the other. My God, they already have five children; we only have two—and we got married earlier!

*So you did not really have any plan when . . .*

No, we don't have any plans even now. If I get pregnant, that's it.

*And when the baby comes . . .*

Then let it come. We really don't have plans. I am glad that the interval between my children is wide. They did not come yearly. I see older women who are still pregnant when they already have a lot of children.

*At that time (in the interval preceding the most recent birth) did you fear that you would get pregnant?*

No. Besides if you're already pregnant, what else can you do but accept it? (Urban woman)

#### Acceptance and Ambivalence

Circumstances such as those described in the last interview cited are commonly found in the in-depth interview transcripts. Clearly, many accept pregnancies when they occur, even if they were not wanted or intended. In a number of instances, pregnancies occurred to people who wished to stop or postpone childbearing, yet the pregnancies were classified as intended according to participants' responses to survey questions. Although the survey questions request that the respondent think back to the time of conception,<sup>16</sup> the pregnancy (that clearly had not been intended at the time of conception) was immediately or almost immediately accepted, often with enthusiasm. In some cases, the intention to avoid future childbearing had not been a strong one, or the respondent had been ambivalent about having another child. In the case cited below, both husband and wife correctly described their spouse's view in their survey responses that the last pregnancy had been unwanted. That pregnancy's unwanted status is supported by their responses to questions in the in-depth interview.

*Between [baby's name] and your youngest child, there is a birth interval of almost two years. Did you use any family planning method (during the time before your wife became pregnant with the youngest)?*

Yes, but there were times that I was not able to control myself, so she became pregnant.

*And your method failed.*

Yes.

*So you were using a method that time?*

Yes, we were using withdrawal.

*Did you plan to space pregnancies after the second child?*

We planned to stop having children after the second child, but having another one was also acceptable with us.

This third pregnancy was coded as intended based on the man's survey responses, but it probably would have been considered unwanted from the information obtained through the in-depth interview; the couple had clearly planned to stop having children after their second child was born, but then they had a third. However, the consequences of having the third child were not seen as severe. According to the transcript, if a fourth child were to come, it too would be accepted.

*Let's go back to our earlier topic. Do you want to have another child?*

If we are given another one, why not? We'll accept it.

*Will you be upset?*

No, because they come from God. We will accept it with open hearts.

*But what do you wish for?*

To stop having children. If she becomes pregnant again, we'll go ahead with the pregnancy, but it's almost two years since the last pregnancy. It seems we are successful in birth control now.

## Discussion and Conclusions

As expected, the results suggest that greater consistency between survey and in-depth interview data occurs when more clearly factual information is at issue than when attitudinal data are the focus. Between the two data sources, complete consistency was found for questions concerning the numbers of children the respondents have had and the number that are still living. Moreover, reasonably high correspondence was also found between the survey and semistructured inter-

views among the women in our study, particularly among those from rural areas.

Where discrepant attitudinal responses are discerned, the data suggest a number of reasons for disagreement. Although the survey questions were designed to focus the respondent's attention, first on his or her own attitude at the time of conception and then on her or his spouse's attitude, some respondents answered according to their spouse's view or according to a combination of their attitudes, providing a "couple's attitude." Inconsistency in some cases may have resulted from the respondent's ambivalence about whether or not to have another child or from her or his or initial opposition followed by acceptance of the pregnancy. In both cases, the survey response was occasionally more positive and occasionally more negative than that individual's sentiment, as discerned subsequently from the more detailed in-depth interview. Finally, the failure of some in-depth interviewers to focus explicitly on time of conception may also account for a small amount of the inconsistency observed.

Overall, responses to the in-depth interview tended to be more positive than would have been predicted from the information gleaned from the survey alone. This result is consistent with the idea, noted above, that responses about pregnancy wantedness are likely to become more positive as time elapses. Because the time passed between the survey and the in-depth interview was short, however, we do not believe that time was an important influence in this case on the responses to the two interviews.

