

**Specific calculation methods are as follows:**

**Comprehensive evaluation:**

- (1) The average value of the point in the overall item should be calculated.
- (2) The standard deviation of the point in the overall item should be calculated.
- (3) The point in the overall item should be replaced by the deviation value with results of (1) and (2).
- (4) The deviation value of correlation degree for the satisfaction degree (the explanatory variable) and overall evaluation (the target variable) of each item should be calculated.

**The satisfaction degree:**

- (1)The average value of the point in the overall item should be calculated.
- (2) The standard deviation of the point in the overall item should be calculated.
- (3) The point in the overall item should be replaced by the deviation value with results of (1) and (2).

The steps of the concrete calculation method are as follows:

Each evaluation distinction should be quantified; and the point should be calculated

Comprehensive evaluation	
Evaluation distinction	Points
Overall satisfaction	5
Slight satisfaction	4
Bare satisfaction	3
Slight dissatisfaction	2
Dissatisfaction	1
Having no idea	0

point=

The number of people who answer [overall satisfaction] × 5 points + the number of people who answer [slight satisfaction] × 4 points + the number of people who answer [bare satisfaction] × 3 points + the number of people who answer [slight dissatisfaction] × 2 points + the number of people who answer [dissatisfaction] × 1 points

---

Overall number of people - (the number of people who answer [having no idea] + the number of people who do not answer)

Satisfaction degree	
Evaluation distinction	Points
Satisfaction	5
Slight satisfaction	4
Bare satisfaction	3
Slight dissatisfaction	2
Dissatisfaction	1
Having no idea	0

point=

The number of people who answer [overall satisfaction] × 5 points + the number of people who answer [slight satisfaction] × 4 points + the number of people who answer [bare satisfaction] × 3 points + the number of people who answer [slight dissatisfaction] × 2 points + the number of people who answer [dissatisfaction] × 1 points

---

Overall number of people - (the number of people who answer [having no idea] + the number of people who do not answer)

In order to better distinguish the position relation of numerical values which are distributed in Chart CS, the point in each item should be replaced by the deviation value. The steps of the concrete calculation method are as follows:

Step a: Calculate the difference between a given value and the sample mean (formula:  $x_i - \bar{x}$ )

Step b: Calculate the square of the difference between a given value and the sample mean

(formula:  $(x_i - \bar{x})^2$ )

Step c: Calculate the fraction of each sample (n= the number of samples) and the square of mean difference divided by the number of samples

$$S^2 = \frac{(x_1 - \bar{x})^2 + (x_2 - \bar{x})^2 + \dots + (x_n - \bar{x})^2}{n}$$

$$= \frac{1}{n} \sum_{i=1}^n (x_i - \bar{x})^2$$

Step d: Calculate the standard deviation (S), the square root of the resulting value in Step C

$$S = \sqrt{\frac{1}{n} \sum_{i=1}^n (x_i - \bar{x})^2}$$

Step e: Calculate the deviation value

$$\text{that is: deviation value} = \frac{\text{Each value} - \text{Mean value}}{\text{Standard deviation}} \times 10 + 50$$