Potential interviewer bias in the 2005-06 National Family Health Survey in India

ABSTRACT

BACKGROUND

There has been a lack of studies that have systematically assessed the level of interviewer bias in large-scale household surveys.

OBJECTIVE

The objective of the paper is to examine possible interviewer bias in the 2005-06 National Family Health Survey (NFHS-3) in India.

METHODS

We compute the 'highest' and 'lowest' percentages or scores, the median and standard deviation and a summary index for each team of interviewers for states in India at the time of NFHS-3. To determine statistical significance, we use one-way analysis of variance (ANOVA) and binary logistic regression.

RESULTS

The highest and lowest scorers are more likely to differ on sensitive questions than on non-sensitive questions in a one-way ANOVA and binary logistic regression. Of the 100 teams, the highest and lowest scorers are likely to differ in 87 teams on wife beating justified score. In comparison, the highest and lowest scorers are likely to differ in only 14 teams on average education. The north, south and west regions have the most disparity among interviewers within interviewing teams.

CONCLUSIONS

Our analysis indicates the likelihood of interviewer bias related to some sensitive questions in NFHS-3, particularly in some regions of India, but there is no evidence of this type of interviewer bias for non-sensitive questions.

CONTRIBUTION

This study is the first to examine interviewer bias on sensitive and non-sensitive questions in a large-scale household survey in a low-income or middle-income country. The probable interviewer bias is restricted to only a few sensitive questions in NFHS-3.

KEYWORDS OR KEYWORD PHRASES

Interviewer bias; National Family Health Survey; India; analysis of variance; binary logistic regression

1. Introduction

Results from household sample surveys have become an important part of the policy making process, especially in developing countries like India. In the absence of regular and complete data from vital registration systems and other government-supported systems, sample surveys have become an essential source of data in the field of population and health. The results obtained from sample surveys are frequently used for monitoring policies and programmes at the national and state levels. In India, the National Family Health Surveys and District Level Household Surveys occupy a central place in policy discussions of maternal and child health programmes (MoHFW 2010). In addition, data from these surveys have been used extensively for monitoring the Millennium Development Goals (MDGs) and will be an important data source for estimating progress on the Sustainable Development Goals.

Nonetheless, large-scale household surveys suffer from two broad sources of errors—sampling and non-sampling errors. Sampling errors refer to the errors that are associated with the sample design and implementation (Kish 1995). Non-sampling errors include all other errors that are not associated with the sample design and implementation (United Nations1982). Fortunately, sampling errors can be easily estimated and can be controlled in surveys by

meticulous design and implementation (Kish 1995). Non-sampling errors, on the other hand, cannot be measured statistically with any reasonable degree of precision, and minimizing such errors remains a challenge despite the implementation of innovative quality-control measures. Non-sampling errors may be particularly important in household surveys with very large samples and wide geographic spread. Interviewer bias is one type of non-sampling error that may occur when interviewers knowingly or unknowingly introduce bias while collecting information from respondents. Interviewer bias may be particularly pronounced when information on sensitive topics (such as domestic violence and sexual behaviour) is collected in a survey. There is a general perception that, to avoid embarrassment, some interviewers might record the answers to particularly sensitive questions without actually asking the questions to the respondents or without probing to obtain accurate results. Sometimes, there is also a tendency for respondents to give and for interviewers to record culturally accepted answers (known as social desirability bias). There is also a possibility that interviewers might rush through the interview if they are pressured to do so within a tight timeframe. Interviewer bias might also arise when interviewers do not read the questions as intended, or they add other information that may confuse or mislead the respondent (Kasprzyk 2005).

Although there is a concern that interviewer behaviour may introduce a systematic bias in some large-scale surveys, we could not identify any studies that have systematically assessed the level of such bias, although some studies have examined the 'interviewer effect', i.e., measurement error attributable to a specific interviewer characteristic such as race or gender (Davis et al. 2010; Groves 1989). To fill this gap in the existing literature, in this paper we examine possible interviewer bias in the 2005-06 National Family Health Survey (NFHS-3) in India by exploring differences in estimates of key indicators within interviewing teams. We are particularly interested in assessing whether response patterns on potentially sensitive questions (such as experience of domestic violence, justification of wife beating, and timing of first

sexual intercourse) differ from response patterns on non-sensitive questions (such as years of schooling, women's age, and current contraceptive use). In addition, we explore whether response patterns within interviewing teams vary across states.

1.1 The 2005-06 National Family Health Survey in India

In NFHS-3, interviews were conducted with 124,385 women age 15-49 years. For the first time, men age 15-54 years were also interviewed in an NFHS survey (74,369 male interviews were conducted).The survey included questions on key population, health and nutrition topics, as well as the measurement of biomarkers for height, weight, anaemia and HIV status. All the 29 states of India were covered in NFHS-3. The NFHS-3 national report provides additional details about the survey (IIPS and Macro International 2007).

2. Data and Methods

We use data from the 2005-06 NFHS in this paper because it is the most recent national NFHS with available data. Another reason for choosing NFHS-3 is that it had the largest sample size and the longest questionnaire among the first three NFHS rounds, thus making NFHS-3 potentially more vulnerable to non-sampling errors in general and interviewer bias in particular. NFHS-3 used a multi-stage design to select the sample of households from rural and urban areas. A two-stage design was used in rural areas, with villages selected at the first stage using probability proportional to size (PPS) sampling, followed by the selection of households using systematic random sampling in the second stage. In urban areas, a three-stage design was used. Wards were selected with PPS in the first stage, followed by the selection of one Census Enumeration Block (CEB) from each ward using PPS in the second stage. Finally, households were selected using systematic sampling from the selected CEBs. Due to the sample design and non-response, appropriate sampling weights were estimated and were used in this analysis.

The field interviewers in every state were grouped into teams. In the 22 states in which men were interviewed in a subsample of households, the standard interviewing team was comprised of one team supervisor, one field editor, three female interviewers, one male interviewer and two health investigators. In the remaining seven states in which men in all households were eligible for interviewing, there were typically two female interviewers and two male interviewers, in addition to the other team members. A number of primary sampling units (PSUs) were assigned to each team of interviewers. For example, suppose PSU A is assigned to team 1, then all the household, men's and women's interviews in PSU A were conducted by the interviewers in team 1. The 2005-06 NFHS data set includes an interviewer number for each record, and provides the ability to identify interviewing teams. This information makes it possible to determine how many interviews different members of the teams conducted during the survey. We utilize this information to examine the patterns of responses on sensitive and non-sensitive questions. We look for patterns of responses within the teams within each state to rule out spatial and temporal differences in the responses. Since PSUs are generally more homogenous than districts and states, we expect that the pattern of responses for interviewer A in team 1 should not differ much from the pattern of responses for interviewer B or interviewer C in team 1. But if the pattern of responses for interviewer A in team 1 differs considerably from the pattern of responses for interviewer B or interviewer C in the same team, it suggests the possibility of interviewer bias in the data collected by at least one of the interviewers in team 1. The same logic is applied to all the teams employed in the survey in a particular state. To make the analysis more robust, we included only those interviewers who were in the field for the entire duration of the survey. In addition, we counted only those interviews in which all interviewers on the same team worked in the same PSUs. Interviewers that conducted fewer than 25 interviews and teams that included fewer than three female interviewers were dropped from the analysis. All the teams from Andhra Pradesh and

Tamil Nadu were dropped from the analysis since there were fewer than three female interviewers in every team.

