

# Value Preference and Response Performance Analysis of Government in Network Public Opinion -- Based on Probit Model

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**Abstract**—With the continuous development of big data and the continuous progress of social media, at present, the government's response to online public opinion is one of the important contents of the government's work, which is an important support for social stability and the orderly participation of the public in the network. This paper mainly analyzes based on the public value theory, collects six types of online public opinion in China in the past four years, takes the online public opinion events as the analysis object, and uses the probit model to test the consistency of the public value theory for the government's response to online public opinion performance. Through the analysis of the object, it can be concluded that task-based public value and non task-based public value have a positive impact on the government response performance perceived by the online public and mainstream media. In terms of cognitive performance of online public, the interaction effect between task-based public value and non task-based public value is significant and has a positive synergy. This paper theoretically verifies some viewpoints of Government Performance Governance Theory and relative deprivation theory based on public value, and provides enlightenment and ideas for cognition, understanding and governance of public opinion in practice.

**Keywords**- Public value theory; Network public opinion; Response performance

## 1 INTRODUCTION

Response is the core concept of normative democracy theory. When responding to the public, the government should first consider the concept of democracy. As an important module of government response, public opinion response is related to the harmony and stability of society and the views of the outside world on the government. With the continuous development of the

times, the way the government responds to public opinion is also constantly improving and innovating. At present, China is in the era of big data development. Networks and social media are not only virtual social platforms, but also a public sphere for public opinion expression. The Internet creates a space for public opinion, in which public opinion is likely to ferment, so the government's response to public opinion is very important. Social media provides a platform for public opinion expression and has become a response medium that the government relies heavily on. Public opinion and government response have gradually moved from offline to online<sup>[1]</sup>.

The government's response to online public opinion has always been highly valued. A series of documents, such as the opinions on strengthening the information content construction of government websites and the notice on Further Doing a good job in the response of government public opinion in the work of government openness, make institutional provisions for governments at all levels to respond to network public opinion. Under the high attention of the Party Central Committee and the State Council, local governments at all levels have fully realized the importance of online public opinion, made outstanding achievements in response practice, and established an all-round, all fields and multi-channel online response platform. Up to now, China has established more than 360 thousand tiktok platforms including micro-blog, WeChat, website and jitter. These platforms have played a positive role in ensuring public participation, responding to public preferences and realizing government people interaction

Despite the continuous progress in the construction of the government's network response platform, there is still a certain gap in the government's response ability and response effect. In the face of the continuous fermentation of network public opinion, problems such as non-standard, opaque and untimely government response occur from time to time. Some responses not only did not calm public concerns, but stimulated a new round of public opinion doubts, resulting in the expansion and upgrading of the situation. Once such problems appear, they will have a negative impact on the image and credibility of the government, and increase the risk of entering the "Tacitus trap". Therefore, both from the perspective of practice and theory, this paper urges this paper to re study the government response in network public opinion. The realistic question is, how should the government act to improve response performance and better respond to online public opinion?

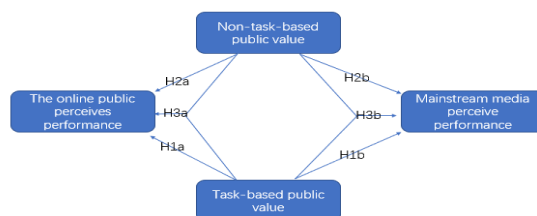
## **2 RAISE A PRESUMPTION AND RESEARCH DESIGN**

### **2.1 Raise a presumption**

At present, the response of Internet public opinion is deeply concerned by governments at all levels. The notice on further responding to government public opinion in government affairs publicity clearly stipulates that "for government public opinion involving particularly major and major emergencies, a press conference shall be held within 24 hours at the latest, and for other government public opinions, a response shall be given within 48 hours, and authoritative information shall be continuously released according to the progress of the work." For the response performance, "all regions and departments should focus on the response effect, carry out regular supervision, effectively solve doubts, clarify facts, and win public understanding

and support<sup>[2]</sup>." This paper extracts the definition and standard of government response performance, that is to win public understanding and support through response, and judge response performance by whether government response has received public support or not. In addition, this paper also attempts to study the impact of mainstream media on government response performance.

