

# A study on the Social Satisfaction of Hunan Province's Quality work in 2018

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**Abstract.** From the perspective of the public, this paper collects data on product quality, engineering quality, service quality, environmental quality and quality awareness of Hunan Province through online surveys, computer-assisted telephone interviews and interviews, and from geography. Data analysis was carried out from the perspectives of regional and economic conditions, and the characteristics of the respondents' population, which comprehensively and objectively reflected the quality work in Hunan Province in 2019. The survey results show that the satisfaction of the quality work of the Hunan Provincial in 2019 is generally satisfactory, the environmental quality satisfaction improvement effect is obvious, and the product quality satisfaction needs to be further improved. Quality satisfaction is greatly affected by regional differences and educational levels.

## 1. Introduction

Quality work is closely related to the vital interests of the people. It is an effective way to connect the Quality management department and the public by conducting the survey and evaluation of quality work satisfaction. As the client of the quality work, the public has the most direct and true feeling on the local quality work. Once the related department has a lack of quality and safety supervision, or the quality and quantity of public services are inadequate, the public will be the first one who find the mistake. It is beneficial for the related institutions to conduct the evaluation of quality work satisfaction on better understanding the public demand and strengthening the supervision on Product Quality, Engineering Quality and Service Quality. It is also conducive to the related institutions to better improve its own lack of quality work, and enhance the sense of responsibility and competition.

## 2. Evaluation Scope

The International Organization for Standardization (ISO) summarizes and abstracts different concepts of quality and gradually forms well-known terminology, that is, "The degree to which a set of inherent characteristics fulfill requirements." This definition has a wide range of meanings, reflecting both the need to meet the requirements of the standard, we called it a narrow concept of quality, and it also contain the need to meet the needs of customers, it is a broad concept of quality. So far, this definition is generally accepted.

The broad concept of quality not only refers to product, engineering and service quality, it also has been extended to all processes, systems and organizations, and to all personal skills, personal and departmental work quality, new abilities, and group spirit. It also includes professional technology, financial benefits, business conditions, management ideas and management level, behavior mode and standards, legal system and ethics, etc.

The "quality" in the quality work investigated in this paper follows the concept of generalized quality. We not only survey the Hunan Province 's Quality work on product, engineering and service, also add the survey on the environmental quality and quality consistency. We use the network survey, computer-aided telephone interview and interception interview, to collected a large number of data, so that it can truly reflect the public's attitude towards quality work, and comprehensive and systematic understanding of the quality work. We will strive to find out the results and shortcomings

in Hunan Province 's Quality work from the perspective of the public,, and form the third-party evaluation results of the quality work of each city and state to provide reference for quality work.

### 3. Evaluation Theory and Method

In order to ensure the accuracy, scientificity and comprehensiveness of the survey results, the survey conducts stratified random sampling according to the principle of probabilistic scale proportionality. Then, we determin the sample size of each city and state on the basis of the population size of each city and state in Hunan Province.The Collected sample covered 14 cities in the province, and collected an effective sample size of 3977.

#### 3.1 Sample Situation

This project collects data comprehensively through Online Survey, Computer Aided Telephone Interview(CATI), interception interview and other survey methods.

The online survey uses the mobile phone number of each city resident as a sample sample box to send an invitation to participate in the survey in the form of a text message.

The CATI application computer system dials the automatically generated or preset telephone number. The professional telephone interviewer makes a telephone call to the public according to the questionnaire displayed on the computer screen. The collected data needs to be monitored and quality controlled (QC) Supervised spot check and verification.

The interviewed by the professionally trained investigators entered the community or the site of the specific service site in the field, randomly intercepted the public and asked for a Service Quality evaluation of the field. The effective sample ratio is shown in Figure 1.

