Impact of ISO 9000 Certification in Academic Libraries in Malaysia : Empirical Study

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Abstract

The study investigates the impact of ISO 9000:2001 certification toward employees satisfaction, the results derived from the selected academic libraries in Malaysia.. The study used the Academic Library Employee Satisfaction Questionnaire (ALESQ) to ascertain the level of library staff satisfaction of the libraries that implementing the ISO 9001into their systems. The instrument assessed seven dimensions of employee satisfaction - resources management, team building/coworkers, recognition, leadership, communication, training and job satisfaction. A total of 549 respondents were selected from 60 academic libraries, which 409 represented Public Higher Education Institute (PuHEI) and 60 represented Private Higher Education Institute (PrHEI). The study shows the overall employee satisfaction of between 5.0 and 5.4 on a 7-point scale. It showed a statistically significance difference in employees satisfaction score for 10 categories of academic library (resource management, staff recognition and job satisfaction –were statistically difference).There is a significant difference between males and females in the employees satisfaction scores.

Keyword(s): ISO 9000 series; Quality management; Standardization; Employee Satisfaction.

Introduction

The nerve centre of the University, in fact that of all systems of education, is a library (Arora, 2008). This is no doubt because Katsirikou (2004) stated that academic libraries play a significant role as social institutions supporting knowledge and research. As a service organization, a library consists of a group of people, resources, physical and financial which is operating as a process to achieve organization objective.

In reality, the organization realized that employee satisfaction at work influences many aspects of organization performane such as efficiency, productivity, absenteeism, turnovers rates, and intention to quit (Maghrabi, 1999). In relation to this, many organizations, including library seeks to approach an establish quality management system in their quality managemet practices such as Total Quality Management, Malcolm National Baldridge Quality Award or to achieve recognition by ISO 9000 certification. In Malaysia the most prominent of quality management practices is ISO 9000. The initiative to implement ISO 9000 quality system in public higher education institution (PuHEIs) was undertaken with the introduction of the Development and Administration Circular by the Malaysian Government in 1996 (Jabatan Perkhidmatan Awam, 1996). This circular enforce all government agencies to implement MS ISO 9000 quality system in their organization as a tool to ensure the delivery of quality services to customers is excellence. Among the pioneer of public HEIs that are already certified to ISO 9000 are Universiti Teknologi Malaysia, Universiti Utara Malaysia, Universiti Putra Malaysia, Universiti Pendidikan Sultan Idris, Universiti Sains Malaysia.

ISO 9000 is a set of international quality management standards and guidelines. It assists an organization in developing, implementing, registering, and sustaining an appropriate quality management system that functions independent of the specific product and/or service (Westcott,

2006). The primary concern of ISO 9000 is "quality assurance," which refers to what an organization does to ensure compliance of its product and service that is consistent with the customer's requirements (Feng, Terziovski dan Samson, 2008; Lin dan Jang, 2008). ISO 9000 also purposely focus more intention on human resource.

According to Department of Standard Malaysia from the total of 4638 organizations certified with QMS-MS ISO 9001, approximately 204 of them are from education organization (Department of Standard Malaysia, 2009). Therefore research on effectivenes of ISO 9000 in education sector, especially in library became an active research. However, there is a lack of empirical study to investigate an effectiveness of ISO 9000 toward employees satisfaction.

Job Satisfaction of Academic Library Employees

Previous studies on job satisfaction of academic library employees, both professional and paraprofessional, have been carried out over the last decades. According to Lim (2008), some of these studies explore relationships between job satisfaction and the intrinsic characteristics of the work, such as creativity, autonomy, challenge, decision making, and the relationship with library users. Togia, Koustelious and Tsigilis (2004) revealed that, mean values of job satisfaction dimensions for Greek academic librarians at moderately level. From five aspects (working conditions,pay, promotion, job itself, supervision, and organization as whole), the highest mean score was noticed for the ''job itself'' followed by ''supervision'' and ''working conditions.'' Sierpe (1999) found from 81 responses (74.3%), overall the employees were satisfied, but they were dissatisfied with communication and operating procedures, and in respect to the overall job satisfaction, women attained a marginally higher score.

D'Elia (1979) found that job satisfaction among librarians is not related to their sex, the type of library in which they worked, or their vocational needs, but is related to the characteristics of their job environments. Of these, the supervisory climate and the intrinsic characteristics of the job itself are the two most important determinants of job satisfaction. Igbaria and Guimaraes (1993) found gender influences job satisfaction. They also found work, supervision, coworkers, pay, promotion and overal job satisfaction are positively correlated with overall job satisfaction. Cetin (2006) found that age has no significant difference in job satisfaction. Recently research by Vlosky and Aguilar (2009) found in general race and income shown impact to employee satisfaction; and income was least correlated with job satisfaction.

