

**Bringing China to the Nonresponse Table:
Individual Determinants of Survey Nonresponse among Chinese Villagers**

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Short description:

The paper uses original data from a survey of Chinese villagers to examine the association between individual characteristics and nonresponse across questions that vary in their degree of political sensitivity.

Abstract:

Survey research is still relatively uncommon in China. While the effects of survey design and individual characteristics on nonresponse have been examined in developed countries, there has been scant research on conducting surveys in more challenging research environments, such as China. This paper provides analysis of nonresponse from a new, original survey of over 800 villagers conducted by the authors in China in 2012. The analysis examines the association between individual characteristics such as level of education, income, and membership in the Communist Party on nonresponse across different types of questions. Given the authoritarian political context, we expect more nonresponse for questions that are perceived as politically sensitive. Understanding nonresponse is fundamental in determining the value of a sample survey for inference. Therefore, substantive analysis of sample survey data needs to account for potential biases introduced by nonresponse. This paper furthers our understanding of potential bias in survey data in China and other challenging research contexts.

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I. Introduction

The conventional wisdom maintains that Chinese citizens have relatively high levels of trust in the central government, but low levels of trust in local government (Li 2013). As the story goes, the center has benefited from a widespread perception that Beijing's policies are well-intentioned and that local officials are to blame for improper implementation. Initial analysis of our survey of villagers supported this contention (see Figure 1).

[Figures 1 & 2 about here]

When nonresponse is taken into consideration, however, we find no significant difference between trust in central and local officials (see Figure 2). Rather, only 5 percent of respondents were willing to say that they did not trust central leaders, whereas that proportion reached 27 percent when asked about village leaders. Meanwhile, 28 percent of respondents declined to answer the question about trust in central leaders, whereas only 5 percent did not give a response for the question on trust in village leaders.² In this case, how the researcher addresses nonresponse can impact substantive conclusions about state–society relations.

Understanding nonresponse is fundamental to determining a sample survey's value for inference. Therefore, substantive analysis of sample survey data needs to account for potential biases introduced by item nonresponse, or non-substantial response (NSR). Through an analysis of the Health, Environmental Protection, and Society Survey (HEPS), conducted by the authors in the People's Republic of China in 2012, this paper furthers our understanding of nonresponse-induced bias by demonstrating that while item nonresponse can be mitigated through survey design, nonresponse is still higher among certain individuals, thereby introducing some bias in

² Figures 1 and 2 include respondents who completed the battery of questions regarding trust. If the respondent ended participation prior to reaching the relevant question, yielding an incomplete questionnaire, s/he is not included in these figures.

substantive analysis of survey results. The paper examines the association between individual characteristics (such as level of education, ethnicity, and membership in the communist party) and item nonresponse for questions of trustworthiness of political representatives and institutions.

Previous research on item nonresponse focuses on developed democracies where survey research is a well-established, rigorous practice and political scientists typically do not need to navigate a politically authoritarian environment. Best practices in survey research consider factors that impact NSR rates including language and question wording, the respondent's level of education, and enumerator interviewing techniques. In non-democracies, a limited amount of research has begun to assess the role of politically sensitive questions, sex, ethnicity, and other dynamics that may impact NSR differently in challenging research environments. The sources of NSR in developing countries and authoritarian regimes continue to be generally neglected. Prevailing beliefs among academic elites in China stem from preconceptions about marginal social groups rather than substantiated investigation of the sources of nonresponse and how to mitigate them.

To examine item nonresponse in a challenging research environment, this paper utilizes HEPS, an original survey of over 800 villagers in rural China, conducted by the authors in 2012.³ First, we find that item nonresponse can be significantly reduced through careful questionnaire design and enumerator training. We also find surprisingly low rates of NSR on politically sensitive questions; this finding substantiates our claim that survey research can be useful even in an authoritarian political setting. Second, through an analysis of questions related to trust in government, we identify individual-level determinants of NSR. While some of our findings confirm or provide additional nuance to existing theories, we also contradict some previous hypotheses that were based on outdated evidence.

³ For this paper, we are focused only on villager responses.

This paper is organized as follows. First, we review the research on nonresponse bias with a focus on survey research in China. Second, we examine item nonresponse in the HEPS survey and evaluate hypotheses to explain NSRs through individual characteristics. Finally, we discuss the effect of item nonresponse on substantive analysis and suggest future directions for understanding and reducing nonresponse in survey research in challenging research environments.

II. Nonresponse in Survey Research: Re-examining Assumptions and Cross-Country Comparisons

Nonresponse bias affects the inferential power of survey data. Item nonresponse is a crucial issue in survey methods, and has been from the beginning of quantitative survey research.⁴ First and foremost, researchers seek to reduce item nonresponse in order to ensure a representative sample and avoid the introduction of bias. Given that some NSRs are inevitable, researchers then seek to identify whether such nonresponse has occurred systematically such that it may bias substantive analyses. Nonresponse can impact analysis, but it also serves to highlight socially or politically sensitive questions; we can utilize relative NSR rates not only to identify these politically (or culturally) sensitive questions, but also to test what other factors might predict NSRs within the range of these questions.

There are two broad types of nonresponse: unit nonresponse and item nonresponse. Unit nonresponse occurs when the unit of the survey sample—the respondent—refuses or fails to participate in the survey, whatever the method of survey may be (e.g., telephone, face-to-face, or written). Unit nonresponse is not a central issue of concern for surveys conducted in China generally at this point, due to factors such as a higher proportion of surveys conducted as face-to-

⁴ See Krosnick, 2002, for an overview.

face interviews, and cultural expectations of acquiescence (Zhu 1996; Landry and Shen 2005; Ren 2009). By contrast, item nonresponse is more common in Chinese politics research (Zhu 1996; Ren 2009) and appears as a variable source of concern in the HEPS survey.

Item nonresponse, or as we defined it here, non-substantial response (NSR),⁵ can be defined as “the failure to obtain information for a question within an interview or questionnaire” (de Leeuw 2001) and can occur as a consequence of several characteristics associated with the respondent and/or the question. In this paper, we use the terms item nonresponse and non-substantial response interchangeably to indicate that the respondent has chosen “do not know” or “refuse to answer” in lieu of providing a substantive answer to the question. The following are some respondent characteristics have been demonstrated to be associated with item nonresponse: education, age, sex, and cognitive ability (e.g., Beatty and Herrmann, 2002). Enumerator characteristics are generally taken into consideration in reference to the dynamic between enumerator and respondent, such as relative level of comfort, or the enumerator’s skill in building trust (Groves et al., 2002). Relevant question characteristics include question topic, such as whether the question is knowledge- or opinion-based, and question format, such as closed-ended, ranking, or qualitative (e.g., Harmon 2001; Landry and Shen, 2005). For example, open-ended questions tend to elicit more NSRs than closed-ended questions. If the question is knowledge based, NSRs may result from respondents simply lacking the necessary information to provide an answer: “do not know” could be a factual assessment (Frick and Grabka 2005).