2.1 Variables

We included six variables in the analysis: average years of schooling of women, percentage of ages ending with the digit '0' or '5', percentage of women reporting use of a modern contraceptive method, percentage of women justifying wife beating in different situations, percentage of women who experienced domestic violence themselves (in terms of scores based on the types of domestic violence experienced) and percentage of women who reported that they had sexual intercourse for the first time when they started living with their (first) husband. The question on completed years of schooling is used to estimate the average years of schooling for women. The questions on age at their last birthday and their date of birth were used to compute the percentage of women who reported ages ending with '0' or '5'. Since it is expected that about 10 percent of women will have ages ending in each digit from '0' through '9', then if the combined percentage of ages ending in '0' or '5' exceeds 20 percent by a substantial margin, it is an indication of age heaping. This could be due to some respondents not knowing their age with any degree of precision, but it could reflect a failure on the part of the interviewer to spend a sufficient amount of time and effort to probe for an exact age. The indicator on modern contraceptive use refers to currently married women who were using any modern method of contraception at the time of the survey.

NFHS-3 also asked women whether a husband is justified in hitting or beating his wife in the following situations:

a) If she goes out without telling him?

b) If she neglects the house or the children?

c) If she argues with him?

d) If she refuses to have sex with him?

e) If he suspects her of being unfaithful?

f) If she shows disrespect for in-laws?

The possible responses to each question were yes, no, or don't know. Women who responded 'yes' or 'don't know' to an item were categorized as justifying wife beating for that item and were coded as '1'. The rest were coded as '0'. All six items were coded in a similar fashion. Finally, the six items were combined by simply adding the item scores. The combined score ranges between '0' and '6', with zero indicating that women did not justify wife beating under any of the six circumstances and six indicating that the women justified wife beating in all the six circumstances.

Women were asked the following questions to elicit information on the experience of domestic violence:

(Does/Did) your (last) husband ever do any of the following things to you:

a) slap you?

b) twist your arm or pull your hair?

c) push you, shake you, or throw something at you?

d) punch you with his fist or with something that could hurt you?

e) kick you, drag you or beat you up?

f) try to choke you or burn you on purpose?

g) threaten or attack you with a knife, gun, or any other weapon?

h) physically force you to have sexual intercourse with him even when you did not want to?

i) force you to perform any sexual acts you did not want to?

Women who reported 'yes' were coded as '1' (i.e., having experienced that item). Those who reported "no" were coded as '0'. All the nine items were coded in a similar way.

Finally, all the items were combined by adding the scores on each item. The combined scores range between '0' and '9'. Women who reported 'no' on all nine items received a score of '0' and women who reported 'yes' on all nine items received a score of '9'. Women were also asked to report the age (in years) when they had sexual intercourse for the very first time. The response categories to this question include never had sexual intercourse, age in years and first time when they started living with their(first) husband. Of the six variables defined above, the first three variables are considered to be non-sensitive whereas the remaining three are considered to be potentially sensitive.

2.2 Methods

We use descriptive statistics and tests of the statistical significance of differences to examine the extent of possible interviewer bias in NFHS-3. We compute the 'highest' and 'lowest' percentages/scores for each team of interviewers for each state in India at the time of NFHS-3. We also compute the median and standard deviation for each team of interviewers. Finally, we compute a summary index for each team to measure the variation in percentages or scores across interviewers within each team. The summary index is computed using the following formula:

Summary index = (Highest percentage or score in the team – Lowest percentage or score in the team)/(average score for the team)

If all members of an interviewing team had the same average percentages or scores, the index value would be zero. Higher index values indicate that there is substantial variation in the averages within the team. In general, it would be expected that over the course of the entire fieldwork, the index values should be low within each team. We used a cut-off value of 0.4 to examine whether the variation in the averages within the team is high or low. We also show the number of interviewing teams that had statistically different average percentages or scores between interviewers with the highest and lowest average percentages and scores. For

categorical variables, the statistical significance was determined through binary logistic regression. For continuous variables, the statistical significance was based on a one-way analysis of variance. The independent variable in this analysis is the interviewer, which has three categories—highest scorer, lowest scorer and others.

3. Results

Table 1 shows the total number of teams of interviewers, the total number of interviewers and the total number of interviews conducted in each state. The states in Table 1 are arranged according to the geographic regions in India. The minimum and maximum number of interviews conducted by teams of interviewers in different states is also shown in Table 1. Substantial variations across states are seen in the total number of teams and the total number of interviewers. The total number of interviews by the teams included in the analysis ranges between 377 in Meghalaya and 5650 in West Bengal.

Tables 2A-2F present the maximum and minimum percentage or score for each team of interviewers by the six selected variables and by state. We also present the standard deviation and the index value for each team. Patterns in the percentage of women who reported that they had sexual intercourse the first time when they started living with their (first) husband are noteworthy. In the northern states, the index value was 0.4 or more for one team in Jammu and Kashmir, three teams in Himachal Pradesh, four teams in Punjab, two teams in Uttarakhand, two teams in Rajasthan, and four teams in Haryana. Overall, half the teams in the northern states scored 0.4 or more. Interestingly, almost all the teams in Punjab and Haryana had an index value of 0.4 or more. Moreover, half of the teams in Himachal Pradesh and more than half in Uttarakhand scored 0.4 or more. The patterns in the central states were completely different from those in the northern states. None of the teams in Uttar Pradesh, Madhya Pradesh and Chhattisgarh scored 0.4 or more. In fact, all of the teams in those three states had index scores of either 0.0 or 0.1. In the North-Eastern states, only one team each in Sikkim, Mizoram

and Tripura scored 0.4 or more. In the eastern states, only one team in Jharkhand scored 0.4 or more. The pattern in the western states was much closer to that of the northern states—three out of the six teams in Gujarat and one team each in Maharashtra and Goa scored 0.4 or more; half of the teams in the western states scored 0.4 or more. In the south, one team in Karnataka and four of the six teams in Kerala scored 0.4 or more. Overall, almost half of the teams in the southern states scored 0.4 or more.

For another sensitive variable ('justification of wife beating'), in the northern states, 29 teams out of the 32 teams scored 0.4 to more, and 14 of these teams had scores of 1.0 or higher. In the central states, all teams except one scored 0.4 or more. Twelve out of 19 teams (63%) in the North-Eastern states scored 0.4 or more, and six of these teams scored 1.0 or higher. All teams in the eastern region scored 0.4 or more, and 5 of these teams had scores of 1.0 or higher. The western states were very similar to the northern and central states; nine of the 10 teams scored 0.4 or more, and four of these teams scored 1.0 or higher. All teams in Karnataka and four of the six teams in Kerala scored 0.4 or more. However, only two teams in the south had scores of 1.0 or higher. Typically, the highest and lowest scores for individual teams on 'justification of wife beating' were far apart. The index values ranged up to 2.1 (for one team in Jammu and Kashmir).

When it comes to the actual experience of domestic violence, the picture is completely different. Two teams each in Gujarat and Karnataka scored 0.4 or more; one team each in Haryana, Madhya Pradesh, Bihar, Mizoram, Tripura, and Maharashtra scored 0.4 or more; and the rest of the teams had scores ranging from 0.0-0.3.