Relating to department or unit of employees work, the results shown conflicting. Chwe (1978) found that there were no differences in job satisfaction between reference staff and catalogers. Oppositely, Lynch and Verdin (1987), found that the reference librarians reported higher levels of job satisfaction than cataloger employees. Cetin (2006) found job title does not have a significant difference with job satisfaction.

Pertaining education background, staff with more professional experience reported higher satisfaction. For example Horenstein (1993) found that librarians with high academic rank were more satisfied with nonfaculty or hybrid groups.

Years of experience also seem to play a role in job satisfaction. Lynch and Verdin (1987) found library workers with less than one year of experience were more satisfied on the opportunities for promotion variable, whereas staff with more than 10 years of experience were least satisfied, but Togia et. al. (2004) quoted in theirs paper that, Voelck (1995) indicated ''the fewer the years of experience, the less satisfied support staff are overall and with the work itself, operations procedures, coworkers and benefits''.

It should be noted, in Malaysia the application of ISO 9000 standards into educational organizations dates back to 1990s, when the the Government decided to adopt and implement the ISO 9000. In 1997 the Sultanah Bahiyah Library, Northern University of Malaysia became the first academic library certified ISO 9000 certification. Currently according to Department of Standard Malaysia there are approximately 204 higher institution were certified by ISO 9000 certification. (Department of Standard Malaysia, 2009).

Particularly in employee perspective, researchers have stated that various benefits gain from implementation a QMS based on ISO 9001:2000 in the library. Mola (2007) found ISO 9001 are empowers the skills of human resources, and improves the staff morale. Kiran (2007) reported that ISO 9001 benefit the organizations' in cultural changes which is makes staff become more sensitive to quality-related issues in day-to-day work processes and thus enables organizations to better operate in terms of user satisfaction.

In terms of effectiveness communication within the library and the parent organization, the QMS ISO 9001:2000 had really improved the library's internal communication and eliminated any posibble misunderstanding because the responsibilities and authority attached to each post were clarified (Kaur, 2007). On the issue of job satisfaction and morale of the library staff, Kiran (2007) found that the QMS ISO 9001:2000 had certainly increased this more than that was expected.

Meanwhile, Praditteera (2001) found from fourtheen benefits of ISO 9000 in academic libraries in Thailand, the four related to employees are improved library staff morale and attitudes; improved effectiveness in teamwork; better understanding among library staff and library customers' improved management of library personnel.

The above review shows studies on job satisfaction are associated with academic libraries became an active research, but it still a lack of study to examine job satisfaction among library staff, especiallly an effectinevess of ISO 9000 toward library staff satisfaction. Most studies focus on job satisfaction and relationships with library staff background such as gender, education background, etc. Due to a paucity of this, the present study was conducted in a number of academic institutions in Malaysia to examine the job satisfaction experienced by academic library staff after their organization adopted ISO 9000.

2.0 Research questions

The main purpose of this study is to investigate to what extent the libraries that implementing ISO 9000 give influence to the employees' satisfaction. The specific research questions are: 1) what are the aggregate scores of employees satisfaction; 2)is there any significant difference of the employees' satisfaction with different demographic characteristics.

3.0 Methodology

a. Instrument

The Academic Library Employees Job Satisfaction (ACEJS) questionnaire has been developed and used to accomplish the objective the study. Thus, to measure and verify an effectiveness of ISO 9001, the Effectiveness of Resource Management, Effectiveness Development Team Building, Staff Recognition, Effectiveness of Top Management Leadership, Effectiveness of the Internal Communication, Effectiveness of the Training Program, and Overall Job Satisfaction were used. These dimensions also very significant with 5 requirements in ISO 9001 certification.. Likert scale of

"1' to '7" were used. Score 1 indicates strongly dissatisfy, 2 – very dissatisfy, 3 – not satisfy, 4 – moderately satisfy, 5 – satisfy, 6 – very satisfy and 7 indicates strongly satisfy.

b. Measures

Resource Management – resources include people, money, equipments, power, an information. Evaluation of resources comprise qualification, quantity, suitability, time-frame, validity, accuracy, safety, dan relation to cost-benefit (Miller, 2007). Twelve items from (Burke, Graham dan Smith, 2005; Ilias Said, 2005; Jacob dan Jenis, 2000; Robson, Yarrow dan Owen, 2003) were employed to measure effective resource management.