⁵ There were four ways to identify an NSR in this project: 1) “refuse to answer,” 2) “do not know,” 3) quantitative answers left blank and 4) qualitative answers left blank. Within “refuse to answer” and “do not know” there were two subcategories: either a subject was given “refuse to answer” and/or “do not know” as options to select in a multiple choice question, or the subject responded as such of his or her own volition when it was either not an option on a multiple choice question and the subject would give the enumerator no other response, or it was in response to a qualitative question. For this paper, we focus on “do not know” and “refuse to answer,” conflating them under the category of NSR. The distinction to be made between “refuse to answer” and “do not know” when the latter is used to avoid providing a substantial response deserves closer study, but that is not the focus here. Moreover, since “refuse to answer” was given very rarely in our data, we would argue that any such study would require either survey data which contains a larger proportion of “refuse to answer,” or would require a cross-survey comparison.

However, “do not know” can also reflect a refusal to give an answer for other reasons, such as perceived social or political cost (Berinsky, 2004). Thus a question perceived to be sensitive with confidentiality at risk would generate an NSR (Mayer 2001).

Sensitivity of a given issue is highly contextual (see Tourangeau and Yan, 2007, for a categorization of sensitivity-related NSRs), but here we focus on political sensitivity. In China, politically sensitive questions have a clear association with NSRs, and changes in political dynamics can change rates of NSRs. For example, Tang (2005) found that NSRs to questions concerning satisfaction with the government increased approximately 10% to 20% following the government crackdown in Tiananmen Square in 1989.

There is strong evidence that researchers can reduce NSRs such that those remaining more accurately reflect an idiosyncratic refusal to answer or a lack of knowledge, rather than one of the many other NSR causal factors already identified. Scholars have found several points in the design and implementation of surveys that would allow for a critical reduction in NSRs: questionnaire design (Harmon 2001), pretest procedures (Presser et al., 2004), interview process and establishing trust between enumerator and respondent (Mensch and Kandel, 1988; Hox et al., 2002), and questionnaire structure (Redline and Dillman, 2002).

The majority of research, including sources of NSRs and methods for reducing item nonresponse overall, concern survey research and data gathered in democratic and/or economically developed contexts. Only some of this information and these methodological strategies can be used in more restrictive research environments, such as China. Until relatively recently, survey research in China was a nascent and primitive endeavor: between 1978 and 1995, Manion (2010) identifies only eight scientific political science surveys. Starting in 1996, the rate of survey research increased, but so did the restrictions on foreign scholars' involvement.

Between 1999 and 2004, the Measures for the Administration of Foreign-Affiliated Surveys (National Bureau of Statistics) generated increasingly restrictive requirements that had to be met to obtain survey permits, which further frustrated the development of survey research. Survey research by foreign scholars without direct oversight by Chinese researchers is ostensibly illegal and may be considered “gathering sensitive information.”⁶ Some provinces, particularly those that have additional concerns regarding social stability or national resources, have adopted even more stringent policies than those of the central government (e.g., Tibet, a flashpoint for social instability). Onerous restrictions on research, particularly survey research by foreign scholars, has slowed the development of survey research, but not prevented it. Moreover, as training in survey methods has improved, both within Chinese universities and through Chinese scholars studying research methods abroad and returning home to conduct surveys, Chinese nationals have generated excellent national and regional survey data, although much of it is inaccessible to non-Chinese scholars.⁷

Survey research in China, however, tends to avoid discussion of nonresponse. We found 67 publications from 1998 to 2016 that use survey data collected in China related to politics. Of these, 61 percent did not clearly specify the rate of NSR, nor did they explain how they addressed NSR in their analysis (Figure 1). 13 percent of these publications claimed to have a very high response rate (less than 10 percent NSR). 12 percent stated that they dropped the missing data. Another 6 percent recoded the missing data and 4 percent used multiple imputation.

[Figure 3 about here]

⁶ Recent attention to “illegal surveys” generally pertains to geographic mapping of national resources with commercial or national security implications. See, for example, Wang, Qian, “Tougher penalties mapped out to fight illegal surveys,” *The China Daily*, October 23, 2012, http://europe.chinadaily.com.cn/china/2012-10/23/content_15837733.htm, accessed March 28, 2013. Nonetheless, in the context of a “rule by law” legal system (Peerenboom, 2002), in which the Chinese government has been known to apply the law selectively and instrumentally, the implementation of survey regulations is not entirely predictable.

⁷ See Carlson et al., (2010) for a complete review of survey research in China.

There are few China studies that explore the relationship between political sensitivity and NSRs, and how the general methodological tools for accounting for item nonresponse, such as imputation, ought to be used in the context of China. Ren (2009) does raise these issues in a dissertation chapter, using a cross-national data source, the World Values Survey, to compare relative rates of NSRs in China to other countries, including the U.S. and South Korea. She found that NSR rates for knowledge-based questions about the respondent's life were very similar to rates in the U.S., but that these rates were broadly divergent on questions related to political issues. However, with the exception of this study, all other research delving into the potential significance of NSRs in China surveys generally are either dependent on outmoded or methodologically questionable data, or acknowledge the potential biases but do not fully analyze patterns that may emerge. For example, two studies that specifically studied the dynamics and role of item nonresponse in survey research were based on data gathered in the early 1990s. In "I Don't Know' in Public Opinion Surveys in China: Individual and Contextual Causes of Item Nonresponse," Zhu (1996) carefully analyzes which factors highlighted in Western methodological literature were relevant to assessment of NSRs in China. Zhu did find that relative political sensitivity of a given question (as opposed to knowledge-based questions) was a very strong predictor of NSRs. Shi (1997) found that Chinese and Japanese are more likely to say "I don't know," rather than giving dishonest substantive answers. Strikingly, even some more recent research is based on data gathered 20 years ago: Hoddie (2008) used data from a survey conducted in 1993 to argue that ethnic minorities were more likely to give non-substantial responses in surveys. But given the NSR rates' strong association with political sensitivity, and the rapid political, economic, and social changes that have occurred in China over the last 30

years, data gathered 15 to 20 years ago can no longer provide accurate appraisals of NSR rates as these might reflect the current political climate.

Those studies which are more recent, however, do not explore this dynamic in a systematic fashion or one that allows scrutiny. For example, Li (2003), in providing the general structure of a survey project, states “Nonresponses to attitudinal questions ranged from 3% to more than 20% in both surveys. In general, women and the elderly were more likely to give nonresponses,” without further discussion of the source of these disparities. In another study that compared sampling methodologies for surveys conducted in rural China, Landry and Shen (2005) found that there were variations in NSRs across different groups of respondents—migrants and locals—on politically salient questions, but this was not the focus of their study.

