Understanding and addressing refusals: Lessons from modern slavery surveys at the national and state level in India

Jacqueline Joudo Larsen*
Walk Free Foundation, Perth, Australia – jjoudolarsen@walkfreefoundation.org

Pablo Diego-Rosell
Gallup, Castellón de la Plana, Spain – pablo_diego-rosell@gallup.com

Abstract

Measuring the extent of modern slavery is a difficult undertaking, however recent research has focused on testing and refining the use of household surveys. Representative surveys have proven to be an adequate estimation methodology in countries where the problem is significant, and that victims are likely to be identified in a random sample of the national population. Nonetheless, these surveys involve asking people a series of very sensitive questions about experiences of forced labour and forced marriage, some of which are answered more willingly than others. Since 2014, a total of 54 surveys have been conducted through the Gallup World Poll, with equivalent surveys undertaken in 15 of India's states. Across all national surveys, refusal rates were below 10 percent, however the India state surveys had a substantially higher refusal rate of 86 percent. An assessment of refusal bias was undertaken to determine the most credible approach by which the estimate for India could be adjusted to account for the refusal rate.

Keywords: nonresponse error; modern slavery; postsurvey adjustment; household surveys.

1. Introduction

Nationally representative household surveys have been used for decades to estimate crime victimization (Ennis, 1967; Hough & Mayhew, 1983; Van Dijk, Mayhew & Killias, 1990) in a bid to quantify the 'dark figure' of crime – crimes that are not recorded in official statistics. More recently, the method has been applied to measure the prevalence of various forms of modern slavery (De Cock 2013, Pennington et al, 2009; Walk Free Foundation 2014); a crime with a substantial gap between the number of victims recorded by police and NGOs, and anecdotal reports of the scale. Although the use of the methodology in this context is in its infancy and requires further refinement, several rounds of surveys indicate that the approach is promising and has indeed brought us closer to measuring what had been considered unmeasurable.

In 2014, Walk Free Foundation trialled random sample household surveys to estimate the prevalence of modern slavery at the national level in seven countries. The surveys of modern slavery were conducted as part of the Gallup World Poll which is representative of 98 percent of the world's adult population, including the entire civilian, non-institutionalised population, aged 15 and older. To date, 54 surveys have been conducted, interviewing more than 43,000 respondents in 53 languages and 47 countries. Equivalent surveys have been undertaken in 15 of India's states. Measurement errors were not consistent across the surveys and the availability of both national and state level surveys in India provided an opportunity to understand these differences, and explain some causes of refusals.

2. Development and testing of the modern slavery module

Lessons learned in household surveys conducted in other fields, and about other forms of crime have enabled the rapid development and testing of items on modern slavery, however measurement errors remain. Steps were taken to reduce response errors by following processes to ensure quality, and

considering factors that influence response rates such as, population coverage, method of data collection, the response load imposed through length, difficulty, and sensitivity, questionnaire design and layout, language used, and relevant cultural contexts. Cognitive testing was undertaken in six of the seven survey countries in order to test the methods used and get an indication of response rates. Results of testing were generally positive, although some changes were made to the instrument to improve clarity and reduce response errors.

The instrument begins with questions about network members to establish network size. This is followed by a set of four filter questions which ask about experiences, of the respondent or those of their immediate family members, that fall into two broad categories: unfree labour, and forced marriage:

1. Have you or has anyone in your immediate family ever been forced to work by an employer or a recruiter?
2. Have you or has anyone in your immediate family ever been forced to work to repay a debt with an employer or recruiter and were not allowed to leave?
3. Have you or has anyone in your immediate family ever been offered one kind of work, but then were forced to do something else and not allowed to leave?
4. Have you or has anyone in your immediate family ever been forced to marry?

Three additional filter questions were added to surveys conducted in 2016 in order to better capture cases involving inherited debt and the experiences of children:

5. Have you or has anyone in your immediate family ever been forced to work to repay a debt that you or they inherited?
6. Have you or has anyone in your immediate family, including children, ever had to work in order to help another family member who was forced to work by an employer?
7. Have you or has anyone in your immediate family, including children, ever been forced to work for an employer so that another person would receive a job, land, money or other resources?