Team Building – in quality management principles, employees involving in all operation aspects is required. The organization who is apply this approach support an ideology of participatin and corporation through employees involvement in decision making (Dawson dan Palmer, 1995). Seven items from (Adsit, London, Crom dan Jones, 1996; Burke dan rakan-rakan, 2005; Robson dan rakan-rakan, 2003; Ulrich, Halbrook, Meder, Stuchlik dan Thorpe, 1991) were employed.

Staff Recognition – Nicholas, Amrik & Mile (1997) and Choi & Rungtusanatham (1999) were stressed employees recognition. When employees appreciated, it will increase their inspiration and seriousness in work. Six items from (Adsit dan rakan-rakan, 1996; Flynn, Schroeder dan Sakakibara, 1995; Hemsworth, Sánchez-Rodríguez dan Bidgood, 2005; Jacob dan Jenis, 2000) were employed to measure staff recognition.

Top management leadership – leaders are the main players in the way to culture organization development. According to Miller (2007) leadership evaluation are measured through their order and supporting towards organization mission, vision, strategic planing and organizational structure. A five items scale derived from (Adsit dan rakan-rakan, 1996; Burke dan rakan-rakan, 2005; Ilias Said, 2005; Jacob dan Jenis, 2000; Juran, 1988; Robson dan rakan-rakan, 2003; Ulrich dan rakan-rakan, 1991).

Internal Communication – main factor in organization development is communication (Clack, 1993). The better the managers' communation, the more satisfied employees are with all aspects of their work life (Whitworth, 1990). A total of five items were employed from (Adsit dan rakan-rakan, 1996; Kaldenberg dan Gobeli, 1995; Robson dan rakan-rakan, 2003; Ulrich dan rakan-rakan, 1991).

Effective Training – trained staff considered important resource toward organization achievement. Four items have been derived from (Adsit dan rakan-rakan, 1996; Hurl dan Estelami, 2007; Ilias Said, 2005; Kaldenberg dan Gobeli, 1995; Ulrich dan rakan-rakan, 1991) to measure employees training effectiveness.

Job Satisfaction – four items from (Hurl dan Estelami, 2007; Jacob dan Jenis, 2000; Silva, 2006) were employed to measure library employees job satisfaction.

c. Sample

A total of 549 respondents were selected from 60 academic libraries. Out of this, 409 were represented Public Higher Education Institute (PuHEI) and 60 were represented Private Higher Education Institute (PrHEI). For PuHEI , specifically, 203 were from Universitiy Library; 14 from College Universitiy Library, 18 from College Library, 108 from Education Institution Library, 52 from Polytechnic Library, 15 Community College library and 30 from Matriculation Library. Meanwhile for PrHEI, 19 respondents were from University Library, 17 from Non-University Level Library and 3 from College Library.

4.0 Findings

a. Respondent Characteristics / Descriptive Data

From 549 respondents, four-hundreds and nine respondents (89.1%) were from Public Higher Education Institute (PuHEI) and sixty (10.9%) were from Private Higher Education Institute (PrHEI). Overall two-hundreds and four respondents (37.2%) were male and 338 (61.6%) were female. One-hundreds and eight (27.0%) were librarian (library officer), 255 (46.4%), library assistant, 28 (5.1%) clerk, 20 (3.6%), assistant officer, 7 (1.3%), office boy, one (.2%) Senior Library Asistent, and 88 (16.0%) others. From 549 respondents, 134 (24.4%) were respondents had been in their present department for less than 1 years, 149 (27.1%) for 1– 3 year, 90 (16.4) for 3 to 5 years and 176 (32.1) 5 years or more.

b. Aggregation/Commulative employees satisfaction

Table 1 reveals the mean for the overall job satisfaction between PuHEI and PrHEI, as well as overall satisfaction for academic libraries in Malaysia. Refering to aggregation satisfaction, the respondents were relatively satisfy with their management in term of employees satisfaction facets. From seven facets of employees satisfaction, communication attain the highest score (5.5) and the lowest is leadership. Comparison between PuHEI and PrHEI, respondents from PuHEI shared Leadership and Training as a lowest score (5.1), meanwhile employees from PrHEI shown the lowest score is for leadership (4.9).

