Self-censorship of regime support in authoritarian states: Evidence from list experiments in China

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Abstract
The study of popular support for authoritarian regimes has long relied on the assumption that respondents provide truthful answers to surveys. However, when measuring regime support in closed political systems there is a distinct risk that individuals are less than forthright due to fear that their opinions may be made known to the public or the authorities. In order to test this assumption, we conducted a novel web-based survey in China in which we included four list experiments of commonly used items in the comparative literature on regime support. We find systematic bias for all four measures; substantially more individuals state that they support the regime with direct questioning than when presented with our indirect list experiments. The level of self-censorship, which ranges from 24.5 to 26.5 percentage points, is considerably higher than previously thought. Self-censorship is further most prevalent among the wealthy, urban, female and younger respondents.

Keywords
Political support, self-censorship, list experiment, response bias, China

Introduction
In an extraordinary display of regime support, 94% of Chinese respondents reported that they had trust in the national government in the 2011 wave of the Asian Barometer. But to what extent are expressions of regime support in closed political systems reflective of sincere beliefs? This paper presents evidence from an online survey in China in which we employ four list experiments to test for self-censorship bias in measures of diffuse and specific regime support (Easton, 1975). Our findings indicate that self-censorship is widespread for all four of our sensitive items, and considerably higher than previously assumed, with 24.5% to 26.5% of respondents hiding their true beliefs.

Prior studies have typically justified the assumption of little or no bias based on the observation that individuals express critical viewpoints during qualitative interviews (Li, 2004), that variation is found in potentially sensitive survey measures (Landry et al., 2010), or that trust in government only weakly correlates with fear of being reported to the authorities (Chen and Shi, 2001; Shi, 2001). However, these arguments are not unproblematic. For instance, Li (2004) finds that rural Chinese criticize the regime, but that criticism is often directed at local government, not central government. It remains possible that urban residents are more prone to self-censor, or that criticism of central government is more sensitive than criticism of local government. To study the correlation between a measure of political fear and political trust is potentially problematic because political fear may itself be a sensitive survey question. Moreover, with respect to these prior studies, much has changed in China in recent years. Since President Xi Jinping’s ascent to power in late 2012 the regime has become increasingly personalized, the use of repression has increased, and rival political factions have been targeted (Shirk, 2018).

A handful of recent studies have examined self-censorship in non-democracies, but findings have been somewhat mixed. Survey-based measures of electoral support for an autocratic...
president as it is evaluative of the political regime as a whole; highly publicized, policy of Xi Jinping’s rule.

evaluation of specific support as it has been a primary, and study aims to fill this gap, which is of further salience given censorship of multidimensional regime support in China. This evidence of self-censorship with regard to distrust for central officials, but a recent replication by Li et al. (2018) finds evidence of self-censorship in a list experiment of political distrust and willingness to openly criticize central government. Tang (2016) finds no evidence of self-censorship in a list experiment of political distrust and willingness to openly criticize central government. The second item probes for respondents’ perceptions of Xi Jinping’s flagship anti-corruption campaign that was launched immediately after he assumed office. In addition to the campaign being closely tied to the current top leadership, it is contested whether it represents a sincere effort to root out corruption, or simply functions as a tool for the elimination of rival factions (for a discussion, see Lam, 2015). The item thus functions as a second evaluation of specific support as it has been a primary, and highly publicized, policy of Xi Jinping’s rule.

The third item functions as a measure of diffuse support as it is evaluative of the political regime as a whole; specifically, to what extent an individual believes the current system is best. This item probes for respondents’ perspectives on the system of governance in the broadest sense, all levels of government and institutions included. Our fourth and final item, support for government censorship, similarly falls into the diffuse, institutional dimension. We argue that censorship is representative of diffuse support, given that it is a salient institution of authoritarian rule, and that to support the restriction of political discussion is analogous to an expression of support for the underlying norms of the authoritarian regime.3

Sample

The data for the study were collected via a web-based survey in mainland China. A market research firm was contracted to recruit a random sample of respondents from their panel of approximately two million users. A total of 2463 participants entered the survey, which resulted in a sample of 1953 after removal of those who did not finish or failed one of the attention checks (for a completion rate of 79%).