A different picture emerges when we analyse patterns in the non-sensitive questions – average years of schooling, ages ending with '0' or '5', and modern contraceptive use. The index values were comparatively low across the board for average years of schooling. Among the northern states, only one team each in Rajasthan and Haryana scored 0.4 or more. None of

the teams in the central, eastern and North-Eastern states scored 0.4 or more. In the west, one team in Maharashtra scored 0.6. In the south, two teams in Karnataka scored 0.4 or more. Index scores were somewhat higher for ages ending with '0' or '5', but they were still generally low. Two teams in Jammu and Kashmir, one team each in Himachal Pradesh, Punjab Uttarakhand and Delhi, two teams in Rajasthan and three teams in Haryana scored 0.4 or more. Only two teams in the central states scored 0.4 or more. Scores in the eastern states were pretty similar to those in the central states. Four teams out of the total of 19 teams in north-eastern India scored 0.4 or more. Only one team each in Maharashtra and Karnataka scored 0.4 or more. Index values in the case of use of any modern method of family planning were also low. One team each in Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Haryana, Mizoram, Tripura, Goa and Karnataka scored 0.4 or more. Two out of six teams in Gujarat and two out of six teams in Assam scored 0.4 or higher.

Table 3 shows how many interviewing teams had statistically different average percentages or scores between interviewers with the highest and lowest average percentages and scores. The results in Table 3 are consistent with the findings based on the index value. The highest and lowest scorers are more likely to differ on sensitive questions than on non-sensitive questions. The same regions (north, south and west) and states as before stand out as having the most disparity among interviewers within interviewing teams.

4. Conclusions

The analysis indicates that the response patterns on sensitive questions are different from those on non-sensitive questions. The index values, which measure the variation in percentages or scores across interviewers within each team, are substantially higher for the sensitive questions than the non-sensitive questions. The higher index values for sensitive questions indicate that there is substantial variation in the averages on sensitive questions within the teams, even

though they were working in the same PSUs throughout the course of the fieldwork. There are also clear regional and state patterns in the responses to sensitive and non-sensitive questions. Overall, the index values for sensitive questions in the northern, southern and western states are higher than the index values in the other regions (especially in the central states). A few states stand out as having particularly high index values for sensitive questions—Punjab, Haryana, Gujarat, Karnataka and Kerala. Interestingly, all five of these states are among the richest states in India in terms of per capita income.

The magnitude of the index values also depends on the degree of sensitivity of the questions. For example, the index values were highest for the justification of wife beating and the timing of first sexual intercourse. Moreover, the index values were above 0.4 for a large number of teams on these two items. The variations in the averages within the teams were smaller for the third sensitive question. The index values were generally low for the three non-sensitive questions.

The limitations of our study must also be noted. Since we restricted our analysis to only those teams that had at least three female interviewers, the analysis included only one or two teams in Uttar Pradesh, Odisha, Meghalaya, Arunachal Pradesh, Jharkhand and Maharashtra. For this reason, we could not include any teams of interviewers from Andhra Pradesh and Tamil Nadu. Second, the data cannot be used to identify the actual reasons for differences in the magnitude of index values over the three sensitive questions. For example, we cannot determine whether the difference in the index values for the timing of first sexual intercourse and justification of wife beating is due to interviewers sometimes recording the responses without asking the question or interviewers not asking the questions in the intended manner or perhaps some other reason that is not related to interviewer bias. Third, we could not use a more recent dataset due to the unavailability of information on teams of interviewers and interviews conducted by different members of the team in other datasets like the District Level

Household Surveys or the Annual Health Survey. The fourth round of the NFHS is currently underway, and the data are likely to be available for research only in 2017.

Nevertheless, our study is probably the first to examine interviewer bias in a large-scale household survey in a low-income or middle-income country. Our analysis indicates the likelihood of interviewer bias related to some sensitive questions in NFHS-3, particularly in some regions of India. The analysis did not find any evidence of this type of interviewer bias for non-sensitive questions. Since only a small number of questions in NFHS-3 are considered sensitive, it is encouraging that probable interviewer bias is restricted only to those few questions.

Our findings, therefore, call for caution when analysing levels and patterns in the responses to sensitive questions in NFHS-3, as well as trends in these indicators between NFHS surveys. Comparisons of the results of these sensitive questions over geographic regions and states using NFHS-3 must also be interpreted with care given that the magnitude of potential interviewer bias varies considerably across different states and regions.

Our findings also have implications for designing and implementing future large-scale surveys in developing countries like India. Large-scale household surveys may not be the best vehicle for collecting data on sensitive topics. However, when sensitive questions are included in large-scale household surveys, adequate attention should be given to trying to minimize related interviewer bias. Strategies to overcome interviewer bias include rigorous interviewer training, supervision and monitoring, as well as controls on the workload of interviewers (Kasprzyk 2005). Although these strategies were implemented in NFHS-3 and are in place to varying degrees in most household surveys, additional emphasis on collecting reliable information on sensitive topics is needed. Furthermore, due to the shift in providing district-level estimates in household surveys in India in addition to national and state estimates, the sample sizes of recent household surveys conducted in India has increased manifold. The

increase in sample sizes complicates efforts to maintain high-quality data in these surveys. However, new tools, such as the advent of real-time data availability for surveys using Computer Assisted Personal Interviewing (CAPI) and internet file streaming, make it possible to monitor data collection remotely and detect problems at an early stage of fieldwork. Additional ways to improve the quality of sensitive information collected in large-scale household surveys should also be explored.

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Table 1: Total number of teams of interviewers, the total number of interviewers, the total number of interviews conducted, and the maximum and minimum number of interviews conducted by teams of interviewers for the different states of India, 2005-06

Regions	States	Total number of teams	Total number of interviewers	Total number of interviews	Minimum interviews	Maximum interviews	Standard deviation of interviews
North	Jammu & Kashmir	6	18	2832	49	227	69.9
	Himachal Pradesh	6	19	3139	33	197	38.4
	Punjab	5	16	2844	34	254	53.3
	Uttarakhand	4	12	2235	97	226	45.1
	Haryana	5	16	2298	56	196	35.1
Central	Delhi	1	3	713	169	320	76.4
	Rajasthan	5	15	3218	175	240	21.5
	Uttar Pradesh	1	3	894	52	433	213.4
	Chhattisgarh	4	12	3069	196	302	35.8
	Madhya Pradesh	8	24	5090	178	249	20.3
North East	Sikkim	4	12	2110	108	211	28.6
	Arunachal Pradesh	2	6	687	65	168	48.6
	Mizoram	4	12	1202	26	120	25.7
	Tripura	4	12	1845	120	205	24.0
	Meghalaya	1	3	377	120	133	6.7
	Assam	4	12	2996	105	359	56.7
East	West Bengal	8	24	5650	33	322	81.0
	Jharkhand	2	6	1175	41	242	76.4
	Odisha	1	3	1067	327	387	30.1
	Bihar	4	12	2529	183	238	16.1
West	Gujarat	6	20	3675	29	229	55.2
	Maharashtra	2	6	1043	25	297	120.1
	Goa	2	6	1261	148	240	33.0
South	Karnataka	5	15	2719	27	273	89.3
	Kerala	6	18	3559	153	248	29.8

Table 2A: Maximum and minimum percentage or score, median percentage or score, standard deviation and index value for each team of interviewers by the six selected variables and by state, 2005-06