Table 1 : Aggregation Employees Satisfaction Means

	PuHEI (N=489)		PrHEI (N=60)		Aggregation (N=549)	
Employees Satisfaction Facets	Mean	SD	Mean	SD	Mean	SD
Resource Management	5.2	1.0	5.2	1.1	5.2	1.0
Team Building	5.4	0.9	5.6	1.0	5.4	0.9
Leadership	5.1	1.1	4.9	1.2	5.0	1.1
Recognition	5.2	1.1	5.2	1.3	5.2	1.1
Commucation	5.5	0.9	5.7	1.0	5.5	0.9
Training	5.1	1.0	5.2	1.2	5.1	1.0
Job satisfaction	5.4	1.1	5.2	1.3	5.4	1.0
Total Employees Satisfaction	5.3	0.9	5.3	1.1	5.3	0.9

On the nature of work (job title) the satisfaction differences do occur. Librarians and assistant officer more satisfy with team building and communication; library assistant satisfy with team building and job satisfaction; clerk with recognition and communication; assistant officer with team building, office boy with recognition; and senior library assistant with communication. All respondents very dissatisfy with leadership. For the gender, the study found that males respondents report higher scores in the overall of employees satisfaction compared with female. This study shown implementation of ISO 9000 contribute the employees received generally the same satisfaction reflect to the years working experience in the library. For overall employees satisfaction, results shown no vast difference level of satisfaction or dissatisfaction among respondents.

The pattern of employees satisfaction for the length/years of employees work shown a little bit difference. Respondents who has been working less than one year and more than 5 years represented their satisfaction approximately same and those who were experienced from 1 to 3 years and 3 to 5 years share the same mean, 5.2. The results shown years of working experience at an existing

department no effect in employees satisfaction. Employees who are report working less than 1 year provide score of satisfaction 5.3 same as workers working for more than 5 years. The same result shows from workers working at the respective department from 1 to 3 years and from 3 to 5 years.

c. Hypotheses result

H1:   There a significant difference in the mean employees satisfaction scores for PuAL and PrAL at $p < .05$

An independent-sample t-test was conducted to compare the employees satisfaction facets scores for Public Academic Library (PuAL) and Private Academic Library (PrAL). There were no significant difference in scores for all facets of employees satisfaction between PuAL and PrAL. For example, in resource management the score for PuAL [(M=5.2, SD=1.0; t(547)= -.02, p > .05]. The mean values indicate that employee from PuAL and PrAL share the same satisfaction (PrAL =5.2, PuAL =5.2]. The rest of the facets can be refered inTable 2.

Table 2 : Independence T-test for Public Academic Library (PuAL) and Private Academic Library (PrAL)

Factor		N	Mean	SD	t	df	Sig.	Remarks
Resource Management	Public	489	5.2	1.0	-0.2	547	0.863	ns
	Private	60	5.2	1.1	-0.2			
Team Building	Public	489	5.4	0.9	-1.1	547	0.264	ns
	Private	60	5.6	1.0	-1.0			
Staff Recognition	Public	489	5.1	1.1	1.4	547	0.176	ns
	Private	60	4.9	1.2	1.2			
Leadership	Public	489	5.2	1.1	0.2	547	0.821	ns
	Private	60	5.2	1.3	0.2			
Communication	Public	489	5.5	0.9	-1.7	547	0.082	ns
	Private	60	5.7	1.0	-1.5			
Training	Public	489	5.1	1.0	-0.8	547	0.439	ns
	Private	60	5.2	1.2	-0.7			
Job Satisfaction	Public	489	5.4	1.1	1.0	547	0.311	ns
	Private	60	5.2	1.3	0.9			
Total Employees Satisfaction	Public	489	5.3	0.9	-0.1	547	0.910	ns
	Private	60	5.3	1.1	-0.1			

H2:   There a difference in employees satisfaction scores for ten categories of academic libraries at $p < .05$

A one-way between-groups analysis of variance (ANOVA) was conducted to explore whether the means of employees satisfaction from differences categories of academic libraries differ. Libraries/subjects were divided into ten categories of academic libraries; seven for Public Higher Education (University, Education Institution, Polytechnic, College, Matriculation, College Community, and College University) and three Private Higher Education (University, Non-University Level and College). As shown in Table 3, there were statistically significance difference at $p < .05$ level in employees satisfaction score for resource management, staff recognition and job satisfaction [F(9,539)=2.1, p=0.0], [F(9,539)=2.4, p=0.0], and [F(9,539)=3.2, p=0.0] respetively. Meanwhile five employee satisfaction facets were no statistically significance are team building, leadership, communication, training and total employees satisfaction [F(9,539)=1.7, p=0.01, [F(9,539)=1.6, p=0.1], [F(9,539)=1.7, p=0.1], [F(9,539)=0.8, p=0.6], and [F(9,539)=1.9, p=0.1]