A web-based sample is naturally unrepresentative of the general population, with over-representation of young, highly educated, urban and wealthy individuals. This poses a risk that such a demographic imbalance can have implications for the level of self-censorship, as it is plausible that the wealthy and educated are more likely to self-censor than others – a point to which we return in our estimates of the individual-level characteristics of self-censorship (see also Jiang and Yang, 2016). Nevertheless, evaluations of web-based and crowd-sourcing samples have found that participant pools are much more diverse than other samples of convenience, such as university students (Buhrmester et al., 2011). Further, our sample is geographically more representative than those evaluated in prior studies of self-censorship in China, Tang (2016) excluded, consisting of observations from all Chinese provinces with a mix of rural and urban respondents (see Online Appendix Figure 5).

While we are careful to avoid any claim that our sample is representative of the Chinese population, it is a random sample from the market research firm’s population which allows for some generalization. It should also be noted that in spite of the descriptive differences between our sample and nationally representative surveys, estimates of the level of regime support with direct questioning between the two survey modes are highly consistent (we discuss this further in the results section). Our sample is descriptively very similar to other web-based samples in China (see Huang and Yeh, 2017).

In democratic countries it has been shown that web-based data collection is more likely than face-to-face interviews to elicit truthful responses to sensitive questions (Heerwegh, 2009). However, web-based surveys in China may not provide the same level of respondent security;

Data and design

Multidimensional regime support

The four measures of regime support employed in this study build on the well-known distinction between diffuse and specific support (Easton, 1975). The first item pertains to specific support as it evaluates confidence in the current central government. The second item probes for respondents’ perceptions of Xi Jinping’s flagship anti-corruption campaign that was launched immediately after he assumed office. In addition to the campaign being closely tied to the current top leadership, it is contested whether it represents a sincere effort to root out corruption, or simply functions as a tool for the elimination of rival factions (for a discussion, see Lam, 2015). The item thus functions as a second evaluation of specific support as it has been a primary, and highly publicized, policy of Xi Jinping’s rule.

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The list experiment ensures respondent anonymity by asking individuals to provide the number of statements with which they agree from a list of four or five, not agreement with any specific statement. The control group receives a list with four statements, whereas the treatment group receives a list of five statements – the same four presented to the control group plus the sensitive item of interest. The four lists are presented below in Table 1. The statements are arranged in the order in which they were presented to respondents, with the sensitive item of interest in bold. To minimize both order effects and the risk that respondents would learn the purpose of the exercise through repetition, we intentionally chose control list items that were broadly political or social in nature so that the item of interest did not appear overly conspicuous. To avoid ceiling and floor effects – when a respondent agrees with all or none of the statements, thereby exposing their true preference to the sensitive item and invalidating the list experiment – we included four items in our control list rather than three as is common, and conducted two pilot studies to evaluate and adjust the lists. The low number of respondents in the lowest and highest categories should alleviate any concerns about ceiling and floor effects (see Table 2 of the Online Appendix for the distributions of responses). Lastly, to reduce variance in estimation we follow Glynn (2013) and design the lists to contain items that negatively correlate.

Self-censorship can be differentiated into two distinct forms: non-response – a neutral, “do not know”, or blank response; or falsification – an untruthful answer. The list experiment primarily focuses on the latter but, given increased anonymity, the propensity to non-respond is also reduced. For example, the non-response rate to direct measures is between 5% and 13.3%, but this drops to 0% to 0.4% in the list items. This is consistent with list experiment applications in other contexts (Blair and Imai, 2012). Table 4 in the Online Appendix shows the descriptive statistics with these figures. This result provides evidence of two things: first, respondents felt secure in the anonymous questioning technique, and second, list experiments are not too cognitively demanding for Chinese respondents.

The survey included several demographic items such as gender, age, level of education, income, ethnicity, region and city, hukou status and party membership (for the full survey, see the Online Appendix).

The survey included two blocks each containing two treatment and two control lists. The blocks were designed to contain one diffuse and one specific support treatment list, as shown in Figure 1, with random assignment.

Table 1. The List Experiments.