III. Examining Item Nonresponse in the HEPS Survey

In this section, we use villagers’ responses to questions in the HEPS survey to examine NSR. The survey comprised three provinces, Jiangsu, Hubei, and Yunnan, which vary in their socio-economic, demographic, and geographic characteristics. We then utilized a multi-stage, nested sampling design to select localities and individuals. Within each province, we selected three municipalities⁸ to represent the socio-economic diversity of the given province. Below the municipality, localities were chosen in a nested, randomized fashion.⁹

⁸ Municipalities, also sometimes translated as prefectures or prefecture cities (地级市) constitute an administrative unit one level below the province. One municipality comprises counties, towns and townships, and villages, (or cities and districts in urban areas).

⁹ Specifically, within each municipality, three counties were selected randomly, then two townships and one back-up township within each county, and finally three villages and two back-up villages within each township. Publicly available lists of counties and townships were reliable, but additional information that would have been required for a probability sample or for a stratified sample was not reliably and consistently available, so we selected counties, townships, and villages within each municipality randomly. The final sample visited by enumerators comprised three provinces, nine municipalities, 27 counties, 83 townships, and 170 villages.

In this paper, we focus on questions of political trust, i.e., whether local and central officials, court officials, security police, and representatives of specific bureaus were trustworthy. Questions regarding trust have long been a source of interest in China studies, in part because central officials enjoy an unusually high level of trust, 90% (Shi, 2001) while lower levels of government are often blamed for problems that arise. Moreover, not only do individual citizens blame sub-national level officials, but the central government often reinforces this belief by scapegoating local officials as a political strategy. When local officials are disciplined, it is a sign that the central government is “committed” to fixing problems and is not directly responsible for them (Li, 2013). A commonly held belief is that Beijing’s policies are good, but that local government is corrupt and implements them poorly. Therefore, questions regarding trust in officials are particularly salient in the Chinese context and useful for elucidating nonresponse patterns.

A. Nonresponse and Survey Design: HEPS

Because we were sensitive to the possibility of item nonresponse, we sought to avert major sources of nonresponse through survey design. First, we designed questionnaire items to be consistent with local linguistic expressions. Second, to the extent possible, we selected teams of enumerators who were gender balanced, local to the region, and spoke the local dialect. Third, we conducted intensive three-day trainings for the team of enumerators in each province, which included a pre-test in each province.¹⁰ A combination of careful questionnaire design and enumerator training likely contributed to our relatively low rates of NSR.

An important preconception about villagers that could have been a source of high rates of nonresponse is the common belief that, among rural people, “*suzhi di*” (素质低), which roughly

¹⁰ Groves and his co-authors (2009) suggest that the optimal length of enumerator training is two or three days.

translates as “the overall combination of cognitive ability and education is lacking.” Urbanites and scholars often hold this perception and we have heard this phrase repeatedly from Chinese colleagues in the academic elite when referring to villagers. Thus, some local collaborators were concerned that villagers would not understand or would not have thought about the issues raised in a large proportion of questions, rendering the data meaningless. This attitude presented two challenges. First, we had to convince the enumerators that in fact this belief was neither relevant nor accurate, so that enumerators’ biases would not affect how they asked or recorded questions. Second, we had to address this issue as an interviewing skill problem: the attitude that rural respondents were somehow inferior could not only cause problems if the enumerators acted in a fashion that conveyed this belief, but also would be an expectation the enumerators would have to pre-empt. Villagers have often experienced the urban hauteur, so enumerators would have to convince respondents that they were trustworthy and respected villagers’ contributions, while asking them personal and sensitive questions. Therefore, we worked intensively with enumerators on how to build a rapport with villagers through strategies such as exchanging niceties.

Our analysis of the HEPS survey data demonstrates that (1) with careful survey design, non-substantial response is less of a problem in an authoritarian regime than we might expect and (2) that villagers’ individual characteristics can partly explain the likelihood of an NSR, but in some previously unexpected ways. First, despite the conventional wisdom regarding NSR in rural China, we find a surprisingly low rate of item nonresponse, even with the most politically sensitive questions. There are two major factors that would lead us to expect a higher rate of NSR among Chinese villagers. First, as stated earlier, China is an authoritarian regime in which interviewees may fear social and political costs, including potential retaliation from officials, for

responses that challenge the status quo of state control. In rural areas, most villagers have never participated in a survey and they may not feel confident that their responses will be kept anonymous and confidential, which compounds pre-existing fears of political persecution. The second factor relates to the aforementioned discussion of “*suzhi di*” and lower levels of education in the countryside. This characteristic represents the Chinese equivalent of a respondent’s limited cognitive ability to process and evaluate the question, which has been established as a source of higher NSRs (see, e.g., Beatty and Hermann, 2002). Nonetheless, our survey data reveal a surprisingly low rate of NSR, even among survey questions that were deemed highly politically sensitive.¹¹ Therefore, we contend that, while education certainly affects response, this is not determinative and, with adequate survey design, NSRs among less educated individuals can be minimal.

Although we cannot dismiss the possibility of dishonest answers, there are indications that respondents were willing to respond to politically sensitive questions. For example, a small percentage of villagers did claim to have participated in political activities that could be construed as challenging local officials, such as signing a petition and participating in a protest (5 percent and less than 1 percent respectively).¹² Participating in a protest can be interpreted as a subversive act.¹³ While less than one percent is not a large proportion, this nonetheless indicates

¹¹ For example, highly politically sensitive questions such as “Have you participated in protests?” had an NSR rate of less than 5 percent.

¹² Letters and Visits Offices in China are a formal institution for accepting petitions from individuals and groups who seek redress usually from a government-affiliated institution. Many petitions are routine, but “mass petitions” (petitions involving large groups) or those that threaten the reputation of the local leaders may result in the persecution of the petitioner. For more on the petition system, see Minzner (2006).

¹³ Protests in China are not always interpreted as a threat to the regime. For example, using protest as a negotiation tactic by workers to gain higher wages or improved work conditions has become routine and is not perceived as a threat to political stability (Ratigan’s interviews and informal communications with local officials in 2011). Another example would be nationalist protests against foreign powers (such as anti-Japan demonstrations) which are also a form of sanctioned political action. However, protests that threaten the legitimacy of local or national elites can be harshly persecuted, as in the Tiananmen Square incident of 1989 or, more recently and less violently, the highly publicized revolt in Wukan village in 2011 (Wines, M. “A Village in Revolt Could Be a Harbinger for China,” *The*

that some villagers felt confident enough to self-report having participated in the most sensitive type of political action in an authoritarian regime. When villagers were asked to evaluate the performance of government officials, villagers were willing to criticize both local and national government officials in significant proportions, with a low rate of NSRs. Table 1 shows the proportions of villagers who were willing to express a critical view of the local and national government as well as the proportions of NSRs.

[Table 1 about here]

The survey questions with the highest rates of NSR were questions that asked about the perceived trustworthiness of various levels of government officials and institutions. The highest rate of NSR in the series of questions on trust was regarding the trustworthiness of personnel at the Letters & Visits Office at 41 percent (see Table 2). Overall, the relatively low levels of NSR for even these questions suggest that survey research of political behavior and attitudes can be viable and instructive, even in an authoritarian regime.