Table 3 : Analisis of variance (ANOVA) for difference types of Academic Library (Agregation Satisfaction)

Employees Satisfaction Facet		Sum of Squares	df	Mean Square	F	Sig.	Remarks
Resource Management	Between Groups	17.5	9	1.9	2.1	0.0	s
	Within Groups	508.2	539	0.9	-	-	
	Total	525.8	548	-	-	-	
Team Building	Between Groups	12.9	9	1.4	1.7	0.1	ns
	Within Groups	452.7	539	0.8	-	-	
	Total	465.5	548	-	-	-	
Staff Recognition	Between Groups	25.4	9	2.8	2.4	0.0	s
	Within Groups	644.4	539	1.2	-	-	
	Total	669.8	548	-	-	-	
Leadership	Between Groups	17.2	9	1.9	1.6	0.1	ns
	Within Groups	658.7	539	1.2	-	-	
	Total	675.9	548	-	-	-	
Communication	Between Groups	11.9	9	1.3	1.7	0.1	ns
	Within Groups	409.8	539	0.8	-	-	
	Total	421.8	548	-	-	-	
Training	Between Groups	8.3	9	0.9	0.8	0.6	ns
	Within Groups	608.8	539	1.1	-	-	
	Total	617.1	548	-	-	-	
Job Satisfaction	Between Groups	32.2	9	3.6	3.2	0.0	s
	Within Groups	601.9	539	1.1	-	-	
	Total	634.1	548	-	-	-	
Tot. Emp. Satisfaction	Between Groups	13.1	9	1.5	1.9	0.1	ns
	Within Groups	423.2	539	0.8	-	-	
	Total	436.3	548	-	-	-	

H3:   There a difference in employees satisfaction scores for ten groups of staff working experience in the library at $p < .05$

Subjects were divided into ten groups according to their periods of services in the library (less than 6 months; 1 – 2 years; 2 – 3 years; 3 – 4 years; 4 – 5 years; 5 – 9 years; 10 – 14 years; 15 – 19 years; 20 – 29 years; and more than 30 years). The results from the analysis (Table 4) indicate no statistically significance difference at $p < .05$ level in employees satisfaction score for 10 groups periods of services, except for job satisfaction [$F_{(9,539)}=2.3$, $p=0.0$]. The results for no statistically significance difference can be viewed from the table below.

Table 4 : Analisis of variance (ANOVA) of the years of working experience in the library (PuAL & PrAL)

Employees Satisfaction Facet		Sum of Squares	df	Mean Square	F	Sig.	Remarks
Resource Management	Between Groups	9.4	9	1.0	1.1	0.4	ns
	Within Groups	514.5	536	1.0	-	-	
	Total	523.9	545	-	-	-	

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Employees Satisfaction Facet		Sum of Squares	df	Mean Square	F	Sig.	Remarks
Team Building	Between Groups	4.7	9	0.5	0.6	0.8	ns
	Within Groups	460.3	536	0.9	-	-	
	Total	465.0	545	-	-	-	
Staff Recognition	Between Groups	12.4	9	1.4	1.1	0.3	ns
	Within Groups	653.8	536	1.2	-	-	
	Total	666.1	545	-	-	-	
Leadership	Between Groups	18.3	9	2.0	1.7	0.1	ns
	Within Groups	655.2	536	1.2	-	-	
	Total	673.6	545	-	-	-	
Communication	Between Groups	10.7	9	1.2	1.6	0.1	ns
	Within Groups	409.7	536	0.8	-	-	
	Total	420.4	545	-	-	-	
Training	Between Groups	7.9	9	0.9	0.8	0.6	ns
	Within Groups	608.0	536	1.1	-	-	
	Total	615.9	545	-	-	-	
Job Satisfaction	Between Groups	23.7	9	2.6	2.3	0.0	s
	Within Groups	608.3	536	1.1	-	-	
	Total	632.0	545	-	-	-	
Tot. Emp. Satisfaction	Between Groups	8.8	9	1.0	1.2	0.3	ns
	Within Groups	426.0	536	0.8	-	-	
	Total	434.8	545	-	-	-	

H4:   There a difference in employees satisfaction scores for four groups of working experience in the existing department at $p < .05$

An ANOVA also been conducted to explore whether the means of employees satisfaction from differences of working experience in existing department differ. Subjects were divided into four groups according to their periods of services in the current department (less than 1 year; 1 – 3 years; 3 – 5 years; and more than 5 years). There were no statistically significance difference (Table 5) at $p < .05$ level in employees satisfaction scores for four groups periods of services in the current department, except for leadership [F(9,545)=2.9, p=0.0].