North Region		Jammu & Kashmir						Himachal Pradesh						Punjab					Uttarakhand			
Team number (TN)		TN1	TN2	TN3	TN4	TN6	TN7	TN1	TN2	TN3	TN4	TN5	TN6	TN1	TN2	TN3	TN4	TN6	TN1	TN2	TN3	TN6
Number of respondents		620	662	643	521	212	174	435	528	573	461	577	565	564	641	579	641	419	625	669	592	349
First intercourse at first union (Percentage)	Highest	67.0	65.0	65.1	70.1	76.8	73.5	60.2	74.7	73.9	62.3	75.4	71.4	76.2	23.2	72.5	64.8	46.7	71.4	68.3	55.8	72.7
	Lowest	56.3	50.7	50.9	39.0	68.7	69.0	12.4	60.1	63.6	30.7	51.3	58.3	44.1	7.1	54.0	43.1	1.3	65.5	44.4	26.3	65.8
	Median	65.9	59.2	62.7	45.0	75.0	70.4	27.0	68.3	70.8	61.8	71.5	59.7	67.0	21.1	67.5	53.1	32.5	65.6	53.1	35.5	69.1
	SD	5.9	7.2	7.6	16.5	4.3	2.3	24.5	7.3	4.4	18.1	13.0	7.2	16.5	8.7	8.3	10.9	23.2	3.4	12.1	15.1	3.4
	Index	0.2	0.2	0.2	0.6	0.1	0.1	1.4	0.2	0.1	0.6	0.4	0.2	0.5	0.9	0.3	0.4	1.7	0.1	0.4	0.8	0.1
Wife beating justified score (Average score)	Highest	4.7	4.3	3.5	2.3	0.5	0.6	1.4	1.0	1.1	1.5	1.2	0.8	3.3	2.6	2.1	2.0	2.0	3.0	2.0	1.7	2.7
	Lowest	4.1	2.1	0.9	1.5	0.1	0.3	0.4	0.2	0.0	0.7	0.3	0.3	1.4	1.5	0.8	0.3	1.2	2.1	1.7	0.5	1.8
	Median	4.1	3.7	3.3	2.1	0.1	0.5	1.1	0.3	0.7	1.3	0.4	0.6	2.0	2.4	1.6	1.9	1.8	2.6	1.7	0.7	2.1
	SD	0.3	1.2	1.4	0.4	0.3	0.2	0.5	0.4	0.5	0.4	0.5	0.3	1.0	0.6	0.5	0.9	0.4	0.5	0.2	0.7	0.5
	Index	0.1	0.7	1.0	0.4	2.1	0.7	1.0	1.7	1.7	0.7	1.4	0.9	0.9	0.5	0.9	1.2	0.5	0.4	0.2	1.2	0.4
Experience of domestic violence (Average score)	Highest	6.1	5.8	6.2	5.1	4.6	4.6	4.7	4.7	5.5	5.1	4.0	4.7	4.7	5.1	5.4	6.0	4.6	4.6	5.1	5.3	4.8
	Lowest	*5.5*	*5.0*	*5.2*	*4.5*	*4.2*	*4.1*	*3.8*	*4.2*	*4.0*	*4.6*	*3.9*	*3.8*	*4.1*	*4.3*	*3.8*	*4.7*	*4.4*	*4.1*	*4.4*	*4.0*	*4.5*
	Median	5.5	5.8	5.5	4.9	4.3	4.3	4.0	4.4	4.1	4.8	4.0	4.5	4.4	4.6	4.5	5.3	4.5	4.5	4.4	4.5	4.7
	S.D	0.4	0.4	0.5	0.3	0.2	0.2	0.5	0.3	0.7	0.3	0.0	0.5	0.3	0.4	0.7	0.6	0.1	0.3	0.4	0.6	0.2
	Index	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.3	0.1	0.0	0.2	0.1	0.2	0.3	0.2	0.0	0.1	0.2	0.3	0.1
Average education (Average years of schooling)	Highest	5.1	4.9	5.0	5.6	11.4	10.4	7.7	8.9	10.7	8.2	8.1	8.2	8.3	6.3	7.4	6.3	7.2	7.2	6.7	6.5	8.0
	Lowest	4.5	4.7	4.8	5.4	10.1	9.3	7.5	8.0	8.8	7.5	7.7	7.8	7.0	5.8	6.5	5.8	6.4	6.5	5.6	5.1	7.5
	Median	4.5	4.8	4.9	5.5	10.2	10.1	7.6	8.4	9.6	7.8	7.9	7.9	7.2	5.9	6.8	5.9	7.0	6.7	5.8	5.5	7.9
	SD	0.3	0.1	0.1	0.1	0.7	0.5	0.1	0.4	0.9	0.4	0.2	0.2	0.7	0.3	0.4	0.3	0.4	0.3	0.6	0.7	0.2
	Index	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.1	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
Age ending with 0 or 5 (Percentage)	Highest	26.4	27.6	33.0	20.3	23.2	20.4	20.5	25.3	31.4	21.9	23.3	30.2	31.6	32.7	39.0	38.3	33.3	33.0	26.1	36.5	39.2
	Lowest	19.3	22.9	17.9	16.8	20.9	14.1	16.1	19.0	22.4	19.6	14.4	23.5	23.4	28.4	26.5	27.7	31.7	24.4	19.1	33.6	18.9
	Median	21.4	23.3	26.5	20.0	21.1	14.3	16.1	24.7	24.9	19.9	20.3	27.8	28.1	28.9	32.8	29.2	32.1	27.2	24.3	34.3	32.0
	SD	3.7	2.6	7.6	1.9	1.3	3.6	2.6	3.5	3.9	1.3	4.5	3.4	4.1	2.3	5.3	5.7	0.8	4.4	3.6	1.5	10.3
	Index	0.3	0.2	0.6	0.2	0.1	0.4	0.3	0.3	0.3	0.1	0.5	0.2	0.3	0.1	0.4	0.3	0.0	0.3	0.3	0.1	0.7
Modern contraceptive use (Percentage)	Highest	32.2	35.9	29.0	26.6	40.8	42.9	53.3	54.0	58.7	55.1	54.9	54.9	46.2	48.2	42.5	48.2	45.5	47.4	48.4	40.4	38.1
	Lowest	24.7	22.9	26.0	23.1	29.9	31.5	49.7	45.2	39.4	50.3	45.7	50.3	36.0	37.0	33.3	43.2	36.5	39.7	40.8	25.0	35.6
	Median	31.5	23.8	27.0	26.0	31.9	32.4	50.4	45.7	54.6	52.7	51.9	52.6	38.1	45.3	38.3	43.9	38.1	39.9	45.6	35.0	36.7
	S.D	4.2	7.3	1.5	1.9	5.8	6.3	1.9	4.9	9.1	2.4	4.7	2.3	5.4	5.8	4.5	2.7	4.8	4.4	3.8	7.8	1.3
	Index	0.3	0.5	0.1	0.1	0.3	0.3	0.1	0.2	0.4	0.1	0.2	0.1	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.5	0.1

