

## Is it Satisfaction or Performance? An Investigative Study of Higher Education

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### Abstract

**Purpose** – Most studies on higher education focus on students as customers, and evaluate student levels of satisfaction/dissatisfaction with their programs, while generally neglecting teacher work satisfaction. Thus, this study evaluates how employee dissatisfaction with various investment items determines the improvement priority.

**Methodology** – This study used the academic literature to establish a satisfaction model for higher education employees. The model is divided into six dimensions: organization vision, respect, result feedback and motivation, management system, pay and benefits, and work environment. Using a questionnaire based on the model, 248 teachers were surveyed from the various Management Institutes and Business Schools to investigate and analyze their importance-satisfaction level. The importance-satisfaction model (I-S model) was then applied to place each quality attribute into the I-S model, and thus determine the improvement strategy.

**Findings** – The analytical results showed that higher education employees focus on high salaries and fair promotion systems.

**Originality/value** – The employee satisfaction model for the higher education sector not only considers satisfaction levels but also degrees of importance in deciding the improvement strategy.

**Key words:** Higher Education, Management Education, Quality Education and Satisfaction.

## 1. Introduction

Improving customer satisfaction not only raises company profits, but also facilitates company development (Dubrovski, 2001). Previous studies have proposed that employees are the greatest assets of a company, and that satisfied customers must satisfy employee requirements (Nebeker et al., 2001). Employee satisfaction influences organisational performance as much as customer satisfaction. Employees are the internal customers of the business; they satisfy the current working environment and are willing to cooperate with the business to accomplish business goals. Teachers are the employees of education organizations, and teacher satisfaction with the working environment can promote teaching and research quality. Therefore, teacher requirements must be fulfilled to improve the working environment and enable teachers to achieve outstanding research and teaching performance. In higher education, most studies focus on students as “customers”, and evaluate their level of satisfaction/dissatisfaction with their programs of study (Comm and Mathaisel, 2000), while generally neglecting teacher work satisfaction. While several employee satisfaction studies have been performed, very few deal with university teachers or academics in general (Ward and Sloane, 1998). Since employee satisfaction has been found to be as important as customer (student) satisfaction (Oshagbemi, 1997), research on higher education quality has now also begun to considering academic satisfaction (Comm and Mathaisel, 2003). The literature on employee satisfaction remains immature compared to that on customer satisfaction. Therefore, employee satisfaction surveys, particularly on employee satisfaction in the higher education sector, still require study and survey. Questionnaires, as well as employee interviews can also be applied to survey employee satisfaction. Businesses frequently design questionnaires from the perspective of managers, and thus the questionnaire items generally do not reflect real employee requirements (Comm and Mathaisel, 2000); thus, the survey results do not improve actual employee satisfaction levels. Consequently, this study evaluates how employee dissatisfaction with various investment items determines the improvement priority. This is where the present study positions.

## 2. Literature review

Employee satisfaction for higher education Organizations strongly desire job satisfaction from their employees (Oshagbemi, 2003). Job satisfaction has been found to significantly influence job performance, absenteeism, turnover, and psychological distress (Andrisani, 1978; Davis, 1992; Spector, 1997). Dissatisfied workers are prone to excessive turnover and absenteeism. Understanding job satisfaction thus may be linked to performance, organizational productivity and other issues, including labour turnover (Dickter et al., 1996; Lee et al., 1999; Melamed et al., 1995; Sekoran and Jauch, 1978). Employee satisfaction is as important as customer satisfaction in influencing organizational performance. Lee (1988) showed that job satisfaction is among the best predictors of turnover. Job satisfaction also influences customer perceptions of service quality (Rafaeli, 1989; Schneider and Bowen, 1985). Additionally, Williams (1995) found that employee benefits influence job satisfaction. Indirect costs associated with job dissatisfaction include training, recruiting and learning curve inefficiencies, as well as reduction in the client base (Brown and Mitchell, 1993). Conversely, employee satisfaction can improve productivity, reduce staff turnover and enhance creativity and commitment. Therefore,