Table 5 : Analisis of variance (ANOVA) of the years of working experience at current department

Employees Satisfaction Facet		Sum of Squares	df	Mean Square	F	Sig.	Remarks
Resource Management	Between Groups	3.4	3	1.1	1.2	0.3	ns
	Within Groups	522.4	545	1.0			
	Total	525.8	548				
Team Building	Between Groups	3.8	3	1.3	1.5	0.2	ns
	Within Groups	461.7	545	0.8			
	Total	465.5	548				
Staff Recognition	Between Groups	3.4	3	1.1	0.9	0.4	ns
	Within Groups	666.4	545	1.2			
	Total	669.8	548				
Leadership	Between Groups	10.7	3	3.6	2.9	0.0	s
	Within Groups	665.3	545	1.2			

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			df		F	Sig.	
	Total	675.9	548				
Communication	Between Groups	5.7	3	1.9	2.5	0.1	ns
	Within Groups	416.0	545	0.8			
	Total	421.8	548				
Training	Between Groups	2.0	3	0.7	0.6	0.6	ns
	Within Groups	615.1	545	1.1			
	Total	617.1	548				
Job Satisfaction	Between Groups	5.8	3	1.9	1.7	0.2	ns
	Within Groups	628.3	545	1.2			
	Total	634.1	548				
Tot. Emp. Satisfaction	Between Groups	3.0	3	1.0	1.3	0.3	ns
	Within Groups	433.2	545	0.8			
	Total	436.3	548				

H5:   There a significant difference in the mean employees satisfaction for males and females at $p < .05$.

A comparison of the employees satisfaction facets scores for male and female shows that there is a significant difference between males and females in the employees satisfaction scores, t(df=540) =2.72, p =.01 for resource management. The mean values indicate that male significantly more satisfy (M=5.3) than females (F=5.1). The rest of the employees satisfaction facets can be referred from the Table 6 below.

Table 6 : Independence T-test of the variable Gender (PuAL & PrAL)

Factor		N	Mean	SD	t	df	Sig.	Remarks
Resource Management	M	204	5.3	1.0	2.72	540	0.01	s
	F	338	5.1	1.0				
Team Building	M	204	5.6	0.9	2.40	540	0.02	s
	F	338	5.4	0.9				
Staff Recognition	M	204	5.2	1.2	2.36	540	0.02	s
	F	338	4.9	1.1				
Leadership	M	204	5.4	1.1	3.06	540	0.00	s
	F	338	5.1	1.1				
Communication	M	204	5.6	0.9	1.41	540	0.16	s
	F	338	5.5	0.9				
Training	M	204	5.2	1.1	2.06	540	0.04	s
	F	338	5.0	1.1				
Job Satisfaction	M	204	5.5	1.0	2.89	540	0.00	s
	F	338	5.3	1.1				
Tot. Emp. Satisfaction	M	204	5.4	0.9	2.79	540	0.01	s
	F	338	5.2	0.9				

Discussions and Conclusion

In this study, both aggregation of the employees' job satisfaction and individual satisfaction were evaluated. The results showed that employees were satisfied with their jobs. This is similar with (Togia dan rakan-rakan, 2004). Generally, employee satisfaction in relation to leadership and training

was low. It is recommended that particular attention must given to improve leadership behaviour. Top management with have enough authority could make effective efforts to improve quality management practices. As mentioned by several researchers, leader is a key player in any organization. So, the study belief if the library management can improve staff leadership, the level of employees satisfaction can be better.

Gender having a significant effect on employees satisfaction. This is contradict result from Cetin (2006) but it seem similar from several previous studies such as (D'Elia, 1979; Guimaraes, 1996; Sierpe, 1999). Others variable such as types of library, categories of library, working experience in current department, as well as in the library were seen no significance or partially significant with employee satisfaction facets. It seems that employee satisfier factors such as resource management, team building staff recognition, leadership, communication, training, and job satisfaction were effect of graduation level on employee satisfaction no affect by type of library (public or private).