B. Explaining NSR: Hypotheses

What then determines non-substantial response for Chinese villagers? Based on previous research, we hypothesize that villagers will be less likely to give an NSR if they are more educated and cosmopolitan, Chinese Communist Party (CCP) members, from the Han majority (rather than ethnic minorities), and trust their neighbors. We will discuss each of these hypotheses in turn.

Previous research indicates that individuals with a lower level of education and, thus, cognitive ability will have a higher level of NSR. Scholars in China typically affirm that this factor is even more salient in the context of rural China because villagers have “*suzhi di*.”

New York Times, December 25, 2011, http://www.nytimes.com/2011/12/26/world/asia/in-china-the-wukan-revolt-could-be-a-harbinger.html?pagewanted=all&_r=0, Accessed April 5, 2013.)

Therefore, we hypothesize that villagers with a lower level of education will have a higher likelihood of NSR.

H₁: Villagers with a lower level of education will be more likely to give a non-substantial response.

We contend that many villagers have considered political issues and do not have limited cognitive skills; hence the relatively low rate of NSR overall in our survey. Nonetheless, in this context, individuals with fewer years of schooling are less likely to opine in a survey interview. The Chinese concept of “*suzhi di*” consists of more than years of schooling, however. This concept also carries the connotation of someone who is parochial, i.e. not cultured or exposed to issues beyond their lives in the village. Therefore, we expand on Hypothesis 1 by testing whether villagers who are more cosmopolitan are less likely to provide an NSR. We measure whether a villager has a degree of cosmopolitanism through two dichotomous variables: those who have engaged in migrant labor and those who have family or close friends in a large city or foreign country. In the first case, migrants typically leave the village to work in a larger city where they will be exposed to (but excluded from enjoying) higher standards of living. In the second case, villagers who have close friends or family in large cities or abroad are more likely to have heard about life beyond the village and, therefore, have more cognitive resources to respond to complex survey questions. Based on this logic, we propose Hypotheses 1A and 1B.

H_{1A}: Villagers who have been migrant workers will be less likely to give a non-substantial response.

H_{1B}: Villagers who have close friends or family in large cities or abroad will be less likely to give a non-substantial response.

Similar to the logic pertaining to education, we hypothesize that villagers who are Communist Party members will be less likely to provide an NSR. Communist Party members are

more likely to have interactions with higher level government officials (such as township and county officials) and attend Party meetings that would provide them with perspectives beyond the village. Because the CCP is an elite party (about 6 percent of the population) and recruitment strategies deliberately select more educated individuals, CCP members tend to be more educated and wealthier than non-members (Dickson, 2003). In our sample, fewer than 10 percent of villagers are party members (see Table 2). Nonetheless, we hypothesize that, even when controlling for education, party membership will be associated with a lower likelihood of NSR because party members often have a broader view of political issues beyond the village. In addition, CCP members may also feel more confident to critique the government as part of the state apparatus because their status within the apparatus is more secure and they have connections to maintain that status. Party members are more likely to be aware of the competing priorities of various state agencies and that lower level officials have some room to maneuver in less politically sensitive policy areas. Therefore, under certain conditions, their understanding of party-state politics empowers them to be less fearful of arbitrary persecution and, thus, more open in expressing their critiques.

H₂: Villagers who are communist party members will be less likely to give a non-substantial response.

Previous research suggests that ethnic minorities are more likely to give an NSR. Conventional wisdom proposes that ethnic minorities are more isolated from the state and therefore lack either the knowledge or the willingness to share opinions on political questions (see, e.g., Hoddie, 2008). Due to a history of state-sponsored repression targeting non-Han communities, ethnic minorities may also be more fearful of the state apparatus and even less

likely to trust enumerators than villagers from the Han majority. We therefore present Hypothesis 3:

H3: Villagers who are from an ethnic minority will be more likely to give a non-substantial response.

Finally, the degree to which respondents are willing to trust people can influence nonresponse insofar as individuals who do not easily trust others may not be willing to divulge personal information to an enumerator. Particularly in the context of rural China, where surveys are rare, villagers with a self-identified propensity to distrust others may not believe that the information will be anonymous and confidential. We utilize villagers' evaluation of whether other villagers (i.e. their neighbors) are trustworthy to capture the respondent's inclination to distrust others. Therefore, we hypothesize that villagers who think their neighbors are not trustworthy are more likely to give an NSR.

H4: Villagers who think their neighbors are not trustworthy will be more likely to give a non-substantial response.

C. Explaining NSR: Findings

We tested these hypotheses on original survey data of Chinese villagers that ask about whether government officials and state agencies are trustworthy. Villagers were asked: "On a scale from one to four, how trustworthy do you think the following people are?" Enumerators then listed thirteen types of people: other villagers/neighbors, urban residents, business people, village leaders, county leaders, provincial leaders, central government leaders, local health workers, city health workers, lawyers, officials in local courts, Letters & Visits officials, and the Public Security Bureau (PSB), which is the domestic police force in China. For this paper, we focus on NSR for the parts of this question that pertain to government officials and had a relatively high rate of NSR (over 20 percent). We constructed a variable for NSR by coding a

substantial response as 0 and a non-substantial response (either “don’t know” or “refuse to answer”) as 1. Table 2 provides summary statistics for the variables in the model.

[Table 2 about here]

We then employed logistic regression with our variables of interest, control variables, and county fixed effects to evaluate the association between our explanatory variables and NSR. Table 3 summarizes our results.

[Table 3 about here]

Based on these models, we find support for several of our hypotheses, but also find some evidence to challenge the conventional wisdom on survey research in China. Our first hypothesis, pertaining to education and NSR, is supported by these data. Controlling for other factors, education was negatively associated with NSR and statistically significant at the 10 percent level for three of the five models. For the fifth model, it was mildly significant at the 15 percent level. This result provides strong evidence for the independent effect of education on NSR.

Does this, therefore, confirm that villagers who have little to no access to the world beyond the village lack cognitive ability? In fact, when we consider villagers’ exposure to life beyond the village through personal experience (migrant labor) and acquaintances (friends and family in large cities or abroad), a more mixed picture emerges. Whether the respondent had been a migrant laborer is negatively associated with NSR in all models and statistically significant at the 10 percent level in Model 3. This finding weakly supports our hypothesis that former migrants will be less likely to give an NSR. However, villagers who have close friends or relatives in large cities or abroad are more likely to provide a non-substantial response across all models; this result is significant at the 5 percent level for two of the five models: central government officials and the PSB (police). These conflicting results require further investigation,

but our research suggests that villagers who know migrants may be more attuned to the possibility of a sensitive political environment and, thus, more concerned about negative repercussions from an unfavorable evaluation of government officials. Therefore, we find mixed results for Hypotheses 1A and 1B.

Our data do support H2, that communist party members will be less likely to give an NSR. This result is significant at the 10 percent level for two models (Model 1 and 3) and at the 15 percent level for Model 4. This provides strong evidence that Party members more likely to give a substantial response. Figure 4 compares the predicted probabilities for NSR among CCP members and non-members at different levels of education, when holding the other independent variables at their mean.