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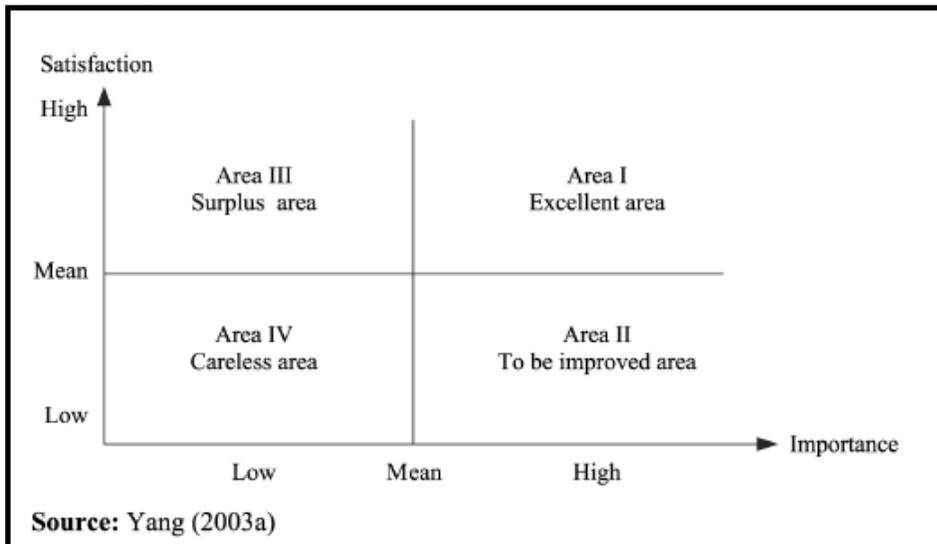
employee satisfaction should not be ignored and yet very few businesses seriously consider employee satisfaction (Ulmer et al., 1999). The objectives of higher education are to provide in-depth knowledge, seek academic development, educate students, and coordinate national development demands (Johnes and Taylor, 1990). Perkins (1973) proposed that university teachers fulfill three major functions, namely teaching, researching and administration and management. Consequently, university teacher satisfaction is related to the functions of higher education. Dalton and Pica (1998) found that the quality of faculty and instruction are important elements for satisfying business undergraduates and graduates, and that business placement and services were important to students. Similarly, in the higher education sector, Oshagbemi (1997a) investigated job satisfaction among university professors. Hagedorn (1994) examined the satisfaction of academic staff using various variables, including salary, perceived support from colleagues, satisfaction with administration, enjoyment of student interaction and perceived stress levels.

### **2.1. Employee importance and satisfaction survey**

The purposes of employee satisfaction surveys are not only to discover employee satisfaction levels, but also to determine necessary improvements via the results of employee satisfaction surveys. Employee satisfaction surveys commonly apply questionnaire and complaint analyses. However, complaint analysis is a passive method, which cannot fully determine employee satisfaction. Recently, firms have increasingly started using questionnaire surveys (Yang, 2003a). Some businesses apply customer satisfaction survey models when devising employee satisfaction surveys (Lam et al., 2001), as in this study. The SERVQUAL model (Parasuraman et al., 1985, 1988, 1991) is the best-known service quality measurement model. SERVQUAL measures the gap between customer perceptions and expectations of service quality to determine perceived service quality. As scholars study service quality, and businesses measure employee satisfaction, SERVQUAL is generally applied as an investigative tool. However, the SERVQUAL method is difficult to apply to business. Yang (2003b) indicated that the SERVQUAL questionnaire design has a number of limitations. Customers and employees have difficulties in answering the SERVQUAL questionnaire, particularly the “expectations” section. For the above reasons, this study applies the I-S model rather than SERVQUAL to analyses employee satisfaction.

### **2.2. Importance-satisfaction model (I-S model)**

Low-quality attributes should not be the only consideration when designing improvement plans. Usually, the customer (employee) measures the quality of goods or services based on several important attributes or elements (Berry et al., 1990; Deming, 1986). The customer (employee) evaluates product or service quality by considering several important quality attributes; therefore firms must take actions to improve the attributes that are important to the customer but which have low satisfaction levels. Figure 1 shows the analytical results of an I-S model survey conducted by Yang (2003). The results for each quality attribute are placed in the model and then improvement strategies are considered based on the position of each item.