This paper holds that in the era of social media, network public opinion represented by we media and the perceived performance of mainstream media on government response may affect each other, but they are not completely consistent. This can be understood from three perspectives: first, from the perspective of the communication subject, the communicators of the mainstream media are official institutions, and their news reports are more rigorous because they represent the opinions of the government, which need to be reviewed at all levels before they can be released. The disseminator of we media is individual Internet users, which is divorced from the audit link in the traditional sense<sup>[3]</sup>. The voice of individuals is less considered "politically correct" and less restricted, so they have greater authority to make evaluation based on perception; Second, from the perspective of rationalism, mainstream media are more rational than we media. In the face of public events, mainstream media report objectively based on evidence; Third, from the perspective of publishing content, mainstream media use more linear narration to provide complete information of events, and finally make qualitative analysis. We media express their opinions by capturing fragmented information. Therefore, there may be differences between the government response performance recognized by the mainstream media and the online public. Therefore, it is appropriate to set different variables for empirical test to explore the differences between the two. The core variable relationship of the full text is shown in Figure 1



**Figure1** The core variable relationship

Task based public value preference refers to the core activities and main target preferences of public institutions, public projects, public policies and public activities, which come from policies and regulations and have a certain mandatory response to the government, Task-based public value can be summarized as: truth, justice, rule of law and efficiency. It should be emphasized that in the face of specific events, new values may be incorporated according to specific tasks. In the cases of online public opinion, violence, disaster, food and medicine and other events involving public security account for more than 60%. For these events, security should also be one of the task-based values to be carried by the government response. Therefore, the task-based public value set constructed in this paper includes four public value contents: truth, justice and rule of law, efficiency and security. It is easy to judge that these four values are not only the value content explicitly required in the policy documents, but also the public value preferred by the online public and mainstream media. It can be inferred that the higher the

consistency between the government response and the task-based public value, the more helpful it is for the online public and mainstream media to recognize the government response performance. This paper puts forward assumptions H1、H1a、H1b。

Hypothesis H1: The consistency between government response content and task-based public value will positively affect response performance;

Hypothesis H1a: The consistency between government response content and task-based public value will positively affect the perceived performance of online public;

Hypothesis H1b: The consistency between government response content and task-based public value will positively affect the perceived performance of mainstream media.

Non task-based public value is not mandatory due to the lack of policy regulation. It belongs to the value that the government can provide in addition to the task expected by the public.

Based on the literature, this paper constructs a non task-based public value set composed of four values: transparency, accountability, rationality and compassion for the weak. Non task-based public value meets the alternative value preference of the online public, and the government has more requirements for the content of response. Some studies have shown that the commitment to transparency and accountability in the response will help calm the situation. Responding reasonably and sympathizing with the weak can gain favor, eliminate estrangement, calm the online public mood and media doubts, help to establish the trust between the public and the mainstream media, and then improve perceived performance。 This paper puts forward assumptions H2、H2a、H2b。

Hypothesis H2: The consistency between government response content and non task-based public value will positively affect response performance;

Hypothesis H2a: The consistency between government response content and non task-based public value will positively affect the perceived performance of online public;

Hypothesis H2b: The consistency between government response content and non task-based public value will positively affect the perceived performance of mainstream media.

The content of the response should not only respect the facts, take the facts as the basis and the law as the criterion, but also pay due attention to the demands of public opinion, which will help to improve the response effect. People's public opinion data center also pointed out that public opinion response should be fast, based on facts, humanistic care and a certain temperature in order to produce a more positive response effect<sup>[4]</sup>.

In addition, in the government response, both task-based values and non task-based values should be met to a greater extent, which should affect the performance of the government to a certain extent. The comprehensive response effect is much greater than the case by case response effect. The interaction between task-based public value and non task-based public value may have an impact on response performance, and this interaction is greater than the single effect. This paper puts forward assumptions H3、H3a、H3b。

Hypothesis H3: The interaction between task-based public value and non task-based public value will positively affect the government response performance;

Hypothesis H3a: The interaction between task-based public value and non task-based public value will positively affect the perceived performance of the Internet public;

Hypothesis H3b: The interaction between task-based public value and non task-based public value will positively affect the perceived performance of mainstream media.