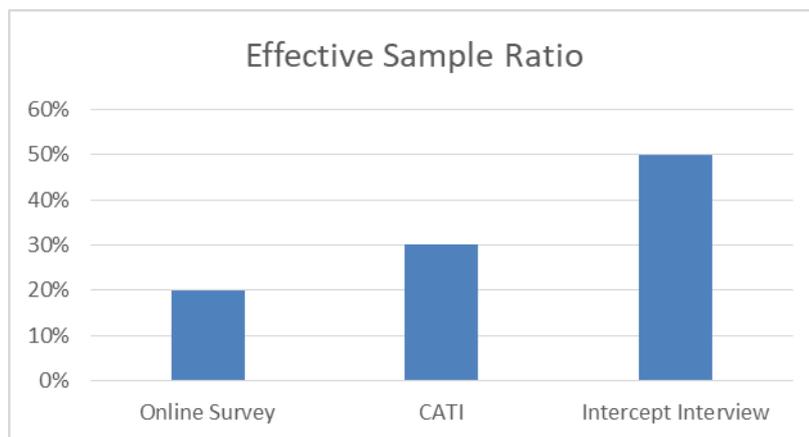


Figure 1. Effective Sample Ratio

#### 3.2 Index System

Hunan Provincial Quality Work Social public satisfaction evaluation is a measure based on the public's perception of local quality work content. The evaluation covers five major areas: Product Quality, Engineering Quality, Service Quality, Environmental Quality and Quality Consciousness.

It is divided into five first-level indicators, and corresponding second-level indicators are set for each first-level indicator. Moreover, contents that are easy for residents to feel and closely related to daily life are selected as evaluation indicators.5 point Likert scales were used to measure the project. The detailed evaluation content index system and measurement method are shown in table 1.

Table 1. Public evaluation and evaluation of quality work of hunan provincial

First-level Indicators	Second-level Indicators	Measurement Index	Metric Method
Product Quality	Food and drug quality	drug	Very dissatisfied i=1; Dissatisfied i=2; General i=3; Satisfied i=4; Very satisfied i=5
		Daily food	
	Quality of agricultural products	Grain, vegetables, fruits, meat, Aquatic products	
	Quality of consumer goods	Consumer durables	
		Everyday items	
Quality of special equipment	Urban elevator, public facilities of amusement places		
Engineering Quality	Construction quality	housing	
	Traffic engineering quality	Public transport engineering	
Service Quality	Quality of productive services	Short distance public transport service	
		Long-distance transport service	
		Communication and Internet services	
		Banking services	
		Insurance services	
		E-commerce services	
		Logistics and express delivery services	
	Quality of life services	Primary and secondary education services	
		Medical services	
		Pension services	
		Public service	
		Tourism services	
		Public cultural and sports services	
Home decoration service			
environmental quality	Water environmental quality	The quality of lakes	
	Atmospheric quality	Air	
Quality Consciousness	Quality complaints	Quality complaint satisfaction	
	Information disclosure and publicity	Quality and safety issues, quality publicity	
	The quality of ascension	mprovement of product, engineering, environment and Service Quality	

#### 4. Evaluation Results and Analysis

##### 4.1 Overall Score

In 2018, the comprehensive evaluation of the quality work of the Hunan Provincial was 68.85 points, and the overall level was in a satisfactory stage. Among them, Service Quality scored the highest (69.53). Product Quality scored the lowest, 67.69. Environmental quality, Engineering quality and quality Consciousness were in the middle, respectively 69.38, 69.14 and 68.50.

Compared with 2017, the public satisfaction score of the quality work in Hunan increased by 0.3 points in 2018, and the scores of the first-level indicators showed slight fluctuations. Among them, the satisfaction of environmental quality was significantly improved, which was 1.17 points higher than that of 2017. The satisfaction of Engineering Quality decreased slightly, which was 0.2 points

lower than that of 2017. The satisfaction scores of Service Quality, Product Quality and Quality Consciousness increased by 0.21, 0.19 and 0.09 respectively.