<table>
<thead>
<tr>
<th>Confidence</th>
<th>Corruption</th>
<th>System</th>
<th>Censorship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generally speaking, most people cannot be trusted.</td>
<td>Air pollution is one of the most important problems in our country.</td>
<td>It is important to follow religious norms and ceremonies.</td>
<td>People can only get rich at the expense of others.</td>
</tr>
<tr>
<td>We should focus less on the economy and more on the environment.</td>
<td>Overall, the quality of life was better 30 years ago.</td>
<td>Private ownership of business should be increased.</td>
<td>The government should have the right to prevent the media from publishing things that might be politically destabilizing.</td>
</tr>
<tr>
<td>The government is like a parent and should tell us what to do.</td>
<td>Overall, our country is going in the right direction.</td>
<td>Our system of government is better than any other that I can think of.</td>
<td>I consider myself capable of participating in politics.</td>
</tr>
<tr>
<td>I have confidence in the national government.</td>
<td>The government is doing its best to crack down on corruption and root out bribery.</td>
<td>It is reasonable for students to pay tuition for university education.</td>
<td>It is reasonable for students to pay tuition for university education.</td>
</tr>
<tr>
<td>The government is the employee of the people and should do things according to the wishes of the people.</td>
<td>Economic progress is more important than protecting the environment.</td>
<td>The economic situation of my family was better a few years ago than it is today.</td>
<td>The economic situation of my family was better a few years ago than it is today.</td>
</tr>
</tbody>
</table>
determining which block a respondent received. Each respondent, therefore, is both in the treatment group for two items and the control group for two others. The second step was to randomize within the blocks themselves; the order in which the lists were presented to respondents was randomized so as to avoid any potential priming effects that may have arisen from the order of presentation of the lists.

After the lists, all respondents were presented with the four sensitive items directly, thus providing estimates of support with the direct technique. The order of presentation of these four questions was also randomized. The main risk with asking a treated individual a direct question post-treatment is potential priming effects. We find, however, no evidence to suggest that a treatment list primes one to respond in a certain manner to the direct question, nor to opt for a “Do not know” response (see Online Appendix Table 5 and Table 6).

Estimation

Estimates of regime support using indirect questioning are calculated as a simple difference-in-means between the treatment and control groups. As respondents state the number of items from a list with which they agree, the overall mean values of the control and treatment groups for a specific item can theoretically differ by a maximum of 1, excluding possible random variation. To determine the extent of self-censorship we compare this estimate with that from the direct questioning method. Any statistically significant difference between methods is considered evidence of self-censorship.

For all direct questions respondents were given the options “Agree”, “Do not agree” or “Do not know/Do not wish to say” (DK). In the main analysis we drop DK responses. This provides larger estimates of self-censorship than if we were to have coded DK answers as non-support, but it is more consistent with how items of regime support are typically analysed. Coding DK as non-support results in self-censorship estimates of 15.7% to 22.1%, all of which are statistically significant at the 99% level (see Online Appendix Table 8).

Results

The difference-in-means calculations are presented graphically in Figure 2. For each item and method the estimated proportion is shown with points, and the 95% confidence interval is represented by the corresponding horizontal lines. The larger confidence intervals that are reported in the indirect questions are a reflection of the comparative imprecision of the list experiment technique. For numerical point estimates and standard errors, see Online Appendix Table 7.

Considering confidence in the central government first, for the direct measure, 90.9% of respondents reported that they agreed with the statement: “I have confidence in the national government.” This figure is consistent with nationally representative samples; in the 2010 World Values Survey, 84.6% of Chinese reported confidence in the national government. In contrast, according to the indirect, list method, only 66% of individuals reported agreement: a difference of 25 percentage points with a 95% confidence interval from 16 to 34 percentage points.

Moving on to our second measure of specific support, 89.3% of our respondents agree that the government is doing its best to root out corruption with direct estimation. In the 2005–2008 Asian Barometer survey, 63.1% of
respondents believed that the government was doing “something” or “its best” to crack down on corruption, but this was estimated several years before Xi Jinping’s anti-corruption campaign. Being so closely associated with President Xi may have also increased the perceived sensitivity. Again the point estimates from the indirect technique are substantially lower than the direct. Only an estimated 63% of respondents agree with the direct statement, a 26.4 percentage point difference. The range of falsification for this item based on a 95% confidence interval is 19% to 34% of respondents.