## 2.2 Research design

Since the government's response to public opinion is a clear request made after 2016, this paper mainly collects samples after 2018 for analysis. Based on the public opinion data center of people's network, public opinion center of Xinhuanet, public opinion monitoring center of legal network, Zhongzheng public opinion and other domestic authoritative public opinion monitoring institutions with large database case samples, this paper mainly carries out carpet search, eliminates cases involving enterprises, energy, animal protection and other cases that have nothing to do with the response of local governments, and draws lessons from the classification of public opinion events in the public opinion monitoring room of people's network, Establish a sample database of public opinion cases. The cases in the sample database are snowballed in-depth data mining one by one<sup>[5]</sup>. Among them, the information of public opinion events and government response comes from government microblog, wechat, government website and media reports, which can be obtained manually. The perception of online public and mainstream media on government response performance comes from public microblog comments and mainstream media reports, which are obtained through octopus, Hou Yi and other data collectors. A total of relevant information such as event type, outbreak time, response content, response time, response organization, netizen comments, mainstream media response and so on are extracted. Finally, according to the set coding rules and algorithms, the information is processed to form the data set of case samples. A total of 159 public opinion cases were finally determined from 2018 to 2021, See Figure 2 for sample distribution by year type.

## 2.3 Model design

The explained variable in this paper is a dichotomous variable, so probit regression model is used for hypothesis test. Among them, in order to verify hypothesis 1 and hypothesis 2, model (1) and model (2) are established to test the relationship between the consistency of two types of public value and the perceived performance of online public and mainstream media. In order to test hypothesis 3, model (3) and model (4) are established to test the relationship between the interaction of two types of public values and the perceived performance of online public and mainstream media. For model (3) and model (4), the explanatory variables are centralized in order to eliminate the influence of multicollinearity before constructing the interaction items.

$$s_{public} = \beta_0 + \beta_1 mission + \beta_2 nonmission + \beta_3 rapid + \beta_4 level + \beta_5 suplevel + \beta_6 tone + \beta_7 type + \beta_8 ftimes + \beta_9 fmedia + \beta_{10} mulsector + \varepsilon \quad (1)$$
$$s_{media} = \beta_0 + \beta_1 mission + \beta_2 nonmission + \beta_3 rapid + \beta_4 level + \beta_5 suplevel + \beta_6 tone + \beta_7 type + \beta_8 ftimes + \beta_9 fmedia + \beta_{10} mulsector + \varepsilon \quad (2)$$

	2018	2019	2020	2021	Total	Proportion
Food Safety	4	0	5	4	13	8.2%
Violence	12	21	10	12	55	34.5%
Educational public opinion	5	6	13	6	30	18.9%
Official administration and Anti-corruption	4	24	19	4	51	32.1%
Disaster public opinion	2	1	1	0	4	2.5%
Environmental public opinion	0	4	1	1	6	3.8%
Total	27	56	49	27	159	100%
Proportion	17%	35.2%	30.8%	17%	100%	

**Figure 2** for sample distribution by year type

$$s_{public} = \beta_0 + \beta_1 mission + \beta_2 nonmission + \beta_3 mission \times nonmission + \beta_4 rapid + \beta_5 level + \beta_6 uplevel + \beta_7 tone + \beta_8 type + \beta_9 times + \beta_{10} fmedia + \beta_{11} mulsector + \varepsilon \quad (3)$$

$$s_{media} = \beta_0 + \beta_1 mission + \beta_2 nonmission + \beta_3 mission \times nonmission + \beta_4 rapid + \beta_5 level + \beta_6 uplevel + \beta_7 tone + \beta_8 type + \beta_9 times + \beta_{10} fmedia + \beta_{11} mulsector + \varepsilon \quad (4)$$

## 2.4 Variable description

This paper sets two types of government response performance: public perceived performance (spublic) and mainstream media judgment performance (smedia). This paper holds that in the face of public network public opinion, the government response has only two results: success or failure, and there is no middle fuzzy zone. Therefore, the success of response is defined as performance. At the level of online public, the success of response shows that the public pays attention to the event itself, rather than strongly questioning the government response. At the level of mainstream media, the success of response is reflected in that the media does not release news, question or criticize the government response<sup>[6]</sup>.

This paper examines two variables: mission and non mission. Investigate variables for data acquisition: first, conduct confirmatory analysis of public value content. Specifically, randomly select the sample set of public microblog comments for content analysis, extract effective information for word frequency statistics, take the sun Xiaoguo event as a case, encode the statistical keywords and summarize them into values preferences, and verify whether the task-based and non task-based public value sets constructed above are complete and mutually exclusive. Figure 3 shows the keyword analysis of the cases.