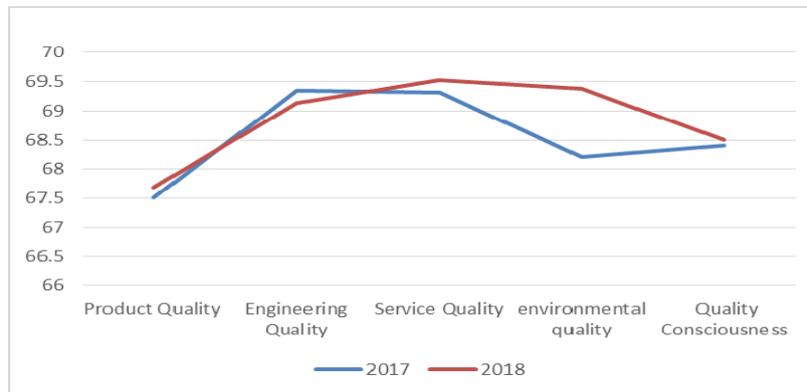


Figure 2. Comparison of Total Score between different years

## 4.2 Sub-index evaluation results

### 4.2.1 Analysis of Product Quality evaluation results

The Product Quality satisfaction evaluation of the overall evaluation score is 67.69 points. Among them, the Agricultural Product Quality score was 71.41 points, the food quality was 69.84 points, the drug quality score was 63.15 points, and the durable consumer goods quality, daily product quality and special equipment quality scores were all above 65 points. 68.4 points, 67.28 points and 65.01 points.

Compared with 2017, the 2018 Product Quality satisfaction score increased by 0.19 points, indicating that the related institutions has played a positive role in the implementation of product quality supervision and spot check and special rectification. From the perspective of the change in the index of refined indicators, the quality of durable consumer goods, the quality of special equipment, the quality of daily consumer goods, and the quality of drugs have declined compared with last year. Agricultural Product Quality was 3.65 points higher than last year. Food quality improved by 3.58 points compared with last year; The construction of agricultural Product safety demonstration zones under the guidance of the local institutions has played a greater role in promoting the improvement of agricultural Product Quality.

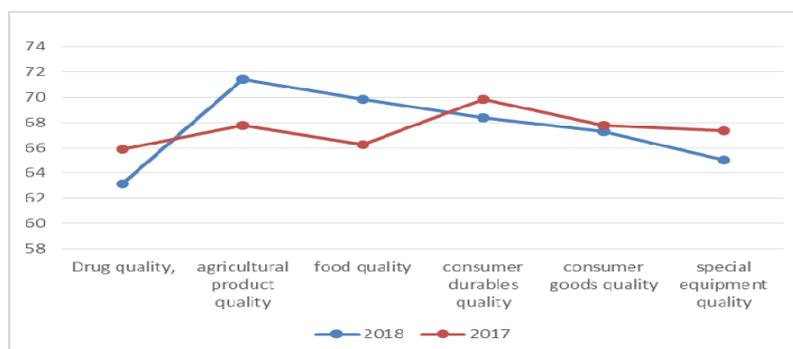


Figure 3. Comparison of products quality evaluation results

### 4.2.2 Analysis of Engineering Quality evaluation results

The overall evaluation score of Engineering Quality satisfaction was 69.14. Among them, the Quality score of traffic Engineering is 70.2, while the Quality score of architectural Engineering is 68.08. (see figure 2-7 for details)

Compared with 2017, the satisfaction score of Engineering Quality in 2018 decreased by 0.2 points. In terms of the change in the score of detailed index, the Quality score of transportation

Engineering was the same as that of last year. Compared with last year, the Quality of construction Engineering decreased by 0.39 points.

4.2.3 Analysis of Service Quality evaluation results

The overall score of public satisfaction evaluation on Service Quality was 69.53. Among them, the satisfaction degree of productive Service Quality is 70.08, while the satisfaction degree of life Service Quality is 68.97.

Compared with 2017, the satisfaction score of Service Quality in 2018 increased by 0.21 points, which indicates that the work of Service Quality has made some achievements in 2018, and the public's overall perception evaluation of Service Quality is on the rise. According to the score change of detailed index, the productive Service Quality was 0.27 points higher than that of last year. And the Quality of living Service increased by 0.14 points. In addition to the small decline in home decoration Service Quality, the Service Quality of other industries have different degrees of improvement.