Responses from women are, with some notable exceptions, largely consistent across interview types, but the data from men are less reliable. This finding may be a result of the small sample available for analysis or of the greater salience for women of pregnancy and childbearing. If men are interviewed in future studies, survey questions should be developed more fully to capture the individual's own viewpoint, the spouse's view, and the combined attitude of both partners. More clearly worded preambles to the series of wantedness questions are necessary. Krysan (1999) suggests adding random probes to collect more detailed information within large surveys,<sup>17</sup> which may provide an alternative to validity checks such as the ones we have undertaken between survey and semistructured interviews.

Despite the problems of consistency observed in this small sample, the men's data provide important additional insights into the dynamics surrounding pregnancy wantedness in the Philippines. They open a window into reproductive decisionmaking (or the lack thereof) in a society where both partners tend to be involved and

where men often prevail over women in this important domain. Biddlecom and her colleagues (1997: 114) have argued that "power imbalances (usually favoring men) characterize most marriages [in the Philippines], and this tends to exaggerate the ultimate impact of spousal disagreement. The husband's opposition to contraception may be sufficient to block contraceptive use in many cases, but the converse will occur much less often."

Becker (1996: 301) argues that "reproductive health researchers should study both partners, unless the responses of one partner are irrelevant to the behavior under consideration . . ." Clearly, this circumstance is not the case in the context of the Philippines. He notes, moreover, that "reproductive health interventions that target both members of a couple are more effective than those same interventions aimed at one sex only" (Becker 1996: 302). Based on our findings, and those of Biddlecom et al. (1997), this conclusion is appropriate in the context analyzed here. Future studies such as this one, conducted with larger samples of male respondents, will provide a clearer sense of data quality and suggest more areas in which data collection can be improved.

## Appendix

### *Wording of Questions Used in the US National Survey of Family Growth (NSFG)*

Women who had not been using or who had discontinued using a contraceptive method before they became pregnant were asked, "Was the reason you (had stopped/were not) using a method because you yourself wanted to become pregnant?"<sup>18</sup> Those who answered "no" to the first question, and those who had been using some form of contraception, were then asked, "At the time that you became pregnant with (*name/* the pregnancy that ended in *month of year*), did you yourself actually want to have a(nother) child at some point in the future?" Those who were unsure were asked; "It is sometimes difficult to recall these things, but just before that pregnancy began, would you say you probably wanted a(nother) child at some point in the future, or probably not?"

Women who said they had not used or had discontinued using a contraceptive prior to a pregnancy because they had wanted to become pregnant, and those who said they had wanted or probably wanted to have a(nother) child at some time were then asked, "Did you become pregnant sooner than you wanted, later than you wanted, or at about the right time?" Pregnancies that occurred at a time when a respondent had not been using a contraceptive or when she had discontinued its use because she wanted to become pregnant were classified as "wanted," as were those that occurred when a respondent was practicing contraception but still felt that she wanted (or probably wanted) to have a(nother) child at some time.

A birth was classified as "unwanted" if the respondent reported that she had not wanted (or had probably not wanted) to have a(nother) child at the time of conception or at any point in the future. If the respondent said she did not know or care whether or not she had a(nother) child then or in the future, the wantedness status of the pregnancy was categorized as undetermined, and such cases were coded as "missing." The same series of questions was asked of women about their husbands' views about the pregnancy at the time of conception (and they were asked of each man about his own views and about his perceptions of his wife's views of the pregnancy), and the same categorization of responses was used.