The remaining two items relate to the diffuse dimension of system support. In direct questioning, 68.2% of respondents state that the current Chinese system is better than any other they could think of. This too is consistent with nationally representative surveys – the 2011 wave of the Asian Barometer asked, “Compared to other systems in the world would you say our system of governance works fine as it is, needs minor change, needs major change, or should be replaced?”, to which a similar 71.8% of respondents replied that the system needed only minor change or works fine. For this measure as well we find evidence of substantial self-censorship when comparing direct and indirect estimates. Only an estimated 43.5% state that the Chinese system of governance is best with indirect questioning, a difference of 24.7 percentage points, with a 95% confidence interval of 16 to 34 percent of respondents.

For our final sensitive item, support for government censorship, 69.8% state that they believe the government should have the right to prevent the media from publishing potentially destabilizing material. This is somewhat higher than in a representative sample collected in 2011; in Wave 3 of the Chinese Asian Barometer, 54% of respondents stated that “the government should have the right to prevent the media from publishing things that may be politically destabilizing.” However, the differing estimates may be a product of the timing of the survey in this case as well. Similar to the anti-corruption campaign, the media have been increasingly pressured by government authorities under Xi Jinping’s rule, a development which may also be felt among the general population. The indirect point estimate of 45% is a full 24.8 percentage points lower than the direct method estimate, with a 95% confidence interval of 16% to 34% of respondents.

Who self-censors?

In order to examine individual characteristics associated with self-censorship, we compare the difference between fitted values of the indirect and direct techniques by subgroup with the inclusion of demographic control variables (see Blair and Imai, 2012, and the List package for R documentation (Blair and Imai, 2010) for details). While our sample size is too small to enable us to draw definitive conclusions regarding subgroup differences, we uncover several patterns which should be investigated in future studies.

Our guiding premise is the notion that preference falsification should be more prevalent among those who have more resources to lose (Jiang and Yang, 2016; Kuran, 1997). This leads us to predict that we should find greater falsification among the wealthy and the higher-educated as they have greater economic resources at stake. Further, we should expect those with urban hukou (household registration) status to falsify to a greater extent than rural hukou because of the design of the Chinese social system, which provides social services in the locality of one’s hukou only. A similar logic can be applied to party members, who have access to the political apparatus, and also to economic benefits that accompany such status.

With respect to age, our resource premise does not directly apply with control for other background factors. We would nevertheless expect older respondents to falsify more because of their lived experience of more repressive periods of CCP rule, such as the cultural revolution and Tiananmen square protests (see e.g. Etchegaray et al., 2018; Jiang and Yang, 2016).

Risk-aversion theory argues that women are in general more risk averse than men (Eckel and Grossman, 2008). As such, we expect to find gender-based differences in falsification such that women should self-censor to a greater extent.

Lastly, in relation to who one believes to have commissioned the survey, we would expect that those who believe the government commissioned the survey to falsify more. Those that believe so may be inherently distrusting of the government and therefore less likely to take the risk of expressing disapproval. On the other hand, individuals who believe that the government is responsible for the survey...
may falsify to a lesser extent, if they consider such government-sponsored questioning as a “signal” that the expression of such beliefs is pre-approved.

Figure 3 reports the estimated self-censorship by subgroup for all four items. The points represent estimated proportions and the horizontal bars the 95% confidence intervals. First, contrary to expectation, there is a tendency among younger respondents to self-censor to a higher degree than older respondents. A possible explanation is that younger respondents have more knowledge of the...
state’s online reach, causing them to self-censor to a larger extent. Regardless, these results highlight the importance of accounting for differences in self-censorship among subgroups. With the direct estimates (found in the Online Appendix Figure 4), younger respondents consistently exhibit higher levels of political support, whereas this pattern is reversed after accounting for self-censorship.

Party membership does not clearly determine falsification, and education appears only relevant for the measures of diffuse support, the greatest difference being with respect to government censorship.