4.3 Evaluation results of each area

According to the geographical location, we divide Hunan into Chan Zhuzhou Xiangtan area (east of Hunan), Dongting Lake area (north of Hunan), Southern Hunan area (southern Hunan), and Xiangxi area (west of Hunan). According to various data, Hunan Quality job satisfaction is high in the east, low in the west, high in the north and low in the south. There are 5 cities and counties such as Xiangtan City, Yueyang City, Changde City, Changsha City and Zhuzhou City with scores of 70 points or more. The specific score is shown in the Figure 4.

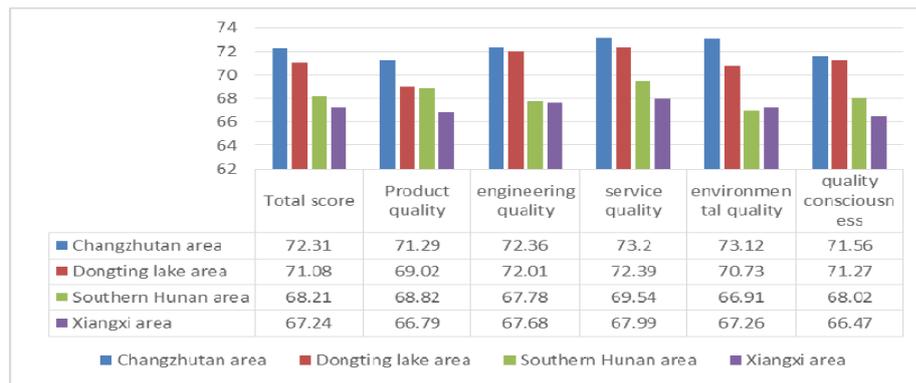


Figure 4. Comparison of scores between different area

4.4 Satisfaction of different respondents

4.4.1 The score difference between urban and rural areas

According to the known data obtained, the satisfaction degree of urban respondents to quality work is higher than that of rural respondents. The satisfaction degree of urban respondents is 69.51, and the satisfaction degree of rural respondents is 67.31. Urban respondents' satisfaction with quality work is significantly higher than that of rural respondents. The most fundamental reason lies in the long-term imbalance of resource allocation. In the future, the quality work needs to pay more attention to rural areas.

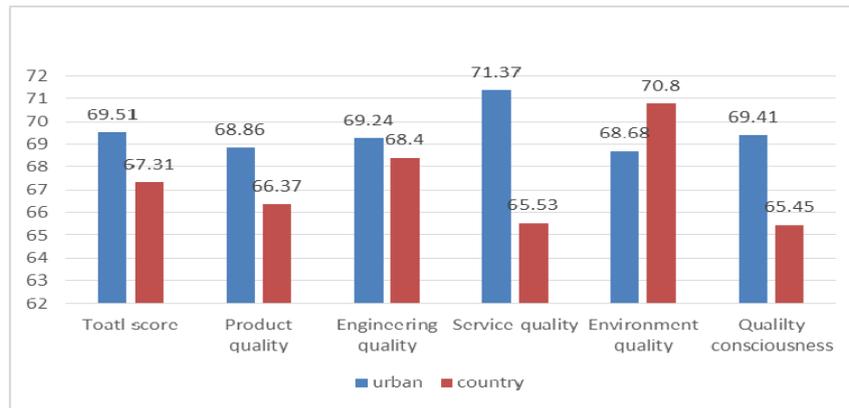


Figure 5. Comparison of scores between different audience

#### 4.4.2 Quality evaluation of different academic qualifications

According to the available data, respondents with a high school education or below have the lowest satisfaction with quality work, which is 68.12. The degree of satisfaction with the quality work was 68.80 among the residents with college education.

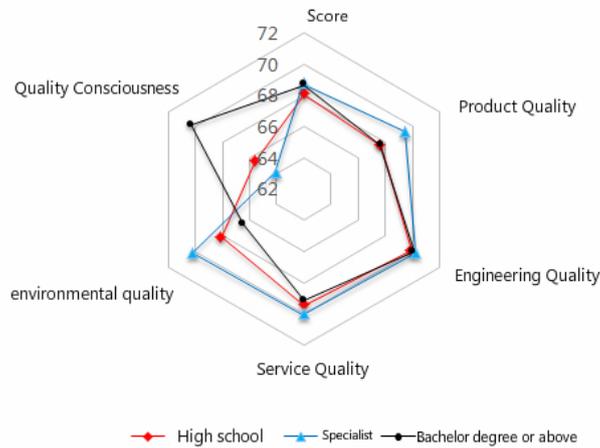


Figure 6. Quality evaluation of different academic qualifications

## 5. The results of the analysis

### 5.1 Satisfaction of different respondents

The public satisfaction of the quality work of the Hunan Provincial is generally at a satisfactory stage, and the people's satisfaction with the quality work has steadily increased.