## Notes

- 1 Couples not using modern, effective contraceptive methods in the Philippines often practice natural family planning methods including periodic abstinence. The choice of this method over surgical, hormonal, or barrier methods may be determined by religious conviction, but is also frequently made because of fear of the perceived side effects of other methods (Perez and Tabije 1996). Although widespread instruction is offered in the use of periodic abstinence, the quality of the instruction sessions has been questioned (Madigan 1985; Madigan et al. 1987).
- 2 Intended pregnancies are those that were wanted and that were considered well timed, that is, the pregnancy did not occur sooner than desired or after the couple had had all the children they wanted.
- 3 In addition, several studies suggest a link between birth-intention status, maternal behavior during pregnancy and after birth, and birth outcomes (Welder et al. 1987; Hummer et al. 1995; Korenman et al. 2001), indicating that intended pregnancies have better health outcomes, particularly for the child.
- 4 The two sets of questions were from the Demographic and Health Surveys and the National Survey of Family Growth.
- 5 This approach has been tried elsewhere with success. Krysan (1999) adopted a similar strategy on a different topic (attitudes toward racial equality in the United States) to explain seemingly contradictory survey results and provided new information about how survey framers and respondents might interpret questions differently.
- 6 Nueva Ecija is about four to five hours' drive north of metropolitan Manila and is predominantly agricultural, with rice being the main crop.
- 7 The total response rate for the survey was 70 percent. The target sample size was established in advance, and the 1,200 interviews were completed with 30 percent of the cases being substitutions within neighborhoods.
- 8 The data were collected as part of a larger project that imposed this structure on the in-depth interview sample. For the purposes of our analysis, a larger sample would have been highly desirable. In light of our small sample sizes, caution must be exercised in interpreting the data we present.
- 9 Pregnancies that are unwanted at conception do not necessarily result in unwanted children. Data from our study (which we do not present here) clearly indicate that individuals who report a pregnancy as unwanted at the time of conception nonetheless may be delighted (or at least accepting) that the pregnancy has occurred and cherish the child born from that pregnancy.



- 10 Respondents were also asked what they thought their spouses felt about the wantedness of the same pregnancy.
- 11 Clearly, greater correspondence would be expected between the survey and in-depth interview reports on the latter, less detailed variable.
- 12 Therefore, in analyses of the in-depth individual interview transcripts, we are not limited to pregnancies occurring in the last five years. For this analysis, however, we consider only responses about the most recent pregnancy in the five years preceding the survey.
- 13 For three of the men, data for the survey interview are incomplete.
- 14 A recent test-retest analysis of survey data on pregnancy wantedness in the US showed similar levels of response consistency among women across surveys (Williams et al. 1998).
- 15 The responses might have been 100 percent consistent had the interviewer asked the question more clearly during the in-depth interview.
- 16 The in-depth interview questions were supposed to do the same, but did not always do so.
- 17 This approach is also recommended by Schuman (1966).
- 18 Throughout the series, the wording of questions for men was adjusted appropriately. To simplify the discussion of the complex series of questions, only the version asked of women is presented here.