North Region (Cont.…)		Delhi	Rajasthan					Haryana				
Team number (TN)		**TN4**	**TN1**	**TN2**	**TN3**	**TN4**	**TN5**	**TN2**	**TN3**	**TN4**	**TN5**	**TN6**
Number of respondents		713	687	668	629	599	635	415	471	503	450	459
First intercourse at first union (Percentage)	Highest	69.8	49.8	79.2	75.9	71.2	82.1	22.3	80.5	75.0	2.5	85.2
	Lowest	59.7	32.8	71.4	69.2	31.9	76.6	1.6	42.9	11.7	0.0	62.5
	Median	62.5	47.7	78.4	74.9	44.1	78.9	2.0	78.6	29.1	1.5	82.0
	SD	5.2	9.3	4.3	3.6	20.1	2.8	11.8	18.2	32.7	1.3	12.3
	Index	0.2	0.4	0.1	0.1	0.8	0.1	2.4	0.5	1.6	1.9	0.3
Wife beating justified score (Average score)	Highest	0.9	2.4	2.1	2.5	2.8	2.2	2.9	3.9	1.5	1.1	3.3
	Lowest	0.7	0.9	0.9	1.1	0.3	0.5	1.6	1.2	0.2	0.1	0.8
	Median	0.9	1.8	1.9	2.2	2.6	1.8	2.8	1.9	0.8	0.2	2.8
	SD	0.1	0.8	0.6	0.7	1.3	0.9	0.7	1.2	0.6	0.5	1.3
	Index	0.3	0.9	0.7	0.7	1.3	1.2	0.6	1.2	1.5	2.0	1.1
Experience of domestic violence (Average score)	Highest	3.9	5.1	5.0	5.5	4.7	4.5	5.0	5.3	5.2	4.4	4.4
	Lowest	*3.7*	*5.0*	*4.1*	*4.2*	*4.2*	*4.3*	*4.0*	*3.1*	*4.1*	*3.9*	*3.7*
	Median	3.9	5.1	4.7	4.9	4.3	4.3	4.1	4.8	4.6	4.1	3.7
	S.D	0.1	0.1	0.5	0.7	0.3	0.1	0.5	1.0	0.5	0.3	0.4
	Index	0.1	0.0	0.2	0.3	0.1	0.1	0.2	0.5	0.2	0.1	0.2
Average education (Average years of schooling)	Highest	7.8	4.7	4.8	4.6	3.1	2.7	6.9	6.1	4.7	6.2	5.9
	Lowest	7.8	3.6	4.3	2.6	2.6	2.7	6.1	4.1	4.3	5.7	5.3
	Median	7.8	3.9	4.7	3.9	2.8	2.7	6.3	4.7	4.6	6.0	5.9
	SD	0.0	0.6	0.3	1.0	0.2	0.0	0.4	0.9	0.2	0.3	0.3
	Index	0.0	0.3	0.1	0.5	0.2	0.0	0.1	0.4	0.1	0.1	0.1
Age ending with 0 or 5 (Percentage)	Highest	31.6	32.4	31.7	41.2	43.5	43.4	36.9	44.4	28.1	28.1	39.3
	Lowest	17.8	24.3	22.1	24.7	32.6	39.7	23.0	28.2	19.9	24.4	23.2
	Median	29.0	30.0	26.7	34.4	40.4	40.4	29.4	34.3	24.6	26.2	28.4
	SD	7.4	4.1	4.8	8.3	5.6	2.0	7.0	6.7	4.1	1.9	8.2
	Index	0.5	0.3	0.4	0.5	0.3	0.1	0.5	0.5	0.3	0.1	0.5
Modern contraceptive use (Percentage)	Highest	50.4	42.7	46.1	39.0	34.2	33.7	42.1	56.4	54.4	41.9	53.6
	Lowest	45.3	38.2	34.8	34.8	31.7	32.5	36.3	33.9	46.9	33.8	41.4
	Median	46.2	41.0	43.8	35.8	33.0	33.2	40.8	50.8	49.7	40.6	51.1
	S.D	2.8	2.3	5.9	2.2	1.3	0.6	3.0	9.8	3.8	4.3	6.4
	Index	0.1	0.1	0.3	0.1	0.1	0.0	0.1	0.5	0.1	0.2	0.2

Table 2B: Maximum and minimum percentage or score, median percentage/score, standard deviation and index value for each team of interviewers by the six selected variables and by state, 2005-06

Central region		Uttar Pradesh	Chhattisgarh				Madhya Pradesh							
Team number (TN)		**TN4**	**TN1**	**TN2**	**TN4**	**TN5**	**TN1**	**TN2**	**TN3**	**TN4**	**TN5**	**TN6**	**TN7**	**TN10**
Number of respondents		894	819	828	722	700	606	665	642	696	645	614	573	649
First intercourse at first union (Percentage)	Highest	79.2	72.8	82.3	77.9	79.1	85.5	82.6	80.9	77.5	85.3	81.7	67.0	81.2
	Lowest	70.4	70.6	76.3	75.0	75.0	80.8	80.1	76.3	72.9	80.8	77.6	61.1	76.3
	Median	*71.2*	*72.2*	*79.8*	*76.9*	*79.0*	*81.7*	*80.1*	*79.2*	*77.1*	*83.3*	*79.6*	*62.8*	*76.9*
	SD	4.9	1.1	3.0	1.5	2.3	2.5	1.4	2.3	2.5	2.2	2.1	3.1	2.7
	Index	0.1	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Wife beating justified score (Average score)	Highest	2.4	0.9	1.9	0.9	0.8	1.9	1.5	1.0	2.4	2.5	1.4	2.1	2.0
	Lowest	0.6	0.2	1.3	0.8	0.4	0.4	0.5	0.5	1.3	0.5	0.8	0.9	0.9
	Median	1.8	0.6	1.4	0.8	0.7	0.9	0.6	1.0	1.5	0.5	1.3	1.9	1.4
	SD	1.0	0.4	0.3	0.1	0.2	0.7	0.6	0.3	0.6	1.1	0.3	0.7	0.5
	Index	1.2	1.2	0.4	0.2	0.6	1.3	1.2	0.5	0.6	1.7	0.5	0.8	0.8
Experience of domestic violence (Average score)	Highest	5.1	5.0	4.8	5.1	4.8	4.2	4.8	5.0	4.8	5.3	4.6	4.8	4.5
	Lowest	4.2	4.6	4.3	4.4	4.3	3.3	4.2	3.4	4.7	4.0	4.1	4.3	3.9
	Median	5.0	4.7	4.5	4.6	4.4	3.6	4.2	4.0	4.8	4.2	4.6	4.4	4.0
	S.D	0.5	0.2	0.2	0.4	0.3	0.5	0.3	0.8	0.1	0.7	0.3	0.2	0.3
	Index	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.4	0.0	0.3	0.1	0.1	0.2
Average education (Average yearsof schooling)	Highest	6.2	5.8	4.2	4.8	3.9	7.1	4.5	5.3	5.3	5.6	7.4	6.0	5.2
	Lowest	5.3	4.9	4.1	3.6	2.9	6.4	4.2	5.2	4.8	4.9	7.1	5.3	4.7
	Median	*6.0*	*5.3*	*4.2*	*4.0*	*3.7*	*6.8*	*4.4*	*5.2*	*4.9*	*5.4*	*7.3*	*5.8*	*4.8*
	SD	0.5	0.4	0.1	0.6	0.5	0.4	0.2	0.1	0.3	0.4	0.1	0.4	0.3
	Index	0.1	0.2	0.0	0.3	0.3	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
Age ending with 0 or5 (Percentage)	Highest	28.8	25.8	23.8	25.0	24.5	29.6	31.2	34.1	28.8	27.8	26.5	24.5	33.1
	Lowest	20.3	17.1	18.9	22.4	19.4	26.6	28.1	27.0	26.1	24.7	22.1	20.7	26.4
	Median	22.0	18.4	23.0	24.1	23.0	27.9	31.0	33.1	28.5	24.7	25.9	21.8	32.0
	SD	4.5	4.7	2.6	1.3	2.6	1.5	1.7	3.9	1.5	1.8	2.4	1.9	3.6
	Index	0.4	0.4	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2
Modern contraceptive use (Percentage)	Highest	32.7	43.8	41.2	35.5	39.7	52.6	50.5	48.3	46.7	44.9	48.5	44.4	51.8
	Lowest	30.3	42.3	34.8	28.6	33.7	48.6	45.9	45.4	44.6	44.2	39.5	36.4	41.5
	Median	32.5	42.7	38.2	31.3	38.9	49.1	50.0	47.9	45.4	44.9	43.7	38.0	44.4
	S.D	1.4	0.8	3.2	3.4	3.3	2.2	2.5	1.6	1.1	0.4	4.5	4.2	5.3
	Index	0.1	0.0	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.2	0.2	0.2