From the data, in addition to a slight decline in the satisfaction of Engineering Quality, the other aspects of the data all show an upward trend, especially the satisfaction with environmental Quality, which is greatly improved compared with that of 2017. Satisfaction with Product Quality has been improved compared with that in 2017, but overall, the overall level is still at a low level. It is urgent for the related institutions to pay more attention to Product Quality and improve its Quality.

### 5.2 Regional quality satisfaction is obviously different

In Hunan province, the quality work satisfaction is high in the east and low in the west, high in the north and low in the south. The scores of Changzhutan area in the Middle East of Hunan province get the highest score, and Dongting lake area in the north are only second to changzhutan area, and the two areas both higher than the provincial average. The quality satisfaction scores of these two regions are basically the same as the regional economic development level of Hunan province. The western and southern topography of Hunan is dominated by mountainous areas, and there are many ethnic

minority communities, the level of economic development is lower than other area. The eastern and northern regions are dominated by plains, and the level of economic development is relatively high.

### **5.3 Different groups have different concerns about quality**

Different education levels and different income levels in urban and rural areas have a great influence on the satisfaction score, and the difference between the two groups is up to 2.2 points. Especially in terms of Quality Consciousness, there is a huge difference between the interviewees with different education levels. The Quality Consciousness scores of the interviewees with bachelor's degree or above are much higher than those of the other two groups.

## **6. Countermeasures and Suggestions**

### **6.1 Focus on the needs of the masses and improve Product Quality**

Products involve every aspect of People's Daily life, and the level of product quality directly affects people's living standards. According to the evaluation data, although the public's satisfaction with product quality increased in 2018, the overall level of product quality was relatively low compared with other indicators. The related institutions should fully understand the needs of the public through the quality work satisfaction survey, focus on strengthening the quality of food and drugs, agricultural products, special equipment and other products supervision. The related institutions should strengthen quality social supervision and public opinion supervision, establish a sound feedback mechanism for quality signal transmission, encourage consumer organizations, industry associations, third-party institutions to conduct product quality comparison tests, comprehensive evaluations, experiential investigations, and guide rational consumption choices.

### **6.2 Promote the construction of credit system**

The enterprise is the main body of responsibility for product quality, the main body of quality improvement, and an important participant in quality development. Only by taking the enterprise as the main body, implementing the main responsibility of the enterprise, and giving full play to the enthusiasm of the enterprise, can we improve the quality from the source. The related institutions should continue to promote the construction of credit system and urge enterprises to actively fulfill their responsibility, and strengthen the education of the people's quality awareness. At the same time, in line with the hotspots of the Internet data era, linking the construction of credit system with the quality of enterprises, improving the construction of quality and safety traceability system, and establishing a system of quality and integrity traceability, which is beneficial to enterprises to enhance their competitiveness and benefit from the formation of a good quality demonstration. Create a good atmosphere in which everyone values quality and enjoys quality for everyone.

### **6.3 Improve quality awareness and create quality culture**

Realizing quality improvement not only requires the efforts of many quality managers and producers, but also requires a strong quality culture atmosphere, and more needs quality researchers and innovators. The related institutions should carry forward the spirit of craftsmanship, establish the ingenuity, cultivate the craftsman, produce the fine products as the starting point, promote the inheritance and development of quality culture, adhere to the principles and values of quality first, infiltrate the spirit of artisans into each product, and promote the quality of Hunan Province. To improve the overall level, we must adhere to the quality first as the value orientation, strengthen the quality propaganda, and establish the concept of advocating quality.

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