In the context of academic library categories, it seem resource management, staff recognition, and job satisfaction having significant effects on their satisfaction. This mean employees work in difference categories of library [(University, Education Institution, Polytechnic, College, Matriculation, College Community, and College University - for Public Academic and University, Non-University Level and College – for Private Higher Education] having difference satisfaction with these three employee satisfaction facets. This is a similar result from (Lynch dan Verdin, 1987). For the rest of four employees satisfaction facets there are no significance difference, which shown the same finding from D'Elia (1979) and Cetin (2006) .

This study also demonstrates that years of working in the library or periods of working in their current department did not significant with the most of employees satisfaction facets. For years of working experience in library, job satisfaction was the only variable significant with employees satisfaction and for periods of working in their current department the only variable is leadership.

For conclusion, this study has been provided very significant impact on library management as a whole. Even the ISO 9000 was recognized very useful tool to improve organization performance, as well as employees satisfaction, but this study shows employees only satisfied. Thus the library management should play an appropriate action to ensure enhance of employee satisfaction and understand that employees are the most important resource in organizations. Managers at all levels cannot cause an employee to become motivated; they can however, through their actions and more participative attitudes help to create the environment for individuals to motivate themselves.

Lastly, we belief that this study is very significance in theoretical and practically. But we observed the study just indicate the level of employees satisfaction while their library certified y ISO 9000. It does not show the relationship or correlation between ISO 9000 and employees satisfaction. It is suggested that the similar researcher should be done to investigate the relationship between ISO 9000 and employees satisfaction or hree tier relationships i.e ISO 9000, employees satisfaction and customer satisfaction in the future.

References

Adsit, D. J., M. London, S. Crom dan D. Jones (1996). "Relationships between employee attitudes, customer satisfaction and departmental performance." Journal of Management **15**(1): 62-75.

Arora, K. (2008). University Library System : Centralization and Decentralization. New Delhi, Regal Publications.

Burke, R. J., J. Graham dan F. Smith (2005). "TQM implication effects of reengineering on the employee satisfaction-customer satisfaction relationship." The TQM Magazine **17**(4): 358-363.

Cetin, M. O. (2006). "The relationship between job satisfaction, occupational and organizational commitment of academics. ." The Journal of American Academy of Business **8**(1): 78-88.

Choi, T. Y. dan M. Rungtusanatham (1999). "Comparison of quality management practices: Across the supply chain and industries." Journal of Supply Chain Management; **35**(1): 20.

Chwe, S. S. (1978). "A comparative study of job satisfaction: Catalogers and reference librarians in university libraries." Journal of Academic Librarianship **3**(4): 175–194.

Clack, M. E. (1993). Organizational Development and TQM : The Havard College Library's Experience. Integreting Total Quality Management in a Library Setting. S. Jurrow dan S. B. Barnard. New York, The Haworth Press**:** 29-43.

Dawson, P. dan G. Palmer (1995). Quality Management : The theory and practice of implementing change. elbourne, Longman.

D'Elia, G. P. (1979). "The Determinants of Job Satisfaction among Beginning Librarians." The Library Quarterly **49**(3): 283–302.

Department of Standard Malaysia (2009). "Accredited Certification (As of 30 June 2009 - Updated Quarterly)." Volume(Issue) **2009**, http://www.standardsmalaysia.gov.my.

Feng, M., M. Terziovski dan D. Samson (2008). "Relationship of ISO 9001:2000 quality system certification with operational and business performance : A survey in Australia and New Zealand-based manufacturing and service companies." Journal of Manufacturing Technology Management **19**(1): 22-37.

Flynn, B. B., R. G. Schroeder dan S. Sakakibara (1995). "The impact of quality management practices on performance and competitive advantage",." Decision Sciences **26**(5): 659-692.

Guimaraes, T. (1996). "TQM's impact on employee attitudes." The TQM Magazine **8**(1): 20–25.

Hemsworth, D., C. Sánchez-Rodríguez dan B. Bidgood (2005). "Determining the impact of quality management practices and purchasing-related information systems on purchasing performance : A structural model." Journal of Enterprise Information Management **18**(1/2): 169.

Horenstein, B. (1993). "Job Satisfaction of Academic Librarians: An Examination of the Relationships between Satisfaction, Faculty Status, and Participation." College and Research Libraries **54**(3): 255-69 ; available at : www.eric.ed.gov/ERICWebPortal/recordDetail?

Hurl, R. F. dan H. Estelami (2007). "An exploratory study of employee turnover indicators as predictors of customer satisfaction." Journal of Services Marketing **3**(21): 186–199.