**Figure 1: Importance Satisfaction Model**

### 2.3. Establishment of employee satisfaction model

The most commonly used methods for importance-satisfaction surveys are to examine the thoughts and satisfaction of subjects via questionnaires; the dimensions of the questionnaires are used to explain the determinants. The dimensions of the determinants for employee satisfaction surveys vary among different businesses or organizations, but the differences are not obvious; moreover, the structure of employee satisfaction models for higher education is also identical.

The following documents were referred to in discussing the determinants of employee satisfaction in the field of higher education. Oshagbemi (1997) measured job satisfaction for 566 college teachers, as shown below:

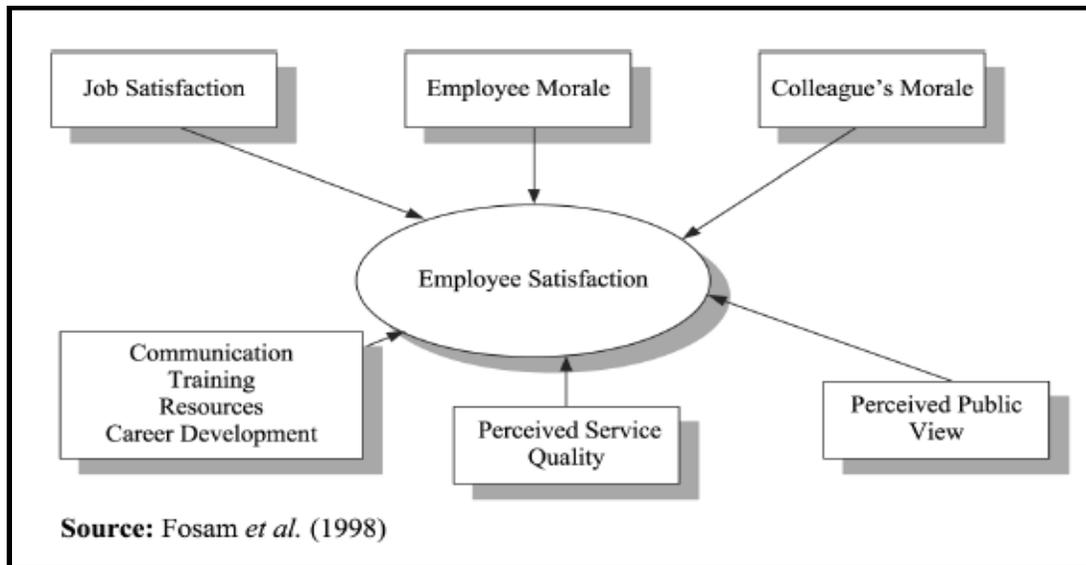
- teaching
- research
- administration and management
- present pay
- promotions
- supervision/supervisor behavior
- behavior of co-workers; and
- physical conditions/working facilities

Fosam et al. (1998) analyzed police organizations to find a suitable employee satisfaction model taking the South Yorkshire Police (SYP) as an example. As shown in Figure 2. Comm and Mathaisel (2000) used SERVQUAL to conduct questionnaire surveys on 606 employees of a private higher education organization to identify the determinants of satisfaction within educational organizations. The findings were as follows:

- workload

- work atmosphere
- decision-making
- ethics/fairness

**Figure 2: Employee Satisfaction Model**



- customer focus
- supervision
- goals and objectives
- training and development
- pay
- benefits

Kusku (2001) proposed applying employee satisfaction surveys to the employees of a Turkish college, and applied the following dimensions for measuring their satisfaction:

- general satisfaction
- management satisfaction
- colleagues
- other working group satisfaction
- job satisfaction
- work environment
- salary satisfaction

Metle (2003) conducted employment satisfaction surveys on female employees in the Kuwaiti public government sector (KGS), and identified the following employment satisfaction factors:

- overall job satisfaction
- pay and security

- co-workers
- supervision
- promotion
- content of work

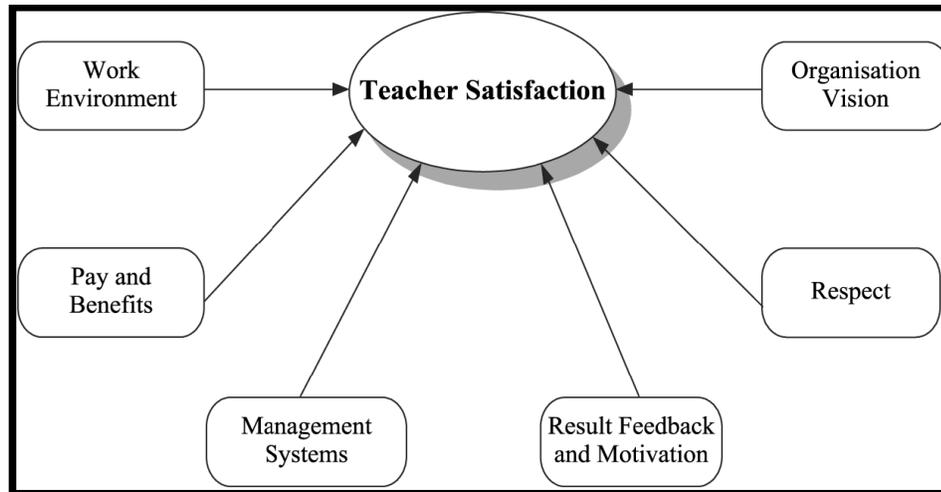
Since the satisfaction of higher education employees has many contributing factors, no complete models can be followed. To establish an employee satisfaction measurement model for the higher education sectors this study applied the employee satisfaction model designed by Fosam et al. (1998), the needs theory of Maslow et al. (1998), and the two-factors theory of Herzberg (1966). This model is designed for university teachers only, and excludes office employees, owing to the different quality attributes of teachers and office employees. The quality attributes for teachers are divided into six dimensions (Figure 3):

- organization vision
- respect
- result feedback and motivation
- management system
- pay and benefits
- work environment.

### 3. Methodology

#### 3.1. Questionnaire design and structure

In order to measure the satisfaction levels of higher education teachers, their requirements must be determined before designing the questionnaire. These requirements, termed “quality attributes” in this study, are also the items that teachers emphasize most strongly. Different businesses have various management models and business cultures, and thus also have different employee requirement.

**Figure 3: Employee satisfaction Model for Employee Satisfaction**

Therefore, different businesses cannot apply the same measurement model. Table I shows the factors used for measuring employee satisfaction with higher education obtained from understanding the functions of higher education and discussing with experts, schools' personnel directors and 14 teachers, and then eliminating the unnecessary or inappropriate quality attributes. The following findings were obtained:

- organization vision (seven items);
- respect (four items);
- result feedback and motivation (five items);
- .management system (eight items);
- pay and benefits (six items); and
- work environment (nine items).

This questionnaire was divided into three parts, as follows:

1. Demographics. Including sex, age, qualifications, years of service, and years at present school.
2. Importance survey. The importance survey scale ranged from 1 to 7 (with 1 representing extremely low importance and 7 representing extremely high importance).
3. Satisfaction survey. The satisfaction survey scale ranged from 1 to 7 (with 1 representing extremely dissatisfied and 7 representing extremely satisfied).

### 3.2. Data collection and analysis

This study issued a questionnaire to all teachers at various management institutes in delhi and NCR region. A total of 248 questionnaires were issued and 192 were returned (a response rate of 77.42 percent).