Table 2C: Maximum and minimum percentage or score, median percentage or score, standard deviation and index value for each team of interviewers by the six selected variables and by state, 2005-06

North East Region		Sikkim				Arunachal Pradesh		Mizoram				Tripura				Megha-laya	Assam			
Team number (TN)		**TN1**	**TN2**	**TN3**	**TN4**	**TN3**	**TN5**	**TN2**	**TN3**	**TN4**	**TN5**	**TN1**	**TN2**	**TN3**	**TN4**	**TN5**	**TN1**	**TN2**	**TN3**	**TN5**
Number of respondents		535	479	569	527	475	212	250	356	301	295	487	528	380	450	377	776	741	742	737
First intercourse at first union (Percentage)	Highest	67.1	72.2	73.0	67.7	74.4	70.8	69.2	43.7	53.5	61.4	78.8	79.9	80.8	62.7	65.8	78.6	76.5	74.3	76.9
	Lowest	61.9	64.3	49.4	66.3	67.7	51.9	66.7	40.2	36.0	53.6	64.4	65.4	77.0	4.4	55.6	72.9	72.5	66.3	70.8
	Median	63.9	67.0	65.8	66.9	67.8	64.7	67.2	40.8	45.1	57.3	73.7	66.4	77.7	42.6	60.9	74.4	75.7	71.9	71.3
	SD	2.6	4.0	12.1	0.7	3.8	9.6	1.3	1.9	8.8	3.9	7.3	8.1	2.1	29.6	5.1	3.0	2.1	4.1	3.4
	Index	0.1	0.1	0.4	0.0	0.1	0.3	0.0	0.1	0.4	0.1	0.2	0.2	0.0	1.6	0.2	0.1	0.1	0.1	0.1
Wife beating justified score (Average score)	Highest	2.6	2.2	3.2	2.6	2.9	2.6	2.7	2.8	3.7	3.4	3.1	1.9	1.7	2.3	0.8	1.3	2.1	2.4	1.9
	Lowest	1.6	1.6	2.2	2.2	1.8	2.1	1.2	2.5	0.5	2.4	1.1	0.1	1.4	0.9	0.7	0.4	0.6	1.7	0.3
	Median	1.9	2.2	2.4	2.3	2.3	2.5	1.6	2.8	2.2	2.9	1.2	1.6	1.7	1.5	0.7	1.1	1.0	1.9	1.4
	SD	0.5	0.3	0.5	0.2	0.5	0.3	0.8	0.2	1.6	0.5	1.1	0.9	0.1	0.7	0.1	0.5	0.7	0.4	0.8
	Index	0.5	0.3	0.4	0.2	0.5	0.2	0.8	0.1	1.5	0.4	1.1	1.4	0.2	0.9	0.2	1.0	1.2	0.3	1.3
Experience of domestic violence (Average score)	Highest	4.6	4.7	5.5	4.4	5.1	4.1	4.2	5.0	5.1	4.9	5.5	5.5	4.6	5.2	5.4	4.0	4.3	5.4	4.9
	Lowest	4.5	3.8	4.2	4.1	4.9	3.0	2.6	4.0	4.4	3.7	3.7	3.9	3.9	4.1	4.8	3.9	4.1	4.7	3.9
	Median	4.5	4.4	4.6	4.4	5.0	3.9	3.9	4.7	5.1	4.4	4.9	4.2	4.3	4.5	5.3	3.9	4.2	5.2	4.2
	S.D	0.0	0.5	0.7	0.1	0.1	0.6	0.9	0.5	0.4	0.6	0.9	0.8	0.3	0.6	0.3	0.1	0.1	0.4	0.5
	Index	0.0	0.2	0.3	0.1	0.0	0.3	0.5	0.2	0.2	0.3	0.4	0.3	0.1	0.2	0.1	0.0	0.0	0.1	0.2
Average education (Average years of schooling)	Highest	6.9	6.8	6.5	6.9	5.2	2.9	9.5	7.9	7.7	8.0	5.8	6.1	6.3	6.3	6.9	6.1	6.1	6.1	6.6
	Lowest	6.4	4.9	5.7	5.9	4.5	2.3	7.5	7.8	7.1	7.3	4.9	5.4	5.7	6.2	6.0	5.7	5.6	5.4	5.5
	Median	6.7	6.2	6.4	6.8	5.1	2.5	8.3	7.8	7.1	7.5	5.1	5.7	6.0	6.3	6.5	5.8	5.9	6.1	5.7
	SD	0.2	1.0	0.4	0.6	0.4	0.3	1.0	0.0	0.3	0.4	0.5	0.4	0.3	0.1	0.4	0.2	0.2	0.4	0.6
	Index	0.1	0.3	0.1	0.2	0.2	0.2	0.2	0.0	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2
Age ending with 0 or5 (Percentage)	Highest	*25.7*	*26.9*	*23.7*	*24.6*	29.1	33.8	31.9	30.8	27.0	34.5	22.2	29.5	26.7	25.0	29.0	28.2	28.4	35.7	32.0
	Lowest	21.6	23.6	21.4	21.0	19.6	13.8	30.5	20.2	21.6	19.8	19.0	20.7	19.4	23.6	27.5	24.4	23.1	33.1	28.5
	Median	25.0	26.2	21.6	24.0	24.8	30.4	30.8	24.8	22.2	22.6	19.2	26.3	22.3	24.6	28.6	24.8	24.7	34.3	31.4
	SD	2.2	1.7	1.3	1.9	4.7	10.7	0.8	5.3	3.0	7.8	1.8	4.5	3.6	0.7	0.8	2.1	2.7	1.3	1.9
	Index	0.2	0.1	0.1	0.2	0.4	0.8	0.0	0.4	0.2	0.6	0.2	0.3	0.3	0.1	0.1	0.1	0.2	0.1	0.1
Modern contraceptive use (Percentage)	Highest	32.3	38.0	37.9	31.4	33.3	26.5	53.8	47.9	39.0	41.8	39.7	34.2	35.5	35.9	21.0	23.0	20.2	24.8	17.7
	Lowest	30.6	30.4	29.2	28.0	32.9	22.8	38.1	32.5	33.3	37.6	30.8	30.7	33.3	23.0	15.0	15.2	12.4	20.3	15.9
	Median	31.7	31.0	37.9	28.2	32.9	24.6	43.7	35.8	36.3	38.1	35.9	31.0	34.5	30.0	16.5	19.4	17.8	23.7	16.4
	S.D	0.9	4.2	5.0	1.9	0.3	1.8	8.0	8.1	2.8	2.3	4.4	1.9	1.1	6.5	3.1	3.9	4.0	2.3	0.9
	Index	0.1	0.2	0.3	0.1	0.0	0.1	0.3	0.4	0.2	0.1	0.2	0.1	0.1	0.4	0.3	0.4	0.5	0.2	0.1

Table 2D: Maximum and minimum percentage or score, median percentage or score, standard deviation and index value for each team of interviewers by the six selected variables and by state, 2005-06