[Figure 4 about here]

Previous research contends that ethnic minorities will be less likely to respond to survey questions (Hypothesis 3). However, our data contradict this supposition. Ethnicity is not a statistically significant factor in the likelihood of NSR in four of the five models. Moreover, in Model 1, members of ethnic minorities are less likely than Han Chinese to give a non-substantial response. We argue that careful selection and training of survey enumerators can reduce NSR among ethnic minorities. We endeavored to employ enumerators from the local region and who could speak local dialects, where possible. In addition, we provided rigorous sensitivity training for all enumerators and emphasized the importance of treating the respondent with respect. As part of this training, enumerators conducted a pretest in each province, which enabled us to observe their conduct in the field and provide feedback prior to conducting the survey. Therefore, through this process, we argue that we were able to mitigate the effect of ethnicity on non-

substantial response. These results are significant within the Chinese context as well as in other countries where ethnic or racial divisions may be present.

Finally, Hypothesis 4 tests whether an individual's propensity for distrust is associated with NSR. Our data strongly support the assertion that villagers who self-identify as less trustful of others are more likely to provide an NSR. The coefficient for distrusting one's neighbors is positive in all models and highly statistically significant in three of the models (at the 1 percent level for Model 3 and at the 5 percent level for Models 4 and 5.)

In addition to the explanatory variables, we included several control variables: sex, age, age-squared, whether the respondent was born in the village (local), whether the enumerators spoke the local dialect, and whether the respondent had prior interaction with the officials in the question. We also included county fixed effects in the model to capture unknown factors associated with the political context that may affect respondents. For example, the province of Yunnan has unusually stringent regulations concerning survey research and this political context may have impacted villagers' likelihood of non-substantial response.

A control variable that merits further investigation is sex. Women were more likely than men to give an NSR in all models and this result was statistically significant at the 10 percent level in Models 2 and 4 and at the 15 percent level in Model 3. We were concerned about gender dynamics when conducting the survey and, therefore, interviews were conducted by pairs of two enumerators: one male and one female. We sought to reduce female nonresponse by ensuring that at least one enumerator in each pair was female. Nonetheless, we could not overcome this factor. Figure 5 depicts the predicted probabilities for NSR among men and women at different levels of education, when holding the other independent variables at their mean.

[Figure 5 about here]

Further investigation should examine the role of gender in nonresponse and the extent to which this factor can be mitigated. The “gender effect” has emerged in previous studies of item nonresponse in China, but the reasons for this effect have been under-theorized and neglected by the research (e.g., Zhu 1996; Li 2003). Further research should explore why, even when enumerator teams are gender-balanced, women are less likely to give a substantive response and the extent to which this effect is prevalent cross-nationally.

In sum, our data suggest that NSR can be overcome in challenging research environments. First, enumerator selection and training is crucial to reducing non-substantial responses. Local political and cultural environments should be considered in enumerator selection and training to offset potential nonresponse due to salient social cleavages, such as local ethnic or racial dynamics. Second, NSR among Chinese villagers is associated with individual characteristics including education and communist party membership. Yet, the effect of exposure to life beyond the village is unclear. In addition, respondents who have a pre-existing propensity to distrust others are less likely to give a substantive response; we would expect to find this result in contexts beyond China, however.

IV. Conclusion and Implications

We sustain that some forms of NSR can be mitigated through intensive enumerator sensitivity training, careful wording of questions, and face-to-face interviews (where appropriate). Despite concerns that villagers would not respond to complex questions, most items had a low rate of NSR. In particular, in our data, there was no evidence of increased NSR among ethnic minorities or older people. In fact, in one question, ethnic minorities were more likely to respond than Han Chinese. Therefore, preconceptions about the role of ethnicity and NSR should be reconsidered in light of these more recent survey data.

Nevertheless, some individual characteristics continue to be associated with a higher likelihood of NSR. Villagers with fewer years of schooling and less exposure to life beyond the village are more likely to provide an NSR. Similarly, communist party members are less likely to provide an NSR. Therefore, substantive results from these data should consider that the opinions of more educated villagers and party members may be somewhat overrepresented. Our data also suggest the need to explore other measures of “cognitive ability” and how life experiences may impact response. For example, villagers’ exposure to urban life is a salient issue in China.

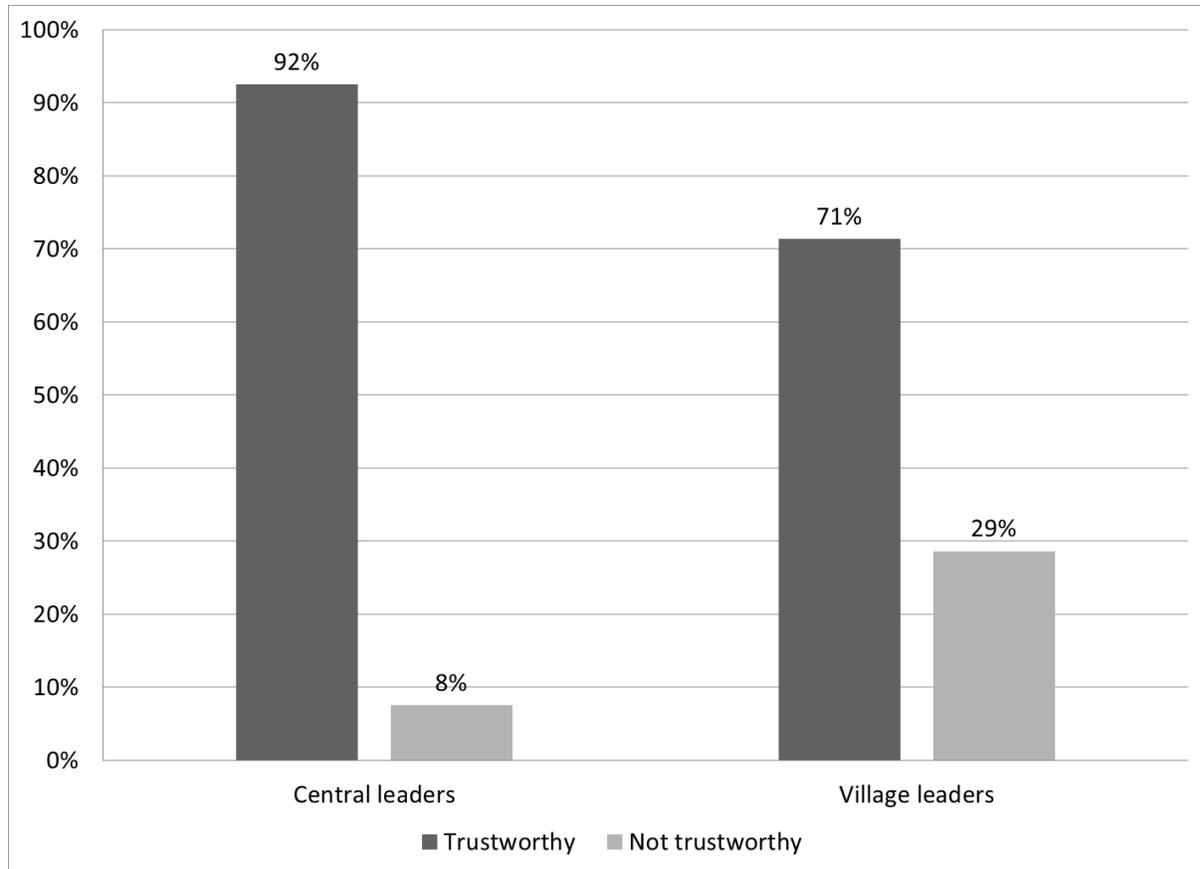
Women are also more likely to give an NSR. In this regard, our data are consistent with previous research (Li, 2003). Despite careful survey design including gender parity in enumerator teams and intensive enumerator training, female respondents were still more likely to provide an NSR. Future research should examine why a gender disparity exists in survey response and how to overcome it. In addition, substantive results should take into consideration how the under-representation of women could introduce bias.