Gender appears to be a factor in determining self-censorship, with women showing a greater propensity to falsify their responses. This is most pronounced with regard to support for the existing political system, where the propensity to falsify differs by 22 percentage points. Again, looking at the direct estimates we are reminded of the importance of accounting for differences in self-censorship to avoid drawing false conclusions; with direct questioning, 85% of women support the system while only 66% of men state that they support it. Greater self-censorship among women effectively erases this observed difference in explicit support.

Those with urban hukou are more likely to falsify their preferences than are those with rural hukou, supporting our prior expectation. This difference is substantial; the level of self-censorship with regard to system of government was 28 percentage points higher among urban residents, and 15 percentage points higher for government censorship. The substantial difference we find between rural and urban residents calls into question the validity of the assumption that many researchers have made based on prior research – that open criticism of the regime among rural residents is indicative of a lack of self-censorship generally in China. With direct questioning, urban residents support the system to a greater extent than rural residents, 81% vis-à-vis 72%, a difference of 9 percentage points. This difference is, however, not reflective of true preferences, but a product of a difference in the propensity to self-censor; 41% of urban residents state support with the indirect question compared to 60% of rural residents. It is in fact rural residents who support authoritarian rule to a greater extent than do urban residents among this sample.

Income level defines the next two subgroups, and we see that there is a difference between high- and low-income earners only with regard to perceptions of the corruption campaign.

Lastly, respondents who believe that the government commissioned the survey appear to be less likely to falsify than those who believe that an independent research institute (or other organization) commissioned the survey with regard to two of the four items, while the relationship is reversed for the other two items. These results are on balance consistent with our “signal” hypothesis in that individuals may believe that if the government gives the option to disapprove it is not a risk to do so. These results are consistent with Lei and Lu (2017), but also show that the finding that individuals are more critical of the government to a CCP enumerator perhaps should not be viewed as evidence that self-censorship on surveys does not exist.

**Conclusion**

We study self-censorship in relation to multidimensional regime support and find that 24.5%–26.5% of respondents who state regime support in direct questioning in fact hold regime-critical opinions. The extent of self-censorship is such that the CCP does not enjoy such high levels of regime support as reported in most surveys. Interestingly, we find substantially higher estimates of support along the specific dimension than we find for measures of diffuse support, but the extent of self-censorship is consistent.

These results have two major implications for the study of regime support in authoritarian states. First, it is likely that the staggeringly high levels of regime support found in some authoritarian states as reported by cross-national surveys are positively biased. This concern is not new, but this study shows that this bias is consistent across a variety of common survey items and different dimensions of support. Further, if this was not considered problematic in prior eras, current developments necessitate a re-evaluation. Second, studies which aim to uncover the determinants of regime support are likely biased, given the varying nature of self-censorship. This systematic variation in self-censorship is sufficient to eliminate, and in some cases reverse, the observed relationship between background factors and system support as measured by direct questioning.

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The replication files are available at https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/LVQGCL.

Notes

1. Because Tang (2016) measures distrust, he measures a low-prevalence activity and, consequently, estimates of self-censorship are also low, 4% of respondents, with 8% who distrust officials in direct questioning, whereas 12% distrust with indirect questioning. This, however, does not directly indicate that self-censorship is unproblematic as is argued because 33% of respondents self-censored their responses to direct questioning.

2. Note that Lei and Lu’s (2017) second study was conducted in 2014, a little over a year into the current leadership’s tenure at a time where repression had already increased yet not reached current levels.

3. While the latter is the popular narrative in the media, recent scholarly work indicates that the campaign is more than simply a tool in factional politics (see e.g. Manion, 2016; Qin et al., 2017).

4. Censorship has been common in China even prior to the current CCP regime which means that this item may probe for support for the Chinese state rather than the CCP party state. However, the wording of the question should prompt individuals to consider the current regime.

5. It is possible that additional items on the lists, such as “Overall, the country is going in the right direction”, are sensitive in the Chinese political context, but because the same items are presented to the control and treatment group, the potential sensitivity of any additional item does not invalidate the results.

6. Tsai (2010) raises the concern that Chinese respondents find indirect questions confusing. In comparison to Tsai’s rural respondents, our sample is more highly educated and savvy enough to use the Internet. Moreover, the list set-up is arguably less cognitively burdensome in an online setting than it is face to face.

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