#### 3.2.1. Analysis of reliability and validity

Reliability is generally measured by Cronbach's ( $\alpha$ ); the Cronbach's  $\alpha$  of employee measurements for higher education was calculated using the statistical software, SPSS. The Cronbach's  $\alpha$  of employee

importance was 0.9425, and the Cronbach's  $\alpha$  of employee satisfaction was 0.9587. The differences between these two figures are small, among 0.94, 0.95, which indicates that the questionnaires administered in this study are highly reliable. After the questionnaire was retrieved, the analysis of reliability and validity on the six dimensions of satisfaction model was conducted first. According to Gay (1992), a reliability coefficient exceeding 0.8 for any test or scale was the minimum acceptable reliability coefficient. In terms of validity, the questionnaire was designed to acquire data according to the theory-model related studies. This study also conducted interviews with HR directors and discussions with teachers. The feedback obtained indicated that the questionnaire had extremely high reliability and validity (Table II).

### 3.2.2. Importance and satisfaction quality attribute analysis

The importance of requirements represents the levels of significance of the quality attributes for all teachers. Normally, teachers would hope that schools would provide the highest service standards for the important quality attributes. The importance of quality attributes can reflect teacher requirements. This study ranked all of the quality attributes in order of importance and satisfaction.

**Table I: Evaluation Dimensions and attributes of teacher satisfaction and their relationship with two different theories**

Needs theory of Maslow	Two factors theory of Herzberg	Evaluation dimensions	Evaluation items of quality elements
Self-actualization needs		Organisation vision	School's entire development plan School's reputation and image School's participation in local culture or public welfare activities School principal's perspective School principal's and directors' ambition Help teachers develop self-vision Participation in school's major policy decisions
		Respect	Professional knowledge is respected Mutual respect among teachers Respect for their teachers by students Students' outstanding performances
Esteem needs	Motivation factor	Result feedback and motivation	Achievements of teaching and research Rewards and glorification for outstanding performances Provision of achievements rewards Support for the results of teaching and research Allow teachers to know school's operating conditions
Social needs		Management systems	Provision of fair promotion systems Provision of good management systems Clear system of rewards and penalties Directors with leadership and managerial capacity Open system of directors' assignment Provision of smooth communication channels Introduction of innovation management systems Provision of high-quality service processes

(continued)

Needs theory of Maslow	Two factors theory of Herzberg	Evaluation dimensions	Evaluation items of quality elements
Safety needs	Hygiene factor	Pay and benefits	Provision of good salaries systems Provision of working security systems Provision of affiliated kindergartens Provision of good retirement systems Provision of lodging, travel related welfare allowances Provision of subsidies for further education
Physiological needs		Work environment	Provision of abundant library facilities Provision of complete teaching instruments Provision of convenient parking Provision of dining diversity Independent and spacious research space Provision of hygienic dining environments Provision of educative and training environments Provision of abundant research resources Provision of advanced information

### 3.2.3. Analysis of importance quality attributes

The top five quality attributes for higher education employees (marked with a) as listed in (Table III), were: provision of good salary systems (6.839); provision of fair promotion systems (6.821); provision of good retirement systems (6.664); provision of work security systems (6.658), and provision of abundant research resources (6.513). The bottom 35-39 in terms of importance ranking were as follows: provision of good management systems (4.756); provision of convenient parking (4.302), provision of lodging, travel related welfare allowances (4.236); provision of hygienic dining environments (4.062), and provision of dining diversity (4.029). Teachers are most concerned with salaries and work security, and wish to have stable jobs and salaries. Teachers are concerned with promotion opportunities to a higher level, so fair promotion systems are very important. Additionally, good retirement systems and long-term work security enhance teacher confidence at institute; research is fundamental to the work of teachers, and thus abundant research resources are also crucial. The analytical results demonstrate that teachers focus on salaries and fair promotion, and care little about welfare and working environments.

### 3.2.4. Analysis of satisfaction quality attributes

The top five quality attributes (marked with a) in the satisfaction ranking are as follows (Table III): provision of convenient parking (6.575); respect for their teachers by students (5.677); support for the results of teaching and research (5.664); school participation in local culture or public welfare activities (5.569), and provision of further education subsidies (5.568). The bottom 35-39 items in the satisfaction ranking was as follows: provision of abundant library facilities (3.553); provision of affiliated kindergartens (3.511); provision of work security systems (3.256); provision of fair promotion systems (3.152), and provision of good salaries for teachers (3.098).