East Region		West Bengal								Jharkhand		Odisha	Bihar			
Team number (TN)		TN1	TN2	TN4	TN5	TN7	TN8	TN9	TN10	TN1	TN4	TN3	TN2	TN3	TN4	TN5
Number of respondents		959	792	468	784	694	596	704	653	668	507	1067	608	606	641	674
First intercourse at first union (Percentage)	Highest	68.8	81.9	93.9	78.7	80.8	81.3	77.7	85.7	65.4	42.0	74.8	85.0	85.3	81.3	82.6
	Lowest	49.1	77.8	81.2	74.0	78.4	77.5	75.5	72.5	35.0	32.2	70.5	82.1	75.9	67.6	80.2
	Median	58.0	80.3	85.6	76.4	78.9	78.5	76.8	73.2	57.6	39.0	73.1	84.1	79.8	80.2	80.3
	SD	9.9	2.0	6.5	2.3	1.3	2.0	1.1	7.4	15.8	5.0	2.1	1.5	4.7	7.6	1.4
	Index	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.6	0.3	0.1	0.0	0.1	0.2	0.0
Wife beating justified score (Average score)	Highest	1.2	1.4	1.5	1.6	0.7	0.4	1.9	2.0	3.4	2.6	4.0	1.9	0.9	2.0	1.7
	Lowest	0.5	0.8	0.2	0.6	0.2	0.1	1.3	1.0	1.3	1.6	2.3	1.0	0.1	1.2	0.7
	Median	0.5	0.9	1.0	0.9	0.7	0.2	1.8	1.4	1.7	2.1	2.3	1.7	0.7	1.2	1.1
	SD	0.4	0.3	0.7	0.5	0.3	0.2	0.4	0.5	1.1	0.5	1.0	0.5	0.4	0.5	0.5
	Index	0.8	0.6	1.4	0.9	1.0	1.1	0.4	0.7	1.0	0.5	0.6	0.6	1.3	0.6	0.8
Experience of domestic violence (Average score)	Highest	5.3	4.5	3.3	4.3	4.1	4.7	4.5	5.5	4.7	4.0	4.5	5.9	5.0	5.4	5.8
	Lowest	4.3	4.2	2.5	4.2	3.8	4.0	4.3	5.0	4.2	3.8	4.2	4.2	4.8	5.0	4.8
	Median	4.8	4.2	3.2	4.2	3.8	4.3	4.4	5.0	4.4	3.9	4.4	4.4	5.0	5.1	5.2
	S.D	0.5	0.2	0.5	0.0	0.2	0.4	0.1	0.3	0.2	0.1	0.1	0.9	0.1	0.2	0.5
	Index	0.2	0.1	0.3	0.0	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.4	0.0	0.1	0.2
Average education (Average yearsof schooling)	Highest	6.6	4.9	5.5	5.6	6.8	6.9	5.1	6.3	3.7	2.6	5.5	3.8	3.5	4.8	3.8
	Lowest	6.0	4.7	5.0	5.0	6.3	6.1	4.6	4.8	3.5	2.1	4.7	3.2	3.3	4.2	3.1
	Median	6.5	4.9	5.4	5.2	6.7	6.4	4.7	6.0	3.7	2.3	5.3	3.2	3.5	4.7	3.6
	SD	0.3	0.1	0.2	0.3	0.3	0.4	0.2	0.8	0.1	0.2	0.4	0.4	0.1	0.3	0.3
	Index	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.2
Age ending with 0 or5 (Percentage)	Highest	26.4	26.2	33.0	30.3	30.2	24.7	25.0	25.7	24.0	24.4	24.9	24.9	29.7	24.3	28.8
	Lowest	21.5	23.9	21.2	27.0	21.8	19.8	20.6	18.2	19.5	21.1	22.0	21.3	25.7	20.0	24.0
	Median	23.1	24.8	28.1	29.3	23.2	21.4	21.2	22.9	21.4	23.7	22.2	22.6	25.7	24.0	24.4
	SD	2.5	1.2	5.9	1.7	4.5	2.5	2.4	3.8	2.3	1.7	1.6	1.8	2.4	2.4	2.7
	Index	0.2	0.1	0.4	0.1	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2
Modern contraceptive use (Percentage)	Highest	33.8	43.0	39.2	43.0	39.3	39.0	43.0	37.5	30.9	23.1	36.0	21.8	24.0	32.9	28.1
	Lowest	28.9	34.5	27.3	35.0	33.7	36.0	37.7	35.7	25.1	21.4	30.9	18.8	17.3	26.2	23.7
	Median	30.0	38.7	36.2	35.4	38.8	37.6	39.4	37.3	25.5	22.0	31.8	19.2	23.7	29.0	27.3
	S.D	2.6	4.2	6.2	4.5	3.1	1.5	2.7	1.0	3.2	0.9	2.7	1.6	3.8	3.4	2.3
	Index	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.0	0.2	0.1	0.2	0.1	0.3	0.2	0.2

Table 2E: Maximum and minimum percentage or score, median percentage or score, standard deviation and index value for each team of interviewers by the six selected variables and by state, 2005-06

West Region		Gujarat						Maharashtra		Goa	
Team number (TN)		TN1	TN2	TN3	TN4	TN5	TN6	TN6	TN9	TN3	TN6
Number of respondents		581	575	660	631	607	621	463	580	568	693
First intercourse at first union (Percentage)	Highest	77.4	59.5	74.7	84.8	77.9	71.5	64.2	64.6	68.5	29.8
	Lowest	51.7	20.7	62.8	59.5	73.3	37.1	58.8	36.8	66.2	9.2
	Median	72.3	53.4	71.8	76.0	75.9	61.5	64.0	60.0	68.2	27.9
	SD	11.4	20.9	6.2	10.6	2.3	17.7	3.1	14.9	1.2	11.4
	Index	0.4	0.9	0.2	0.3	0.1	0.6	0.1	0.5	0.0	0.9
Wife beating justified score (Average score)	Highest	3.8	3.2	2.8	2.2	1.8	2.5	4.2	3.2	1.2	2.1
	Lowest	1.7	2.2	0.9	1.2	1.0	2.4	1.4	0.4	0.3	1.0
	Median	2.6	2.7	1.7	1.7	1.6	2.4	1.5	0.6	0.8	1.9
	SD	0.9	0.5	1.0	0.5	0.5	0.0	1.6	1.6	0.4	0.6
	Index	0.8	0.4	1.1	0.6	0.6	0.0	1.2	2.0	1.1	0.6
Experience of domestic violence (Average score)	Highest	6.2	4.2	4.3	6.1	4.3	4.4	4.4	4.3	4.5	5.1
	Lowest	*3.8*	*3.5*	*3.6*	*3.4*	*3.9*	*4.0*	*2.6*	*3.9*	*4.3*	*4.3*
	Median	4.7	3.6	3.7	3.8	4.1	4.2	4.3	4.2	4.5	4.7
	S.D	1.1	0.4	0.3	1.2	0.2	0.2	1.0	0.2	0.1	0.4
	Index	0.5	0.2	0.2	0.6	0.1	0.1	0.5	0.1	0.1	0.2
Average education (Average years of schooling)	Highest	4.7	5.5	6.1	8.1	6.9	5.7	8.1	8.6	9.5	9.7
	Lowest	4.2	5.3	5.9	6.0	6.0	4.8	4.2	8.0	9.0	8.5
	Median	4.3	5.5	5.9	6.6	6.7	5.2	7.6	8.4	9.1	9.5
	SD	0.2	0.1	0.1	0.9	0.5	0.5	2.1	0.3	0.2	0.6
	Index	0.1	0.0	0.0	0.3	0.1	0.2	0.6	0.1	0.0	0.1
Age ending with 0 or5 (Percentage)	Highest	29.5	23.2	26.6	29.7	24.6	29.8	22.1	26.3	26.9	22.9
	Lowest	24.1	18.7	19.2	22.9	21.5	23.2	15.9	16.7	21.6	18.7
	Median	24.6	22.1	20.1	24.2	23.1	25.4	20.0	19.8	23.9	18.9
	SD	2.5	2.3	4.0	3.1	1.5	3.4	3.2	4.9	2.7	2.4
	Index	0.2	0.2	0.3	0.3	0.1	0.3	0.3	0.5	0.2	0.2
Modern contraceptive use (Percentage)	Highest	48.2	45.1	40.8	55.0	44.9	46.9	48.0	54.9	28.9	29.4
	Lowest	27.6	42.4	37.2	35.1	41.2	44.3	43.2	43.3	22.8	19.1
	Median	45.1	43.5	38.9	47.2	42.6	44.4	44.7	43.4	25.0	25.0
	S.D	9.6	1.4	1.8	8.3	1.9	1.5	2.5	6.7	3.1	5.2
	Index	0.5	0.1	0.1	0.4	0.1	0.1	0.1	0.2	0.2	0.4