Our analysis also reveals some potentially complex dynamics between village “insiders” and “outsiders.” Villagers were more likely to give an NSR regarding trust in police when enumerators spoke the local dialect. This may indicate an interaction effect between the question and enumerators’ provenance. We speculate that the enumerator’s appearance of local ties may undermine trust between enumerator and respondent on those issues which respondents believe poses greater danger. Future research should explore these dynamics among questions that may negatively implicate the respondent from the perspective of local authorities, and compare them to questions about government officials who have little to no presence in daily village life, such as the central government in Beijing.

Finally, we make two recommendations for future research, generally. First, preconceived assumptions about what respondents are willing to answer should be carefully evaluated, even in authoritarian countries. There are many methods and opportunities to ascertain the limits of what is politically advisable without endangering enumerators, collaborators, or respondents, and all efforts should be made to confirm those limits through preliminary research and pretests. Second, research in politically restrictive environments can be challenging, but can yield useful information, even in the form of non-substantial response patterns.

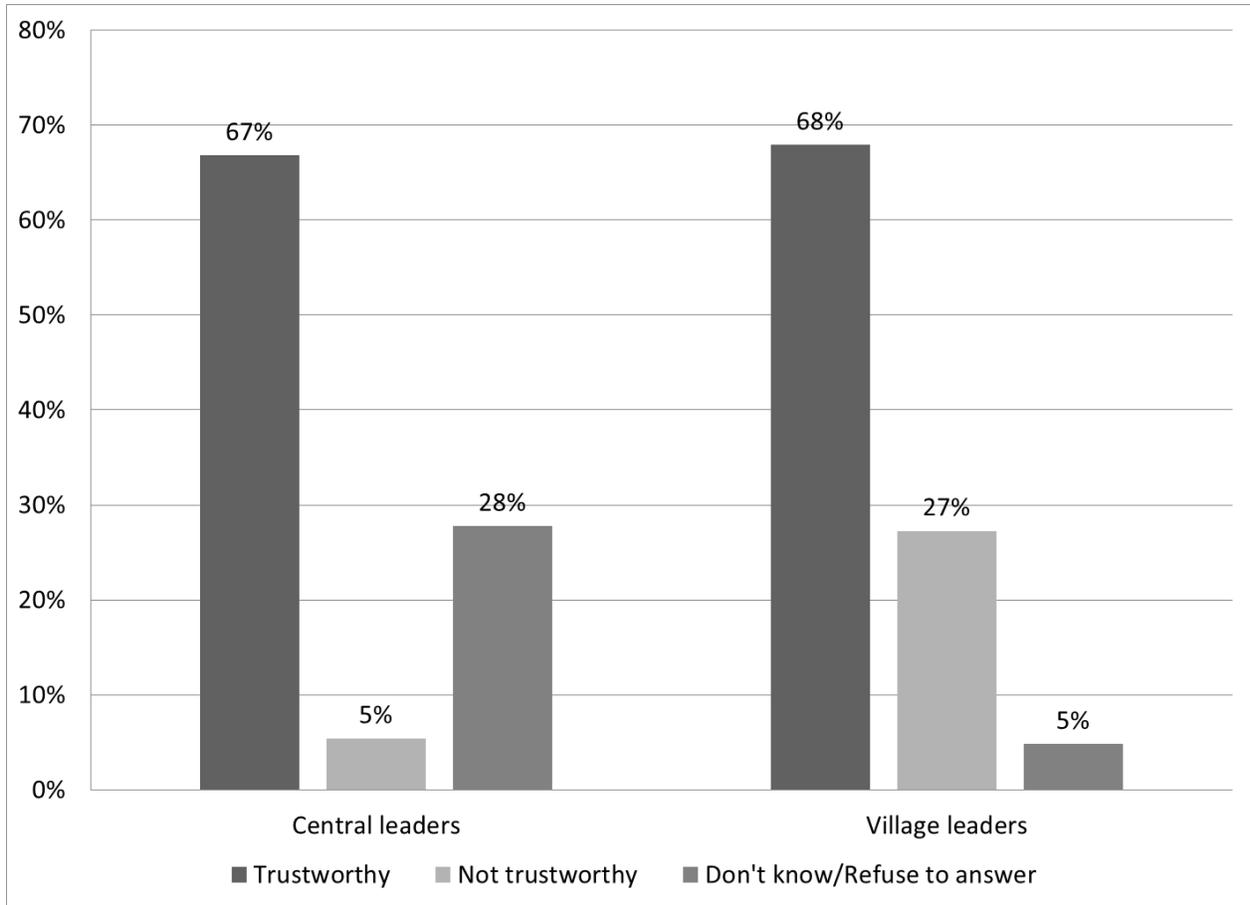
Figures

Figure 1: Trust in Central and Village Leaders with Nonresponse Dropped



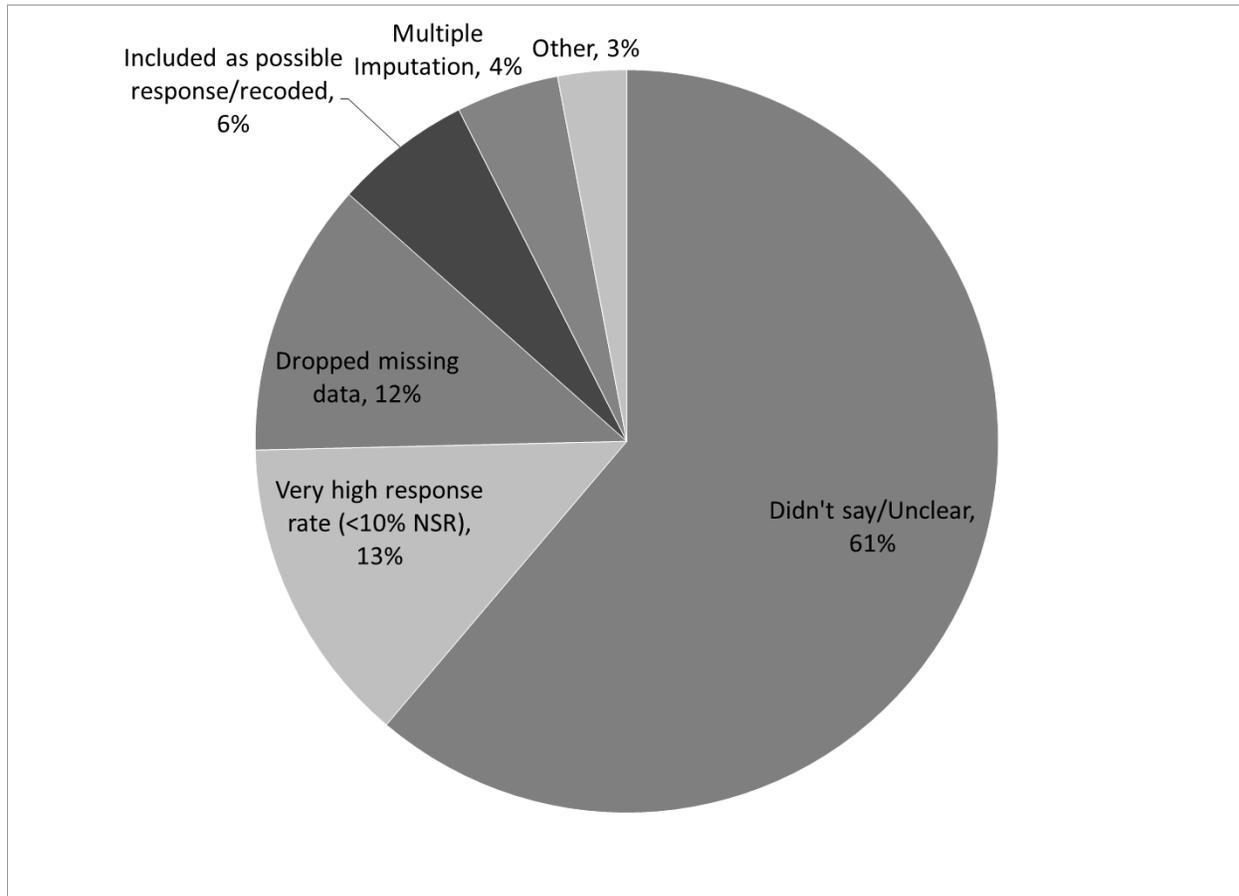
Source: Authors' original survey of Chinese villagers.

Figure 2: Trust in Central and Village Leaders with Nonresponse Included



Source: Authors' original survey of Chinese villagers.

Figure 3: Nonresponse in Survey Research in China



Sample includes 67 academic publications from 1998 through 2016 that use survey research in China on political or social science topics.

Figure 4: Predicted Probabilities of NSR: non-CCP vs. CCP members

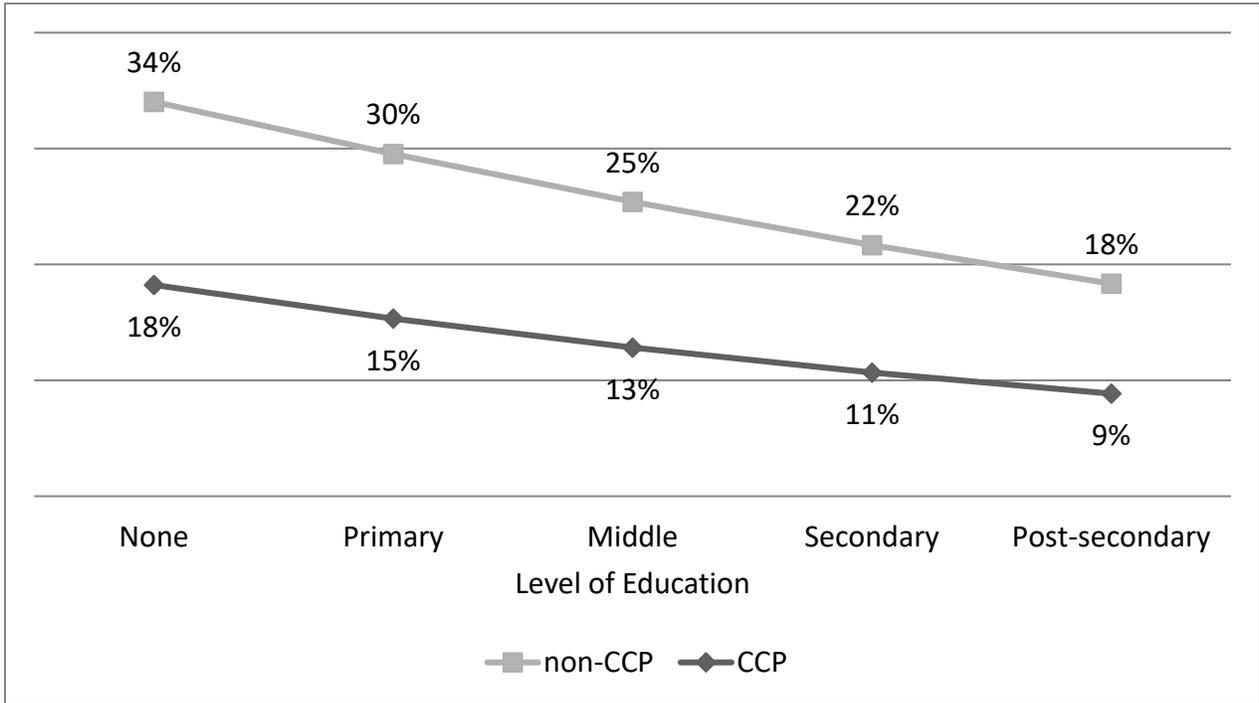
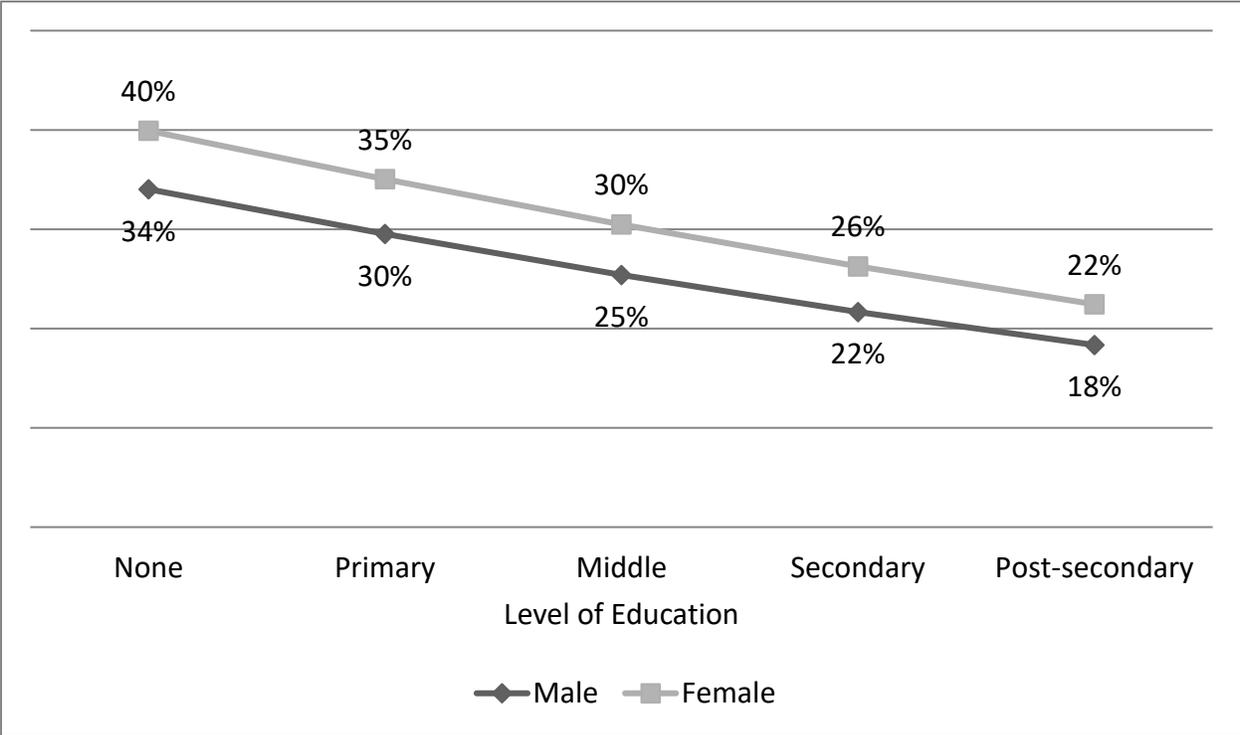