Key word	Frequency	Expression coding	Value preference	Value type
Umbrella	14	Accountability	Responsibility	×
Eliminate evil	14	Eliminate black and evil	Safety	✓
Handle	12	Accountability	Responsibility	×
Law	11	According to law	Justice of the rule of law	✓
Appease	11	Questioning justice	Justice of the rule of law	✓
Public Security Law	10	Questioning justice	Justice of the rule of law	✓
Find out	8	Accountability	Responsibility	×
Corrupt	7	Questioning justice	Justice of the rule of law	✓
Absolutely lawless	6	Questioning justice	Justice of the rule of law	✓
Deep excavation	6	Question the result	The truth	✓

**Figure 3** confirmatory analysis of public value cases

*Task-based value is* ✓ *Non-task-based value is* ×

A series of control variables were selected based on existing studies. After controlling the level of the initial involved unit, the judgment of response performance by the online public and mainstream media may be affected by the level of the involved government. It is generally believed that the higher the level is, the higher the probability of success is. After controlling the response time (RAPID), the Public Opinion Data Center of People's Daily Online proposed the "golden 4 hours" rule. Most literatures believe that the faster the response, the better the situation will calm down. The up-level of responding units is controlled. When facing public opinion, the units directly involved will choose to seek help from the superior department, and the superior department will often take the initiative to intervene and upgrade back when the incident has a great impact. The intervention of superior departments can objectively alleviate public anxiety and thus affect performance perception, and the more promotion, the greater the impact. In tone control, too many official utterances, such as "leadership attaches importance to", will arouse the aversion of the online public and thus affect performance perception, while humanized and down-to-earth expressions are just the opposite. By controlling the number of response units (Mulsec-Tor), the multi-department joint response is more authoritative than the single department response and is more easily recognized by the public and mainstream media. In addition, factors that may affect response performance, such as event type, response times and response media, are also controlled.

### 3 RESULTS & DISCUSSION

#### 3.1 Research conclusions

From the perspective of public value theory, this paper analyzes the impact of the consistency between government response and public value on response performance based on online public opinion cases. It is found that task-based public value and non-task-based public value positively affect the perceived performance of online public and mainstream media on

government response. This shows that both the online public and mainstream media will pay attention to two types of public values. Rosen- Bloom proposed the concept of non-task-based public value, and based on normative research, he believed that the emphasis on results of performance management under the new public management may reduce the attention to non-task-based value, because for most organizations, These values are not task-based in nature. This paper verifies that non-task-based public values have a positive role in promoting government response performance. Compared with the independent consistency of government response and task-based and non-task-based public values, the synergistic effect of the two types of values is stronger when they are consistent at the same time. This shows that for the online public, the government's response should be both rational narrative and empathic expression, and the response of "covering all aspects" is better than that of "matter-of-fact". To some extent, this explains the uncertainty of government performance under the new public management paradigm. There is no significant interaction between the two types of values on response performance perceived by mainstream media. This shows that the mainstream media has a greater tolerance for the government's response, and the government can win the recognition of the mainstream media as long as it is "on the case", clearly and objectively states the facts and logically and consistently.

### **3.2 The revelation**

Based on the research of this paper, we can explain the enlightenment of government response performance based on public value.

1) The public value carried by the government response content is inconsistent with the public value of the network public demand, which is the main reason for the low response performance, while the public value identification is the "nose" of the government response performance. Therefore, it is necessary to deeply understand that the value of response performance is not the value of some stakeholder groups, but the public value as a collective preference.

2) Public value is determined by the essential characteristics of the result of social construction, and there is no long-term fixed and universal value content. Therefore, the government should make full use of various public opinion databases to review public opinion events on the public network, analyze the value supply in the government response and the value demand in the public feedback information, explore the establishment of public value content database of different types of public opinion events, and accurately grasp the public value behind various public opinion events.

3) When facing public opinion events, the government should quickly collect online comments from the public, extract and predict the various value preferences of the public, carry the value content through government response on the basis of reference to the public value content database, and respond in a "comprehensive" manner. On the basis of maintaining the consistency of public value, other influencing factors such as response level, response mode, response speed and language expression are considered.

From the theoretical perspective of public value, local governments need to respond in the process of constant exploration and pursuit of public value in the face of the public seeking to maximize public value. Any government response that deviates from public values is a cause



for public criticism. From the perspective of the binary relation of government and society, the Chinese party committee leadership, government responsibility in the mode of "big government" can solve practical problems, one of the reasons is the party and the government fundamental interests is entirely consistent with the public, it has to do with western-style democracy under the pursuit of "small government, big society", pay attention to social organizations on the government function replacement is quite different. It is in this theoretical perspective and realistic background that local governments should not simply suppress and block online public opinion, but should meet the expectations and requirements of the public to the greatest extent, accommodate the value preference of the public and take care of the emotional appeals that may be exaggerated and amplified.

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