The above requirements are the five most important items for teacher satisfaction, as identified through the detailed analysis of the responses.

**Table II: Reliability and Validity for Six Dimensions**

Dimensions	Importance survey Cronbach's $\alpha$	Satisfaction survey Cronbach's $\alpha$
Organisation vision	0.905	0.894
Respect	0.917	0.885
Result feedback and motivation	0.911	0.909
Management systems	0.865	0.837
Pay and benefits	0.872	0.874
Work environment	0.819	0.828

**Table III: Analysis of Importance and Satisfaction Quality attributes**

No.	Items	Importance	Ranking	Satisfaction	Ranking
1	Institute's entire development plan	5.877	18	4.766	19
2	Institute's reputation and image	6.042	13	4.964	12
<b>3</b>	<b>Institute's participation in local culture or public activities</b>	<b>5.104</b>	<b>30</b>	<b>5.569</b>	<b>4</b>
4	Institute's principal's perspective	6.473	6	4.899	15
5	Institute's directors' ambition	5.809	19	4.768	18
6	Help teachers develop self-visions	5.926	16	4.951	14
7	Participation in Institute's major policy decisions	5.766	20	5.385	7
8	Professional knowledge is respected	6.269	8	5.567	6
9	Mutual respect among teachers	5.964	14	4.722	21
10	Respect for their teachers by students	5.304	28	5.677	2a
11	Students' outstanding performances	5.162	29	4.026	28
12	Achievements of teaching and research	6.435	7	5.033	11
13	Rewards and glorification for outstanding performances	6.074	12	5.258	8
14	Provision of achievements rewards	5.936	15	3.655	33
<b>15</b>	<b>Support for the results of teaching and research</b>	<b>6.133</b>	<b>10</b>	<b>5.664</b>	<b>3</b>
16	Allow teachers to know school's operating conditions	5.023	32	4.568	23
<b>17</b>	<b>Provision of fair promotion systems</b>	<b>6.821</b>	<b>2</b>	<b>3.152</b>	<b>38</b>
18	Provision of good management systems	4.756	35	3.745	30

19	Clear system of rewards and penalties	5.087	31	3.589	34
20	Directors with leadership and managerial capacity	5.313	27	3.795	29
21	Open system of directors' assignation	4.897	33	3.679	31
22	Provision of smooth communication channels	5.356	26	4.959	13
23	Introduction of innovation management systems	5.632	24	4.762	20
24	Provision of high-quality service processes	5.74	22	4.375	24
<b>25</b>	<b>Provision of good salaries systems</b>	<b>6.839</b>	<b>1</b>	<b>3.098</b>	<b>39</b>
<b>26</b>	<b>Provision of working security systems</b>	<b>6.658</b>	<b>4</b>	<b>3.256</b>	<b>37</b>
27	Provision of affiliated kindergartens	6.221	9	3.511	36
<b>28</b>	<b>Provision of good retirement systems</b>	<b>6.664</b>	<b>3</b>	<b>4.869</b>	<b>16</b>
29	Provision of lodging, travel related allowances	4.236	37	5.054	10
<b>30</b>	<b>Provision of subsidies for further education</b>	<b>4.859</b>	<b>34</b>	<b>5.568</b>	<b>5</b>
31	Provision of abundant library facilities	6.122	11	3.553	35
32	Provision of complete teaching instruments	5.896	17	3.668	32
<b>33</b>	<b>Provision of convenient parking</b>	<b>4.302</b>	<b>36</b>	<b>6.575</b>	<b>1</b>
34	Provision of dining diversity	4.029	39	5.081	9
35	Independent and spacious research space	5.667	23	4.084	27
36	Provision of hygienic dining environments	4.062	38	4.684	22
37	Provision of educative and training environments	5.394	25	4.353	26
<b>38</b>	<b>Provision of abundant research resources</b>	<b>6.513</b>	<b>5</b>	<b>4.359</b>	<b>25</b>
39	Provision of advanced information	5.753	21	4.869	17
	<i>The highlighted items reveal the top five quality attributes.</i>				