Table 2F: Maximum and minimum percentage or score, median percentage or score, standard deviation and index value for each team of interviewers by the six selected variables and by state, 2005-06

South Region		Karnataka					Kerala					
Team number (TN)		TN1	TN2	TN4	TN7	TN10	TN1	TN2	TN3	TN4	TN5	TN6
Number of respondents		543	639	471	568	498	709	563	524	626	556	581
First Intercourse at first union (Percentage)	Highest	77.3	81.6	80.3	81.0	81.5	80.0	74.5	72.2	72.0	70.0	77.1
	Lowest	65.6	68.3	75.4	74.1	35.5	32.3	64.5	27.2	54.6	31.7	5.9
	Median	72.5	79.1	76.8	74.7	78.9	35.5	65.7	50.5	70.3	62.9	45.8
	SD	5.9	7.1	2.5	3.8	25.9	26.7	5.4	22.5	9.5	20.4	35.7
	Index	0.2	0.2	0.1	0.1	0.7	1.0	0.1	0.9	0.3	0.7	1.7
Wife beating justified score (Average score)	Highest	1.5	3.1	2.4	4.0	2.7	2.8	1.8	2.8	2.9	1.4	2.3
	Lowest	0.4	1.2	1.4	2.0	1.6	1.4	1.3	0.8	2.4	0.7	1.5
	Median	1.5	2.0	2.3	2.9	2.0	2.5	1.4	2.5	2.6	1.2	2.1
	SD	0.6	0.9	0.6	1.0	0.6	0.8	0.2	1.1	0.2	0.3	0.4
	Index	1.0	0.9	0.5	0.7	0.5	0.7	0.3	1.0	0.2	0.6	0.4
Experience of domestic violence (Average score)	Highest	5.3	4.6	4.3	4.9	6.3	4.3	4.6	4.5	4.7	4.4	5.2
	Lowest	4.6	3.1	3.4	4.3	4.1	4.1	4.1	3.9	3.8	4.1	4.0
	Median	4.8	3.4	4.0	4.7	4.2	4.3	4.3	4.0	3.9	4.2	4.2
	S.D	0.4	0.8	0.5	0.3	1.2	0.2	0.3	0.3	0.5	0.1	0.6
	Index	0.1	0.4	0.2	0.1	0.4	0.1	0.1	0.1	0.2	0.1	0.3
Average education (Average years of schooling)	Highest	6.2	7.3	8.0	5.1	8.2	10.0	10.1	9.5	9.5	9.2	9.7
	Lowest	5.5	7.1	5.5	4.6	5.6	9.4	9.6	9.1	9.2	9.0	9.3
	Median	5.6	7.3	6.4	4.6	5.6	9.6	9.8	9.1	9.2	9.2	9.5
	SD	0.4	0.1	1.3	0.3	1.5	0.3	0.2	0.2	0.2	0.1	0.2
	Index	0.1	0.0	0.4	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0
Age ending with 0 or5 (Percentage)	Highest	23.1	23.2	21.5	24.2	23.7	22.1	23.5	21.5	22.8	28.1	23.8
	Lowest	14.8	17.4	19.3	22.0	18.8	19.1	20.7	16.0	17.6	23.6	19.6
	Median	18.3	21.9	19.7	22.2	22.6	21.0	23.5	18.3	22.2	23.8	22.4
	SD	4.2	3.1	1.2	1.2	2.6	1.5	1.6	2.8	2.9	2.6	2.2
	Index	0.4	0.3	0.1	0.1	0.2	0.1	0.1	0.3	0.3	0.2	0.2
Modern contraceptive use (Percentage)	Highest	47.5	56.1	55.4	55.6	50.2	46.4	52.7	53.8	50.9	41.0	44.4
	Lowest	34.4	48.7	45.9	47.3	22.6	41.6	39.0	48.5	39.5	37.5	40.5
	Median	46.7	51.3	47.2	50.7	44.5	43.0	41.0	49.7	49.2	40.1	42.1
	S.D	7.3	3.8	5.1	4.2	14.6	2.5	7.4	2.7	6.1	1.8	1.9
	Index	0.3	0.1	0.2	0.2	0.7	0.1	0.3	0.1	0.2	0.1	0.1

Table 3: Total number of interviewing teams by state and the number of interviewing teams in which the interviewer with the highest percentage or score differed significantly from the interviewer with the lowest percentage or score by the six selected variables and by state, 2005-06

Region / State	Total no. of teams	Number of interviewing teams with significantly different percentages or scores[1]					
		First intercourse at first union[2]	Wife beating justified score[3]	Experience of domestic violence[3]	Average education[3]	Age ending with 0 or 5[2]	Modern contraceptive use[2]
North							
Jammu and Kashmir	**6**	4	5	0	0	1	1
Himachal Pradesh	**6**	5	6	0	1	1	1
Punjab	**5**	5	5	2	1	1	1
Uttarakhand	**4**	2	3	1	1	2	1
Haryana	**5**	4	5	1	1	3	2
Delhi	**1**	1	0	0	0	1	0
Rajasthan	**5**	2	5	2	1	3	1
Central							
Uttar Pradesh	**1**	1	1	1	0	0	0
Chhattisgarh	**4**	0	2	0	1	1	0
Madhya Pradesh	**8**	0	8	2	0	0	1
North East							
Sikkim	**4**	1	3	1	1	0	0
Arunachal Pradesh	**2**	1	1	0	0	2	0
Mizoram	**4**	1	3	0	1	1	1
Tripura	**4**	3	3	2	0	0	1
Meghalaya	**1**	0	0	0	0	0	0
Assam	**4**	1	3	1	1	0	2
East							
West Bengal	**8**	2	8	1	0	1	1
Jharkhand	**2**	2	2	0	0	0	0
Odisha	**1**	0	1	0	0	0	0
Bihar	**4**	2	4	2	0	0	0
West							
Gujarat	**6**	5	5	2	1	1	2
Maharashtra	**2**	1	2	0	1	0	0
Goa	**2**	1	2	0	1	0	1
South							
Karnataka	**5**	2	5	2	2	0	1
Kerala	**6**	6	5	1	0	0	2
Total	**100**	**52**	**87**	**21**	**14**	**18**	**19**

[1]Teams for which the interviewer with the highest percentage or score differed significantly from the interviewer with the lowest percentage or score
[2]Based on the results of binary logistic regression
[3]Based on the results of one-way analysis of variance