Igbaria, M. dan T. Guimaraes (1993). "Antecedents and Consequences of Job Satisfaction among Information Center Employees." Journal of Management Information Systems **9**(4): 145-174.

Ilias Said (2005). The Implementation of ISO 9000 Quality Management System and Business Performance of Contractors in Malaysia. Faculty of Technology Management (PhD). Sintok, Universiti Utara Malaysia**:** 244.

Jabatan Perkhidmatan Awam (1996). Pekeliling Kemajuan Pentadbiran Awam Bilangan 2 Tahun 1996 : Garis Panduan Bagi Melaksanakan MS ISO 9000 Dalam Perkhidmatan Awam. Kuala Lumpur, Jabatan Perdana Menteri.

Jacob, K. E. dan J. D. Jenis (2000). "A causal model for employee satisfaction." Total Quality management **11**(8): 1081-1094.

Juran, J. M. (1988). Juran on planning for Quality. New York, The Free Press.

Kaldenberg, D. O. dan D. H. Gobeli (1995). "Total quality management practices and business outcomes: Evidence from dental practices." Journal of Small Business Management **33**(1): 21.

Katsirikou, A. (2004). "Libraries future through co-operations." Libraries and Information **17**(19-21).

Kaur, K. (2007). MS ISO 9001:2000 Implementation in Malaysian Academic Libraries. Building an Infirmation Society for All, Petaling Jaya, University Malaya.

Lin, C.-I. dan W.-Y. Jang (2008). "Successful ISO 9000 implementation in Taiwan How can we achieve it, and what does it mean?" International Journal of Productivity and Performance Management **57**(8): 600-622.

Lussier, R. N. (1996). Human Relations in Organizations : A Skill-Building Approach. Chicago, Irwin.

Lynch dan Verdin (1987). "Job satisfaction in libraries: A replication." Library Quarterly, . **3**(4): 190–202.

Maghrabi, A. S. (1999). "Assessing the Effect of Job Satisfaction on Managers." International Journal of Value - Based Management **12**(1): 1-12.

Miller, B. A. (2007). Assessing Organizational Performance Higher Educatiuon. San Francisco, John Wiley.

Mola, N. B. (2007). "The use of ISO 9001 quality standard in higher education institution libraries." Library Service.

Murray., R. A. (1999). Job Satisfaction of Professional and Paraprofessional Library Staff at the University of North Carolina at Chapel Hill. School of Information and Library Science. University of North Carolina, University of North Carolina**:** 56.

Nicholas, B. B., S. S. Amrik dan T. Mile (1997). "Comparing quality management practices in the Australian service and manufacturing industries." International Journal of Quality & Reliability Management **14**(8): 814-833.

Praditteera, M. (2001). ISO 9000 Implementation in Thai Academic Library. School of Education, University of Pittsburgh**:** 1-191.

Robson, A., D. Yarrow dan J. Owen (2003). "Does quality drive employee satisfaction in the UK learning sector?" The International Journal of Quality & Reliability Management **22**(4/5): 465.

Sierpe, E. (1999). "Job Satisfaction among Librarians in English-Language Universities in Quebec." Library & Information Science Research **21**(4): 479–499.

Silva, P. (2006). "Effects of disposition on hospitality employee job satisfaction and commitment." Contemporary Hospitality Management **18**(4): 317-328.

Sook Lim (2008). "Job satisfaction of information technology workers in academic libraries." Library & Information Science Research **30**: 115–121.

Togia, A., A. Koustelios dan N. Tsigilis (2004). "Job satisfaction among Greek academic librarians." Library & Information Science Research **26**: 373–383.

Ulrich, D., R. Halbrook, D. Meder, M. Stuchlik dan S. Thorpe (1991). "Employee and Customer Attachment: Synergies for Competitive Advantage." Human Resource Planning **14**(2): 89.

Vlosky, R. P. dan F. X. Aguilar (2009). "A Model of Employee Satisfaction: Gender Differences in Cooperative Extension." Journal of Extension **47**(2).

Voelck, J. (1995). "Job Satisfaction among Support Staff in Michigan Academic Libraries." College & Research Libraries **56**(2): 157-170; available at : http://www.eric.ed.gov/ERICWebPortal.

Westcott, R. T., Ed. (2006). The Certified Manager of Quality/Organizational Excellence Handvbook. Milwaukee, ASQ Quality Press.

Whitworth, B. (1990). "Proof at Last." Communication World **7**(12): 28-31.