The filter questions were deliberately broad to capture as many cases of modern slavery as possible within the sample. When a respondent answers ‘yes’ to any of the screening questions about unfree work or forced marriage, on behalf of themselves or an immediate family member, they are then asked a series of follow up questions, including who the victim was, when and where it occurred, the ways in which the victim/s were kept from leaving that work, the type of work they were forced to do, and in the case of forced marriage, whether they consented to the marriage[1]. This additional information was collected to reduce the likelihood of false positives and help make decisions about appropriate cut off points for estimation.

3. Refusals in the national and state surveys in India

A nationally representative survey was implemented in India as part of the Gallup World Poll in 2015, with a total of 3000 respondents. Given the very large size of the Indian population, geographic differences and the potentially large impact on the overall result, and to ensure the India result was as robust as possible, further surveys were commissioned. Together with the World Bank and FAO, the Walk Free Foundation commissioned Gallup to run a bespoke survey in 15 States, with a total of 14,000 respondents. This covers, at a minimum, 80 percent of the Indian population.

Prior to the India state surveys, there had been little concern regarding response rates in the national surveys conducted to date. Across all national surveys, refusal rates had been below 10 percent,

[1] A copy of the full instrument is available on the Global Slavery Index website.

reaching a maximum for any given country of around 30 percent. In the India national survey, the refusal rate was 0 percent. In the India state surveys, the level of refusals was unusually high with nearly 86 percent of respondents who passed the slavery filter questions refusing to answer the question that follows, which seeks information (in general terms) about who the victim was[2]. Without this information, a case does not pass the filter.

Analysis of results confirms that in the India State surveys, the equivalent of 35 million individuals in India *who report a case of forced labour/forced marriage either of themselves or in their family network* are identified. But the equivalent of 30 million respondents refuse to identify the member of their family network who was a victim. Applying our usual counting rules, the estimate of prevalence arrived at appears unrealistically low. The number of confirmed victims is about half (2.6 million) of the equivalent of 5 million respondents who were willing to identify a victim. This equates to a proportion of 0.2% of the Indian population having been in some form of forced labour or forced marriage, in the last 5 years.

Table 1: Refusals in the India State survey process

	Forced Labour (million)	Forced Marriage (million)	Total (million)
Pass filter	34.2	4.5	35.2
Refused individual	29.9	3.0	30.2
Identified individual	4.3	1.5	5.0
Confirmed Estimate	2.4	0.1	2.6

While survey research on modern slavery in India is sparse, qualitative literature points to a high incidence of bonded and forced labour, and forced marriage. Further, the high rate of refusals - with many people having passed the initial filter question – in itself, provides strong information. Refusal to answer likely suggests the sensitivity of the topic in India and the difficulties in dealing with a topic which is a very real experience for many people. To ensure an accurate estimate, several options for factoring the refusals into the final estimate were considered. An assessment of refusal bias was undertaken to determine the most credible approach.

Defining refusals

As data on the slavery-status of refusers doesn't exist, refusal bias cannot be observed directly. However, potential refusal bias can be identified by establishing whether 'refusers' are significantly different from 'respondents' along dimensions expected to correlate with slavery (socio-economic status, caste, well-being, etc)[3]. 'Refusers' are those respondents who said 'yes' to any of the filter questions, but subsequently refused answering follow-up items identifying their familial relationship to the victim. In total, 504 individuals passed the filter questions for either forced marriage or forced labor, but only 132 (26%) identified their relationship with the victim.

5. Predictors of refusal

[2] **P8.** Could you please tell me who in your immediate family was in any of these situations? You don't have to tell me their names, just refer to them by their relationship to you: for example, it could be you, your spouse or partner, your son, daughter, brother, sister, mother or father.

[3] To ensure that the analysis is representative of the population, all analyses hereafter have been conducted with weights to the projected population ('projwt'). We adjust sampling errors and statistical significance tests for the complex sample design (stratification and clustering) using Taylor series linearization.

Refusers do not seem to be more likely to have refused other questions, although the refusal rate on other questions is always in the low single digits. We examined descriptive statistics for variables that are demographically important or hypothesized to correlate with slavery status, including urban/rural setting, gender, education level, marital status, class/caste, feelings about household income, gender of head of household, not enough money for food, religion, age, size of family, number of siblings, and number of children. Since the differences observed could be due to random variance, we conduct univariate statistical significance tests for each variable ('univ'). Since some of these variables are correlated (e.g. religion/caste, feelings about household income, size of family), multivariate statistical significance tests were conducted for all variables in combination.