Teachers are dissatisfied with the lack of library facilities, and with the teaching and research requirements. Additionally, no kindergartens are affiliated with the school, so teachers must spend significant time and money on taking care of their children. In educational working environments, teachers are most concerned with the prospects for promotion; however, the artificial factors in the promotion systems usually cause teachers to feel unfairness, mirroring the findings of research by other scholars (Oshagbemi, 1996). Studies of higher education employees in European and American setups demonstrate that salaries are the main item of dissatisfaction of teachers (Command Mathaisel, 2000; Kusku, 2001; Oshagbemi, 1997) and then the promotion systems (Oshagbemi, 1996), demonstrating that the items of dissatisfaction for university teachers are the same in Eastern and Western countries. These analyses can help education providers to fulfill teacher requirements and focus on improving those qualities attributes that they are most dissatisfied with.

#### 4. Importance-Satisfaction Model (I-S model) applications

The purpose of employee satisfaction surveys is to determine the improvement quality attributes from the results of the analyses, in situations where the low quality attributes are usually those that must be improved. However, whether this objective is correct remains uncertain. For organizations with

abundant resources, more improvements can be made, but for those with limited resources it is necessary to prioritize certain attributes. Selecting the low-quality attributes is not the proper method since teachers measure their satisfaction by the importance of quality attributes; thus, the attributes that institutes most need to improve should be the quality attributes that are rated as important by teachers and yet for which satisfaction scores are low. The I-S model is the best application model for this. In the I-S model all quality attributes were placed in the model and improvement strategies are then determined according to the position of each attribute.

## 5. Results

### I-S model results

Those quality attributes were placed in the I-S model, as shown in Figure 4:

#### **(1) Excellent area:**

1. Institute's/College's entire development plan.
2. Institute's/College's reputation and image.
4. Institute's/College's management's perspective.
5. Institute's/College's directors' ambition.
6. Help teachers develop self-visions.
7. Participation in Institute's/College's major policy decisions.
8. Professional knowledge is respected.
9. Mutual respect among teachers
12. Achievements of teaching and research.
13. Rewards and glorification for the outstanding performances.
15. Support for the results of teaching and research.
28. Provision of good retirement systems.
39. Provision of advanced information.

#### **(2) To be improved area:**

14. Provision of achievements rewards.
17. Provision of fair promotion systems.
24. Provision of high-quality services process.
25. Provision of good salaries systems.
26. Provision of working security systems.
27. Provision of affiliated kindergartens.
31. Provision of abundant library facilities.
32. Provision of complete teaching instrument.
35. Independent and spacious research space.
38. Provision of abundant research resources.

#### **(3) Surplus area:**

3. Institute's/College's participation in local culture or public welfare activities.
  10. Respect for their teachers by students.
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16. Allow teachers to know school's operating conditions.
22. Provision of smooth communication channels.
23. Introduction of innovation management systems.
29. Provision of lodging, travel related welfare allowances.
30. Provision of subsidies for further education.
33. Provision of convenient parking.
34. Provision of dining diversity.
36. Provision of hygienic dining environments.

#### (4) Careless area:

11. Students' outstanding performances.
18. Provision of good management systems.
19. Clear systems of rewards and penalties.
20. Directors have leadership and managerial capacity.
21. Open systems of directors' assignation.
37. Provision of educative and training environments.