## References

- Alam, Iqbal and Richard Leete. 1993. "Pauses in fertility trends in Sri Lanka and the Philippines." In *The Revolution in Asian Fertility: Dimensions, Causes, and Implications*. Eds. Richard Leete and Iqbal Alam. Oxford: Clarendon Press. Pp. 83–96.
- Bankole, Akinrinola and Charles F. Westoff. 1998. "The consistency and validity of reproductive attitudes: Evidence from Morocco." *Journal of Biosocial Science* 30(4): 439–455.
- Becker, Stan. 1996. "Couples and reproductive health." *Studies in Family Planning* 27(6): 291–306.
- Berscheid, Ellen. 1985. "Interpersonal attraction." In *The Handbook of Social Psychology*. Eds. G. Lindzey and E. Aronson. New York: Random House. Pp. 413–484.
- Biddlecom, Ann E., John B. Casterline, and Aurora E. Perez. 1997. "Spouses' views of contraception in the Philippines." *International Family Planning Perspectives* 23(3): 108–115.
- Bongaarts, John. 1990. "The measurement of wanted fertility." *Population and Development Review* 6(3): 487–506.
- Burnbauer, Lauren D. 1993. *Explaining Opinion Inconsistency on a Single Policy Issue: An Examination of Public Opinion on Abortion as 'Quality' Opinion*. New Brunswick, NJ: Rutgers University. Doctoral dissertation.
- Casterline, John B., Aurora E. Perez, and Ann E. Biddlecom. 1997. "Factors underlying unmet need for family planning in the Philippines." *Studies in Family Planning* 28(3): 173–191.
- Casterline, John B., Fatma El-Zanaty, and Laila El-Zeini. 2001. "The interplay of fertility preferences and contraceptive use: Longitudinal data from Egypt." Paper presented at the annual meeting of the Population Association of America, Washington, DC, 28–31 March.
- Chaffee, Steven H. and Connie Roser. 1986. "Involvement and the consistency of knowledge, attitudes, and behaviors." *Communication Research* 13(3): 373–399.
- Feather, N.T. 1969. "Attitude and selective recall." *Journal of Personality and Social Psychology* 12(4): 310–319.
- Hauser, Philip M. 1967. "Family planning and population programs: A book review article." *Demography* 4(1): 397–414.
- Hummer, Robert A., Carl P. Schmertmann, Isaac W. Eberstein, and Susan Kelly. 1995. "Retrospective reports of pregnancy wantedness and birth outcomes in the United States." *Social Science Quarterly* 76(2): 402–418.
- Kaufmann, Rachel B., Leo Morris, and Alison Spitz. 1997. "Comparison of two question sequences for assessing pregnancy intentions." *American Journal of Epidemiology* 145(9): 810–816.
- Korenman, Sanders, Robert Kaestner, and Ted Joyce. 2001. "Consequences for children of parental disagreement in pregnancy intention." Paper presented at the annual meeting of the Population Association of America, Washington, DC, 28–31 March.
- Kost, Kathryn and Jacqueline Darroch Forrest. 1995. "Intention status of U.S. births in 1988: Differences by mothers' socioeconomic and demographic characteristics." *Family Planning Perspectives* 27(1): 11–17.
- Krysan, Maria. 1999. "Qualifying a quantifying analysis on racial equality." *Social Psychology Quarterly* 62(2): 211–218.
- Madigan, Francis C. 1985. *Report on the 1984 Philippine Periodic Abstinence Survey, Volume 1: Response to Open-ended Questions*. Cagayan de Oro City, Philippines: Research Institute for Mindanao Culture.
- Madigan, Francis C., L.P. Sealza, and M.D. Tabor. 1987. "Can natural family planning be taught in two short, easy lessons? Simplified natural family planning for isolated and/or busy couples." *Philippine Population Journal* 3(1–4): 51–61.
- National Statistics Office (NSO) [Philippines] and Macro International (MI). 1994. *National Demographic Survey, 1993*. Calverton, MD: NSO and MI.
- Perez, Aurora E., and T. Tabije. 1996. "Contraceptive Discontinuation, Failure, and Switching Behavior in the Philippines." *DHS Working Paper No. 18*. Calverton, MD: Macro International.
- Population Reference Bureau. 1999. *World Population Data Sheet*. Book edition. Washington, DC: Population Reference Bureau.
- Ryder, Norman B. 1973. "A critique of the National Fertility Study." *Demography* 10(4): 495–506.
- Ryder, Norman B. and Charles F. Westoff. 1969. "Fertility planning status: United States, 1965." *Demography* 6(4): 435–444.
- . 1972. "Wanted and unwanted fertility in the United States: 1965 and 1970." In *Demographic and Social Aspects of Population Growth*. Volume 1 of Commission Reports: U.S. Commission on Population Growth and the American Future. Eds. Charles F. Westoff and Robert Parke, Jr. Washington, DC: U.S. Government Printing Office. Pp. 467–488.
- Sanderson, Warren C. and Jee-Peng Tan. 1996. *Population in Asia*. Avebury: Brookfield, VT.
- Schuman, Howard. 1966. "The Random probe: A technique for evaluating the validity of closed questions." *American Sociological Review* 31(2): 218–222.
- UNWire. 2001. "Philippines: Report finds population growth hampers development." *UNWire*, 15 March.

- Welder, Robert H., Isaac W. Eberstein, and Mohamed Bailey. 1987. "Pregnancy wantedness and maternal behavior." *Demography* 24(3): 407–412.
- Westoff, Charles F. 1990. "Reproductive intentions and fertility rates." *Family Planning Perspectives* 16(3): 84–96.
- Williams, Lindy and Joyce Abma. Forthcoming. "Birth wantedness reports—a look forward and a look back." *Social Biology*.
- Williams, Lindy, Joyce Abma, and Linda Piccinino. 1999. "Childbearing expectations and subsequent fertility behavior: An analysis using prospective reports." *Family Planning Perspectives* 31(5): 220–227.
- Williams, Lindy, Linda Piccinino, and Joyce Abma. 1998. "Pregnancy Wantedness: Attitude Stability Over Time." *Working Paper Series* No. 98–06. Ithaca, NY: Cornell University, Population and Development Program.

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