The multivariate model shows an $R^2 = .338$, indicating that about 34 percent of the variance in response status is accounted by the factors included. While this still leaves plenty of unexplained variance, it represents a robust model. Adjusting for other covariates, refusers are not different from respondents in their education level, feelings on standard of living, gender, age, caste, family size etc. However refusers are more likely to (i) live in a rural setting, (ii) not have been able to afford food in the last 12 months, and (iii) to have family members (particularly parents) living within their state/country.

The fact that the Indian state surveys had seven filter questions in comparison to three on the World Poll may have increased the unease of respondents building up to the follow-up questions on forced labour. Table 2 shows the percentage of 'Yes' responses for each filter question for P8 refusers compared to P8 respondents. The table suggests that respondents are less willing to say yes with each subsequent question, and refusers stop saying yes and drop off more quickly than non-refusers. It is possible that this trend is because more people are in the first situations (P5/P6), and fewer are in the latter situations (P7B/P7C), but the fact that the refusers drop off so significantly suggest otherwise.

Table 2. Response rates by filter question

Question	P8 respondents	P8 refusers
P5_1 Forced to Work by Employer or Recruiter	51%	69%
P6_1 Forced to Work to Repay a Debt with an Employer or Recruiter	56%	34%
P7 Forced to do Some Other Kind of Work and Not Allowed to Leave	30%	18%
P7_A Have you or has anyone in your immediate family ever been forced to work to repay a debt that you or they inherited?	37%	11%
P7B Have you or has anyone in your immediate family, including children, ever had to work in order to help another family member who was forced to work by an employer?	32%	13%
P7C Have you or has anyone in your immediate family, including children, ever been forced to work for an employer so that another person would receive a job, land, money or other resources?	26%	8%

Lastly, the field team reported that initial interviews in a given location had the best response rates, but once word got around about the survey, refusal rates increased for the Walk Free Foundation module in subsequent interviews within the Primary Sampling Unit (PSU). We would anticipate this effect to be more marked in rural locations, where tightly-knit community links and community leaders would facilitate the refusal propagation effect.

Figure 1 shows the refusal rates by the order in which a questionnaire was administered in a given PSU. Refusal rates clearly increase as the length of stay in the PSU increases, with a particularly

marked effect in rural areas, where refusal rates peak after just three questionnaires have been completed in the PSU. This intra-cluster dynamic is consistent with the refusal propagation effect described by the local research partner carrying out the surveys, although the similar effect in urban areas was unexpected.