Figure 4: I-S Model Application

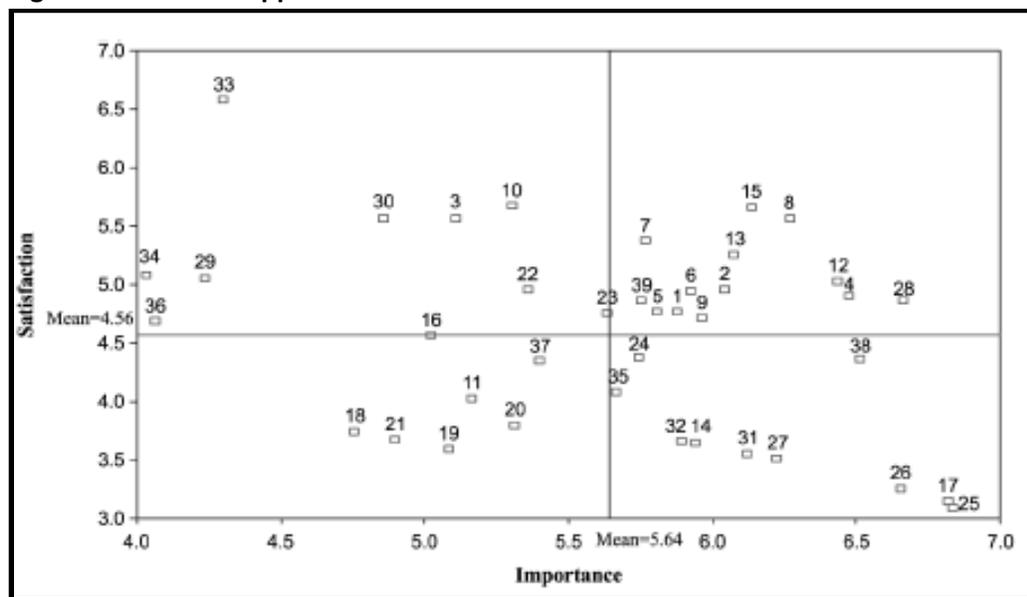


Figure 4 shows the average teacher satisfaction value of 4.56, demonstrating the acceptable operation performance. The “excellent area”, in which teachers are completely satisfied, includes 13 quality attributes; the “to be improved area”, in which teachers are dissatisfied with the quality attributes and hope that institutes can actively improve them contains ten attributes; the “surplus area”, indicating that the institutes have acceptable performances in this items, contains ten attributes. Furthermore, the “careless area” contains six attributes; if institutional resources are limited; these quality attributes have a low priority. Furthermore, if institute resources are abundant, these items should also be improved.

The quality attributes ranked 35-39th based on satisfaction all fell within the “to be improved area”, indicating that this model can also contain the dissatisfied quality attributes and demonstrating the practicability of the model. Two quality attributes in the improvement region are worth discussing. The first of these attributes is “Provision of good salaries systems” (No. 25). Teachers focus on salaries, and generally ignore other relevant welfare and research environments provided by the institute, or even randomly job-hop. The inability of institute to retain their core employees or to decrease employee turnover is a negative phenomenon. The other notably item is “provision of fair promotion systems” (No. 17). Promotion leads to an increased salary, and consequently this item is strongly related to monetary value. This quality attribute can easily be enhanced by establishing fair promotion systems and applying them correctly. This item is the quality attribute that is easiest to overcome with minimal investment of resources. The items referred to No. 17 and 25 are both related to monetary rewards, and can help the education providers to identify corresponding strategies for satisfying the requirements of teachers.

## 6. Conclusions

As organizations focus on customer relationship management, they should not forget that employees are also internal customers. Organizations have satisfied their customers only if they have also satisfied their employees. Businesses generally determine enhancement priorities based on the low satisfaction items, rather than considering actual employee requirements. Although this approach improved some dissatisfied quality attributes, these attributes are not the main focuses of employees. Consequently, considerable money is spent on improvement of dissatisfied quality attributes without improving employee satisfaction. Using higher education employees as examples, this study proposed the improvement priority based on the perspectives of importance and satisfaction, and the I-S model theory; institutes, based on their own resources, can determine the improvement strategies and priorities to satisfy actual employee requirements. For education organizations, employees placing an excessive value on their salaries indicate that employee may randomly job-hop to chase higher salaries, impacting institute’s morale. This study can help education providers to understand the wishes of the teachers, which include financial satisfaction, related welfare and fair promotion systems; teacher satisfaction with institutions and colleges, management can benefit both teachers and institutions.

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