Figure 5: Predicted Probabilities of NSR: Female vs. Male



Tables

Table 1: Villagers' Responses to Questions Evaluating the Government

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know	Refuse to answer
Overall, I am very satisfied with the work of the village committee.	9%	48%	28%	9%	5%	1%
When village and government officials discuss the problems in our village, officials try to solve them quickly.	13%	45%	26%	4%	11%	1%
County government officials definitely care about problems faced by our village.	16%	44%	24%	5%	11%	1%
Central government officials definitely care about problems faced by our village.	38%	32%	11%	3%	15%	0%
The county government is willing to help improve my life.	23%	44%	20%	4%	9%	1%
The central government is willing to help improve my life.	41%	34%	10%	2%	12%	0%

n= 801

Percentages may not add to 100 due to rounding error.

Source: Authors' survey of Chinese villagers.

Table 2: Summary Statistics for NSR Models

	Obs.	Mean	Std. Dev.	Min.	Max.
Response Variables:					
NSR on county leaders (0 = response; 1 = NSR)	739	0.298	0.458	0	1
NSR on central leaders (0 = response; 1 = NSR)	739	0.279	0.449	0	1
NSR on local courts (0 = response; 1 = NSR)	738	0.321	0.467	0	1
NSR on Letters & Visits personnel (0 = response; 1 = NSR)	737	0.410	0.492	0	1
NSR on PSB (police) (0 = response; 1 = NSR)	734	0.234	0.424	0	1
Explanatory and Control Variables:					
Sex (1 = male; 2 = female)	801	1.476	0.500	0	1
Age	798	46.640	15.244	14	95
Education (categorical on a scale of 1-5)	800	2.720	1.069	1	5
Ethnicity (0 = Han Chinese; 1 = ethnic minority)	775	0.097	0.296	0	1
Communist party member (0 = not a member; 1 = member)	744	0.095	0.294	0	1
Trusts neighbors (categorical on a scale of 1-4, 1 = neighbors very trustworthy; 4 = neighbors very untrustworthy)	730	1.811	0.609	1	4
Local (0 = born in the village; 1 = not local)	801	0.235	0.424	0	1
Has done migrant labor (0 = no; 1 = yes)	755	0.333	0.471	0	1
Enumerators speak dialect (0 = no; 1 = yes)	801	0.916	0.277	0	1
Knows migrants (0 = no; 1 = yes)	705	0.458	0.499	0	1
Has met county leaders (0 = no; 1 = yes)	725	0.116	0.320	0	1
Has met central leaders (0 = no; 1 = yes)	726	0.010	0.098	0	1
Has met court officials (0 = no; 1 = yes)	722	0.069	0.254	0	1
Has met Letters & Visits officials (0 = no; 1 = yes)	721	0.050	0.218	0	1
Has met Public Security officials (0 = no; 1 = yes)	719	0.242	0.429	0	1

Source: Authors' survey of Chinese villagers.

Table 3: Logistic Regression of Non-Substantial Response with County Fixed Effects**Question:** Do you think the following people are trustworthy?**Response Variable:** Non-Substantial Response (0 = Response; 1 = NSR)

	County Leaders (1)	Central Leaders (2)	Local Courts (3)	Letters & Visits Personnel (4)	Public Security (Police) (5)
Intercept	-1.847 (-1.413)	-3.929** (1.455)	-2.676** (1.347)	-1.620 (1.203)	-5.491*** (1.619)
Sex	0.253 (-0.222)	0.443* (0.219)	0.346† (0.220)	0.368* (0.205)	0.345 (0.258)
Age	-0.019 (-0.042)	0.022 (0.042)	0.008 (0.040)	-0.013 (0.037)	0.036 (0.047)
Age ²	0.000 (-0.001)	0.000 (0.001)	0.000 (0.000)	0.000 (0.000)	0.000 (0.001)
Education	-0.208* (0.121)	-0.024 (0.117)	-0.416*** (0.125)	-0.203* (0.110)	-0.200† (0.137)
Ethnicity	-0.927* (0.510)	-0.655 (0.468)	0.028 (0.429)	-0.371 (0.380)	-0.033 (0.494)
Communist party member	-0.839* (0.463)	-0.324 (0.377)	-0.942** (0.447)	-0.583† (0.358)	-0.437 (0.465)
Distrusts neighbors	0.029 (0.192)	0.244 (0.186)	0.663*** (0.196)	0.534** (0.175)	0.469** (0.219)
Local	0.233 (0.255)	0.249 (0.248)	0.223 (0.248)	0.162 (0.233)	0.735*** (0.274)
Has done migrant labor	-0.334 (0.247)	-0.052 (0.238)	-0.471* (0.247)	-0.012 (0.221)	-0.198 (0.281)
Knows migrants	0.184 (0.240)	0.477** (0.234)	0.261 (0.239)	0.307 (0.219)	0.593** (0.270)
Enumerators speak dialect	-0.438 (0.419)	-0.486 (0.399)	0.663 (0.463)	0.259 (0.412)	1.524** (0.611)
Prior interaction with official	-2.179*** (0.624)	-15.447 (876.313)	-16.632 (532.074)	-2.898*** (1.042)	-2.293*** (0.445)
Observations	636	636	635	634	631

† $p < 0.15$, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Standard errors are in parentheses.

Source: Authors' survey of Chinese villagers.

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