Figure 1. Refusal Rates by Questionnaire Order within PSU

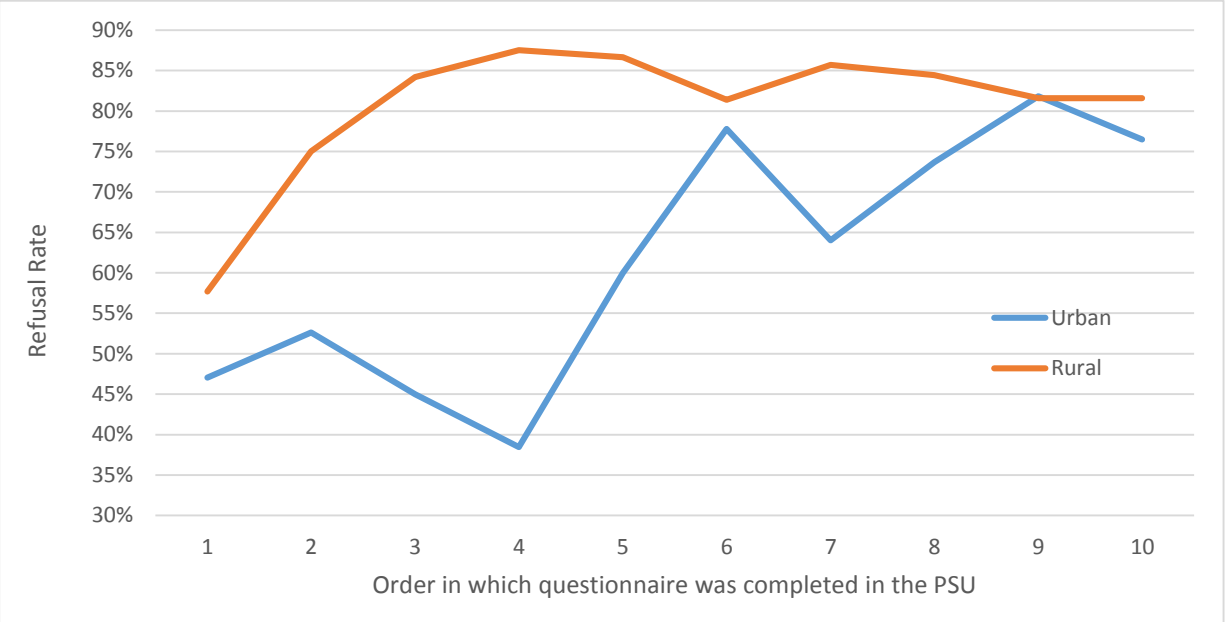

Table 3 presents a more formal test of the refusal propagation hypothesis, considering the effect of questionnaire order on refusal rates, as well as the interaction between questionnaire ordering and setting (urban/rural), accounting for the complex sample design (weights, stratification and clustering). The results of the test are significant for the questionnaire ordering effect and the setting, with lower refusals expected in urban areas, but we find no significant interaction between setting and questionnaire ordering, indicating that the refusal slope is similar across settings, after controlling for the differences in average refusal levels.

Table 3. Test of Model Effects

Source	df1	df2	Wald F	Sig.
(Corrected Model)	3.000	196.000	5.100	.00**
(Intercept)	1.000	198.000	85.824	.00**
WP7572	1.000	198.000	4.954	.03*
psu_order	1.000	198.000	11.804	.00**
WP7572 * psu_order	1.000	198.000	3.006	.08

a. Model: refuse_any = (Intercept) + WP7572 + psu_order + WP7572 * psu_order

*p<0.05; **p<0.01

Results are consistent with the refusal propagation effect described by our local partner, but with the data available we cannot rule out alternative hypotheses, such as interviewer fatigue or rush. It is possible that the increase in refusal rates has an earlier onset in rural areas due to social refusal propagation effects, whereas the late peak in refusals, peaking around questionnaire six in urban areas is driven by a combination of factors.

5. Conclusions

At the outset, three options for factoring the refusal rate into the estimate for India were considered. The first involved basing the estimate on the number of people who passed the filter question. While this is a clear and simple approach, in order to reduce the number of false positives and ensure the estimates are conservative, very specific counting rules are required to be applied to all cases that pass a filter. This approach was not pursued as it was likely to lead to an over-estimate.

The second involved using the estimate of people who passed the filter as the base for the final estimator and adjusting for refusals. For example, 35.2 million respondents pass the initial filter, but only 5 million are willing to provide more information. Of these 5 million, 2.6 million are confirmed as cases of forced labour or forced marriage, meaning that it takes about 1.92 cases that pass the filter to identify one 'positive/confirmed case' of forced labour/marriage.

The third option involved using the initial filter responses as the base, adjusting for refusals, and applying the ratio of filtered cases to 'positive' from the India national survey. As there were no refusals in that survey, that ratio would not require an assumption of equal yields for reporting and non-reporting filtered cases. Calculated in this way, it takes about 2.55 cases that pass the filter to identify a 'positive/confirmed case'. One difficulty with this approach is that it involves using results from one survey to inform a set of different surveys, albeit in the same country and using the same survey questions. The application of this option would be warranted if there was a significant refusal bias.

Findings of the analysis of refusals support the hypothesis that refusers are generally more vulnerable, and therefore, more likely to be concealing a situation of slavery in their family. Also, if refusers are more likely to be rural, poor and live near their families, it is also possible they may be afraid to talk about the situation out of fear of something happening to their family, or their family finding out that they talked about sensitive family affairs. These findings are consistent with qualitative feedback from the field team, which strongly suggested that refusers are likely to have a true case of slavery in their family.

Based on the convergent evidence, we can expect that the ratio of filtered to confirmed cases would be lower for refusers than for respondents. If this is the case, the estimate of 18.3 million provided by the second option is therefore on the conservative side and was the preferred option as it represents the most accurate and defensible estimate available.

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